The University of Oklahoma Course Catalog (June 2015)

A HI	1113	The Understanding of Art	Explanation and analysis of the principles underlying the visual arts. Consideration of formal, historical and other factors in the valuation and enjoyment of painting, sculpture, architecture and utilitarian objects. (F, Sp, Su) [IV-AF]
A HI	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
A HI	2014	Introduction to Art History	Students will be introduced to basic concepts in art and art history through a thematic study of global art. (Irreg.) [IV-AF]
A HI	2213	Global Art I	The visual arts from the prehistoric through the Renaissance. (F) [IV-AF]
A HI	2223	Global Art II	The visual arts from the Renaissance to the present. (Sp) [IV-AF]
A HI	2930	Special Topics	2-6 hours.; Prerequisite: Permission of instructor. May be repeated with change of topic; maximum credit 12 hours. Courses in special topics not offered in the established curriculum. (Irreg.)
A HI	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
A HI	3133	Survey of Aegean Art and Architecture	Prerequisite: junior standing. Understanding of art and architecture of the Aegean civilization. The focus of the course will be on artistic production of the island of Crete and to a lesser extent Cycladic and Mycenaean achievements in the Bronze Age Greece. (alt. Sp) [IV-WC]
A HI	3213	Classical Art and Archaeology: Greek Art to the Death of Alexander	(Crosslisted with CL C 3213) Prerequisite: sophomore standing. Lectures, occasionally illustrated, and assigned readings. Survey of the architecture, sculpture, painting and minor arts in the Greek regions of the eastern Mediterranean in the successive stages of their development, with analyses of dominant styles and detailed study of select masterpieces and monuments. (F) [IV-AF]
A HI	3223	Classical Art and Archaeology: Hellenistic Greek Art; Roman Art	(Crosslisted with CL C 3223) Prerequisite: sophomore standing. Continuation of 3213. Survey of Hellenistic art, with particular attention to the individuality of style and diversity of matter. Early Etruscan and Roman art. The development of Roman art in native and assimilated forms; studies in domestic and national monuments. (Sp) [IV-AF]
A HI	3263	Survey of Byzantine Art and Architecture	Prerequisite: junior standing A survey of Byzantine monuments from the foundation of Constantinople in 330 CE to its fall in 1453. (Sp-Alt) [IV-AF]
A HI	3303	Renaissance Art in Italy 1200-1600	Prerequisite: junior standing. Focuses on Renaissance art and architecture in Italy from a social and cultural framework, beginning in the 1200's and ending around 1580. (Irreg.) [IV-WC]
A HI	3313	Art and Culture in Italy	Prerequisite: permission of department: acceptance to "Journey to Italy". Taught on-site in Italy as part of the "Journey to Italy" summer program in Arezza. Students will study art from ancient Roman through the Baroque, with special focus on the Renaissance. (Irreg.) [IV-WC]
A HI	3353	Northern Renaissance Art	Prerequisite: junior standing. Painting, sculpture and architecture in Northern Europe from 1400-1600. The course will emphasize painting in Flanders, Germany and the Netherlands. (Irreg.) [IV-WC]
A HI	3403	Baroque Art and Architecture in Europe:1600-1700	Prerequisite: junior standing; Covers art and architecture in Europe in the seventeenth century, during the time period called the Baroque. (Irreg.) [IV-WC]
A HI	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

A HI	3603	American Art	Prerequisite: junior standing. American art from the colonial period to 1950. (Irreg.) [IV-WC]
A HI	3663	Contemporary Art	Prerequisite: Junior standing. Focuses on contemporary art of the world with a strong emphasis on art made since 1989. (Irreg.)
A HI	3673	History of Visual Communication	Prerequisite: junior standing. The history of visual communications and design from prehistoric times to the twentieth century. (Sp)
A HI	3693	New Media Art	Prerequisite: Junior standing. This course covers new media - video, installation, performance, and digital media - and technology in art since 1950. (Irreg.)
A HI	3733	Art of the American West	Prerequisite: ENGL 1213 and junior standing. An introduction to the art of the American West accompanied by close study of relevant primary and scholarly texts. Students will be responsible for active participation in class discussion and for a series of short papers and assessments designed to develop skills in writing and historical interpretation. (Irreg.)
A HI	3753	History of Interior Design, Early Civilization to 1800	Prerequisite: junior Standing. Historical survey of architectural interiors and of the decorative arts from prehistory to 1800. Readings, lectures and discussion about the art, composition, and the aesthetic theories that give value to historical interiors. (F) [IV-WC]
A HI	3763	History of Interior Design, 19th and 20th Centuries	Prerequisite: junior Standing. History of interior with emphasis on cultural and socio-economic factors which led to their development. Emphasis on designers and patrons and on the major furnishings styles and design ideas of the nineteenth and twentieth centuries. (Sp)
A HI	3803	Pre-Columbian Art & Architecture of Meso- and South America	Prerequisite: junior standing. An overview of Pre-Columbian art and architecture in Meso-America from Prehistoric times until the Spanish intervention in the early 1500s. (F-alternate) [IV-NW]
A HI	3833	Introduction to Native American Art	Prerequisite: Junior standing. Introduces students to the aesthetic achievements of the great geo-cultural traditions of Native North America: Woodlands, Plains, Southwest, Northwest Coast, and the Arctic. Ancient, historic, modern, and contemporary works of art are studied in their cultural, religious, and political contexts, emphasizing indigenous world views. (Irreg.)
A HI	3853	Survey of Asian Art	Prerequisite: junior standing. A survey of the art of India, China, and Japan. (Irreg.) [IV-NW]
A HI	3903	Art History, Theory and Practice	Prerequisites: A HI 2213 or A HI 2223, and junior standing. Introduction to the theory and practice of Art History required for the major involving consideration of the field's history, exposure to historical and contemporary approaches to its practice, and training in art historical writing and critical and visual analysis.(Irreg.)
A HI	3913	American Visual Culture	Prerequisites: junior standing. Explores approaches to American visual culture, an interdisciplinary area of inquiry that considers the role of visual experience in everyday life. These include photography, cinema, television, digital media. and public art. We examine the key theorists, methodologies, and cultural practices that have shaped the field of Visual Culture Studies.(Irreg.)
A HI	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
A HI	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
A HI	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
A HI	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

A HI	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
A HI	4113	Cycladic Art	(Slashlisted with 5113) Prerequisite: junior standing. The Bronze Age culture of the Aegean Islands with special emphasis on Cycladic idols and monumental paintings on the island of Thera (Santorini). No student may earn credit for both 4113 and 5113. (Sp-alternate)
A HI	4123	Minoan Art and Architecture	(Slashlisted with 5123) Prerequisite: junior standing. Examination and interpretation of Minoan palatial architecture and related art production on the island of Crete. No student may earn credit for both 4123 and 5123. (Sp-alternate)
A HI	4143	Mycenaean Art and Architecture	(Slashlisted with 5143) Prerequisite: junior standing. Art of mainland Greece with particular attention to Mycenaean settlements and funeral practices. No student may earn credit for both 4143 and 5143. (Sp-alternate)
A HI	4163	Etruscan Art	(Slashlisted with 5163) Prerequisite: junior standing or permission of instructor. Examine and interpret selected works of Etruscan art in reference to the possible influences from the social, political, economic, literary, and religious "climate" of the time. No student may earn credit for both 4163 and 5163. (F) [IV-WC]
A HI	4233	Medieval Art I: Early Christian to c. 1100	(Slashlisted with 5233) Prerequisite: junior standing. A study of Western art and architecture from the early Christian period (fourth century) through the Early Romanesque period (about 1100). Studies of Byzantine, Migratory, Insular, Hispano-Islamic, Carolingian and Ottonian art included. No student may earn credit for both 4233 and 5233. (Alt. F) [IV-WC]
A HI	4243	Medieval Art II: Romanesque	(Slashlisted with 5243) Prerequisite: junior standing. European medieval art of 11th and 12th centuries. Romanesque, the first pan-European art style, is formulated during a period of urban growth and the beginning of the university system. One of the most significant achievements during the Romanesque is the sculpted iconographical portal. No student may earn credit for both 4243 and 5243. (Alt. Sp) [IV-WC]
A HI	4253	Medieval Art III: Gothic	(Slashlisted with 5253) Prerequisite: junior standing. European late Medieval art from mid-12th century to mid-15th century. Beginning with Gothic and continuing into early Renaissance, when two distinct styles come about simultaneously: Flemish and early Renaissance. No student may earn credit for both 4253 and 5253. (Alt. F) [IV-WC]
A HI	4273	Byzantine Icons	(Slashlisted with 5273) Prerequisite: junior standing. Byzantine images occupy a principal position at the heart of the Eastern Church and they are an organic part of daily services. The icon represents a vision of the invisible, and therefore a vision founded on divine knowledge which transforms the created work into the miracle working image. This Class will examine the challenging process of producing holiness and divinity through painting panels. No student may earn credit for both 4273 and 5273. (Irreg.) [IV-AF]
A HI	4303	Early Renaissance Art in Italy	(Slashlisted with 5303) Prerequisite: junior standing. Italian painting, sculpture, and architecture between 1250-1500, emphasizing the birth of the Renaissance from a social and cultural framework. No student may earn credit for both 4303 and 5303. (Irreg.) [IV-WC]
A HI	4333	High Renaissance and Mannerist Art in Italy	(Slashlisted with 5333) Prerequisite: junior standing. Italian High Renaissance and Mannerist painting, sculpture, and architecture between 1500-1600. No student may earn credit for both 4333 and 5333. (Alt. F) [IV-WC]
A HI	4343	Italian Decorative Complexes	Prerequisite: junior standing or permission of instructor. Designed for art history and non-art history majors studying abroad in Italy. Explores the history of sculpture, architecture and painting produced in Italy with particular emphasis on the renaissance in Tuscany between c. 1250 to 1534. No student may earn credit for both 4343 and 5343. (Irreg.) [IV-WC]

A HI	4353	Northern Renaissance Art	(Slashlisted with 5353) Prerequisite: junior standing. Painting, sculpture and architecture in Northern Europe from 1400-1600. The course will emphasize painting in Flanders, Germany and the Netherlands. No student may earn credit for both 4353 and 5353. (Alt. F) [IV-WC]
A HI	4373	The Italian City: Renaissance and Baroque Architecture	(Slashlisted with 5373) Prerequisite: junior standing. Architecture and urban planning of Italy from about 1300-1700. Emphasis on the growth of the city and how new forms of social interaction affected the development of architecture and the urban setting. No student may earn credit for both 4373 and 5373. (Alt. F) [IV-WC]
A HI	4383	Italian Renaissance Art and Science	Prerequisite: junior standing. Focuses on the confluence of science and art in Renaissance Italy through a study of materials, process, technique and structural issues addressed by artists in the creation of painting, sculpture, and architectures. (Su) [IV-WC]
A HI	4403	Southern Baroque Art	(Slashlisted with 5403) Prerequisite: junior standing. Italian painting, sculpture, and architecture from 1600-1700. This course will emphasize the effects of the Counter-Reformation on art and artists in Rome. No student may earn credit for both 4403 and 5403. (Irreg.) [IV-WC]
A HI	4463	Issues in Northern Baroque Art	(Slashlisted with 5463) Prerequisite: junior standing. Focuses on Northern Baroque art as case-study for examination of a variety of art historical methodologies and problems such as attribution, function, and meaning. No student may earn credit for both 4463 and 5463. (Irreg.)
A HI	4503	Art of the 18th Century: The Age of Enlightenment	(Slashlisted with 5503) Prerequisite: junior standing. Emphasizes the interaction of art with scientific, literary, historic and philosophical innovations of the eighteenth century. Content includes painting, sculpture and architecture of Northern Europe. No student may earn credit for both 4503 and 5503. (Alt. Sp) [IV-WC]
A HI	4553	Nineteenth-Century Art	(Slashlisted with 5553) Prerequisite: junior standing. European art from the French Revolution to 1900, with particular emphasis on developments in French painting. Brief consideration of parallel trends in American art. No student may earn credit for both 4553 and 5553. (Irreg.) [IV-WC]
A HI	4613	Readings in Twentieth Century Art	(Slashlisted with 5613) Prerequisite: junior standing. Explores the cultural/intellectual context of the Fauves, German Expressionists, Cubists, Constructivists, Futurists, Dadas, Surrealists, etc., through artists' and critics' writings and manifestos as well as other arts such as poetry, drama and dance. Readings, presentations, and critical writings will be assigned. No student may earn credit for both 4613 and 5613. (Irreg.) [IV-WC]
A HI	4633	Modern Art: Cezanne to 1950	(Slashlisted with 5633) Prerequisite: junior standing. European art from Post-Impressionism to 1950, including some American developments. Emphasis on painting and sculpture, with some consideration of architecture. No student may earn credit for both 4633 and 5633. (Irreg.) [IV-WC]
A HI	4643	Art After Modernism	(Slashlisted with 5643) Prerequisite: Junior standing. Examines the transition from modern to contemporary art in Europe and the United States between 1950 and 1989. No student may earn credit for both 4643 and 5643. (Irreg.)
A HI	4653	Art Since World War II	(Slashlisted with 5653) Prerequisite: junior standing. Recent developments in art, both in the United States and abroad. No student may earn credit for both 4653 and 5653. (Irreg.) [IV-WC]
A HI	4663	Women in Contemporary Art	(Slashlisted with 5663) Prerequisite: permission of instructor. Discussions concerning women's issues in contemporary art, current women artists and their art works. The notion of a "female sensibility" will be examined. Students will engage in individual and group presentations, both of artists and critical issues. Essay writing and preparation of bibliographies. No student may earn credit for both 4663 and 5663. (Irreg.) [IV-WC]
A HI	4673	Modern Sculpture	(Slashlisted with 5673) Prerequisite: junior standing. A study of changing concepts in sculpture from neo-classicism to the present day. No student may earn credit for both 4673 and 5673. (Irreg.) [IV-WC]

A HI	4683	American Material Culture	Prerequisite: junior standing. An interdisciplinary seminar addressing the significance of ordinary American objects (cell phones, storm shelters, pumpjacks, shotguns, ATM machines, lava lamps, food processors; the possibilities are nearly endless) taken as evidence of unconscious as well as conscious attitudes and beliefs, some specific to their original makers, users, owners and perceivers, others latent in the broader cultural milieu in which each object circulated or, indeed, circulates still. (Sp)
A HI	4693	World Modernisms	(Slashlisted with 5693) Prerequisite: junior standing. Examines modernisms of the world between 1950 and 1989 with a strong emphasis on traditions outside the West. No student may earn credit for both 4693 and 5693. (Irreg.)
A HI	4703	History of Photography, 1839-1945	(Slashlisted with 5703) Prerequisite: junior standing. A survey of the history of photography from 1839 to 1945. Topics include photography as art; social, technical, mechanical, scientific and aesthetic factors in the development of the medium. No student may earn credit for both 4703 and 5703. (Irreg.) [IV-AF]
A HI	4713	History of Photography: 1945-Present	(Slashlisted with 5713) Prerequisite: junior standing. A survey of the principal movements, ideas and motifs of photography from post-World War II until the 1990's. No student may earn credit for both 4713 and 5713. (Irreg.) [IV-AF]
A HI	4723	Cinema of the American West: Then and Now	(Slashlisted with 5723) Prerequisite: junior standing. Provides a critical overview of cinema of the American West from the 1930s to present day. Through screenings and course readings, examines the underlying components of Western films, including issues of race, class, ethnicity, gender, sexuality and ideology. Also explores the influence of painting and photography on cinema, as filmmakers both reinforced and reshaped popular imaginings of the American West. No student may earn credit for both 4723 and 5723. (Irreg.)
A HI	4743	The American West in Art, Photography and Popular Culture	(Slashlisted with 5743) Prerequisite: junior standing or permission of instructor. Focuses on the study of the Trans-Mississippi West, as seen through the eyes of artists and photographers from the early 19th century until today. A variety of media will be discussed, including paintings, prints, photography, and sculpture. The purpose of the course will be primarily to study Euro-American artistic conventions/tradition and how they have been employed in defining western history, culture, and native peoples as fact, fiction, and myth. No student may earn credit for both 4743 and 5743. (Irreg.) [IV-AF]
A HI	4753	The American West in Photography	(Slashlisted with 5753) Prerequisite: Junior standing or permission of the instructor. This course focuses on the study of the trans-Mississippi west as seen through the eyes of photographers from the early 19th century up to the present. The purpose of this course will primarily be to study Euro-American photographic conventions, traditions, and styles and how they have been employed in defining American western history, culture and native peoples as fact, artistic motif and myth. No student may earn credit for both 4753 and 5753. (Irreg.) [IV-WC]
A HI	4763	Studies in Art of the American West	Prerequisite: junior standing. Close study of a relatively small number of works of art representing the American West produced in the North American colonies, between roughly 1750 and 1850, accompanied by relevant scholarly texts published since the dawning of the modern age of American art history. Students are responsible for active participation in class discussion, successful completion of two interim assessments, and preparation of a substantial research paper. (F)
A HI	4823	20th Century American Indian Art History	(Slashlisted with 5823) Prerequisite: junior standing. Examination and study of the arts of North American Indians. Included in the survey will be the examination of new materials, styles, and the shifts of gender roles in the creative arts. No student may earn credit for both 4823 and 5823. (F) [IV-NW]

A HI	4843	20th Century Hispanic and Latin American Art History	(Slashlisted with 5843) Prerequisite: junior standing. Visual arts of Mexico, Central and South America. Interdisciplinary methodology includes painting, sculpture, photography, video, installations, pottery, and weaving. No student may earn credit for both 4843 and 5843. (F) [IV-WC]
A HI	4853	American Indian Women Artists	(Slashlisted with 5853) Prerequisite: Junior standing or permission of the instructor. Investigates the arts of indigenous women throughout the Americas. Students will participate in research, discussion of selected readings, written assignments and individual presentations concerning the non-western aesthetics and ideals that are found in arts of Indian women from the 20th century forward. No student may earn credit for both 4853 and 5853. (Irreg.) [IV-NW]
A HI	4873	Japanese Art	(Slashlisted with 5873) Prerequisite: junior standing or permission of instructor. Examines and interprets selected works of Japanese art from prehistory to the present in reference to the possible influences from the social, political, economic, literary, and religious "climate" of the time. No student may earn credit for both 4873 and 5873. (Irreg.) [IV-NW]
A HI	4883	Chinese Art	(Slashlisted with 5883) Prerequisite: junior standing. A general survey of the art of China from the Neolithic period through the 20th century. No student may earn credit for both 4883 and 5883. (Irreg.) [IV-NW]
A HI	4913	Seminar	(Slashlisted with 5913) Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 12 hours. Advanced topics in art history. No student may earn credit for both 4913 and 5913. (Irreg.)
A HI	4930	Internship	1 to 6 hours. Prerequisite: permission of instructor; majors only. May be repeated; maximum credit 6 hours. Students arrange and participate in a professional work experience with an approved internship site. (Irreg.)
A HI	4953	Museum Studies	(Slashlisted with 5953) Prerequisite: junior standing. Analysis of problems in collecting, authenticating, exhibiting and conserving works of art. Attention is also given to museum architecture and administration, as well as to the cultural and educational role of the museum in the community. Field trips, projects and papers are required. No student may earn credit for both 4953 and 5953. (Irreg.)
A HI	4960	Directed Readings	Prerequisite: six hours of upper-division art history and permission of instructor. May be repeated; maximum credit six hours. Research culminating in the preparation of papers using technical and critical literature in the history of art. (Irreg.)
A HI	4963	Museum Studies Seminar	Prerequisite: junior standing. Intended to provide an introduction to the museum profession and particularly to art museums. The class will consist of lectures/discussion and field trips to art museums (as well as other kinds) in Norman, Oklahoma City, Tulsa and Fort Worth. No student may earn credit for both 4963 and 5963. (Irreg.)
A HI	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
A HI	4990	Independent Study	1 to 3 hours. Prerequisite: senior standing and permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
A HI	4993	Senior Capstone Experience	Prerequisite: senior classification. May not be repeated for credit. Primary objective is to provide a culminating experience for the senior-year student. Satisfies the University-wide General Education Requirement for a capstone course for art history majors. (F, Sp) [V]

A HI	5113	Cycladic Art	(Slashlisted with 4113) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. The Bronze Age culture of the Aegean Islands with special emphasis on Cycladic idols and monumental paintings on the island of Thera (Santorini). No student may earn credit for both 4113 and 5113. (Irreg.)
A HI	5123	Minoan Art and Architecture	(Slashlisted with 4123) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Examination and interpretation of Minoan palatial architecture and related art production on the island of Crete. No student may earn credit for both 4123 and 5123. (Irreg.)
A HI	5143	Mycenaean Art and Architecture	(Slashlisted with 4143) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Art of mainland Greece with particular attention to Mycenaean settlements and funeral practices. No student may earn credit for both 4143 and 5143. (Irreg.)
A HI	5163	Etruscan Art	(Slashlisted with 4163) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Examine and interpret selected works of Etruscan art in reference to the possible influences from the social, political, economic, literary, and religious "climate" of the time. No student may earn credit for both 4163 and 5163. (Irreg.)
A HI	5203	Reflections on Western Art	Prerequisite: graduate standing in the School of Art and Art History. Focus on topics in western American art, contrasting contemporary with traditional interpretations, as well as formal with social implications of the subject. Issues to be considered include gender and ethnicity; historiography and the impact of changing perceptions; western art as historical analogue vs. art as creative expression; and art of frontier America as a form of national identity, as commercial and social exploitation and as aesthetic tradition. Content will concentrate on the 19th and early 20th century painters, sculptors, and print makers who derived artistic themes from the trans-Mississippi west. (Irreg.)
A HI	5210	Graduate Readings	1 to 6 hours. Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change of subject; maximum credit nine hours. Selected readings in art history. (Irreg.)
A HI	5213	Ancient Portraits	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. This course examines works from different western and non-western ancient cultures to establish a working definition of the art of portraiture. (Irreg.)
A HI	5220	Graduate Projects	1 to 6 hours. Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change of subject; maximum credit nine hours. Individual problems on selected topics. (Irreg.)
A HI	5233	Medieval Art I: Early Christian to C 1100	(Slashlisted with 4233) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. A study of Western art and architecture from the early Christian period (fourth century) through the Early Romanesque period (about 1100). Studies of Byzantine, Migratory, Insular, Hispano-Islamic, Carolingian and Ottonian art included. No student may earn credit for both 4233 and 5233. (Irreg.)
A HI	5243	Medieval Art II: Romanesque	(Slashlisted with 4243) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. European medieval art of 11th and 12th centuries. Romanesque, the first pan-European art style, is formulated during a period of urban growth and the beginning of the university system. One of the most significant achievements during the Romanesque is the iconographical portal. No student may earn credit for both 4243 and 5243. (Irreg.)

A HI	5253	Medieval Art III: Gothic	(Slashlisted with 4253) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. European late Medieval art from mid-12th century to mid-15th century. Beginning with Gothic and continuing into early Renaissance, when two distinct styles come about simultaneously: Flemish and early Renaissance. No student may earn credit for both 4253 and 5253. (Irreg.)
A HI	5273	Byzantine Icons	(Slashlisted with 4273) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Byzantine images occupy a principal position at the heart of the Eastern Church and they are an organic part of daily services. The icon represents a vision of the invisible, and therefore a vision founded on divine knowledge which transforms the created work into the miracle working image. This class will examine the challenging process of producing holiness and divinity through painting panels. No student may earn credit for both 4273 and 5273. (Irreg.)
A HI	5303	Early Renaissance Art in Italy	(Slashlisted with 4303) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Italian painting, sculpture, and architecture between 1250-1500, emphasizing the birth of the Renaissance from a social and cultural framework. No student may earn credit for both 4303 and 5303. (Irreg.)
A HI	5333	High Renaissance and Mannerist Art in Italy	(Slashlisted with 4333) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Italian High Renaissance and Mannerist painting, sculpture, and architecture between 1500-1600. No student may earn credit for both 4333 and 5333. (Irreg.)
A HI	5343	Italian Decorative Complexes	Prerequisite: graduate standing in the School of Art & Art History. Designed for art history and non-art history majors studying abroad in Italy. Explores the history of sculpture, architecture and painting produced in Italy with particular emphasis on the renaissance in Tuscany between c. 1250 to 1534. No student may earn credit for both 4343 and 5343. (Irreg.)
A HI	5373	The Italian City: Renaissance and Baroque Architecture	(Slashlisted with 4373) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Architecture and urban planning of Italy from about 1300-1700. Emphasis on the growth of the city and how new forms of social interaction affected the development of architecture and the urban setting. No student may earn credit for both 4373 and 5373. (Irreg.)
A HI	5403	Southern Baroque Art	(Slashlisted with 4403) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Italian painting, sculpture, architecture from 1600-1700. This course will emphasize the effects of the Counter-Reformation on art and artists in Rome. No student may earn credit for both 4403 and 5403. (Irreg.)
A HI	5463	Issues in Northern Baroque Art	Prerequisite: Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Looks at northern Baroque art as a case study for the examination of a variety of art historical problems such as attribution, function, interpretation, and symbolism. (Irreg.)
A HI	5503	Art of the 18th Century: The Age of Enlightenment	(Slashlisted with 4503) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Emphasizes the interaction of art with scientific, literary, historic and philosophical innovations of the eighteenth century. Content includes painting, sculpture and architecture of Northern Europe. No student may earn credit for both 4503 and 5503. (Irreg.)
A HI	5553	Nineteenth-Century Art	(Slashlisted with 4553) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. European art from the French Revolution to 1900, with particular emphasis on developments in French painting. Brief consideration of parallel trends in American art. No student may earn credit for both 4553 and 5553. (Irreg.)

A HI	5613	Readings in Twentieth-Century Art	(Slashlisted with 4613) Prerequisite: permission of instructor. Explores the cultural/intellectual context of the Fauves, German Expressionists, Cubists, Constructivists, Futurists, Dadas, Surrealists, Etc., through artists' and critics' writings and manifestoes as well as other arts such as poetry, drama and dance. Readings, presentations, and critical writings will be assigned. No student may earn credit for both 4613 and 5613. (Irreg.)
A HI	5633	Modern Art: Cezanne to 1950	(Slashlisted with 4633) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. European art from Postimpressionism to 1950, including some American developments. Emphasis on painting and sculpture, with some consideration of architecture. No student may earn credit for both 4633 and 5633. (Irreg.)
A HI	5643	Art After Modernism	(Slashlisted with 4643) Prerequisites: graduate standing; permission of instructor. Examines the transition from modern to contemporary art in Europe and the United States between 1950 and 1989. No student may earn credit for both 4643 and 5643. (Irreg.)
A HI	5653	Art Since World War II	(Slashlisted with 4653) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Recent developments in art, both in the United States and abroad. No student may earn credit for both 4653 and 5653. (Irreg.)
A HI	5663	Women in Contemporary Art	(Slashlisted with 4663) Prerequisite: graduate standing in the School of Art and Art History. Discussions concerning women's issues in contemporary art, current women artists and their art works. The notion of a "female sensibility" will be examined. Students will engage in individual and group presentations, both of artists and critical issues. Essay writing and preparation of bibliographies. No student may earn credit for both 4663 and 5663. (Irreg.)
A HI	5673	Modern Sculpture	(Slashlisted with 4673) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. A study of changing concepts in sculpture from neo-classicism to the present day. No student may earn credit for both 4673 and 5673. (Irreg.)
A HI	5693	World Modernisms	(Slashlisted with 4693) Prerequisites: graduate standing; permission of instructor. Examines modernisms of the world between 1960 and 1989 with a strong emphasis on traditions outside the West. No student may earn credit for both 4693 and 5693. (Irreg.)
A HI	5703	History of Photography, 1839-1945	(Slashlisted with 4703) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. A survey of the history of photography from 1839 to 1945. Topics include photography as art; social, technical, mechanical, scientific and aesthetic factors in the development of the medium. No student may earn credit for both 4703 and 5703. (Irreg.)
A HI	5713	History of Photography: 1945-Present	(Slashlisted with 4713) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. A survey of the principal movements, ideas and motifs of photography from post-World War II until the 1990's. No student may earn credit for both 4713 and 5713. (Irreg.)
A HI	5723	Cinema of the American West: Then and Now	(Slashlisted with 4723) Prerequisite: graduate standing; majors only or permission of instructor. Provides a critical overview of cinema of the American West from the 1930s to present day. Through screenings and course readings, examines the underlying components of Western films, including issues of race, class, ethnicity, gender, sexuality, and ideology. Also explores the influence of painting and photography on cinema, as filmmakers both reinforced and reshaped popular imaginings of the American West. No student may earn credit for both 4723 and 5723. (Irreg.)

A HI	5743	The American West in Art, Photography, and Popular Culture	(Slashlisted with 4743) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Focuses on the study of the Trans-Mississippi West, as seen through the eyes of artists and photographers from the early 19th century until today. A variety of media will be discussed, including paintings, prints, photography, and sculpture. The purpose of the course will be primarily to study Euro-American artistic conventions/tradition and how they have been employed in defining western history, culture, and native peoples as fact, fiction, and myth. No student may earn credit for both 4743 and 5743. (Irreg.)
A HI	5753	The American West in Photography	(Slashlisted with 4753) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. This course focuses on the study of the trans-Mississippi west as seen through the eyes of photographers from the early 19th century up to the present. The purpose of this course will primarily be to study Euro-American photographic conventions, traditions, and styles and how they have been employed in defining American western history, culture and native peoples as fact, artistic motif and myth. No student may earn credit for both 4753 and 5753. (Irreg.)
A HI	5763	The American West in Myth and Memory	Prerequisite: graduate standing; majors only or permission of instructor. An interdisciplinary graduate seminar that critically addresses the mythologies of the American West, and the ways they are remembered and expressed over generations. Spanning topics such as colonization, the nuclear west, and terrorism, the course explores the schism between individual memories and public accounts of collective trauma, and the resulting debates over how to remember. Thematically examines expressions of memory through films, memorials, museum exhibits, and other forms of visual culture. (Irreg.)
A HI	5823	20th Century American Indian Art History	(Slashlisted with 4823) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Examination and study of the arts of North American Indians. Included in the survey will be the examination of new materials, styles, and the shifts of gender roles in the creative arts. No student may earn credit for both 4823 and 5823. (Irreg.)
A HI	5843	20th Century Hispanic and Latin American Art History	(Slashlisted with 4843) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Visual arts of Mexico, Central and South America. Interdisciplinary methodology includes painting, sculpture, photography, video installations, pottery, and weaving. No student may earn credit for both 4843 and 5843. (Irreg.)
A HI	5853	American Indian Women Artists	(Slashlisted with 4853) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Investigates the arts of indigenous women throughout the Americas. Students will participate in research, discussion of selected readings, written assignments and individual presentations concerning the non-western aesthetics and ideals that are found in arts of Indian women from the 20th century forward. No student may earn credit for both 4853 and 5853. (Irreg.)
A HI	5873	Japanese Art	(Slashlisted with 4873) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Art and architecture in Japan from prehistory to the present. No student may earn credit for both 4873 and 5873. (Irreg.)
A HI	5883	Chinese Art	(Slashlisted with 4883) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. A general survey of the art of China from the Neolithic period through the 20th century. No student may earn credit for both 4883 and 5883. (Irreg.)
A HI	5903	Methodologies and Theories in Art History	Prerequisite: graduate standing in art history or senior standing with permission of instructor. A study of various scholarly approaches to the history of art, as well as the theories which inform these approaches. Preparation of bibliographies; short presentations and papers. (Irreg.)

A HI	5911	Teaching of Art History	Prerequisites: graduate standing; permission of instructor. Introduction to pedagogy for art history graduate students. It is required for Graduate Teaching Assistants with teaching assignments, and they should normally take it in the first semester of their appointment. The course focuses on principles and practices of good teaching and uses hands-on methods to encourage students to gain confidence and share ideas. Through a series of practical assignments students will increase their competency in creating and evaluating assignments, developing syllabi, and leading discussion sections. (Irreg.)
A HI	5912	Professional Writing for Art Historians	Prerequisites: graduate standing; permission of instructor. This course is intended for graduate students pursuing an art history degree at the M.A. or Ph.D. level. It aims to teach professional writing skills necessary for a career in academia or the art world with a focus on proposals for conferences and grants. (Irreg.)
A HI	5913	Seminar	(Slashlisted with 4913) Prerequisite: permission of instructor. May be repeated with change of content; maximum credit twelve hours. Advanced topics in art history. No student may earn credit for both 4913 and 5913. (Irreg.)
A HI	5930	Graduate Internship	Prerequisite: graduate standing; permission of instructor. Variable credit: 1-6 hours. May be repeated; maximum credit 6 credit hours. An Internship is a planned work experience related to a student's personal career and academic goals. It can help a student learn about a career, apply knowledge gained in the classroom, develop skills, and enrich the student's understanding of a variety of art organizations. The primary purpose of an internship is to help relate academic experiences with those in the workplace. (Irreg.)
A HI	5953	Museum Studies	(Crosslisted with 4953) Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Analysis of problems in collecting, authenticating, exhibiting and conserving works of art. Attention is also given to museum architecture and administration, as well as to the cultural and educational role of the museum in the community. Field trips, projects and papers are required. No student may earn credit for both 4953 and 5953. (Irreg.)
A HI	5960	Directed Readings	Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Research culminating in the preparation of papers using technical and critical literature in the history of art. (Irreg.)
A HI	5963	Museum Studies Seminar	Prerequisite: junior standing. Intended to provide an introduction to the museum profession and particularly to art museums. The class will consist of lectures/discussion and field trips to art museums (as well as other kinds) in Norman, Oklahoma City, Tulsa and Fort Worth. No student may earn credit for both 4963 and 5963. (Irreg.)
A HI	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
A HI	5972	Thesis Proposal	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. Students will create a research topic, select a thesis committee and formulate a proposal and bibliography approved by their committee. (Irreg.)
A HI	5980	Research for Master's Thesis	2 to 9 hours. Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated for credit; maximum credit applicable toward degree, four hours. Directed research culminating in the completion of the master's thesis. (Irreg.)

A HI	5983	Graduate Readings in Museology: Power, Privilege and Ethics	Prerequisite: graduate standing; Art History majors only or permission of the instructor. An interdisciplinary graduate seminar that examines museum ethics in both theoretical and practical contexts. Topics include the acquisition and conservation of art and artifacts, debates over display and interpretation, repatriation and the rights of Native peoples, and overarching questions of ideology and power. Special emphasis is placed on museum processes, collections, and exhibitions pertaining to the American West. (Sp)
A HI	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
A HI	5993	Special Studies	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated; maximum credit twelve hours. Advanced studies in various periods of art history, given under stated titles determined semester by the instructor involved. (Irreg.)
A HI	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
A HI	6103	Regional Art and Artists	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change in topic; maximum credit 12 hours. Advanced seminar that will examine in depth various concepts, individuals, schools, movements or themes. Topics may include: contemporary Oklahoma artists; Grant Wood, Thomas Hart Benton, 16 Taos and Santa Fe painters; contemporary Santa Fe artists; and Oklahoma artists 1880-1950. (Irreg.)
A HI	6203	Native American Art	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change in topic; maximum credit 12 hours. Advanced seminar that will examine in depth various concepts, individuals, schools, movements, or themes. Topics may include: Oklahoma Native American artist; Ledger art; art of Native American people; contemporary Native American painters; Native American sculptors; southwestern Native American weaving; jewelry; beadwork; potteries; coastal American art of the northwest; and native arts of Hawaii. (Irreg.)
A HI	6303	Western American Art	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change in topic; maximum credit 12 hours. Advanced seminar that will examine in depth various concepts, individuals, schools, movements, or themes. Topics may include: contemporary western American artists; the impact of the west in New York artist - 1880-1920; Remington and Russell; Eastern artists and their western sojourns; monumental western American sculptors of the 19th or 20th century; utilitarian art of the west - saddles and tack, spurs, leather and ironwork; and American illustrators to artists. (Irreg.)
A HI	6403	19th Century American Art	Prerequisite: graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change in topic; maximum credit 12 hours. Advanced seminar that will examine in depth various concepts, individuals, schools, movements, or themes. Topics may include: the western landscape in 19th century American art; 19th century American folk art; 19th and 20th century American landscape photographers; natural America as seen by native Americans and Europeans -- a comparison; John James Audubon and the naturalists; the commemorative sculpture legacy of the Civil War; American mythology in 19th and 20th century art; American masters of the 19th century. (Irreg.)

A HI	6423	Topics in American Art History	Prerequisite: Graduate standing in the School of Art and Art History or permission of instructor. Interdisciplinary seminar addressing topics in the history of American art, its focus changing from year to year though always concerned with developments in the art of the American west, based on close, restrained analysis of particular images combined with readings in art history and related disciplines. (Irreg.)
A HI	6433	American Art and Material Culture	Prerequisite: Graduate standing in the School of Art and Art History or permission of the instructor. Interdisciplinary seminar addressing the significance of ordinary objects taken as evidence of unconscious as well as conscious attitudes and beliefs, some specific to their original makers, users, owners and receivers, others latent in the broader cultural milieu in which each object circulated or circulates still. (Irreg.)
A HI	6473	Issues in Spanish Colonial Architecture	Prerequisite: graduate standing. Class will focus on the development of Spanish colonial architecture in the Americas from the sixteenth through the eighteenth centuries, focusing on methodological issues and current scholarship. (Irreg.)
A HI	6503	Contemporary American Art	Prerequisite: Graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change in topic; maximum credit 12 hours. Advanced seminar that will examine in depth various concepts, individuals, schools, movements or themes. Topics may include: Post-modernism and its view of western American icons; contemporary native American southwestern artists; the west coast artists; California impressionism; Peter Hurd and his contemporaries; black American artists; Georgia O'Keeffe and the ghost ranch years; 20th century American immigrants and their art; American innocents; outsiders art and folk artists; contemporary American crafts; contemporary American illustration and graphic design; and contemporary American architecture (Irreg.)
A HI	6513	Critical Issues in Recent American Art History	Prerequisite: Graduate standing in the School of Art and Art History or permission of the instructor. Interdisciplinary seminar addressing critical issues in recent American art history through close attention to a series of recent monograms by major figures in the field. (Irreg.)
A HI	6603	Cross Cultural Art of the Americas	Prerequisite: Graduate standing in the School of Art and Art History or permission of the instructor. May be repeated with change in topic; maximum credit 12 hours. Advanced seminar that will examine in depth various concepts, individuals, schools, movements or themes. May be repeated with a change in topic. Topics may include: the Canadian seven; Mexican art in the 19th century; pottery of San Ildefonso pueblo; pottery of Santa Clara pueblo; New York's influence on Emilo Amero and his Mexican contemporaries; Diego Riveria in America; Jean Charlot and his American murals; and Inuit art of the Artic. (Irreg.)
A HI	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
A HI	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
A HI	6973	Dissertation Proposal	Prerequisite: completion of core coursework for the PhD in Art History. Students will create a research topic and formulate a proposal and bibliography approved by their Doctoral committee. (F, Sp)
A HI	6980	Research for Doctoral Dissertation	Prerequisite: Successful completion of the general examination. Directed research culminating in the completion of the Doctoral dissertation. May be repeated for credit; Maximum credit applicable toward the degree is nine hours. (F, Sp)

A HI	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ACCT	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
ACCT	2113	Fundamental Financial Accounting	Prerequisite: Business Administration 1001 or concurrent enrollment. Basic principles of financial accounting. Emphasis on the preparation and use of the income statement, balance sheet and statement of funds flow for corporations. Coverage includes the analysis and recording of transactions involving cash, inventories, fixed assets, bonds and capital stock as well as closing, adjusting and reversing entries for revenue and expense items. (F, Sp, Su)
ACCT	2123	Fundamental Managerial Accounting	Prerequisite: 2113. Introduction to managerial accounting. Analysis of cost behavior and the use of this knowledge for both short- and long-term decision. An introduction to budgeting and the accumulation of product costs for planning and performance evaluation. Specific coverage includes cost-volume-profit analysis, capital budgeting, allocations, variances from standard costs and the measurement of divisional performance. (F, Sp, Su)
ACCT	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
ACCT	3023	International Financial Statement Analysis	(Crosslisted with B AD 3023) Prerequisite: 2113 and 2123. A review of international financial reporting development, procedures and standards with an emphasis on financial statement interpretation and analysis. Not open to accounting majors. (Irreg.)
ACCT	3033	Financial Reporting Issues in Energy	Prerequisite: Energy Management 3001 or concurrent enrollment and student must be a declared Energy Management major and have been approved for degree candidacy by Price College. Study of financial reporting issues directed toward energy companies. Review of the accounting cycle with an emphasis on the accounting treatment for acquisition of mineral interests, geological and geophysical costs, intangible drilling costs, delay, rental, dry hole costs, lease and well equipment, joint interest billing and royalties payable. (Sp)
ACCT	3113	Intermediate Accounting I	Prerequisite: ACCT 2113 and ACCT 2123 with a grade of C or better in each course. Valuation and other theoretical problems in accounting for cash, temporary investments, receivables, inventories, long-term investments, plant and equipment and intangible assets. (F, Sp)
ACCT	3123	Intermediate Accounting II	Prerequisite: 3113 and junior standing. Stockholders' equity, dilutive securities, investments, issues related to income determination including revenue recognition, accounting for income taxes, pensions, leases and error analysis, preparation and analysis of financial statements, including price level changes and statement of changes in financial position. (F, Sp)
ACCT	3313	Cost Accounting	Prerequisite: 2123, junior standing. Basic cost principles. Job order costing, process and joint costing, and estimated costs. (F, Sp)
ACCT	3353	Accounting Information Systems/Databases	(Crosslisted with MIS 3353) Prerequisite: Student must be approved for degree candidacy by Price College, or permission. A study of the structure, flow and use of financial and non-financial data in computer-based environments with a heavy emphasis on ensuring data integrity. Conceptual data modeling using business rules, normalization, structured query language (SQL), and physical database design and data administration. Course includes cross-functional team project with phased deliverables. (F, Sp)

ACCT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ACCT	3603	Income Tax Accounting I	Prerequisite: 3113 or permission, junior standing. Introduction to the taxation of income including issues related to the measurement and recognition of income, deductions and losses; the taxation of property transactions; basis and cost recovery concepts; and alternative forms of business organization. (F, Sp)
ACCT	3960	Honors Reading	1 to 3 hours. Prerequisite: junior or senior standing, admission to the Honors Program. May be repeated; maximum credit six hours. Independent study in field of accounting and related disciplines to broaden student's perspective in general field of business. (F, Sp)
ACCT	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
ACCT	3980	Honors Research	1 to 3 hours. Prerequisite: junior or senior standing, admission to the Honors Program. May be repeated; maximum credit six hours. Independent research in field of accounting and related disciplines to apply research techniques learned in research tool courses to actual business situations. (F, Sp)
ACCT	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (Irreg.)
ACCT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ACCT	4113	Selected Topics in Advanced Accounting	Prerequisite: ACCT 3113, ACCT 3123, and junior standing . Consolidated financial statements, business combinations, branch accounting, foreign currency transactions and financial statements, governmental accounting, partnerships. (Irreg.)
ACCT	4543	Auditing	Prerequisite: ACCT 3113, ACCT 3123, completion of 3000-level Business core, and ACCT 3353 or concurrent enrollment. Auditing concepts, standards, principles, and procedures; coverage includes professional ethics, auditors' legal responsibilities, EDP control systems, audit sampling, and audit reports. (F, Sp)
ACCT	4563	Oil and Gas Accounting I	Prerequisite: ACCT 3123, FIN 3303, L S 3323, MGT 3013, and MKT 3013. May be taken concurrent with ACCT 3123. A study of financial accounting issues specifically directed toward oil and gas companies. Includes basic oil and gas transactions such as leases, subleases, free wells, farmouts, and carried interests. This course also covers accounting for acquisition costs, exploration and development costs, operating costs, joint interest costs, and revenue accounting for oil and gas companies. Field trip is required. No student may earn credit for both 4563 and 5563. (F)
ACCT	4703	Income Tax Accounting II	(Slashlisted with 5703) Prerequisite: 3603 or permission, junior standing. Advanced issues related to the taxation of multi-jurisdictional operations and transactions involving corporations, partnerships, estates, and trusts, and their owners throughout the life of the entity. No student may earn credit for both 4703 and 5703. (F, Sp)
ACCT	4710	Special Topics in Accounting	Prerequisite: 2113, 2123. May be repeated with change of topic; maximum credit six hours. Topics may include any accounting related area. (F, Sp, Su)

ACCT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ACCT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ACCT	4990	Special Problems in Accounting	1 to 2 hours. Prerequisite: 24 hours of accounting. Directed readings and problems under staff supervision for advanced students. A comprehensive report and/or examination is required. (F, Sp, Su)
ACCT	5023	International Financial Statement Analysis	Prerequisite: 5013 or permission. A review of international financial reporting developments, procedures, and standards with an emphasis on financial statement interpretation and analysis. (Irreg.)
ACCT	5100	Accounting Professional Development	Prerequisite: admission into the BBA/MAcc or MAcc program. Introduces students to a wide range of business and professional issues, including developing current events not covered elsewhere in the curriculum, as well as to build and expand on topics that are covered. The course will also help students develop and polish some of the skills necessary for professional and personal success. (Irreg.)
ACCT	5113	Advanced Accounting	Prerequisite: 3113, 3123, and graduate standing. Topics in this course will cover firms that have merged with or acquired other companies; the effects of doing business in foreign currencies with changing exchange rates, and how to account for these currency issues; and the accounting and reporting for governmental and nonprofit organizations. The main focus will be on reporting consolidated financial statements for entities that are made up of related but legally-separate firms. (F, Sp)
ACCT	5202	Financial Accounting	Prerequisite: graduate standing. Students will learn to construct and analyze financial statements of for-profit corporate enterprises. The basic accounting model including financial statement recording and preparation will be covered. A major emphasis will be placed on using financial statements for decision making by investors, creditors, and other users. Basic ratio analysis and valuation concepts will be introduced. (Irreg.)
ACCT	5212	Managerial Accounting	Prerequisite: 5202 and graduate standing. This course emphasizes the use of accounting information for internal planning and control purposes and introduces students to the types of managerial information used to effectively and efficiently run a business. Covers basic issues in costing, including activity based costing and product costing; the generation and interpretation of information for planning and strategic decision making, including pricing, make-or-buy analysis, and cost-volume-profit analysis; and the production and use of information related to performance measurement, including non-financial performance measures. (Irreg.)
ACCT	5351	Applied Financial Statement Analysis Lab	Prerequisite: graduate standing and permission of instructor; corequisite: 5352. Provides an opportunity to apply skills and knowledge learned in Accounting 5352, Financial Statement Analysis Theory and Methods to a real company. Students are required to complete a financial analysis of a publicly held company including comprehensive strategic and ratio analysis and valuation. (Irreg.)
ACCT	5352	Financial Statement Analysis Theory and Methods	Prerequisite: graduate standing and permission of instructor. Intended to increase your ability to use and make decisions using information presented in the financial statements of publicly traded companies. A number of different decision contexts will be examined including valuation of potential acquisitions, investment analysis, credit analysis, managing corporate financing policies and analyzing business communications. Will consider the role of both accounting and non-accounting information. (Irreg.)

ACCT	5353	Financial Statement Analysis	Prerequisite: graduate standing or permission of instructor. Topics in analysis and use of general purpose financial statements for decision making, ratio analysis, credit risk, and valuation will be covered. (Irreg.)
ACCT	5363	Accounting Information Systems Seminar	Prerequisite: Permission Advanced Accounting information systems topics and current trends in accounting information systems. (Irreg.)
ACCT	5403	Accounting Ethics and Professional Responsibilities	Prerequisite: graduate standing, 24 hours of accounting, and permission. Examines the ethical issues encountered by, and the professional and legal obligations of, practicing accountants with the ultimate goal of enhancing ethical decision-making and behavior in the profession. Applies both ethical theories of decision-making and professional standards to real-world problems encountered across various functional areas of accounting. (Irreg.)
ACCT	5543	Contemporary Auditing Issues	Prerequisite: 4543, graduate standing and permission. Designed to enhance students' understanding of the fundamental concepts of auditing through the analysis and discussion of actual problematic audits or audit-related situations. Emphasis is also placed on the key ethical issues that face audit practitioners. (Irreg.)
ACCT	5553	Fraud Examination	Prerequisite: 4543, graduate standing or permission. To develop a broad understanding of the different types of fraud that affect organizations, as well as to learn how and why fraud occurs. To understand the fundamentals regarding fraud prevention and detection. To learn how to conduct fraud investigations. To learn what is required of external auditors regarding fraud. The course focuses on organizational fraud (e.g. employee and management fraud). (Irreg.)
ACCT	5563	Oil & Gas Accounting I	Prerequisites: graduate Standing and permission of instructor. A study of financial accounting issues specifically directed toward oil and gas companies. These include basic oil and gas transactions such as leases, subleases, free wells, farmouts, and carried interests. This course also covers accounting for acquisition costs, exploration and development costs, operating costs, joint interest costs, and revenue accounting for oil and gas companies. A requirement of this course is a field trip which will take all day on a designated Friday. No student may earn credit for both 4563 and 5563.(F)
ACCT	5573	Advanced Oil and Gas Accounting and Taxation	Prerequisites: ACCT 4563 or ACCT 5563, ACCT 3603, and Graduate standing. This course will cover accounting for derivatives, asset retirement obligations, supplemental footnote disclosures, analysis of financial statements of oil and gas companies, and alternative sources of energy. Approximately 1/3 of the course will be devoted to taxation of oil and gas companies. (Irreg.)
ACCT	5613	Tax Research and Practice	Prerequisite: 4703. Focus on the development of skills necessary to resolve issues in tax practice. Objectives include: 1) develop knowledge of tax research resources; 2) understand the framework of tax law; and 3) understand ethics as applied to tax practice. (Irreg.)
ACCT	5703	Income Tax Accounting II	(Slashlisted with 4703) Prerequisite: 3603 or permission and junior standing. Advanced issues related to the taxation of multi-jurisdictional operations and transactions involving corporations, partnerships, estates, and trusts, and their owners throughout the life of the entity. No student may earn credit for both 4703 and 5703. (F, Sp)
ACCT	5951	Research Methods in Accounting	Prerequisite: candidacy for the degree of Master of Arts with a major in accounting, permission. Enrollment for one semester will be required of all graduate students working toward the degree of Master of Arts with a major in accounting. This seminar must be completed as a condition precedent to enrollment in 5980 and writing the master's thesis. (F, Sp, Su)
ACCT	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)

ACCT	5970	Seminar	1 to 3 hours. Prerequisite: graduate standing and permission. May be repeated with change of subject matter; maximum credit eight hours. A seminar for graduate students, with topics to be announced each time the course is offered. (F, Sp, Su)
ACCT	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
ACCT	5990	Research in Accounting	1 to 4 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit eight hours. (F, Sp, Su)
ACCT	5999	Accounting Unequated Trf Work	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ACCT	6193	Introduction to Accounting Research	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit six hours. A survey of current topics appearing in the academic accounting literature. Students will analyze and critique emerging original research in accounting. Intended for, but not restricted to, doctoral accounting students to provide a foundation for their future research efforts. Required for all Ph.D. students whose dissertation topic is in the area of accounting. (Irreg.)
ACCT	6553	Accounting Theory and Research	Prerequisite: graduate standing, 24 hours of accounting and permission. Examines the history and development of accounting theory and its reflection in current professional standards. In the process, the course also facilitates the development of the knowledge and skills necessary to research and analyze specific practice and policy issues. (Irreg.)
ACCT	6613	Federal Income Taxation of Corporations and Shareholders	Prerequisite: graduate standing, 4613 (or concurrent enrollment in 4613) and permission. An advanced study of corporate income taxation including: corporate formation, concept of earnings and profits, acquisitions and liquidations, reasonable compensation, stock redemptions, accumulated earnings tax, personal holding companies, reorganizations, Subchapter S corporations and other tax areas. (Irreg.)
ACCT	6643	Federal Estate and Gift Tax Planning and Practice	Prerequisite: 4613 (or concurrent enrollment in 4613), graduate standing and permission. An intensive study of property owned by the decedent, powers of appointment, life insurance, valuation issues and techniques, deductions from the gross estate, estate tax credits, transactions subject to the gift tax, gift and estate tax returns and procedures, and emphasis on pre- and post-mortem estate planning. (Irreg.)
ACCT	6713	Judgment and Decision Making Research Seminar	Prerequisite: 6193 or permission of instructor. Introduces basic psychology research in judgment and decision making, explores accounting and accounting-related work in judgment and decision making, and develops evaluation skills for experimental research. (Irreg.)
ACCT	6723	Archival Financial Reporting Research Seminar	Prerequisite: 6193 or permission of instructor. Heavy emphasis placed on basic theory and empirical findings of how accounting information relates to market prices. Additional topics may include archival evidence of firm's earnings management activities, the role of financial analysts' earnings forecasts in financial accounting research, and cross-company differences in financial reporting. (Irreg.)
ACCT	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ACCT	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)

ACCT	6973	Seminar	Prerequisite: 6193 or permission of instructor. May be repeated with change of topic; maximum credit six hours. Seminar in latest developments in research and theory from one of the following general areas of accounting: auditing, taxation, positive theory, managerial accounting, or financial reporting. Specific topic is announced for each time of offering. (Irreg.)
ACCT	6980	Research for Doctor's Dissertation	2 To 16 Hours. (F, Sp, Su)
ACCT	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
AERO	1011	Introduction to Aerospace Studies	Prerequisite: departmental permission; concurrent enrollment in 1300. A study of the doctrine, mission and organization of the United States Air Force. Emphasis is placed on the purpose of strategic offensive and defensive forces and their inherent relationship to the function and employment of aerospace power. (F)
AERO	1021	The Air Force Today	Prerequisite: departmental permission; concurrent enrollment in 1300. A study of aerospace defense, missile defense, general purpose forces and aerospace support forces. The mission, resources and operation of tactical air forces, with special attention to limited war; and a review of Army, Navy and Marine general purpose forces. (Sp)
AERO	1300	Leadership Laboratory	Prerequisite: concurrent enrollment in 1011, 1021, 2011, 2021 or permission. May be repeated a maximum of three times. Designed to introduce the student to the customs and courtesies associated with the Air Force. Also provides a practicum for the initial development of leadership and command abilities. (F, Sp)
AERO	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
AERO	2011	The Evolution of USAF Air and Space Power I	Corequisite: 1300. The development of air power to include the technological advanced which made military aviation possible. American attitudes toward aviation, evolution of pursuit, reconnaissance, bombardment and ground support tactics, the interwar years (1919-1939), air power during World War II, the Berlin Airlift, the Korean War, the development of an independent Air Force, and the Air Force build-up/force modernization of the 1950s. (F)
AERO	2021	The Evolution of USAF Air and Space Power II	Corequisite: 1300. A study of the development of airpower in the post-World War II period. Special emphasis is placed upon airpower and Cold War strategies, the Cuban Missile Crisis, Airpower in southeast Asia, the 1970's a decade of change, the 1980's force modernization, the changing balance and role of airpower relative to today's major military powers. An introductory study of leadership, team building, and problem solving. (Sp)
AERO	3013	Air Force Leadership and Management 1	Prerequisite: departmental permission. An introductory study of the basic concepts and practices of management in the military, private and public sectors. Emphasis is placed upon the principles of organizational communications and the development of oral and written communicative skills. Case studies are used to integrate and extend these principles to actual situations. Concurrent enrollment in AERO 1300 is required. (F)
AERO	3023	Air Force Leadership and Management 2	Prerequisite: AERO 3013 or permission. The study of the fundamentals, traits and techniques of leadership. Included are such topics as job design, motivation, group dynamics, decision making and organizational change. Continued emphasis on the development of communicative skills. Case problems are utilized to relate subject material to managerial principles. Concurrent enrollment in AERO 1300 is required. (Sp)

AERO	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
AERO	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
AERO	4013	American National Security I	Prerequisite: 3023 or departmental permission. Conceptual study of the U.S. national security policy examining the formulation, organization and implementation of national security; the context of national security; the evolution of strategy; and the management of conflict. Included is a block of instruction on the military justice system. Concurrent enrollment in 4100 is required. (F)
AERO	4023	American National Security II	Prerequisite: 4013 or departmental permission. Examines U.S. national security policy in the international setting; arms control and peacekeeping efforts; and civil-military interaction. Includes a study of the military profession and officership. Designed to provide future Air Force officers with a background in the profession and U.S. national security policy so that they can function effectively in today's Air Force. Concurrent enrollment in 4100 is required. (Sp)
AERO	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
AFAM	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
AFAM	2003	Introduction to African and African-American Studies	Introduces students to African and African-American Studies at the University of Oklahoma, and at other institutions of higher education in the United States. Students will study the major ideas, concepts, problems, issues, research and scholars in the field. Provides career focus and information for students who will major or minor in African and African-American Studies. (F, Sp) [IV-NW]
AFAM	2113	Africa and the Diaspora	The course introduces students to the study of Africa and the dispersion of African people throughout the New World. Focus is placed upon the geographical and historical understanding of the continent of Africa and the identification of central causes of underdevelopment within the continent. (Irreg.) [IV NW]
AFAM	2913	Perspectives on the Digital Divide: Theory and Application	This course focuses on the issue of the digital divide and the impact of computer illiteracy in today's society, with special focus on developing regions of Africa. The lack of access to communication technologies, including personal computers and the internet, is examined as an obstacle to the economic, social and political development in these regions. Focus is directed to theory and application. (Irreg.)
AFAM	3123	West African and African-American Experiences	Prerequisite: any course that focuses on African or African American content, or English 1213. Provides a basis for understanding discourse concerning the future of West Africa and Africans in the American Diaspora. Examines significant issues concerning West African people, their past, their priorities, and prognoses. (Irreg.)
AFAM	3133	Introduction to African Aesthetics	Prerequisite: any course that focuses on African or African American content, or English 1213. Explores the philosophy, culture, and aesthetic expressions of African Americans before, during, and after enslavement through a comparison of African and African American culture. Emphasis is placed upon developing a body of knowledge and analytic skills that will enable students to deepen their understanding of traditional and contemporary culture practiced by the African American community. (Irreg.) [IV-NW]

AFAM	3143	Gospel Music Past and Present	Prerequisite: junior standing. African and African-American history as it relates to gospel music. The class correlates the climate and cultural history with various genres of music that led to gospel music. Individual artists are studied not in isolation but as part of the larger cultural context. (F, Sp)
AFAM	3313	A Social History of Black Military Life: 1877-1895	Prerequisite: any course that focuses on African and African American content, or English 1213. Course presents a social history of black military life during the post-Reconstruction era. Examines the nexus between the common attitude toward African Americans in American society and American military racial policy during the post-Reconstruction era. (Irreg.)
AFAM	3323	Black Military Presence in the American West: 1866-1891	Prerequisite: any course that focuses on African or African American content, or English 1213. After the Civil War, Congress enacted legislation to authorize regiments of black enlisted men and white officers for service in cavalry and infantry units throughout the American west. This course examines African American service and heroism to this nation from 1866 to 1891 in Texas, Indian Territory, New Mexico, the Dakotas, Montana, and Arizona. The course is reading and writing intensive. (Irreg.)
AFAM	3333	Blacks in Oklahoma: A Stolen Legacy	Prerequisite: Junior standing and any 2000-level African and African American Studies class. This course examines the unique interrelationships that encouraged black migration into Oklahoma prior to statehood. The experience of African Americans in Oklahoma is characterized by the chattel slavery exercised by members of the five civilized tribes, a legacy of military service and law enforcement, organized efforts to establish Oklahoma as an all-black state, significant socio-political activity (led primarily by editors of black newspapers) and a number of historic cultural contributions. This course will provide an in-depth exploration of the historic interrelationships, socio-political activism, economic development and culture of black Oklahomans, (Irreg.)
AFAM	3343	Black Greek Letter Organizations	Prerequisite: junior standing or departmental permission and successful completion of at least one AFAM course. Examines the history and culture of black greek-letter organizations (BGLOs), the contributions of the BGLOs (also referred to as historically black fraternities and sororities) to the black community through leadership and service, and issues relevant to the future of BGLOs in the 21st century. (Irreg.)
AFAM	3413	African American Education in the United States	Prerequisite: any course that focuses on African or African-American content, or English 1213. Examines two major historical features of African American education: the ways in which the African American community has sought to educate itself and the ways in which white Americans have sought to educate African Americans. Emphasis is placed on the purpose of education, and alternative visions of educational possibility. (Irreg.)
AFAM	3423	African-American Men	Prerequisite: any course the focuses on African and African-American content, or English 1213. Examines the status and role of the African-American male, from the perspective of contemporary research and literature which should frame the extant disclosure and discussions, policy-making, and future research. (Irreg.)
AFAM	3433	African American Women	Prerequisite: any course the focuses on African or African American content, or English 1213. Examines the history and experience of African American women, focusing on race, gender, and socio-economic status and the corresponding effects of these forces in their lives. (Irreg.)
AFAM	3440	Mentored Research Experiences	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

AFAM	3443	African American Athlete	Prerequisite: any course that focuses on African or African American content, or English 1213. Examines the history, participation, and the influences of the black athlete. Provides a forum for discussion of the contemporary issues related to the Africa American athlete. (Irreg.)
AFAM	3453	The Black Athlete in America	Prerequisite: ENGL 1213 or EXPO 1213 or sophomore standing. Provides students with a historical and contemporary overview of the Black athlete in American society. This course will underscore and examine the Black athlete from a social, political, and cultural perspective. Many of the misconceptions and deep-seated stereotypes of Black athletes both in intercollegiate athletics and professional sports will be uncovered. Additionally, perspectives will be gained on the changing status of Black athletes and how those changes have engendered the changing of sport, American society, and critical triumphs within Black culture. (Irreg.)
AFAM	3513	AFAM Research Methods	Prerequisite: AFAM major or minor, junior standing. This course is designed to introduce students to research methods in African and African American studies. Qualitative and quantitative research methods are studied, discussed, and undertaken. Course design stresses the importance of using both methods to cross-validate findings. (Irreg.)
AFAM	3613	Visual Culture and African American Identity: 1895-1939	Prerequisite: any course the focuses on African or African American content, or English 1213. Examines the visual commodities of black and white cultural producers to analyze issues of caste and class status, gender, and sexuality that historically and currently inform competing notions of blackness within the public sphere. (Irreg.) [IV-NW]
AFAM	3643	African Folklore	Prerequisite: Junior standing and any 2000-level African and African American Studies class. This course investigates the continuation of traditional elements produced in diverse media and circumstances in a modern, largely urban Africa. Issues such as identity, difference, diversity; tradition and history; modernity and development; wealth and power; political change and gender relations are topics to be explored through folk expression. (Irreg.)
AFAM	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers topics not usually presented in the regular courses.
AFAM	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses.
AFAM	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
AFAM	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
AFAM	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
AFAM	4003	Senior Seminar in African and African-American Studies	Prerequisite: completion of 12 hours of required AFAM or AFAM-related courses. Provides students the opportunity to review and integrate their study in African and African-American courses. Students will be involved in academic experiences that facilitate the translation from theory to practice. Experiences will vary depending on the instructor. (Sp) [V]

AFAM	4010	Special Topics In African And African-American Studies	1 to 3 hours. Prerequisite: junior standing and any course covering African and African-American issues. May be repeated with change of content; maximum credit nine hours. Designed to permit the study of specific and changing issues and problems in AFAM Studies. Course will also be used for special workshops, conferences, seminars, etc. and individually planned and supervised activities focused on specific areas of concern. (Irreg.)
AFAM	4113	African Civilizations	Prerequisite: any course that focuses on African or African-American content, or English 1213. Examines major ancient and recent African civilizations. Includes study of state formation, kinship, government, iconography, ritual, habitat and dance, music, and art. (Irreg.)
AFAM	4123	African Politics	Prerequisite: Junior standing and any 2000-level African and African-American Studies course. The course examines African politics as it relates to civil-military relations, military coups d'etat and political liberalization and democratization. The overriding objective of the course is to familiarize students with the problems and transformation of African political systems. (Irreg.)
AFAM	4133	Contemporary Visual Art of Africa	Prerequisite: junior standing and any 2000-level African and African-American Studies (AFAM) class. This course explores current visual arts developments in Africa. The course traces the historical evolution, influences and status of contemporary African art, with special reference to established visual artists who either work within or outside of Africa. (Sp)
AFAM	4143	Africa's Role in the Contemporary World	Prerequisite: Junior standing and any 2000-level African and African-American Studies class. This course will resent Africa's contemporary reality--the positive as well as the negative--by examining major current issues after surveying Africa's history, geography, societies, and culture. Themes covered will include: political developments, regional conflicts, human rights and women's issues, economic development and poverty, refugees and migration, and the environment. The course will also examine Africa's role in US global policy priorities, including the war against terrorism. (Irreg.)
AFAM	4153	African Youth Cultures	Prerequisite: Junior standing and any 2000-level African and African-American Studies class. This course examines African youth cultures and sub cultures as they enter and transform political, social, cultural, and economic spaces. It also explores their relationship with adult, mainstream societies. We will investigate African youth's identity project - how and why they articulate and mobilize an individual and group identity. Some issues of exploration will be the following: What is youth culture and subculture? How do western concepts of individualism apply to an African context? (Irreg.)
AFAM	4213	African Dance	Prerequisite: any course that focuses on African or African American content, or English 1213. Examines various essential dance movements from the African Diaspora. Theory and praxis meet in an effort to better understand the culture and language of dance amongst African people. (Irreg.) [IV-AF]
AFAM	4223	African Dance II	Prerequisite: any course that focuses on African or African American content, or English 1213. The course is designed to deepen understanding of African dance through a combination of praxis, theory, and choreography. In this course the Umfundalai technique is taught at an accelerated pace. Students are challenged to perform advanced combinations of this dance technique. Students conduct research on African dance and African dance aesthetics. Theoretical applications of African aesthetics to African dance are made. Students explore aesthetic theory, relevant historical information and traditional African cultural philosophy through choreography. (Irreg.)
AFAM	4233	Blacks and the Movies: Hollywood and Black Independent Film	Prerequisite: any course that focuses on African or African American content, or English 1213. Historical overview of the development of African American cinema. Examines how film has been used to culturally define the parameters of black cultural identity and how black cultural producers promoted alternate constructions of black identity. (Irreg.)

AFAM	4243	The Black Arts Movement	Prerequisite: ENGL 1213 or EXPO 1213, or permission of instructor, or junior standing. Examines the literature, art, music, film, and cultural commentary of the Black Arts Movement. Focuses on the notion of 'blackness' and the black experience as developed in the cultural expressions of key figures of the Black Arts Movement, and the subsequent connection of that movement to further changes in literature, drama, film, music and art. Also explores the emergence of a critical discourse specific to a "new" black aesthetic. (Irreg.)
AFAM	4313	Harlem Renaissance	Prerequisite: any course that focuses on African or African American content, or English 1213. Examines the artistic and literary strivings of African Americans produced during the period between the post-World War I era and the Great Depression. Examines work of individual artists and literary figures. Also examines the impact of African and African American aesthetics on the development of American Modernism. (Irreg.)
AFAM	4323	Afro-Caribbean Prose	Prerequisite: Junior standing and any 2000-level African and African-American Studies class. The course will examine the theme of black identity by exploring writers form the Dominican republic, Puerto Rico, New York, and from Cuba, who humanize the image of blacks by illustrating different aspects and dimensions if the psyche in Spanish-speaking Caribbean islands. Selected texts will be examined to explore how they illustrate representations of silenced voices, address the absence of authentic characterization of blacks, and conscientiously and progressively concentrate on a new racial reality. (Sp)
AFAM	4413	Issues in the African American Family	Prerequisite: any course that focuses on African or African American content, or English 1213. The purpose of the class is to explore the inter- and intra-structural components of the African American family using an applied social systems and ecological approach. Great emphasis will be placed on historical and concurrent social, religious, political and economic factors that influence the psyche of both the family and in a broader sense a culture rooted in the Afrocentric paradigm. (Irreg.)
AFAM	4423	African American Health Issues	Prerequisite: any course that focuses upon African or African American content, or English 1213. Examines health problems, health status, and health behavior of African American men and women. A life course perspective is emphasized from birth to later life. It is assumed that being African American predisposes persons to health problems that increase the risk of disease or that influence health based on the diversity of cultural beliefs, values, and practices. Access to health services will be addressed. (Irreg.)
AFAM	4433	Women of the Diaspora	Prerequisite: any course that focuses on African or African American content, or English 1213. A comparative study of the complex roles of women of African descent in cross-cultural perspective. Examines the issue in the socio-cultural contexts of South Africa, United States, and the Caribbean. Topics include gender relations, impact of urbanization, class status, and Diasporan women as culture workers. (Irreg.)
AFAM	4453	Black/White Relations in America	Prerequisite: any course that focuses on African and African American content, or English 1213. Examines race relations in general and black/white relations in particular; creative race relations problem-solving and decision-making strategies; and self-awareness as it affects race relations. (Irreg.)

AFAM	4463	African American Psychology	Prerequisite: junior standing or departmental permission and successful completion of at least one AFAM course. Examines the psychology of the African American experience with an overview of Black/African American psychology as an evolving field of study and considers the Black/African American Psychology paradigm as one of the key conceptual frameworks for understanding the psychological experiences of African Americans. Explores a range of topics that pertain to the psychological experiences of African Americans such as racism and discrimination, achievement and schooling, kinship and family, racial identity, religion and spirituality, and African American mental health. (F, Su)
AFAM	4513	African Women and Children: Social Welfare Issues	Prerequisite: ENGL 1213 or EXPO 1213 or junior standing. Provides students with knowledge of selected social welfare issues impacting women and children in various countries in Africa. This content is presented within the social, cultural, economic and political context of the particular countries discussed. (F, Sp)
AFAM	4613	African American Music Traditions	Prerequisite: any course that focuses on African or African American content, or English 1213. Examines African cultural retentions in African American music. Emphasis is placed upon traditional African rhythms, attitudes, themes, and sounds. Investigates how these devices inform African American musical traditions. (Irreg.)
AFAM	4623	Hip Hop Culture and Contemporary America	Prerequisite: any course that focuses on African or African American content, or English 1213. Historical inquiry into behavioral and sociopolitical trends of hip hop culture. Attempts to codify and recognize dominant cultural attitudes, concepts and paradigms as global phenomenon shaping understanding of contemporary African American character, identity, and culture. (Irreg.)
AFAM	4633	African American Religious Traditions	Prerequisite: any course that focuses on African or African American content, or English 1213. An anthropological and historical inquiry into the nature of the religious experience of Africans enslaved and involuntarily brought to the United States. Emphasis is placed upon the identification and understanding of the central cultural and religious practices and products form black peoples' experiences of the holy. (Irreg.)
AFAM	4643	Contemporary Black Feminism	Prerequisite: Junior standing and any 2000-level African and African-American Studies class. This course analyses the way race, gender, sexuality, and socioeconomic status have historically dominated, intersected and/or competed within the lives of African-American women. This course examines the way African-American women have drawn upon these internal struggles to serve as voices of power and agents of social change. Readings in this course will highlight the life experiences, work, and contributions of both early and contemporary African-American feminists, particularly their efforts toward advocating for black women's liberation, womanism, and black feminist agendas. (Irreg.)
AFAM	4653	Africana Thought	Prerequisite: ENGL 1213 or EXPO 1213, or permission of instructor, or junior standing. Engages scholars who work in several different traditions and disciplines as they create a body of literature, theory, and criticism whose main focus revolves around some aspect of black lived experiences; the varied attempts to define black selves; and the dialogical tension that often exists between margin and center. (Irreg.)
AFAM	4713	Afrocentric Thinking and the Civil Rights Movement	Prerequisite: any course that focuses on African or African American content, or English 1213. Examines afrocentric thinking and identifies key afrocentric patterns and strategies within the civil rights movement. Students will analyze African American leadership and how leaders brought afrocentric thinking to the forefront. (Irreg.)

AFAM	4723	Leadership in the African American Community	Prerequisite: any course that focuses on African or African American content, or English 1213. Comprehensive analysis of leadership skills and development from afrocentric perspective applied historically for social change; how these strategies are enacted for empowerment within contemporary society. (Irreg.)
AFAM	4733	Civil Rights Law: Employment and Education	Prerequisite: any course the focuses on African or African American content, or English 1213. Analyzes civil rights law in employment and education. Focuses on laws that address discrimination, equal employment opportunity, equal educational opportunity and affirmative action, as well as the legal foundation for diversity initiatives. Examines regulations of enforcement agencies, and agency grievance procedures, including selected court cases. (Irreg.)
AFAM	4743	Black Women and Leadership	Prerequisite: ENGL 1213 or EXPO 1213, and junior standing. Explores issues and strategies related to the roles and responsibilities of women in leadership positions and public service. The focus will be on African-American female leaders in diverse contexts. Do women have an identifiably different ways of leading? How does leadership manifest itself in the public arena? Why does women's public leadership matter? This course is also designed to examine the historical, sociological, psychological, political, economic, and ethical perspectives related to leadership development and practice. (Irreg.)
AFAM	4753	History of the Black Panther Party	Prerequisite: ENGL 1213 or EXPO 1213, or permission of instructor, or sophomore standing. Examines the origins, development, and demise of the Black Panther Party. Its successes and failures are illuminated. The unity and oneness of mind of its members shows that it was one of the most effective protest organizations of the twentieth century. In the process, students will learn about and discuss not only its strengths and weaknesses but also the forces the party often found itself up against. (Irreg.)
AFAM	4813	Prison Industrial Complex	Prerequisite: ENGL 1213 or EXPO 1213, or permission of instructor, or junior standing. The American prison industrial complex is a phenomenon with roots in American prison history, convict leasing, and the proliferation of prison industries. Designed to familiarize students with the phenomenon, how it came to exist, and the impact it has had and is having on American society in general, and on the African American community in particular. (Irreg.)
AFAM	4823	African American Politics and Public Policy	Prerequisite: ENGL 1213 or EXPO 1213, or permission of instructor, or junior standing. Focuses on the African American experience and politics, examining the history and experience from the civil rights era to the election of President Barack Obama. Materials will discuss grassroots and national political agendas, and explore the politics of topics such as environmental justice, healthcare, literature, music, sexuality and voting. Students will define their own political stances and explore how they would determine a goal, build coalitions, and develop public policy agendas and strategies. Imagine you are advising a president as well as your neighbors. (Irreg.)
AFAM	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
AFAM	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

AFAM	4990	Independent Study	Prerequisite: permission of instructor. Permits the student to study in depth, under the guidance of the instructor, particular and special African and African-American topics of interest to the student and within the expertise of the instructor. Generally, students and the instructor meet to determine the nature of independent study, schedule progress reports and meetings, timelines for the submission of assignments, nature of the evaluation process and culminating effort or activity. (F, Sp, Su)
AFAM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
AGSC	1013	Interdisciplinary Perspectives on Extreme Weather and Climate	Employs a lecture/problem-based learning approach to explore the scientific basis and societal impacts of extreme weather and climatic events including droughts, floods, hurricanes, El Niño, and climate change. (Sp)
AGSC	1999	Lowed Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
AGSC	2014	The Earth System	An integrated overview of earth sciences emphasizing earth materials, the oceans and atmosphere, the solar system, and earth's evolution. The interrelationship among the different earth systems will be emphasized. Topics will be explored through a learning-cycle approach. The lab component includes both in-class experiments and one field-based research project. Laboratory (Sp) [II-LAB]
AGSC	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
AGSC	3011	Career Planning & Development for A&GS Majors	Prerequisite: Junior standing or permission of instructor. Provides students with instruction in the career planning process directly related to their major and, ultimately, the world of work. Research shows that the majority of people lose their jobs because of poor work ethic, not because of aptitude. Course teaches appropriate skills desired by employers across AGS disciplines. Through lecture, discussion, individual projects and guest speakers, the interactive curriculum will cover topics such as behavioral interviewing techniques, self-directed job search strategies and career opportunities in multiple job sectors. As the course progresses, students will develop a career portfolio which includes a career assessment, class notes, handouts, cover letters and resumes (including electronic versions).
AGSC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
AGSC	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers topics not usually presented in the regular courses.
AGSC	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
AGSC	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
AGSC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

AGSC	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
AGSC	4970	Seminar	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Subjects covered vary. Deals with interdisciplinary concepts in atmospheric and geographic sciences not usually covered in regular courses. (Irreg.)
AGSC	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
AGSC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Subjects covered vary. Deals with interdisciplinary concepts in atmospheric and geographic sciences not usually treated in regular courses. (Irreg.)
AGSC	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
AGSC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
AHS	1400	Orientation To The Health Professions	Orientation to the health professions. 1 to 2 Hours. Typically, a one-hour survey course to introduce and explore the health professions offered by the colleges of the University of Oklahoma Health Sciences Center. Through a series of lectures, students will interact with educators, practitioners, and students in: audiology, dental hygiene, dentistry, medicine, nuclear medicine, nursing, nutritional sciences, occupational therapy, pharmacy, physical therapy, physician associate, public health, radiation therapy, radiography, sonography, and speech-language pathology. (F, Sp)
AHS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
AHS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
AHS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
AHS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
AME	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
AME	2113	Statics	Prerequisite: Physics 2514 and Mathematics 2433 or 2934 or concurrent enrollment in Mathematics 2433 or 2934. Vector representation of forces and moments: general three-dimensional theorems of statics; centroids and moments of area and inertia. Free-body diagrams, equilibrium of a particle and of rigid bodies, distributed loads, friction and internal shear and moment loads. Analysis of trusses, frames, and machines. (F)

AME	2213	Thermodynamics	Prerequisite: Mathematics 2433 or 2934; and Physics 2524, or concurrent enrollment (in both). First and second law of thermodynamics are developed and applied to the solutions of problems from a variety of engineering fields. Extensive use is made of differential calculus to interrelate thermodynamics functions. (F)
AME	2223	Introduction to Aerospace Engineering	Prerequisite: Physics 2514. Nature of atmospheric and space flight and of associated vehicles, conceptual design of flight and space vehicles, and current problems in aerospace engineering. (F)
AME	2281	Engineering Co-Op Program	(Crosslisted with CH E, CEES, CS, ECE, ENGR, EPHY, GE, IE, PE 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period; maximum credit six hours. (F, Sp, Su)
AME	2303	Materials, Design and Manufacturing Processes	(Crosslisted with I E 2303) Prerequisite: 2113 or Civil Engineering 2113 or Engineering 2113. Mechanical and physical properties of engineering materials. Introduction to design concepts, manufacturing processes and equipment used in engineering. (Sp)
AME	2402	Engineering Computing	Prerequisite: Mathematics 1823 or 1914 or concurrent enrollment. Introduction to computer programming and university computing facilities. Program design and development: computer application exercises in engineering. (F)
AME	2533	Dynamics	Prerequisite: AME 2113, MATH 2433 or 2934. Dynamics (kinematics and kinetics) of particles and rigid bodies for rectilinear, curvilinear and angular motion; work and energy methods; conservations of impulse and momentum; introduction to mechanical vibrations. (Sp)
AME	2623	Circuits and Sensors	Prerequisite: Mathematics 3413 and 3401 or concurrent enrollment; Physics 2524 or concurrent enrollment. Formulation and solution of circuit equations, network theorems, sinusoidal steady-state analysis, simple transients. Introduction to digital logic circuits. Physical principles of sensing and actuation. Applications to engineered systems of computer programming, embedded systems, and controls. (Sp)
AME	3103	Interactive Engineering Design Graphics	Prerequisite: MATH 1823 or 1914. Visualization and modeling techniques for product design and development. Design methodology, graphic standards, projection theory, freehand sketching, spatial geometry, CAD systems, geometric modeling, and tolerancing. Solving open-ended design and visualization problems. (Sp)
AME	3112	Solid Mechanics Lab	Prerequisite: 2113 or Engineering 2113; 3143 or concurrent enrollment. Measurement of displacement; velocity, acceleration, force, torque, strain, stress, data acquisition and processing; data analysis. Laboratory (F)
AME	3122	Heat Transfer and Fluid Mechanics Lab	Prerequisite: 2113 or Engineering 2113, 3173 or concurrent enrollment. Basic measurement concepts in fluid mechanics and thermal science. Concepts and methods of measuring pressure, temperature, flow, thermal and transport properties. Data acquisition and analysis. Laboratory (Sp)
AME	3143	Solid Mechanics	Prerequisite: 2113 or Engineering 2113, Mathematics 3113, or 3413 and 3401. Concepts of stress and strain; mechanical behavior of engineering materials; analysis of uniform stress states; analysis of members in torsion; stresses and deflections in beams; modes and theories of failure; design criteria. (F)
AME	3153	Fluid Mechanics	Prerequisite: 2113, 2213, or Engineering 2113, 2213, Mathematics 3113. Principles of fluid mechanics: fluid statics, flow descriptions, conservation equations, dimensional analysis, potential flow, viscous flow and internal flow. (F)
AME	3173	Heat Transfer	Prerequisite: 2213 or Engineering 2213, 3153. Heat transfer by conduction, convection, and radiation; mass transfer and combined modes of heat transfer. (Sp)

AME	3253	Aerodynamics	Prerequisite: 2223, 2533, Mathematics 3413 and 3401. Fluid properties, fluid statics, flow description, conservation equation; incompressible inviscid flow dynamics; characteristic airfoil parameters; two-dimensional flow around thin airfoils; flow around wings of finite span; boundary layer development; compressibility; governing equations for inviscid compressible flow normal and oblique shock relations; Prandtl-Meyer expansion waves; quasi-one dimensional flow through nozzles and diffusers. (F)
AME	3272	Windtunnel Laboratory	Prerequisite: 3253 or concurrent enrollment. Operation and calibration of subsonic and supersonic wind tunnels, power and measurement. Experimental testing of model airplanes and aerodynamic shapes; determination of drag of flight vehicle components. Lecture and Laboratory (F)
AME	3333	Flight Mechanics	Prerequisite: 2223, 2533. Performance of aerospace vehicles, weight and balance, equations of motion for rigid aircraft, introduction to static stability and control (open loop) as related to aircraft analysis and design. (Sp)
AME	3353	Design of Mechanical Components	Prerequisite: 2303 and 3143. Analysis and design of mechanical subsystems and selection of elements such as gears, shafts, clutches, brakes and modern mechanical components. (Sp)
AME	3363	Design of Thermal-Fluid Systems	Prerequisite: 2401 or Engineering 1001, 3153 or 3253, and 3173. Design of fluid flow, heat transfer and energy systems including analysis, synthesis and optimization. Topics include but are not limited to: ducts and piping systems, fluid machinery, heat exchangers, thermal storage devices, furnaces, combustors, refrigeration and air conditioning systems. (F)
AME	3413	Vibrating Systems	Prerequisite: 2533 and Mathematics 3113. Free and forced vibrations in lumped-parameter linear systems of one, two or more degrees of freedom. Resonance phenomena, dynamic absorbers; vibration-measuring equipment. Introduction to Laplace transforms and transient vibrations, distributed systems. (Irreg.)
AME	3523	Aerospace Structural Analysis	Prerequisite: 3143, Mathematics 3413 and 3401. Advanced concepts of stress and strain; introduction to the analysis of aerospace engineering structures: complex bending and torsion, shear flows in thin-walled and stringer-skin sections; buckling; introduction to the finite element method; introduction to composite materials. (Sp)
AME	3623	Embedded Real-Time Systems	Prerequisite: 2623 or equivalent, Computer Science 1313 or 1323 or equivalent. The fundamentals of real-time embedded systems are covered including processes, scheduling, frequency requirements, and watchdog timers. Includes work with actual real-time systems. (Sp)
AME	3723	Numerical Methods For Engineering Computation	(Crosslisted with CH E, C S 3723) Prerequisites: 2401 or Chemical Engineering 2002, or Engineering 2002 or 2003,or Computer Science 1313 or 1323, and Mathematics 3113 or 3413. Course uses specific software applications tailored toward aerospace and mechanical engineering. Basic methods for obtaining numerical solutions with a digital computer. Included are methods for the solutions of algebraic and transcendental equations, simultaneous linear equations, ordinary and partial differential equations, and curve fitting techniques. The methods are compared with respect to computational efficiency and accuracy. Any student who earns credit for AME 3723 cannot receive duplicate credit for C S 3723, CH E 3723, or P E 3723. This course may not be taken for graduate credit within the College of Engineering. (F)
AME	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Coverage includes materials not usually presented in the regular courses. (F, Sp, Su)

AME	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. The projects covered will vary. Deals with concepts not usually presented in regular coursework. (F, Sp, Su)
AME	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in the student's field. (F, Sp, Su)
AME	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
AME	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
AME	4143	Nanocomposites	(Slashlisted with 5143) Prerequisite: 3143 or permission from instructor. Nanostructured materials and their interactions with polymer matrices; dispersion of nanoparticles and nanotubes; surface and interfaces; structure and characterization of nanophases; synthesis and processing of structural nanocomposites; characterization of properties of nanocomposites; nanomechanics of elastic modulii; potential applications and design. No student may earn credit for both 4143 and 5143. (Irreg.)
AME	4163	Principles of Engineering Design	Prerequisite: 2103 or 3103, 2533, 3353. Design process and methodology from concept through analysis, layout and report: Types of design problems, human element in design, computer aid in design, specification development, concept generation, concept evaluation, product generation, function and performance evaluation, design for manufacturing, design for assembly, design for life-cycle, sustainability, final product documentation, ethics, safety and economics. (F)
AME	4193	Introduction to Computer Aided Design	Prerequisite: senior standing in an Engineering curriculum and knowledge of a computer programming language. Topics include: computer-aided design, engineering, drafting and manufacturing; CAD systems, geometry, computer graphics, hardware, design synthesis. System demonstrations and labs. (Irreg.)
AME	4213	Biomechanics I	(Slashlisted with 5213) Prerequisite: 3143 and 3153 or permission of instructor. Introduction to physiological systems with emphasis on structure and function of tissues and organs; application of continuum mechanics to understanding of tissue and organ behavior at microscopic and macroscopic levels; viscoelastic and solid biomaterials. No student may earn credit for both 4213 and 5213. (F)
AME	4243	Aerospace Propulsion Systems	Prerequisite: AME 2213 or ENGR 2213, and AME 3253. Propulsion systems, thermodynamic cycles, review of compressible flow, combustion and thermochemical analysis, reciprocating engines, gas turbine and jet engines, current developments in propulsion systems. (F)
AME	4263	Computer Integrated Manufacturing	(Slashlisted with 5263) Prerequisite: 2303, 4283. A general understanding on computer-based methods for manufacturing and assembly of mechanical products. The concept and methods for product manufacturing and assembly will be introduced from design viewpoint. No student may earn credit for both 4263 and 5263. (Irreg.)
AME	4273	Aerospace Systems Design I	(Slashlisted With 5273) Aerospace Systems Design I. Prerequisite: 3253 And 3333 Or Permission From Instructor. Analysis And Design Of An Aerospace System Such As A Complete Flight Vehicle, A Propulsion System, A Structural System, Or A Control System; Market Analysis, Operating Studies, Mission Specifications, Certification Requirements; Configuration Selection; Multidisciplinary Character Of Design, Classical Design And Analysis Methods. No Student May Earn Credit For Both 4273 And 5273. Laboratory (F)

AME	4283	Concurrent Design and Manufacturing	Prerequisite: 2303, 2533, and 3143. The general concepts and methods in performing concurrent design and manufacturing for product development. Fundamental design theories and methods such as utility theory, state transition matrix method, game theory, and system life-cycle modeling and optimization will be introduced. No student may earn credit for both 4283 and 5283. (F)
AME	4303	Designing for Open Innovation	(Slashlisted with 5303) Prerequisite: senior standing in engineering, or permission of instructor. Open innovation; designing for sustainability; realizing new complex engineered systems; system definition, verification and validation; identifying and managing dilemmas; Blooms Taxonomy; white space competencies, energy systems. No student may earn credit for both 4303 and 5303. (Irreg.)
AME	4373	Aerospace Systems Design II	(Slashlisted with 5373) Prerequisite: 4273 or permission from instructor. Analysis and design of an aerospace systems such as a complete flight vehicle, a propulsion system, a structural system, or a control system; handling qualities, propulsion system integration design case studies; consideration of operational aspects, reliability, and maintainability; ground and flight testing; advanced design and analysis methods. Laboratory (Sp) [V]
AME	4383	Control Systems	Prerequisite: 2533, Mathematics 3413 and 3401. Introduction to the concepts and theory of feedback control systems. Representation of electromechanical systems and aerospace vehicles by transfer and state variable methods. Stability and performance analysis, design techniques and synthesis methods for linear control systems. (F)
AME	4433	Advanced Thermodynamics	(Slashlisted with 5433) Prerequisite: 2213, 3173, 3363, or permission of instructor. Material focuses on applying advanced thermodynamic principles and tools to real-world application. Topics include: thermodynamic property relations, phase changes and mixtures, improved accuracy power cycle modeling, entropy relations, using exergy analysis as a design tool, and non-equilibrium thermodynamics. No student may earn credit for both 4433 and 5433. (F)
AME	4442	Internal Combustion Engines Laboratory	Prerequisite: 3122 or graduate standing. Test equipment and instrumentation, propulsion systems, reciprocating engines, supercharger fuel systems, tests and evaluation. Lecture and Laboratory (Sp)
AME	4493	Space Sciences and Astrodynamics	(Slashlisted with 5493) Prerequisites: PHYS 2524, MATH 2443 or 2934. Selected topics in astrophysics which may include astrodynamics, stellar structure and evolution, stellar pulsation, supernovae black holes, interstellar medium, galactic structure and clusters and superclusters, active galaxies, quasars, and cosmology. No student may earn credit for both 4493 and 5493. (F)
AME	4513	Flight Controls	(Slashlisted with 5513) Prerequisite: 3333, 4383. Classical control theory with applications to aircraft flight control system design. No student may earn credit for both 4513 and 5513. (F)
AME	4553	Design Practicum	Prerequisite: senior standing, 3363 and 4163. Design study of actual problems in industry. Lecture and Laboratory (Sp) [V]
AME	4593	Space Systems and Mission Design	(Slashlisted with 5593) Prerequisite: 4493 or permission from instructor. Topics include basic orbital mechanics, orbit determination, perturbations, numerical techniques, interplanetary transfer, influence of space environment, atmospheric re-entry. Space vehicles subsystems design; propulsion, attitude determination and control, structural design, thermal control, power and telecommunications. Investigation into mission design concepts and consideration. No student may earn credit for both 4593 and 5593. (Sp)

AME	4613	Multimedia In Engineering	(Slashlisted with 5613) Prerequisite: junior, senior, or graduate standing or permission of instructor. Introduces engineering students to electronic media. Topics will center on engineering and how electronic media can be used by engineers to illustrate technical topics such as three-dimensional motion, data visualization, time-based physical actions, and real-time simulations. Emphasizes developing effective interactive media programs for all engineering disciplines. No student may earn credit for both 4613 and 5613. (F)
AME	4623	Systems Engineering	Prerequisite: junior standing in College of Engineering. Aerospace systems engineering will prepare aerospace or other engineers who may work in the aerospace industry to understand, analyze, and design overall aircraft and spacecraft systems, including ground operations systems. To include guest lecturers from the aerospace industry who will introduce real world applications of aerospace systems engineering, and a team project relevant to aerospace systems engineering. (Irreg.)
AME	4653	Air Conditioning Systems	Prerequisite: 3173. Theory and design of systems for controlling properties such as temperature, humidity, air purity, air distribution and noise in enclosures. (Sp)
AME	4802	Robotics Laboratory	Prerequisites: 3112, Computer Science 1313 or equivalent, or graduate standing. Hands-on studies of robot systems with emphasis on semi-autonomous mobile robots. Mechanical, electrical and computational features of robots will be investigated. Lecture and Laboratory (F)
AME	4812	Dynamics and Controls Laboratory	Prerequisite: 3112 or equivalent or graduate standing. May be repeated with change of project; maximum credit four hours. Objectives are to teach the implementation of instrumentation and controls for mechanical systems and explore design factors of the control of mechanical systems. Lecture and Laboratory (Sp)
AME	4822	Fluid and Thermal Laboratory	Prerequisite: 3173; 3122 or equivalent or graduate standing. May be repeated with change of content; maximum credit six hours. Experimental studies in heat transfer or fluid mechanics. Lecture and Laboratory (F)
AME	4832	Micro and Nanomaterials Lab	Prerequisite: 3112, 3143 or equivalent or graduate standing; Engineering 2313. Introduction of experimental analysis and characterization techniques of different types of advanced materials to include polymeric micro composite materials and nanocomposites. Topics include fabrication methods. Determination of mechanical proper ties, microstructural analysis, nondestructive determination of properties of isotropic and anisotropic solids and microscopy techniques. Laboratory. (Irreg.)
AME	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
AME	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
AME	4971	Seminar	(Slashlisted with 5971) Prerequisite: senior standing. May be repeated without limit; maximum credit one hour for a B.S. degree. Recent developments in selected subjects in aerospace and mechanical engineering presented by invited experts from on and off campus. No student may earn credit for both 4971 and 5971. (F, Sp)
AME	4980	Undergraduate Research Studies	1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Work with various faculty members on individual research projects. The nature of the research and the hours credit varies. (F, Sp, Su)

AME	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
AME	5023	Elastic Stress Analysis	Prerequisite: 3143 and Mathematics 3113; or permission. Theory of stress for continuous media, large displacement strain theory, stress-strain relations for elastic media, plane elasticity, application of theory to modern engineering problems. (F)
AME	5063	Composite Materials	Prerequisite: 3143 or permission. Nature and scope of composite materials; stress-strain relations and strength of a single layer of a laminated composite; laminated composite-material beams, plates and cylindrical shells; micromechanics and characterization of stiffness, fracture and transport properties; applications and optimal design. (Irreg.)
AME	5113	Robot Mobility	Prerequisite: Graduate standing or instructor permission. Material focuses on issues of mobility over different types of surfaces for robot systems. Topics include: mobility solutions from biology, soil interaction, legged locomotion, wheeled locomotion, track locomotion, hybrid systems, energy efficiency, and implementation techniques. (F)
AME	5123	Robot Planning and Control	Prerequisite: graduate standing or instructor permission. Material focuses on issues of sensing, modeling kinematic for autonomous robot systems. Topics include: mobility kinematics and dynamics, sensors, effectors, sensor fusion, spatial representation, planning and control architectures and system integration. (F)
AME	5133	Space Robotics	Prerequisite: graduate standing or instructor permission. Material focuses on issues of orbital and planetary surface robotics. Topics include: Micro gravity and rough natural terrain mobility, attitude control, propulsion, thermal control, telecommunications, the space environment, space compatible sensors, materials and actuators. (F)
AME	5143	Nanocomposites	(Slashlisted with 4143) Prerequisite: 3143, graduate standing or permission of instructor. Nanostructured materials and their interactions with polymer matrices; dispersion of nanoparticles and nanotubes; surface and interfaces; structure and characterization of nanophases; synthesis and processing of structural nanocomposites; characterization of properties of nanocomposites; nanomechanics of elastic modulii; potential applications and design. No student may earn credit for both 4143 and 5143. (Irreg)
AME	5163	Turbomachinery	Prerequisite: 3153 or permission. Energy transfer between a fluid and a rotor; flow of fluids in turbo machines; centrifugal pumps and compressors; radial and axial flow turbines; axial flow compressors and pumps; comparison of types. (Sp)
AME	5203	Bioengineering Principles	(Crosslisted with CH E 5203) Prerequisite: Mathematics 3113 and Physics 2524. Principles of bioengineering for the areas of the biomechanics of solids and fluids, mass transfer, biomaterials, electrical networks, imaging, and ionizing radiation as they apply to the human body. Moral and ethical issues in bioengineering are also studied. No student may earn credit for both 4203 and 5203. (Alt. F)
AME	5213	Biomechanics I	(Slashlisted with 4213; Crosslisted with BME 5213) Prerequisite: AME 3143 and AME 3153 or permission of instructor. Introduction to physiological systems with emphasis on structure and function of tissues and organs; application of continuum mechanics to understanding of tissue and organ behavior at microscopic and macroscopic levels; viscoelastic and solid biomaterials. No student may earn credit for both 4213 and 5213. (F)

AME	5223	Biomechanics II	(Slashlisted with 4223; Crosslisted with BME 5223) Prerequisite: AME 3143 and AME 3153 or permission of instructor. Biofluid mechanics; non-Newtonian behavior of blood and body fluids; basic mechanical properties of muscle, bone, cartilage, and other living tissues; application of continuum mechanics to circulation; growth and change of living organs in response to stress and strain. No student may earn credit for both 4223 and 5223. (Sp)
AME	5233	Biomaterials	(Slashlisted with 4233; Crosslisted with BME 5233) Prerequisite: junior or senior standing in the College of Engineering and permission of instructor. Introduction to materials used in biomedical environment, the design and use of implantable materials, such as metals, polyethylene, ceramics, and composites, biocompatibility, test methods, and tissue growth on biomaterials. No student may earn credit for both 4233 and 5233. (Sp)
AME	5263	Computer Integrated Manufacturing	(Slashlisted with 4263) Prerequisite: graduate standing in engineering. A general understanding on computer-based methods for manufacturing and assembly of mechanical products. The concept and methods for product manufacturing and assembly will be introduced from design viewpoint. No student may earn credit for both 4263 and 5263. (Sp)
AME	5273	Aerospace Systems Design I	(Slashlisted with 4273) Prerequisite: 3253 and 3333, or graduate standing in College of Engineering, or permission of instructor. Analysis and design of an aerospace system such as a complete flight vehicle, a propulsion system, a structural system, or a control system; market analysis, operating studies, mission specifications, certification requirements; configuration selection; multidisciplinary character of design, classical design and analysis methods. No student may earn credit for both 4273 and 5273. Laboratory (F)
AME	5283	Concurrent Design and Manufacturing	Prerequisite: graduate standing in engineering. The general concepts and methods in performing concurrent design and manufacturing for product development. Fundamental design theories and methods such as utility theory, state transition matrix method, game theory, and system life-cycle modeling and optimization will be introduced. No student may earn credit for both 4283 and 5283. (F)
AME	5293	Transport in Biological Systems	(Crosslisted with CH E 5293) Prerequisite: Chemical Engineering 3123 or permission of instructor. Theoretical and practical aspects of transport phenomena in living organisms and biomedical technologies. Applications include hemorheology, drug delivery, extracorporeal circulation, and artificial organs. (Irreg.)
AME	5303	Designing for Open Innovation	(Slashlisted with 4303) Prerequisite: Graduate standing in engineering or permission of instructor. Open innovation; designing for sustainability; realizing new complex engineered systems; system definition, verification and validation; identifying and managing dilemmas; Blooms Taxonomy; white space competencies, energy systems. No student may earn credit for both 4303 and 5303. (Irreg.)
AME	5333	Thermodynamics and Combustion	Prerequisite: Engineering 2213 or permission. Thermodynamics of non-reacting and reacting mixtures, chemical equilibrium, flame temperature, transport processes in combustion, chemical kinetics, fuels and their combustion properties, premixed and diffusion flames, deflagrations and detonations, practical combustion systems, pollutant emissions. (F)
AME	5373	Aerospace Systems Design II	(Slashlisted with 4373) Prerequisite: AME 4273 or graduate standing with the College of Engineering, or permission of instructor. Analysis and design of an aerospace systems such as a complete flight vehicle, a propulsion system, a structural system, or a control system; handling qualities, propulsion system integration design case studies; consideration of operational aspects, reliability, and maintainability; ground and flight testing; advanced design and analysis methods. No student may earn credit for both 4373 and 5373. Laboratory. (Sp)

AME	5433	Advanced Thermodynamics	(Slashlisted with 4433) Prerequisite: 2213, 3173, 3363, or permission of instructor. Material focuses on applying advanced thermodynamic principles and tools to real-world applications. Topics include: thermodynamic property relations, phase changes and mixtures, improved accuracy power cycle modeling , entropy relations, using exergy analysis as a design tool, and non-equilibrium thermodynamics. No student may earn credit for both 4433 and 5433. (F)
AME	5493	Space Sciences and Astrodynamics	(Slashlisted with 4493) Prerequisite: PHYS 2524, MATH 2443 or MATH 2934. Selected topics in astrophysics, the solar system; basic orbital mechanics, orbit determination and maneuvers, perturbations, numerical techniques, rendezvous and proximity operations, the N-body problem and approximations, interplanetary transfers. Design considerations. No student may earn credit for both 4493 and 5493. (F)
AME	5513	Flight Controls	(Slashlisted with 4513) Prerequisite: 3333, 4383. Classical control theory with applications to aircraft flight control system design. No student may earn credit for both 4513 and 5513. (F)
AME	5573	Advanced Engineering Analysis I	Prerequisite: Mathematics 3413 or equivalent. Vector and tensor analysis. Calculus of variations followed by variational methods and/or the method of weighted residuals. (Irreg.)
AME	5583	Advanced Engineering Analysis II	Prerequisite: 5573 or permission. Selected topics in Advanced Engineering Analysis, such as lie theory for ordinary differential equations; eigenvalue problems and spectral analysis; transform methods; solution methods for partial differential equations. (Irreg.)
AME	5593	Space Systems And Mission Design	(Slashlisted with 4593) Prerequisite: 4493 or permission from instructor. Topics include basic orbital mechanics, orbit determination, perturbations, numerical techniques, interplanetary transfer, influence of space environment, atmospheric re-entry. Space vehicles subsystems design; propulsion, attitude determination and control, structural design, thermal control, power and telecommunications. Investigation into mission design concepts and consideration. No student may earn credit for both 4593 and 5593. (Sp)
AME	5710	Topics in Solid Mechanics	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours for master's degree or twelve hours for a doctoral degree. Selected topics in continuum mechanics, such as theory of continuum mechanics, finite element methods, fatigue analysis and fracture mechanics.
AME	5720	Topics in Fluid Mechanics	1 to 3 hours. Prerequisite: 5903 or permission of instructor. May be repeated with change of content; maximum credit nine hours for master's or 12 hours for a doctoral degree program. Concentration in a particular field of specialization in fluid mechanics, such as: rotating flows; hypersonic flow theory; advanced aerodynamics; advanced stability theory; plasma and laser dynamics. (Irreg.)
AME	5740	Topics in Design	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours for master's or 12 hours for doctoral degree program. Selected topics in conceptual, preliminary and final design; CAD and optimization applications.
AME	5750	Topics in Dynamics and Controls	Topics In Dynamics And Controls. 1 To 3 Hours. Prerequisite: Permission Of Instructor. May Be Repeated With Change Of Content; Maximum Credit Nine Hours For Master's Or Twelve Hours For A Doctoral Degree Program. Selected Topics In Dynamics And Control Systems, Such As: Advanced Structural Dynamics, Dynamics Stability Of Non-Conservative Systems, And Discontinuous Control Systems. (Irreg.)

AME	5763	Introduction to the Finite Element Method	(Crosslisted with CEES 5763) Prerequisite: graduate standing. Weighted residual and variational approaches. Finite element formulation for rod, truss and beam elements; plane stress and plane strain problem; axisymmetric and three-dimensional analysis; isoparametric elements; conforming and nonconforming plate and shell elements. (Sp)
AME	5773	Structural Optimization	Prerequisite: 5763 or equivalent, or permission of instructor. An introduction to optimization and to the optimization of simple structures modeled by the finite element method. Specifically truss structures will be optimized by various methods for minimum weight, subject to constraints such as strength and displacement. (F)
AME	5803	Principles of Heat Transfer	Prerequisite: 3173 or permission. Steady and transient heat conduction in multi-dimensional systems, convective heat transfer for external flows, convective heat transfer for internal flows, radiant heat transfer in lumped systems, integral equations of thermal radiation, and combined mode heat transfer. (F)
AME	5890	Guided Individual Studies	1 to 4 hours. Prerequisite: graduate standing and permission. May be repeated; maximum credit nine hours. May be subject to restricted applicability for specific degree requirements. Guided study of selected topics not offered in regularly scheduled classes. Arrangements and work requirements established by prior agreement of instructor and student(s). Students should expect to spend at least sixty hours of reading and study for each credit hour. (F, Sp, Su)
AME	5903	Fundamental Fluid Dynamics	Prerequisite: 3153, 5573 or concurrent enrollment, or permission. Basic laws of fluid motion; Navier-Stokes equations, kinematics of the flow field, vorticity and circulation, basic theorems for inviscid, incompressible flows, potential-flow application, exact solutions. (F)
AME	5913	Viscous Fluid Dynamics	Prerequisite: 5903 or permission. Fundamental exact solutions of viscous flow; Stokes' flow, boundary-layer flow, drag and resistance to motion, elements of heat transfer, effects of compressibility, thin shear layers, jets and wakes, elements of turbulence. (Sp)
AME	5933	Aeroelasticity	Prerequisite: 3143 or equivalent, 3253. Review of structural and aerodynamic theorems. The steady aeroelastic equations and solution methods; divergence and rolling effectiveness. The flutter equations and solution methods; panel flutter; the transonic flutter problem. (Irreg.)
AME	5943	Rocket Propulsion	Prerequisite: permission of instructor. Rocket history, nozzle theory and thermochemistry, propellants, liquid engines, solid engines, heat transfer, trajectory analysis, preliminary design of rocket vehicles and advanced rocket concepts. (Irreg.)
AME	5953	Turbulence I	Turbulence I. Prerequisite: 5913 Or Permission. Description Of Turbulence; Reynolds Averaging, Momentum Equations And Energy Budgets For The Mean Flow And Fluctions. Mean Velocity Profiles, Skin Friction And Spreading Rates For Shear Flows In Various Geometrics, Origin Of Turbulence From Flow Instability. (Irreg.)
AME	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
AME	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
AME	5971	Seminar	(Slashlisted with 4971) Prerequisite: graduate standing. May be repeated without limit; maximum credit two hours for master's degree or four hours for a doctoral degree. Recent developments in selected subjects in aerospace and mechanical engineering presented by invited experts from on and off campus. No student may earn credit for both 4971 and 5971. (F, Sp)

AME	5973	Computational Heat and Fluid Flow	Prerequisite: 3173 and Engineering 3723, or permission of instructor. Computational techniques to solve conservation equations representing heat transfer, mass transfer, and fluid flow processes. The topics include discretization methods for multi-dimensional diffusion and convection problems, and pressure-correction algorithms. Applications involving comprehensive computer codes are also covered. (Sp)
AME	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
AME	5983	Computational Fluid Dynamics	Prerequisite: 5573, 5903, 5973, or permission of instructor. Methods for the numerical solution of the Euler, boundary-layer, Navier-Stokes and parabolized Navier-Stokes equations. (Irreg.)
AME	5990	Special Projects	1 to 9 hours. Prerequisite: graduate standing and permission of instructor. May be repeated but total credit applicable to any degree may be limited. Individual or group R & D projects involving original laboratory, analytical or theoretical investigations and syntheses. Specific objectives and work requirements established by prior agreement of the instructor and student. Students should expect to spend at least 60 hours for each credit hour and to submit appropriate reports or papers. (F, Sp, Su)
AME	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
AME	6033	Fracture Mechanics	Prerequisite: 5023 or equivalent. Elastic crack-tip stress field, crack-tip plastic zone, energy principle, plane strain fracture toughness, crack opening displacement criterion, fatigue crack propagation and applications. (Irreg.)
AME	6333	Combustion Processes II	Prerequisite: 5333 or permission of instructor. Heterogeneous reaction kinetics, liquid droplet and spray combustion, solid particle combustion, kinetically controlled phenomena, fire related problems, pollutant generation and control. (Irreg.)
AME	6663	Advanced Finite Element Methods	(Crosslisted with CEES 6663) Prerequisite: 5763. Selected topics such as: nonlinear material problems, plasticity, creep (visco-plasticity), fracture, etc.; geometrically nonlinear problems; large displacements and structural stability; dynamic problems and analytical solution procedures; soil-structure interactions, application of the finite element method to fluid and heat transfer problem. (Irreg.)
AME	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
AME	6970	Advanced Topics In Aerospace And/Or Mechanical Engineering	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours for a master's and twelve hours for doctoral degree program. Selected advanced topics in all aspects of aerospace and/or mechanical engineering.
AME	6980	Research for Doctoral Dissertation	Research for Doctoral Dissertation. (F, Sp, Su)
AME	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
AMGT	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

AMGT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
AMGT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
AMGT	5013	Overview of Arts Management and Administration	Prerequisite: graduate standing. This class will present an overview and historical perspective of the field of arts administration and management. Readings will be supplemented by guest speakers and visits to professional organizations enhancing the students understanding of the diversity of the professional opportunities in arts administration and arts management. No student may earn credit for both Amgt 4013 And Amgt 5013. (Irreg)
AMGT	5023	Comparative Culture Policy Studies	Prerequisite: graduate standing or permission of instructor. Study cultural policy as it affects a variety of institutions in a number of countries in order to better comprehend national differences in cultural policy. No student may earn credit for both 4023 and 5023. (Irreg.)
AMGT	5030	Internship I in The Arts	Prerequisite: graduate standing or permission of the instructor. May be repeated; Maximum credit: twelve hours. Students arrange for and work in a focused professional work experience. No students may earn credit for both 4030 and 5030 for the same internship. (Irreg.)
AMGT	5113	Grant Writing And Fundraising	Prerequisite: Graduate standing. Examines the role of grant writing, fundraising and resource development in nonprofit organizations. Various grant writing and fundraising techniques and development efforts will be examined. This class will give students a general, but effective working knowledge of grant writing and fundraising. The readings will be supplemented by visiting speakers representing various arts organizations or granting agencies presenting lecturers, leading discussions and/or conducting workshops regarding fundraising and grant writing. No student may earn credit for both 4113 and 5113. (Irreg.)
AMGT	5130	Internship II in the Arts	Prerequisite: graduate standing or permission of the instructor. May be repeated; maximum credit: twelve hours. Students arrange for and work in a focused professional work experience. No student may earn credit for both 4130 and 5130 for the same internship. (Irreg.)
AMGT	5143	Media Relations for Arts Administrators	Prerequisite: graduate standing or permission of instructor. Helps develop the skills and perspective necessary for arts managers to interact positively and proactively with the media. No student may earn credit for both 4143 or 5143. (Irreg.)
AMGT	5153	Art Market Issues	Prerequisite: graduate standing or permission of instructor. Study of the recent development of an expanded international art market that has profound implications for cultural policy and presents some practical issues for art managers. No student may earn credit for both 4153 and 5153. (Irreg.)
AMGT	5163	Current Issues in Arts Management	Prerequisite: graduate standing. A topical review of current issues and events in the arts with a particular focus on those events affecting the arts manager. The readings and discussions will vary each semester and may focus on newly released research reports, changing demographic trends or events chronicled in the press that affect the arts either on a micro (local) or macro (national or international) level. No student may earn credit for both 4163 and 5163. (Irreg.)

AMGT	5253	Producing Practicum	Prerequisite: graduate standing. Students will assist the producer/director of a production of a theatre, choral, opera, concert, dance, musical theatre, or film/video production. Students may also work closely with a curator in the mounting of an exhibition. Students will be expected to work closely with the producer/director in all aspects of the selected production. An analysis of the production process will be required in the form of a paper or other suitable analytical document. No student may earn credit for both 4253 and 5253. (Irreg.)
AMGT	5563	Museum Management And Leadership	Prerequisite: Graduate standing. In-depth study of the philosophy, policies, and practices of museum governance, including such topics as ethics, board development, institutional mission and organization. (Irreg.)
AMGT	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review on selected topics under the direction of a faculty member. (Irreg.)
AMGT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
AMGT	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
AMGT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ANTH	1113	General Anthropology	An introduction to the anthropological way of thinking about biological evolution, fossil hominids, prehistory, the rise of civilization, ecology, war, the energy crisis, racism, sexism and other contemporary controversies. Emphasis is placed on cross-cultural, linguistic and relativistic perspectives. (F, Sp, Su) [III-SS]
ANTH	1203	Language Across Cultures	(Crosslisted with LING 1203) Theories of language family origins and their relationship to human migration; types of human languages; linguistic concept of genetic relatedness; writing systems development; non-Western sociolinguistic and usage phenomena; cultural and scientific importance of endangered languages; how languages become endangered; factors involved in preservation. This course may not count for major credit. (Sp) [IV-NW]
ANTH	1253	Folklore and Folklife	Introduces the academic study of folklore and folklife by introducing four key concepts: Tradition, community, art and performance. Verbal folklore, material culture, performance genres and customary knowledge will be examined. Issues of cultural diversity and historical change will be addressed. Special emphasis will be placed on exploring traditional cultures in the United States and Europe. (F) [IV-AF]
ANTH	1413	Great Discoveries in Archaeology	Introduces students to the accomplishments of ancient civilizations around the world. A brief overview of archaeological methods and research and of the precursors of civilizations. Concentrates on major civilizations of the world including Mesopotamia, Europe, Egypt, sub-Saharan Africa, India, China, Southeast Asia, Mesoamerica, South America, and the North American Midwest. (F) [IV-NW]
ANTH	1523	Prehistoric Foundations of Old World Civilization	The history of humans throughout the Eolithic, Paleolithic, Mesolithic, Neolithic, Bronze and Iron Ages. Emphasis is placed upon the prehistory of Europe, although Africa and Asia are included wherever a broader knowledge contributes to a better understanding of the prehistoric foundations of Western European cultures. (F) [III-SS]

ANTH	1613	Native Peoples of Oklahoma	(Crosslisted with ENGL 1613) A general introduction to the history, cultural traditions and current condition of the 38 diverse Native American tribes who now reside in Oklahoma. (F, Su) [IV-NW]
ANTH	1713	Beginning American Indian Languages I	(Crosslisted with NAS 1713) May be repeated with change of language; maximum credit twelve hours. Introduction to the structure of an American Indian language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
ANTH	1723	Beginning American Indian Languages II	(Crosslisted with NAS 1723) Prerequisite: 1713 in the native language listed as course topic. May be repeated with change of language; maximum credit twelve hours. Introduction to the structure of an American Indian language with special attention to its phonology, morphology and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
ANTH	1823	Religion in Everyday Life	This course focuses on the variety of religious phenomena found throughout the world and the theoretical approaches anthropologists use to account for them. Using ethnographic studies of belief in practice, we will seek to understand the role that religions play in the human experience. (F, Sp) [IV-NW]
ANTH	1913	Plagues and People: Health and Disease in Human Society	The study of the impact of diseases such as malaria, bubonic plague, and AIDS on human society, from their effects on populations to how they have influenced the course of history. Identification of social and cultural factors, conditions that influence and impede the spread of contagious diseases, ethical issues concerning the treatment of the sick, and policies designed to halt epidemics will be examined. The contemporary threat of biological weapons and the impact on local and national public health efforts in the U.S. will be discussed. (Irreg.) [III-SS]
ANTH	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ANTH	2113	Introduction to Archaeology	To acquaint the beginning student with the discipline of archaeology as it is now practiced within the science of anthropology. (F, Sp) [III-SS]
ANTH	2203	Peoples of the World	A survey of world cultures, dealing with representative hunting and gathering, horticultural, pastoralist and complex societies. Designed to familiarize the student with the full range of variation of human behavior. (F, Sp, Su) [IV-NW]
ANTH	2243	Introduction to Sociocultural Anthropology	Introduction to theory and practice in sociocultural anthropology. Review key theoretical approaches from the twentieth century, explore how they are applied ethnographically in the study of social institutions -- economic, political, familial, religious -- and cultural processes, and critique them. Selected topics and issues will be explored from different theoretical perspectives. (F, Sp)
ANTH	2253	Human and Animal Interaction Across Cultures	Examines the variety of ways we think, feel, and interact with animals across cultures. Emphases include the roles of animals; humans' ideas, attitudes, and emotions toward animals; and how these manifest in our behavior toward them. Moral quandaries/contradictions around animal treatment will be examined. The ultimate goal of this course is for students to come away with a broadened notion of human-animal interaction and an awakened curiosity about these frequently take-for-granted cross-species relationships. (Irreg.) [IV-NW]
ANTH	2303	General Linguistics	(Crosslisted with LING 2303) Humanistic and formal study of natural languages: how they are similar to and different from one another in their use of speech sounds, logical structures and mechanisms that integrate events, objects and speakers in spatio-temporal contexts. The relationship between language and culture; language acquisition and language change. (F, Su) [I-O]

ANTH	2503	Introduction to Biological Anthropology	Prerequisite: 1113. The student is exposed to historical, theoretical and applied perspectives of biological anthropology. Concentration on human biocultural evolution; human adaptability, variation, and genetics; primatology and primate behavior. The major emphasis is on understanding modern man as a product of biological, cultural, behavioral and environmental interactions throughout his/her evolutionary development.
ANTH	2533	Exploring Human Evolution	This course is designed to provide an introductory survey of basic tenets of biological anthropology and human evolution, with an emphasis on the multiple interrelationships between human culture and human biology. Material to be covered will include elementary genetics, evolution, adaptation, and the history of key anthropological discoveries. The key goals of the class will be to investigate the nature of evolutionary processes and the multiple ways evolution has shaped humankind as a species. (F)
ANTH	2613	Native Peoples of North America	An introduction to the native societies and cultures north of Mexico from pre-Columbian times to the present. (Sp, Su) [IV-NW]
ANTH	2643	Anthropology of Diet, Health, and Disease	An introduction to the field of food, health and nutritional anthropology. Nutrition is a key component of human health, and an area of increasing concern for anthropologists. The class with cover human growth and development, sustainable agriculture, and global patterns of health and disease. (Sp) [III-SS]
ANTH	2733	Intermediate American Indian Languages	(Crosslisted with NAS 2733) Prerequisite: 1723. May be repeated with change of language; maximum credit twelve hours. A systematic review of the structure of an American Indian language. Syntactic control and vocabulary expansion are emphasized. Conversational practice and traditional oral texts are used to develop proficiency. (F, Sp)
ANTH	2953	Topics in Anthropology	May be repeated with change of topic; maximum credit nine hours. Topics will vary. Acquaints the student with a topic within a subdiscipline of anthropology including anthropological theory and methods. (Irreg.)
ANTH	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
ANTH	3063	Language and Culture	Prerequisite: ANTH 2303. The relationships between language and the rest of culture, with emphasis on diachronic as well as synchronic problems. Such crucial issues as the limitation of language on thought and perception and language and conceptualization are also considered. (F, Sp)
ANTH	3083	Advanced Studies in Folklore and Expressive Culture	Prerequisite: 1113 or junior standing. Introduces students to the critical study of folklore and public culture. The effects of folklore and public culture on human social interaction and how we interpret and understand these effects will be studied. Topics include festivals, foodways, folk arts and crafts, and musical and other performance genres. (Irreg.)
ANTH	3253	Applied Anthropology	Prerequisite: ANTH 2243. Explores the application of anthropological knowledge to real-life problems. Will learn how anthropological concepts, methods, and insights may help us to understand and solve problems that affect our species. (Irreg.)
ANTH	3263	Studies in Ethnography	Prerequisite: 1113, or 2203 or 2243. Examines the relationship between theory and method in selected ethnographic studies. (Irreg.)
ANTH	3373	Archaeology of Death and Burial	Prerequisite: 1113 or junior standing. Provides a cross-cultural survey of mortuary practices in the ancient world and examines how such practices shaped, and were shaped by, the lifestyles and world views of people in our past. (Irreg.)
ANTH	3423	Anthropology of Religion	Prerequisite: 1113 or junior standing. A consideration of the nature and role of religion in small-scale societies. Emphasis will be given to the relationship of the various anthropological approaches to religion with the intellectual history of anthropology as a discipline. (Irreg.)

ANTH	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ANTH	3453	Contemporary Native American Issues	Prerequisite: 1613 and junior standing, or permission of instructor. A survey of the social, political and economic issues of modern Native American groups. The relationship between native tribal cultures and American economic and government interests will be examined. (Irreg.) [IV-NW]
ANTH	3503	Oklahoma Prehistory	Prerequisite: 1113 or junior standing. Traces the evolution of Oklahoma's native people from specialized early hunters of 12,000-30,000 years ago to protohistoric villagers representing links to contemporary Indian tribes. The emphasis is on adaptation to diverse environmental settings and evolution of complex societies. (Irreg.) [IV-NW]
ANTH	3553	Peoples of the Pacific Islands	Prerequisite: 1113 or junior standing. An ethnographic and historical survey of the various peoples of the Pacific (Indonesia, Australia, Melanesia, Micronesia, Polynesia) with emphasis on the peopling of Oceania and varying cultural and social developments and elaborations on an insular environment. (F, Sp) [IV-NW]
ANTH	3713	Native American Artistic Traditions	Prerequisite: 1613 or junior standing. Covers the artistic traditions of Native Americans and how these traditions offer insight into the thinking, lifeways, beliefs, and philosophies of differing groups of native peoples. Artisans, orations, music and dance will be explored, as well as kinship, infant care, concepts of death and self-respect. (Sp) [IV-NW]
ANTH	3743	American Indian Justice in Cultural Law	Prerequisite: 1613 or junior standing. Designed to enhance understanding of the relationship between American Indians, social control, and cultural laws. How traditional means of justice were applied to deviant behaviors which affected the social harmony and goodwill of the entire group are studied. (F, Sp) [IV-NW]
ANTH	3803	Asian Prehistory	Prerequisite: 1113 or junior standing. A survey of the archaeological remains from the Asian continent beginning with the Paleolithic and continuing through to the beginning of the Historic period. Some emphasis will be placed on the development of Chinese civilization. (Irreg.) [IV-NW]
ANTH	3810	Internship in Linguistic Anthropology	Prerequisite: 1113, 2303 and six additional credit hours in Anthropology. May be repeated. Maximum credit six hours. Designed to provide training in linguistic anthropology . Internships are arranged on an individual basis with professional linguistic anthropologists or with professionals working in a setting in which cultural linguistic research can be performed. Students must meet criteria for acceptable performance and submit a final paper. (F, Sp, Su)
ANTH	3853	Music, Language and Culture	Prerequisite: junior standing or permission of instructor. Explores the recent wave of literature on the common roots of language and music, covering everything from their foundations in social interaction to their biological expression and development in evolutionary terms. (Irreg.)
ANTH	3873	Primate Evolution and Behavior	Prerequisite: 1113 or 2503 or junior standing. Course looks at primates, our closest living relatives, with particular emphasis on the evolution and ecology of primate behavior, and uses evolutionary theory as the underlying theoretical perspective. (Irreg.) [II-NL]
ANTH	3883	Archaeology of South America	Prerequisite: 1113 or junior standing. A survey of the archaeological remains from South America with special emphasis on the development of civilization. (F, Sp) [IV-NW]

ANTH	3893	Maya, Aztec and Inca: High Civilizations of Ancient America	Prerequisite: 1113 or junior standing. An archaeological and ethnological study of the pre-Spanish cultures of Mesoamerica and the Central Andes giving primary emphasis to the Maya of Yucatan, the Aztec of Mexico and the Inca of Peru. (F, Sp) [IV-NW]
ANTH	3910	Internship in Biological Anthropology	Prerequisite: 1113, 2503 and six additional credit hours in anthropology. May be repeated. Maximum credit six hours. Designed to provide field and/or laboratory training in biological anthropology. Internships are arranged on an individual basis with professional biological anthropologists. Students must meet criteria for acceptable performance and submit a final paper. (Sp, Su)
ANTH	3920	Internship in Museum Anthropology	Prerequisite: 1113 and six credit hours in Anthropology. May be repeated: maximum credit six hours. Designed to provide hands-on training in anthropological museum work. Internships are arranged on an individual basis with professional museum anthropologists or with professionals working in a museum in which anthropology-oriented museum work is undertaken. Students must meet criteria for acceptable performance and submit a final report. (F, Sp, Su)
ANTH	3930	Fieldwork in Anthropology	1 to 8 hours. Prerequisite: permission of instructor or adviser. May be repeated; maximum credit eight hours. Designed to teach the student field methods in archaeology, ethnology or linguistics through actual participation in a field program using a combination of lectures, lab, discussion, and/or research. The subject matter depends upon the specific summer session and varies from year to year. The course is given during the summer session for a period of eight weeks. (Su)
ANTH	3940	Internship in Archaeology	Prerequisite: 1113, 2113, 3930. May be repeated; maximum credit six hours. Designed to provide advanced archaeological field and/or laboratory training for students who already have some archaeological field and/or laboratory experience. Internships are arranged on an individual basis with professional archaeologists. Students must meet criteria for acceptable performance and submit a final report. (F, Sp, Su)
ANTH	3943	Psychological Anthropology	Prerequisite: 1113 or junior standing. Survey of anthropological studies that make systematic use of psychological concepts and methods; emphasis on the relationship between individual experience and sociocultural phenomena; how the history of the field has influenced current methodological approaches; and topics of interest. (Irreg.)
ANTH	3950	Internship in Cultural Anthropology	Prerequisite: 1113 and six credit hours in cultural anthropology. May be repeated; maximum credit six hours. Designed to provide field training in cultural anthropology. Internships are arranged on an individual basis with professional cultural anthropologists or with professionals working in a setting in which cultural anthropology research can be performed. Students must meet criteria for acceptable performance and submit a final report. (F, Sp, Su)
ANTH	3953	Proseminar in Anthropology	Prerequisite: 1113 or junior standing. May be repeated; maximum credit six hours. Topics will vary and are intended to acquaint undergraduate majors with subdisciplines through specialized study involving anthropological theory, methodology, the preparation, development and writing of reports. (F, Sp)
ANTH	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Honors Reading will provide students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given in this course only after an intensive oral examination. (F, Sp)

ANTH	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project under the guidance of a professor in the student's major department. (F, Sp)
ANTH	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ANTH	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ANTH	4003	Museum Anthropology I	Prerequisite: 1113 or junior standing. Introduces the student to a wide range of topics and issues in the practice of anthropology in museums. Museums will be examined as cultural, political, and educational institutions. Students will gain exposure to exhibition design, collection curations, and museum operations. (F)
ANTH	4023	Museum Anthropology II	Prerequisite: 4003. Consideration of the philosophical and practical issues of education programs in museum settings. Case studies in community-museum relations. Planning and development of exhibit and program components. Policies and procedures or curatorial practice for collection preservation and documentation. (Sp)
ANTH	4033	Story, Performance, Event	(Slashlisted with 5033) Prerequisite: ANTH 2303 and junior standing. Covers the verbal art and performance aspects of linguistic anthropology. Focuses on oral storytelling as we have come to understand it and will have as its main concern how people tell stories. Students will get an overview of verbal art and performance where and when storytelling occurs. No student may earn credit for both 4033 and 5033. (Irreg.)
ANTH	4053	Morphology	(Slashlisted with 5053; Crosslisted with LING 4053) Prerequisite: 3053 and 3353. Introduces and develops theories and concepts of morphology including word formation, derivation, inflection, non-concatenative morphs, covert categories, prosodic phenomena, morphosyntactic categories and clitics. Data from non-Western languages will be prominent. No student may earn credit for both 4053 and 5053. (Irreg.)
ANTH	4063	Language Contact, Loss, and Revitalization	Prerequisite: 2303 and junior standing. Covers the linguistic, social and cultural factors involved in contact-induced language change and language shift, and on the main trends and literature in revitalization and maintenance of endangered languages. Students gain experience in practical applications of language revitalization, focusing on languages of the Americas. No student may earn credit for both 4063 and 5063. (Irreg.)
ANTH	4073	Anthropology of Jews and Jewishness	Prerequisite: 11113 or junior standing. Explores major anthropological issues through the lens of ethnography conducted in Jewish communities around the world. The particular combinations of race, religion, ethnicity, identity, and gender as they are understood and expressed by Jews cross-culturally challenge our understanding of continuity and change in human societies. (Irreg.)
ANTH	4083	Genetic Perspectives on Human Evolution	Prerequisite: 1113 or 2503 or junior standing. Introduction to the field of population genetics; in essence, how biological evolution works. (Irreg.)
ANTH	4103	People and Plants	Prerequisite: 1113 or junior standing. Examines the direct relationships between people and plants, focusing on traditional peoples of the world. Topics include paleoethnobotany, folk classification, agriculture, hallucinogens and medicines. (Irreg.) [III-SS]
ANTH	4113	Anthropology Capstone	Prerequisite: 1113, 2113, 2243, 2303, 2503, and senior standing. Important historical and contemporary ideas and theories in anthropology. Content varies by semester. (Irreg.) [V]

ANTH	4133	Experimental Archaeology	(Slashlisted with 5133) Prerequisite: senior standing in Anthropology. Focus on the theoretical and practical applications of experimental approaches to understanding the past in order to place them in their proper context within archeology. No student may earn credit for both 4133 and 5133. Laboratory (Irreg.)
ANTH	4143	Economy and Culture: Production, Exchange, Consumption	Prerequisite: 1113 or junior standing. This class is an introduction to the issues, methods, and concepts of economic anthropology. Included are issues of production, distribution, and consumption in non-Western and Western societies. Other topics include the comparison of gifts and commodities, inequality, economy as a moral system, and the evolution of global economies. (Irreg.)
ANTH	4163	The Study of Material Culture	(Slashlisted with 5163) Prerequisite: 1113 or junior standing. Focuses on the study of the things people make and the broader social contexts in which objects are used, circulated, made meaningful, and consumed. Methods and theories developed in geography, folklore, cultural anthropology, archeology, and related social sciences will be examined. No student may earn credit for both 4163 and 5163. (F)
ANTH	4193	Human Adaptability	(Slashlisted with 5193) Prerequisite: 2503. The study of biological adaptations of human populations to environmental conditions. Human adaptability as a subfield of physical/biological anthropology will be examined from historical, theoretical, and methodological perspectives. No student may earn credit for both 4193 and 5193. (Irreg.)
ANTH	4233	Seminar in Advanced Curatorial Practice	Prerequisite: 4003. Provides opportunities for advanced instruction and practical experience in the curation and utilization of anthropology collections. (F)
ANTH	4253	The Anthropology of Communities	(Slashlisted with 5253) Prerequisite: 1113 or junior standing. Designed to introduce students to the community in applying anthropological field techniques and theory. while gaining training in method and theory in class, students will be given assignments to execute in community settings. Particular emphasis will be placed on ethnicity, gender and seniority as ethnological parameters. No student may earn credit for both 4253 and 5253. (Irreg.)
ANTH	4283	Curriculum & Teaching Materials Development for Endangered Languages	(Slashlisted with 5283) Prerequisite: ANTH/LING 2303 and junior standing. Provides tools to create maximally useful teaching and learning materials for under-studied languages. Focuses on teaching methods that emphasize language for actual day-to-day communication and language curricula that is culturally situated. No student may earn credit for both 4283 and 5283. (Irreg.)
ANTH	4303	Women and Development in Africa	(Slashlisted with 5303) Prerequisite: 1113 or junior standing. Examines women's involvement in economic development in Africa. Some consideration will be given to family structure and social stratification, as well as women's participation in the social, political and economic spheres. Avenues for viable social change will also be considered. No student may earn credit for both 4303 and 5303. (Irreg.) [IV-NW]
ANTH	4313	Introduction to Native American Languages	(Slashlisted with 5313) Prerequisite: 2303. Survey course into the nature and distribution of Native American languages, with a focus on North and Meso America. Topics include the typology of native languages, language families and real features and cultural domains, and language contact. This course will not satisfy the foreign language requirements. No student may earn credit for both 4313 and 5313. (Irreg.)
ANTH	4323	The Anthropology of Aging	(Slashlisted with 5323) Prerequisite: ANTH 1113. Examines the process and experience of aging as it relates to culture, and what it means to get older in a variety of cultural contexts, including the United States. Special attention will be devoted to cultural ideas about aging, the roles of older people, illness, caregiving, dying, and what it means to age well in a variety of cultures. No student may earn credit for both 4323 and 5323. (Irreg.)

ANTH	4330	Topics in Linguistic Anthropology	(Slashlisted with 5330) 1 to 4 hours. Prerequisite: 2303. May be repeated with change of content; maximum credit twelve hours. Intensive examination of new developments in the field of anthropological linguistics. Topics reflect interests of faculty, but may include issues of language revitalization, language shift, multilingualism, language and identity, storytelling traditions, language change, or language contact. No student may earn credit for both 4330 and 5330 on the same topic. (Irreg.)
ANTH	4363	Linguistic Field Methods	(Crosslisted with LING 4363) Prerequisite: 2303, 3053, and 3353. An introduction to all phases of linguistic field techniques including training in the selection of informants, the use of recording devices, and most important, the actual collection and analysis of linguistic materials. (Irreg.)
ANTH	4373	Dictionaries and the Lexicon	(Slashlisted with 5373) Prerequisite: ANTH/LING 1203 and junior standing. Provides an opportunity to gain knowledge of lexical semantics and the practical application of and problems in lexicography, including the research, planning, construction, and distribution of a dictionary. Uses current software to produce an on-line dictionary of a lesser-studied language aimed at student learners. No student may earn credit for both 4373 and 5373. (Irreg.)
ANTH	4383	Archaeological Origins of Inequality	Prerequisite: 1113 or junior standing. Examines the origins of human inequality using archaeological data. The focus will be on social and political inequality that emerged with the development of hierarchical societies, but will also address gender and age inequalities. (Irreg.)
ANTH	4413	Public Archaeology	(Slashlisted with 5413) Prerequisite: 2113. Focus is on the articulation of academic training in archaeology with current federal rules and regulations; and educational outreach concerning archaeological research and goals. Emphasis is on the preservation and management of archaeological resources. No student may earn credit for both 4413 and 5413. (Irreg.)
ANTH	4423	Introduction to Population Genetics	Prerequisite; 1113 or 2503 or junior standing. Population genetics is a classic course in biological anthropology sciences, and studies the fundamental forces that cause genetic change within and between populations. No student may earn credit for both 4423 and 5423. (Irreg.)
ANTH	4443	Visual Anthropology	Prerequisite: 1113 or junior standing. Explores the historical and contemporary use of media to represent culture, and examines the changes in styles of ethnographic film from direct cinema and observational cinema to reflexivity, personal cinema, indigenous media, and collaboration between ethnographic filmmaker and film subject. (Irreg.) [IV-NW]
ANTH	4463	Peopling of the New World	(Slashlisted with 5463) Prerequisite: ANTH 1413 or ANTH 2113. Introduces the dynamic domain of the earliest human colonization of the Americas. Focuses on such key "peopling" debates as the geographic origins of First Americans; when people first arrived in the New World; and if and how ancient human skeletal remains should be studied. No student may earn credit for both 4463 and 5463. (Irreg.)
ANTH	4483	Contemporary Native American Language Studies	(Slashlisted with 5483) Prerequisite: 2303. This course is a study of Native American languages focusing on issues of language contact, multilingualism, performance, and writing systems. Central themes include the richness of polysynthesis and the relationship between grammatical structures and culture. Course concludes with a discussion of language loss and revitalization. No student may earn credit for both 4483 and 5483. (Irreg.)
ANTH	4523	Anthropology of Media	Prerequisite: ANTH 1113, junior standing, or permission of instructor. Examines the complex relationship between culture and media focusing on nationalism, gender, ethnicity, class, transnationalism, diaspora and indigeneity. Analysis of the capacity of media to impact social life and examines whether media can create social change and transform social ties while expressing contemporary identities. (Irreg.)

ANTH	4553	Human Evolutionary History	(Slashlisted with 5553) Prerequisite: 1113 and 2503 or permission of instructor. Biological anthropology course focusing on the subfield of paleoanthropology, concerned with the examination of the origins of modern Homo sapiens. Focus on evolutionary theory and processes of evolutionary change; theory and method of paleoanthropological research; primate archaeological/fossil record, emphasizing the evolution of hominoids and hominids; analysis and interpretation of fossil records; and major trends, issues, and debates in paleoanthropology. No student may earn credit for both 4553 and 5553. (Irreg.)
ANTH	4593	Anthropology of Human Reproduction	Prerequisite: 2503 or junior standing. Examines the major features of human fertility and reproduction, exploring the interactions between physiology, ecology, and behavior. The course applies an anthropological perspective to such issues as cross-cultural patterns of fertility, the timing and probability of conception, age at first and last reproduction, and male reproductive physiology. (Irreg.) [II-NL]
ANTH	4603	Human Variation	(Slashlisted with 5603) Prerequisite: 2503. Provides an understanding of human biological variation from an evolutionary, historical, and anthropological perspective. An examination of the history of classification of human variation, including concepts of race; the genetic basis of variation, including variation in discrete and complex traits; population-based variation; and human behavioral genetics. No student may earn credit for both 4603 and 5603. (Irreg.)
ANTH	4623	Approaches to Cross-Cultural Human Problems	Prerequisite: 1113 or junior standing. Introduces students to the complex problems of contemporary global-scale cultures and helps them better understand their place on this global arena. This course will look at specific international issues or problems, and relate them to processes occurring in many parts of the world. (Irreg.) [IV-NW]
ANTH	4633	Cultures & Communities of Latin America	Prerequisite: 1113 or junior standing. Using ethnographic evidence, we will examine the legacy of the conquest and the development of modern states and identities in parts of Mesoamerica, central America, South America, and the Caribbean. (Irreg.) [IV-WC]
ANTH	4643	Psychiatric Anthropology	(Slashlisted with 5643) Prerequisite: ANTH 1113. Explores historical and contemporary thinking about culture and mental illness, and examines classic formulations of the relationship between anthropology and psychiatry. No student may earn credit for both 4643 and 5643. (Irreg.)
ANTH	4653	Ethnology of The Greater Southwest	A survey of Indian tribes in the southwestern United States and northwestern Mexico, their history, development, differentiation and cultural adjustment to the environment. Each of the important tribal groups is examined in detail to offer illustrations for discussions on the more general level. (Irreg.) [IV-NW]
ANTH	4663	Native Peoples of the Plains	(Slashlisted with 5663) Prerequisite: 1113 or junior standing. An ethnographic and historical survey of the native peoples of the Plains culture area of North America. No student may earn credit for both 4663 and 5663. (Irreg.)
ANTH	4673	Anthropology of the Caddoan People	Prerequisite: 1113 or junior standing. Integrates linguistic, ethnographic, historical and archaeological data to study the origin, spread and character of the Caddoan-speaking tribes who occupied the Plains' eastern border at the time of the earliest European contact. (Irreg.)
ANTH	4713	Statistical Concepts in Anthropology	Prerequisite: 1113 or junior standing. An introduction to anthropological statistics. Emphasis will be placed on anthropological research design and analysis of anthropological data. (Irreg.)
ANTH	4723	Gender and Health	Prerequisite: 1113 or junior standing. Provides an overview of the complex scientific and cultural interface between sex, gender, and health. Topics covered include gender identity and biological sex, various life cycles issues such as birth, sexual maturity, reproduction, and post-reproductive years. No student may earn credit for both 4723 and 5723. (Irreg.)

ANTH	4743	Culture Contact in the New World	Prerequisite: 1113 or junior standing. Examines culture contact and colonialism using archaeological data. The main focus of the course will be on European colonialism in the new world, but other cases may be examined. Historical, ethnographic, and linguistic data will also be discussed. (Irreg.) [IV-NW]
ANTH	4763	Archaeological Analysis: Methods, Theory and Practice	Prerequisite: 2113. Devoted to the laboratory phase of analyzing archaeological data derived from survey or excavation. The procedures and methods used for classifying and studying the raw data provided by the fieldwork. Laboratory (Irreg.)
ANTH	4813	Archaeology of North America	(Slashlisted with 5813) Prerequisite: 1113 or 1413 or 2113 or junior standing. A course in the prehistory of the American Indian. Study of the prehistory of North America north of Mexico. Consideration of the various archeological areas of the continent in terms of the prehistoric sequence of events from the earliest times up to European contact. No student may earn credit for both 4813 and 5813. (Irreg.) [IV-NW]
ANTH	4823	Medical Anthropology	Prerequisite: ANTH 1113 or junior standing. An introduction to the field of medical anthropology, the subfield of anthropology that focuses on the interaction of culture and biology in the areas of health, medicine and disease. Medical anthropology offers a unique perspective on how people cope with disease and how medical systems are constructed. An introduction to the theoretical orientations in medical anthropology will be followed by a topic overview of the field. No student may earn credit for both 4823 and 5823. (F)
ANTH	4833	Archaeology of the Great Plains	Prerequisite: 1113 or junior standing. A detailed survey of the archaeological remains from the Great Plains from the earliest occupation of the area until the reservation period. (Irreg.)
ANTH	4843	Cross-Cultural Study of Sex, Gender and Sexuality	(Slashlisted with 5843) Prerequisite: 1113 or junior standing. A consideration of ethnographic material that challenge anthropological understandings of the relationship among sex, gender, and sexuality. materials will include "third gender" ethnographic material that has emerged in recent years; community and other studies that suggest gender diversity and complexity in communities that we might label "homosexual"; and anthropological studies of transsexual and transgender phenomena. No student may earn credit for both 4843 and 5843. (Irreg.)
ANTH	4853	Archaeology of the Greater Southwest	Prerequisite: 1113 or junior standing. A detailed survey of the prehistoric sequence in the American Southwest and northwestern Mexico from earliest times up to the time of European contact. (Irreg.)
ANTH	4863	Archaeology of the Southeast	(Slashlisted with 5863) Prerequisite: 1113 or junior standing. A study of the prehistoric and early historic Native American culture histories. Some attention will be given to historic African and European cultures in the Southeast. Emphasis will be placed on long-term social change, pan-regional trends and colonial transformations. No student may earn credit for both 4863 and 5863. (Irreg.)
ANTH	4873	Desert Cultures of North America	Prerequisite: 1113 or junior standing. Anthropological study of various cultures, prehistoric and historic, including Indian, Spanish and modern American, as they reflect adaptation to arid environments in western North America; the relationship between aridity and human culture. (Irreg.) [III-SS]
ANTH	4903	Race and Ethnicity	Prerequisite: 1113 or junior standing. This course introduces a broad spectrum of issues, concepts and methods in the anthropology of race and ethnicity. The goal is to teach students to think, read and write critically about race and ethnicity from a cross-cultural perspective, a strategy that encourages better understanding of the various forms of structural oppression that structure everyday lives. (Irreg.)

ANTH	4933	Advanced Biological Anthropology	Prerequisite: 2503 or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics in biological anthropology such as advanced human osteology, human variation, and theory of evolutionary change. (Irreg.)
ANTH	4943	Human Osteology and Paleopathology	Prerequisite: 2503. Allows the student to develop a basic familiarity with human skeletal remains, standard anatomical terminology, and methods and techniques of data collection. In turn, these osteological skills will provide a means to explore questions of human adaptability, variation, evolution, patterns of health and disease in prehistory, and the applicability of these findings to contemporary problems.
ANTH	4953	Special Topics in Anthropology	Prerequisite: 1113 or junior standing. May be repeated with change of content; maximum credit six hours. Topics will vary and are intended to acquaint the advanced anthropology major with subdisciplines through specialized study involving anthropological theory, methodology, the preparation, development and writing of reports. (Irreg.)
ANTH	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ANTH	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ANTH	4973	Introduction to Faunal Analysis	(Slashlisted with 5973) Prerequisite: 2113. An introductory-level look at animal bone analysis as performed by archaeologists and zooarchaeologists. The bones of birds, fish, reptiles, amphibians, and mammals, as well as mollusk shell are discussed under the topics of taxonomy, taphonomy, age and sex determination, morphometrics, seasonality, and specialized techniques. Identification of bone and discussions relating recent advances in animal bone analysis are typical class activities. No student may earn credit for both 4973 and 5973. (Irreg.)
ANTH	4980	Bachelor of Arts Thesis	1 to 6 hours. Prerequisite: anthropology major; junior standing. May be repeated; maximum credit six hours. Original research in cultural anthropology, biological anthropology, archaeology, or anthropological linguistics. The research will be done under the auspices of an appropriate faculty member; a written thesis on the research is required. (Irreg.)
ANTH	4990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ANTH	5003	Sociocultural Theory	Prerequisite: graduate standing, anthropology majors only. An introduction to the fundamentals of sociocultural theory, major theorists, historical foundations, and contemporary debates in sociocultural theory. Does not serve as a prerequisite for 5123 or 5223. (F)
ANTH	5013	Phonetics and Phonemics	Prerequisite: graduate standing. This class focuses on the phonetic and phonological skills needed for describing world languages. Topics covered under phonetics include articulatory phonetics, ear training, and using acoustic computer programs. Topics in phonology will cover variation and allomorphy in many languages, writing phonological rules, and the analysis of tone and stress. (F)

ANTH	5033	Story, Performance, Event	(Slashlisted with 4033) Prerequisite: graduate standing. Covers the verbal art and performance aspects of linguistic anthropology. Focuses on oral storytelling as we have come to understand it and will have as its main concern how people tell stories. Students will get an overview of verbal art and performance where and when storytelling occurs. No student may earn credit for both 4033 and 5033. (Irreg.)
ANTH	5043	Folklore, Folklife, And Expressive Culture	Prerequisite: graduate standing. Introduces the academic study of folklore and folklife. Focus is on theories and methods used to document and interpret expressive culture, including a wide array of verbal, material, performance, and customary genres. Ethnographic, comparative, literary, geographic, historical, and psychological perspectives will be explored. Emphasis will be placed on contextual studies understanding art in community settings. (Irreg.)
ANTH	5053	Morphology	(Slashlisted with 4053; Crosslisted with LING 5053) Prerequisite: ANTH 3053 and ANTH 3353 and graduate standing. Introduces and develops theories and concepts of morphology including word formation, derivation, inflection, non-concatenative morphs, covert categories, prosodic phenomena, morphosyntactic categories and clitics. Data from non-Western languages will be prominent. No student may earn credit for both 4053 and 5053. (Irreg.)
ANTH	5063	Language Contact, Loss, and Revitalization	Prerequisite: 2303 and graduate standing. Covers the linguistic, social and cultural factors involved in contact-induced language change and language shift, and on the main trends and literature in revitalization and maintenance of endangered languages. Students gain experience in practical applications of language revitalization, focusing on languages of the Americas. No student may earn credit for both 4063 and 5063. (Irreg.)
ANTH	5073	Anthropology of Religion	Prerequisite: graduate standing. This graduate seminar embraces an approach to the anthropology of religion that is both interdisciplinary and rooted in particular places and historical contexts. The goal is to provide grounding in traditional approaches to the subject that will serve as a framework for practice-oriented ethnography of contemporary religion in various contexts. (Irreg.)
ANTH	5083	Quantitative Methods in Anthropology	Prerequisite; graduate standing. Introduces students to the basics of quantitative analysis in the field of anthropology. Topics include parametric and non-parametric measurements of significance and association, mulitvariate techniques, and concepts useful to anthropologists such as spatial analysis and sampling. (Irreg.)
ANTH	5123	Contemporary Culture Theory	Prerequisite: ANTH 5223. Introduces students to different unit and levels of sociocultural analysis. Students will be required to address a series of research problems as a means of understanding sociocultural analysis. (Sp)
ANTH	5133	Experimental Archaeology	(Slashlisted with 4133) Prerequisite: graduate standing in Anthropology. Focus on the theoretical and practical applications of experimental approaches to understanding the past in order to place them in their proper context within archaeology. No student may earn credit for both 4133 and 5133. Laboratory. (Irreg.)
ANTH	5153	Ethnography of Communication	Prerequisite: graduate standing. This course focuses on language use in larger discourse and cultural contexts and how language is used to conduct the social life and the dynamics of culture. Topics include topic and focus, deixis, reported speech, speaking styles, strategies, and genres, and language and ethnicity. (F)
ANTH	5163	The Study of Material Culture	(Slashlisted with 4163) Prerequisite: graduate standing. Focuses on the study of the things people make and the broader social contexts in which objects are used, circulated, made meaningful, and consumed. Methods and theories developed in the fields of geography, folklore, cultural anthropology, archaeology, and related social sciences will be examined. No student may earn credit for both 4163 and 5163. (F)

ANTH	5183	Contemporary Native American Ethnography	Prerequisite: graduate standing. Examines the impact of changes in the relationship between anthropologists and Native communities and the possibilities for an improved collaborative relationship between anthropologists and First Nations communities in the U.S. and Canada. Through readings, class discussion, and media we examine the ways in which Native people maintain cultural identity and sovereignty in response to ever-changing social conditions of life in the 21st century. (Irreg.)
ANTH	5193	Human Adaptability	(Slashlisted with 4193) Prerequisite: 2503, graduate standing. The study of biological adaptations of human populations to environmental conditions. Human adaptability as a subfield of physical/biological anthropology will be examined from historical, theoretical, and methodological perspectives. No student may earn credit for both 4193 and 5193. (Irreg.)
ANTH	5203	Hunter-Gatherers	Prerequisite: graduate standing. Considers the social, economic, ecological, and historical variation in hunter-gatherer societies. The history and theory of hunter-gatherer studies will be explored. Ethnographic and archaeological case studies will be used to examine settlement and mobility practices, architecture, subsistence, social organization, interaction, technology, and cosmology. (Irreg.)
ANTH	5213	Ethnographic Methods	Prerequisite: graduate standing. Survey of ethnographic methods in anthropological research, with weekly fieldwork assignments and writing exercises. First half of class devoted to current theoretical debates, including the post-modern controversy and literary issues in classic ethnography. Second half of class devoted to hands-on research, including participant-observation, interviews, field notes, databases, and linguistic elicitation. (Irreg)
ANTH	5223	Foundations of Social Thought	Prerequisite: graduate standing. Survey of anthropological theorists and theories of culture (evolutionary, functional, cognitive, ecological, structural, symbolic, etc.), and their impact on research methods in each of the four fields of anthropology and related disciplines. Emphasis will be given to a discussion of primary texts written by the major theorists. (F)
ANTH	5253	The Anthropology of Communities	(Slashlisted with 4253) Prerequisite: graduate standing. Designed to introduce students to the community in applying anthropological field techniques and theory. while gaining training in method and theory in class, students will be given assignments to execute in community settings. Particular emphasis will be placed on ethnicity, gender and seniority as ethnological parameters. No student may earn credit for both 4253 and 5253. (Irreg.)
ANTH	5263	Feminist Anthropology	Prerequisite: graduate standing. Examines a variety of relevant books and articles on feminist anthropological theory, an area in which the literature has expanded voluminously since the 1970s. Broad topical areas are as follows: Boasian Contributions to Feminist Anthropology; Women in the Field; Women and Work; and, the New Ethnography. (F)
ANTH	5273	Topics in Social Anthropology	May be repeated; maximum credit twelve hours. Topics vary. (F, Sp)
ANTH	5283	Curriculum & Teaching Materials Development for Endangered Languages	(Slashlisted with 4283) Prerequisite: ANTH/LING 2303 and graduate standing. Provides tools to create maximally useful teaching and learning materials for under-studied languages. Focuses on teaching methods that emphasize language for actual day-to-day communication and language curricula that is culturally situated. No student may earn credit for both 4283 and 5283. (Irreg.)
ANTH	5293	Origins of Complex Society	Prerequisite: graduate standing. Examines the origins and development of complex society and the institutionalization of social inequalities. Complexity is examined along a changing scale of sociopolitical organization, from small "egalitarian" societies to middle-range "chiefdoms" to large archaic states, using both archaeological and ethnographic examples. (Sp)

ANTH	5303	Women and Development in Africa	(Slashlisted with 4303) Prerequisite: graduate-level social science course. Examines women's involvement in economic development in Africa. Some consideration will be given to family structure and social stratification, as well as women's participation in the social, political and economic spheres. Avenues for viable social change will also be considered. No student may earn credit for both 4303 and 5303.
ANTH	5313	Introduction to Native American Languages	(Slashlisted with 4313) Prerequisite: graduate standing. Survey course into the nature and distribution of Native American languages, with a focus on North and Meso America. Topics include the typology of native languages, language families and real features and cultural domains, and language contact. This course will not satisfy the foreign language requirements. No student may earn credit for both 4313 and 5313. (Irreg.)
ANTH	5323	The Anthropology of Aging	(Slashlisted with 4323) Prerequisite: ANTH 5223 and graduate standing. Examines the process and experience of aging as it relates to culture, and what it means to get older in a variety of cultural contexts, including the United States. Special attention will be devoted to cultural ideas about aging, the roles of older people, illness, caregiving, dying, and what it means to age well in a variety of cultures. No student may earn credit for both 4323 and 5323. (Irreg.)
ANTH	5330	Topics in Linguistic Anthropology	(Slashlisted with 4330) 1 to 4 hours. Prerequisite: graduate standing. May be repeated with change of content; maximum credit twelve hours. Intensive examination of new developments in the field of anthropological linguistics. Topics reflect interests of faculty, but may include issues of language revitalization, language shift, multilingualism, language and identity, storytelling traditions, language change, or language contact. No student may earn credit for both 4330 and 5330 on the same topic. (Irreg.)
ANTH	5343	Anthropological Demography	Prerequisite: graduate standing. This course will consider demography, the study of human populations, from an anthropological perspective. The course will focus on critical discussion of the readings, which will cover theory, methods, and empirical case studies, and will emphasize small-scale societies, natural fertility populations, and developing countries. (Irreg.)
ANTH	5363	Linguistic Anthropology	Prerequisite: graduate standing in Anthropology or permission of instructor. Course covers the history of theory in linguistic anthropology, starting with the early work of Boas, Sapir, and Whorf, and continuing with the writings of Levi-Strauss, Hymes, Basso, Silverstein, Bakhtin, and Hill. Surveys contemporary trends in discourse analysis, sociolinguistics and cognitive linguistics. Course is a required core course for anthropology graduate students.(F, Sp)
ANTH	5373	Dictionaries and the Lexicon	(Slashlisted with 4373) Prerequisites: graduate standing. Provides knowledge of lexical semantics and the practical application of problems in lexicography, including the research, planning, construction, and distribution of a dictionary. Uses current software to produce an on-line dictionary of a lesser-studied language aimed at student learners. No student may earn credit for both 4373 and 5373. (Irreg.)
ANTH	5393	Anthropology and the Health of Indigenous People	Prerequisite: graduate standing. Introduces graduate students to research in medical, biological, linguistic, and sociocultural anthropology and archaeology that relates to the health and well-being of global indigenous populations, with an emphasis on the native peoples of the Americas. (F)
ANTH	5403	Human Growth	Prerequisite: graduate standing. Examines human growth from a biocultural perspective. Human growth is shaped by genes and factors including physical environment, nutrition, disease, and activity. Topics include basic principles of growth and development; assessment methods; growth in primates and early hominids; ecological, genetic, and other factors influencing population variation in growth and the developmental basis of disease. (Irreg.)

ANTH	5413	Public Archaeology	(Slashlisted with 4413) Prerequisite: graduate standing, permission of instructor. Focus is on the articulation of graduate academic training in archaeology with current federal rules and regulations, and educational outreach concerning archaeological research and goals. Emphasis is on advanced training in the preservation and management of archaeological resources. No student may earn credit for both 4413 and 5413.
ANTH	5423	Introduction to Population Genetics	Prerequisite: graduate standing. Population genetics is a classic course in biological anthropology sciences, and studies the fundamental forces that cause genetic change within and between populations. No student may earn credit for both 4423 and 5423. (Irreg.)
ANTH	5453	Advanced Faunal Analysis	Prerequisite: graduate standing. Designed to provide the experience of discovering the past technologies that apply to the manufacture, use, and discard of objects made from or technologies utilizing animal remains. (Irreg.)
ANTH	5463	Peopling of the New World	(Slashlisted with 4463) Prerequisite: graduate standing. Introduces the dynamic domain of the earliest human colonization of the Americas. Focuses on such key "peopling" debates as the geographic origins of First Americans; when people first arrived in the New World; and if and how ancient human skeletal remains should be studied. No student may earn credit for both 4463 and 5463. (Irreg.)
ANTH	5483	Contemporary Native American Language Studies	(Slashlisted with 4483) Prerequisite: 2303 and graduate standing. This course is a study of Native American languages focusing on issues of language contact, multilingualism, performance, and writing systems. Central themes include the richness of polysynthesis and the relationship between grammatical structures and culture. Course concludes with a discussion of language loss and revitalization. No student may earn credit for both 4483 and 5483. (Irreg.)
ANTH	5493	Suffering and Meaning	Prerequisite: 5223 and graduate standing. Focuses on individual and collective human suffering, and examines causes of suffering and the existential crises that often ensue. (Irreg.)
ANTH	5543	Research Design	Prerequisite: graduate standing and 5223. Studies ethnographic research methods and design. An overview of current practices and theoretical disputes, followed by group discussion of individual class members' unique research design problem. (Irreg.)
ANTH	5583	Mobility and Sedentism	Prerequisite: graduate standing. Focus on the concepts of mobility and sedentism in the archaeological record. The concepts are defined and discussed in their many forms, and the relationships between the mobility/sedentism continuum and other factors such as the use of agriculture, population size, the natural environment, social organization, skeletal impacts, ritual, and kinds of artifacts are considered. Appropriate ethnographic literature is used extensively. (Irreg.)
ANTH	5603	Human Variation	(Slashlisted with 4603) Prerequisite: 2503, graduate standing. Provides an understanding of human biological variation from an evolutionary, historical, and anthropological perspective. An examination of the history of classification of human variation, including concepts of race; the genetic basis of variation, including variation in discrete and complex traits; population-based variation; and human behavioral genetics. No student may earn credit for both 4603 and 5603. (Irreg.)
ANTH	5613	Morphosyntax	Prerequisite: 5013. This course will familiarize the student with morphological and syntactic phenomena from a large array of languages. Morphological processes, inflectional and derivation, grammatical categories, and problems in morphemic analysis will be covered. Syntactic phenomena covered includes cliticization, noun incorporation agreement, valence, causation, subordination structures, and head/dependent and word order typologies. (Sp)

ANTH	5623	Descriptive Linguistic Methods I	Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit six hours. This course is an introduction to field methods in linguistic anthropology, with emphasis on the preliminary phases of documenting indigenous languages. Course begins with the elicitation of basic vocabulary before progressing to the analysis of sound patterning, grammatical patterning, and elementary sentence structures. Also covers the development of writing systems for previously unwritten languages. (Irreg.)
ANTH	5633	Descriptive Linguistic Methods II	Prerequisite: 5623 or permission of instructor. May be repeated; maximum credit six hours. Continued exploration of field methods in linguistic anthropology, with emphasis on developing the materials for a dictionary, grammatical description and morphology and syntax of language introduced in 5623. Also covers computerized databases. (Irreg.)
ANTH	5643	Psychiatric Anthropology	(Slashlisted with 4643) Prerequisite: ANTH 5223 and graduate standing. Explores historical and contemporary thinking about culture and mental illness, and examines classic formulations of the relationship between anthropology and psychiatry. No student may earn credit for both 4643 and 5643.(Irreg.)
ANTH	5653	Paleoethnobotany	Prerequisite: graduate standing. The study of people and plants in the past. Discussion of types of anthropological questions that can be answered, the types of data studied, and the analytic approaches used. Emphasis will be on macroplant remains, mostly seeds and woods, and development of basic laboratory skills. Laboratory (Irreg.)
ANTH	5663	Native Peoples of the Plains	(Slashlisted with 4663) Prerequisite: 5023 and permission of instructor. An ethnographic and historical survey of the native peoples of the plains culture area of North America. No student may earn credit for both 4663 and 5663. (Irreg.)
ANTH	5673	Psychiatric Anthropology	Prerequisite: 5223 and graduate standing. Explores historical and contemporary thinking about culture and mental illness, and examines classic formulations of the relationship between anthropology and psychiatry. (Irreg.)
ANTH	5683	Prehistoric Human Ecology	Prerequisite: Graduate standing. The interactions between humans and their environments are critical for human survival and have been of anthropological interest for decades. Prehistoric human ecology is studied through a variety of approaches. Along with a discussion of human ecology as a set of theoretical approaches, we will deal with specific case studies. The class is not focused upon paleoenvironmental reconstructions nor is it a lab course dealing with analysis of environmental data. (Irreg.)
ANTH	5693	Thesis/Dissertation Writing	Prerequisite: Graduate standing. The goal of this seminar is to provide a supportive space for discussing the craft of writing, sharing tips for organizing data, and critiquing drafts of works in progress. Every student will be required to circulate thesis chapters, which will form the texts for the seminar. (Irreg.)
ANTH	5723	Gender and Health	Prerequisite: graduate standing. Provides an overview of the complex scientific and cultural interface between sex, gender, and health. Topics covered include gender identity and biological sex, various life cycle issues such as birth, sexual maturity, reproduction, and post-reproductive years. No student may earn credit for both 4723 and 5723. (Sp)
ANTH	5783	Ceramics in Archaeology	Prerequisite: graduate standing. The theoretical frameworks surrounding the analysis of ceramics in archaeology are discussed. Topics considered may include analytic methods, origins, mobility and sedentism, function, production, gender, specialization, distribution, style, ethnicity, household size, ideology, and social identity. (Irreg.)
ANTH	5803	Theories of Identity	Prerequisite: 5223 and graduate standing. Considers the relationship between ethnicity and other social categories on processes such as race, peoplehood, culture, tradition, heritage, nationality, religion, gender, and class. (Sp)

ANTH	5813	Archaeology of North America	(Slashlisted with 4813) Prerequisite: graduate standing. A course in the prehistory of the American Indian. Study of the prehistory of North America north of Mexico. Consideration of the various archeological areas of the continent in terms of the prehistoric sequence of events from the earliest times up to European contact. No student may earn credit for both 4813 and 5813. (Irreg.)
ANTH	5823	Medical Anthropology	Prerequisite: graduate standing and permission of instructor. An introduction to the field of medical anthropology, the subfield of anthropology that focuses on the interaction of culture and biology in the areas of health, medicine and disease. Medical anthropology offers a unique perspective on how people cope with disease and how medical systems are constructed. An introduction to the theoretical orientations in medical anthropology will be followed by a topic overview of the field. No student may earn credit for both 4823 and 5823.(F)
ANTH	5833	Theories of Social Organization	Prerequisite: 5023 or 5233. A survey of current approaches to the description and analysis of social interaction between community members. Emphasis is placed on distinguishing intra-community interaction from inter-community interaction. (Sp)
ANTH	5843	Cross-Cultural Study of Sex, Gender and Sexuality	(Slashlisted with 4843) Prerequisite: graduate standing. A consideration of ethnographic material that challenge anthropological understandings of the relationship among sex, gender, and sexuality. Materials will include "third gender" ethnographic material that has emerged in recent years; community and other studies that suggest gender diversity and complexity in communities that we might label "homosexual"; and anthropological studies of transsexual and transgender phenomena. No student may earn credit for both 4843 and 5843. (Irreg.)
ANTH	5853	Topics in Medical Anthropology	Prerequisite: graduate standing. May be repeated with change of content; maximum credit 12 hours. Seminar with research paper for graduate major with special interest in medical anthropology. (Irreg.)
ANTH	5863	Archaeology of the Southeast	(Slashlisted with 4863) Prerequisite: 1113, 2113. A study of the prehistoric and early historic Native American culture histories. Some attention will be given to historic African and European cultures in the Southeast. Emphasis will be placed on long-term social change, pan-regional trends and colonial transformations. Graduate students will be expected to lead discussions, do seventy-five percent more reading and write a longer research paper. No student may earn credit for both 4863 and 5863. (Sp)
ANTH	5893	Topics in Archaeology	May be repeated; maximum credit 12 hours. Topics will vary. Laboratory (F, Sp)
ANTH	5903	Ethnicity and Health Disparities	Prerequisite: graduate standing. Health is one of the most useful fields of study for anthropologists in that it offers a unique lens through which to explore the biological impact of social, cultural, and economic divisions. Course uses theory and method from several sub-disciplines in anthropology to explore these intersections in a number of contemporary and historic populations. (Irreg.)
ANTH	5913	Topics in Biological Anthropology	Prerequisite: graduate standing. May be repeated with change of topic; maximum credit 12 hours. An opportunity for a seminar of interest in biological anthropology. Laboratory (F, Sp)
ANTH	5923	Lithic Technology and Analysis	Prerequisite: 6713. Instructs students in identification of kinds and sources of stone used prehistorically on the Southern Plains and their eastern border and helps students develop skills in flintknapping as an aid to the process of analyzing archaeological materials. (Irreg.)
ANTH	5933	Advanced Lithic Technology and Analysis	Prerequisite: 5923. Examines the literature on the identification of lithic materials, fracture mechanics, flint knapping, and use wear studies, and the application of this knowledge to specific research problems. (Irreg.)

ANTH	5943	Grasslands Adaptations	Prerequisite: Graduate standing. Evolutionary theory as applied to grassland adaptations. Topics include grassland ecology, bison ecology, climactic changes, and horticultural adaptations. The focus is on the North American plains. (Irreg.)
ANTH	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ANTH	5963	Writing for Anthropologists	Prerequisite: graduate standing in Anthropology. Teaches students to be better and more efficient anthropological writers. Topics range from pragmatic approaches to increasing productivity; to understanding the peer-reviewed process; to the nuts and bolts of writing an effective research paper, literature review, and grant proposal. (Irreg.)
ANTH	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ANTH	5973	Introduction to Faunal Analysis	(Slashlisted with 4973) Prerequisite: graduate standing. An introductory-level at animal bone analysis as performed by archaeologists and zoo archaeologists. The bones of birds, fish, reptiles, amphibians, and mammals, as well as mollusk shell are discussed under the topics of taxonomy, age and sex determination, morphometrics, seasonality, and specialized techniques. Identification of bone and discussion relating recent advances in animal bone analysis are typical class activities. No student may earn credit for both 4973 and 5973. (Irreg)
ANTH	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. Laboratory (F, Sp, Su)
ANTH	5983	Advanced Osteology and Paleopathology	Prerequisite: graduate standing. For the advanced skeletal biology graduate student preparing for laboratory and/or fieldwork research. Training in techniques, analysis and reporting skeletal research. (Irreg.)
ANTH	5990	Special Anthropological Problems	1 to 3 hours. May be repeated; maximum credit 12 hours. Permits the student to investigate a specific problem in terms of currently available data. It may be within any field of anthropology recommended by the instructor or adviser. (F, Sp, Su)
ANTH	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ANTH	6300	Research in Medical Anthropology	Prerequisite; graduate standing. May be repeated; maximum credit 12 hours. Permits graduate student to undertake independent fieldwork or research in medical anthropology. Such research is normally limited to original or unpublished work. (Irreg.)
ANTH	6440	Research in Biological Anthropology	Prerequisite: Graduate standing. May be repeated; maximum credit six hours. Permits students to undertake independent fieldwork or laboratory research in biological anthropology. Such research is normally limited to original or unpublished work. (Irreg.)
ANTH	6590	Fieldwork in American Indian Languages	(Crosslisted with LING 6590) 3 to 6 hours. Advanced field experience in the recording and analysis of Native American languages, including a discussion of problems in selecting and effectively utilizing informants. (Irreg.)
ANTH	6633	Method and Theory in Biological Anthropology	Prerequisite: graduate standing in Anthropology or permission of instructor. The core course in biological anthropology. Historical development of biological (physical) anthropology; the development and application of method and theory in the major subfields of biological anthropology. (Sp)

ANTH	6643	Methods in Living Populations Research	Prerequisite: graduate standing. Survey of the methods used by biological and medical anthropologists to investigate the health and biology of living populations. Focuses on the ethics of research involving human subjects, strategies for establishing collaborative relationships with communities, and strategies for collecting, managing, and analyzing qualitative and quantitative data. (Irreg.)
ANTH	6650	Advanced Fieldwork in Anthropology	3 to 8 hours. Prerequisite: permission of chairperson and dean of the Graduate College. Students interested in this summer program should request a Special Announcement from the Department of Anthropology. Laboratory (Su)
ANTH	6713	Archaeological Theory	Prerequisite: graduate standing in Anthropology or permission of instructor. This course explores archaeological theory, its evolution and context. As an anthropological core class, it stresses the articulation of archaeological theory within its wider parent discipline, anthropology. (F)
ANTH	6750	Research in Archaeology	1 to 4 hours. Permits the student to undertake independent research. Such research is normally limited to original or unpublished work. (Problems to be solved by library research are properly within the scope of 5990.) Laboratory (F, Sp)
ANTH	6803	Advanced Archaeological Theory	Prerequisite; 6713. An advanced course in archaeological theory focusing especially on those theories prominent in the last decade. The course concentrates on theoretical frameworks that might form the students' dissertation research. (Irreg,)
ANTH	6810	Research in Ethnology	1 to 4 hours. Permits the student to undertake independent fieldwork to study some problems in ethnology. (F, Sp, Su)
ANTH	6843	Foundations of Biological and Medical Anthropology	Prerequisite: graduate standing in Anthropology. Introduces students to the theoretical foundations of biological and medical anthropology. (F)
ANTH	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ANTH	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ANTH	6980	Research for Doctoral Dissertation	2 to 16 hours. Laboratory (F, Sp, Su)
ANTH	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ARAB	1115	Beginning Arabic	Aims at developing mastery of Arabic phonology and script, control of basic vocabulary, grammar, basic communicative situations, and cultural concepts explicitly expressed in the language. Listening and speaking are emphasized from the very beginning. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F) [I-FL]
ARAB	1225	Beginning Arabic Continued	Prerequisite: 1115. Focuses on all language skills (listening, speaking, reading, and writing), including developing the ability to interact successfully in basic communicative situations. Short texts and topics of general import as well as cultural concepts embedded in the language will be covered. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (Sp) [I-FL]
ARAB	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

ARAB	2013	Colloquial Arabic	Prerequisite: ARAB 1225. May be repeated once with a change of topic (dialect); maximum credit 6 hours. Develops communicative functional abilities, in particular speaking and listening, in one of the regional spoken dialects of the Arab world. The direct connection between the colloquial dialect taught and Modern Standard Arabic will be explored. Relevant aspects of local culture will be covered, as well as the cultural appropriateness of communicative functions introduced. (F, Sp)
ARAB	2113	Intermediate Arabic	Prerequisite: ARAB 1225. Aims at developing language skills (listening, speaking, reading and writing) at the intermediate level, with more emphasis on reading and writing. Expands into more complex structures, wider communicative situations and vocabulary relating to practical, social, cultural and media topics. (F)
ARAB	2223	Intermediate Arabic Continued	Prerequisite: ARAB 2113; ARAB 2013 or concurrent enrollment. Continues developing language skills (listening, speaking, reading and writing) at the intermediate level, with more emphasis on reading and writing. Continues to expand into more complex structures, wider communicative situations and vocabulary relating to practical, social, cultural and media topics. (Sp)
ARAB	2970	Special Topics/Seminar	NULL
ARAB	3113	Advanced Arabic	Prerequisite: 2223. Students are expected to read, listen to, and understand the content and intent of a variety of authentic texts; write at the paragraph level; and participate in formal and informal discussion on social and professional topics. (F)
ARAB	3223	Advanced Arabic (Continued)	Prerequisite: 3113. Students are expected to read, listen to, and understand the content and intent of a variety of authentic texts; write at the paragraph level; and participate in formal and informal discussion on social and professional topics. (Sp)
ARAB	3423	Advanced Arabic Composition	Prerequisite: ARAB 2223. Instruction in proper writing habits at an advanced level, toward the achievement of idiomatic formal Arabic. Focuses on writing in Arabic for personal, professional and academic needs. Develops the ability to narrate and describe in the different Arabic tenses (past, present and future), narrate and describe with a sufficient control of aspect (indicating whether an action is completed), write summaries of familiar topics, combine sentences into texts of paragraph length, and use cohesive devices properly. (F)
ARAB	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ARAB	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers topics not usually presented in the regular courses.
ARAB	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses.
ARAB	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ARAB	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)

ARAB	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ARAB	4413	Arabic Structure	Prerequisite: 3223. Detailed explanations of the structure of the Arabic language at both the theoretical and pedagogical levels. The different phonological, morphological, and syntactic rules are presented and discussed holistically, combining both form and function, to achieve adequate knowledge of Arabic structure. The course is conducted mostly in Arabic. (F)
ARAB	4433	Arabic Media and Politics	Prerequisite: 3223. Exposes students to various types of mass media covering contemporary political, economic, historical, and social issues in the Arab world. Sociolinguistic features of news reports are examined to understand the content, political underpinnings, and the framing or packaging techniques used in media discourse. The course is conducted entirely in Arabic. (F)
ARAB	4443	Readings in Islamic Religious Texts	Prerequisite: 3223. Representative texts in Arabic from the Qur'an, Qur'anic Exegesis, Prophetic Hadith, Prophet Muhammad's biographies, and legal, mystical, and theological treatises. The objectives are to understand major Islamic doctrines, and themes, and to develop working knowledge of genre specific vocabulary and style. Class is conducted in Arabic. (Sp)
ARAB	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ARAB	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ARAB	4990	Independent Study	1 to 3 hours. Prerequisite: four courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
ARAB	4993	Readings in Contemporary Arab Culture	Prerequisite: ARAB 4413 and ARAB 4433. Deeper understanding of major cultural issues by examining critical texts of intellectual figures throughout the contemporary Arab world. Prepares students to write their final project in Arabic, and provides opportunities for developing their language skills further for adequate mastery of the language. Course is conducted entirely in Arabic. (Sp) [V]
ARAB	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ARCH	1112	Cultures of Collaborating, Creating, and Constructing	Prerequisite: Architecture or Environmental Design major. Introduction to the foundations of the various planning, design, and construction disciplines. Focus on the collaborative process for creating and constructing the built environment. Histories of expertise areas such as planning, architecture, landscape architecture, interior design, construction science, engineering, and graphic environmental design will be explored and related to how these have evolved to their contemporary conditions. (F)
ARCH	1121	Methods I - Introduction to Creating-Making	Corequisite: ARCH 1112, ARCH 1154. An introduction to the historical and theoretical issues forming and informing the built environment. The relationships of conceptual, methodological, and representational skills related to designed environments will be introduced and developed. Design vocabulary, studio culture, and architectural discourse will be explored and related within the framework of Creating-Making. (F)
ARCH	1133	Introduction to Building Technology	Introduction of the historical development and application of basic architectural technology including building service systems, structures and systems of building technology. (Sp)

ARCH	1142	Design, Construction and Society	An introduction to the issues forming and informing the built environment. The history, principles, and practices of architecture, construction, and interior design will be explored. (F)
ARCH	1154	Design I - Design Fundamentals	Corequisite: ARCH 1112 and ARCH 1121. Development of foundational design, visual communication skills, and graphic conventions including sketching and drafting, shade and shadow, rendering methods, perspective, color, materials, and model building. Introduces processes of creating-making through methods engaged in critical thinking and experiential knowing. Methods of composition are introduced and explored: design elements and principles, proportion and scale, ordering systems, and organizational strategies. Introduction to issues of craft and material engagement. (F)
ARCH	1223	Methods II - Material Awareness	Prerequisite: ARCH 1121, ARCH 1112, and ARCH 1154 with a grade of C or better. Corequisite: ARCH 1254. An introduction to the influences of materials and technology on designed environments. Introduction of the historical development and application of basic architectural technology. Introduction to structural systems and components and to the formal/spatial/material characteristics of building technology. (Sp)
ARCH	1254	Design II - Craft and Making	Prerequisite: ARCH 1112, ARCH 1121, and ARCH 1154 with a grade of C or better. Corequisite: ARCH 1223. A continuation in the development of fundamental design and visual communication skills through introductions to the material, formal, and spatial properties of architecture. Fabrication safety, craft, and techniques will be introduced and developed through the making of full-scale constructions. Continued ideas involving creating-making are explored through exercises in the formal, spatial, and material qualities of human environments. (Sp)
ARCH	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ARCH	2233	Architectural Structures I	Prerequisite: Architecture major and completion of 1133, 1142, 1154, 1254, Physics 1114 and Mathematics 1823; or Construction Science major and completion of Physics 2414 and Mathematics 1823. Concepts, knowledge and methods of statics and strengths of materials for architects and constructors. (Sp)
ARCH	2243	History of Architecture I	Prerequisite: majors only or permission of instructor. Corequisite: ARCH 2323, ARCH 2354; for Interior Design majors: completion of A HI 2213 and A HI 2223. A theoretical investigation of the cultural, political, and aesthetic values of diverse Western and non-Western cultures and how these affect the built environment from pre-history through the Renaissance. This course continues the development of critical writing skills and further develops analytic skills that act to inform design decisions related to studio projects. (F) [IV-WC]
ARCH	2323	Methods III - Design Analytics	Prerequisite: ARCH 1223, ARCH 1254 with a grade of C or better. Corequisite: ARCH 2354, ARCH 2243. An introduction to historical precedent, human factors, and the physical and cultural contexts associated with the built environment. The contextual relationships between building, site, and culture will be explored through an introduction to various environmental and site design concepts, skills, and methods appropriate for architects. (F)
ARCH	2333	Architecture and the Environment	Prerequisite: majors only; 1133, 1142, 1154, 1254. Building/site relationships and introduction of selected environmental and site design concepts, knowledge and methods appropriate for architects. (F)
ARCH	2343	History of Architecture II	Prerequisite: ARCH 2323, ARCH 2354, ARCH 2243; Corequisite: ARCH 2423, ARCH 2454. An investigation of the cultural, political, and aesthetic values of diverse Western and non-Western cultures and how these have affected the built environment from the Renaissance through the 19th century. A continuation of the development of critical writing skills and analytic skills that act to inform design decisions related to studio projects. (Sp)

ARCH	2354	Design III - Crafting Place	Prerequisite: ARCH 1223, ARCH 1254 with a grade of C or better. Corequisite: ARCH 2323, ARCH 2243. Development of formal and spatial architectural components that demonstrate engagement with design principles, precedent analysis, human factors, and environmental and cultural influences on design. Expression of ideas through the application of virtual techniques of representation and visual communication are required. (F)
ARCH	2423	Methods IV - Materials and Form	Prerequisite: ARCH 2243, ARCH 2323, and 2354 with a grade of C or better. Corequisite: ARCH 2343, ARCH 2454. An introduction to the nature of building materials with regard to form, strength, durability, workability, structure, connections, surfaces, and edges. Analysis of architectural expression through the use of building materials including the effects of: light, air movement, humidity, and their relationships to both one another and formal and spatial expressions. Provides a phenomenological foundation for more technical development in Methods V. (Sp)
ARCH	2454	Design IV - Materials and Making	Prerequisite: ARCH 2243, ARCH 2323, and ARCH 2354, with a grade of C or better. Corequisite: ARCH 2343, ARCH 2423. A continuation of ARCH 2354. Introduces projects of moderate complexities demonstrating intermediate design principles within the context of the urban environment. Application of both physical and virtual communication skills as professional techniques of representation and communication are required. (Sp)
ARCH	3013	Architecture for Non-Majors	Prerequisite: junior standing. An introduction of basic principles of architecture for the non-architect. Understanding of the qualities and characteristics of a well-designed architectural environment. Not open to architecture majors. (F, Sp) [IV-AF]
ARCH	3433	Environmental Controls I	Prerequisite: Architecture major and completion of 2233, 2243, 2333, 2343, 2354, 2454; or Construction Science major. Introduction to psychometrics, heat transmission in buildings, heating, air conditioning and ventilation, solar heat gain, passive solar conditioning, plumbing and fire protection. (F)
ARCH	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ARCH	3533	Architectural Materials	Prerequisite: 2233, 2243, 2333, 2343, 2354, 2454, and full program admission. The nature of building materials with regard to form, strength, durability, workability, structure, connections, surfaces and edges. Analysis of architectural expression in use of building materials. (F)
ARCH	3554	Studio V	Prerequisite: 2233, 2243, 2333, 2343, 2354, 2454, and full program admission. Continuation of 2454. Introduces projects of increasing complexity. Individual and/or team architectural projects of substantial complexity focusing on the comprehensive integration of social, cultural, theoretical, environmental and technical influences on architecture. Application of professional techniques of representation and communication required. Laboratory (F)
ARCH	3555	Design V - Architectural Making I	Prerequisite: ARCH 2343, ARCH 2423, and ARCH 2454. Corequisite: ARCH 4133, ARCH 4453, and ARCH 4523. Introduces client-initiated programming as an influence on design process. Issues related to structural systems, thermal control systems, and life safety will be explored. Site issues including access/egress/parking, building orientation, and hydrology and subsurface conditions will be introduced as factors affecting Creating-Making. An introduction to software essential to simulation of building performance as a means to integrate climatic conditions, building and site orientations, materials, and form in sustainable ways. (F)

ARCH	3633	Architectural Structures II	Prerequisite: Architecture major and completion of 2233, 2243, 2354, 2454, and full program admission, or Construction Science major and completion of 2233. Extension of the study of architectural structures through structural design of simple building frameworks; simple structural systems for gravity, lateral and seismic loads in steel, wood and masonry; basic structural detailing. Laboratory (F)
ARCH	3654	Studio VI	Prerequisite: 2233, 2243, 2333, 2343, 2354, 2454, and full program admission. Continuation of 3554. Introduces projects of urban issues. Individual and/or team architectural projects of substantial complexity focusing on the comprehensive integration of social, cultural, theoretical, environmental and technical influences on architecture. Application of professional techniques of representation and communication required. Laboratory (Sp)
ARCH	3655	Design VI - Architectural Making II	Prerequisite: ARCH 4133, ARCH 4453, ARCH 4523, and ARCH 3555. Corequisite: ARCH 4233, ARCH 4623. This course is a continuation of Design V with an introduction to passive and active forms of lighting, acoustics, conveyance systems, and electrical systems. An emphasis will be placed on the relation between these auxiliary building systems and Creating-Making. Issues of sustainability including environmental impacts, resource utilization, ethical resource efficiencies and performance-based design will be related to concepts of Creating-Making. Codes and standards that effect the built environment will be explored. (Sp)
ARCH	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
ARCH	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
ARCH	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ARCH	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ARCH	4000	Foreign Study	Prerequisite: permission of instructor. Provides a significant cross-cultural exploration in order to gain exposure to and experience of an alternative culture that enhances awareness and sensitivity to events, ideas, and people outside previous experiences. Area of experience for this requirement will be approved through a faculty coordinator (Board of Exception) and may be student initiated. This course normally involves foreign studies, design/build, community service, volunteer activities, or other experiences relevant to Creating-Making may also be included. Students are required to engage cultures other than their own. The foreign study experience requires a commitment of eight (8) weeks during the summer session or equivalent time during a regular semester. Submission of journals, self-assessment, other demonstrated evidence, and presentation of activity to the college is required during the following semester. (F, Sp, Su)
ARCH	4013	Workplace CAD	Prerequisite: junior standing or permission of the instructor. Comprised of a series of projects that explore workplace CAD issues and build knowledge in this area. Use of AutoCAD 2008 with a secondary introduction to AutoCAD Architecture 2008 and Revit Architecture 2008 is emphasized. (F, Sp)

ARCH	4133	Architectural Structures I	(Slashlisted with 5133) Prerequisite: ARCH 2423, ARCH 2454, ARCH 2343, MATH 1823, and PHYS 1114; Corequisite: ARCH 4523, ARCH 3555, ARCH 4453; or Construction Science major and completion of PHYS 2414 and MATH 1823. An introduction to basic physics, forces within structural systems, material strength, and associated structural engineering principles. Develops both intuitive and empirical knowledge of forces within structural systems that serve as a foundation for future courses within the Structures sequence. The course will engage and influence exercises in Design V in order to develop intuitive understanding of structures and to introduce analytical tools necessary to creating-making. No student may earn credit for both 4133 and 5133. (F)
ARCH	4173	Cinema and Architecture of the City	Prerequisite: junior standing. An examination of urban morphology and city life from antiquity through the capital cities of the 21st century. Investigates the understanding of cities, civic culture and ritual, public and private space, the role of the architect and the city planner, cultural and formal complexity, and adaptation to change. Fosters conceptualization of the urban physical system, and general theories that purport to explain its form and function. No student may earn credit for both 4173 and 5173. (Sp)
ARCH	4183	Survey of Middle Eastern Architecture	(Slashlisted with 5183) Prerequisite: Junior standing or permission of instructor. Survey of Middle Eastern architecture and the impact architects and architecture from this time and region had upon the advancement of environmental/urban design throughout the rest of history. No student may earn credit for both 4183 and 5183. (Irreg.) [IV-NW]
ARCH	4213	Facilities Management	Prerequisite: junior or graduate standing. The relationship between facilities management, design, engineering, business, and behavioral sciences. The function and structure of the facilities management team and its place in the organizational structures. Program and project related facilities management tasks. Facility planning, programming, design, project and construction management, operation and maintenance. (F)
ARCH	4224	Site Design for Architects	Prerequisite: senior standing. Project-based, lecture/studio course, providing students with a basic knowledge of site factors that influence the design, placement, and operation of architectural and other man-made elements. Various aspects of the architectural record exam will be covered. (F, Sp)
ARCH	4233	Architectural Structures II	(Slashlisted with 5233) Prerequisite: ARCH 4133, ARCH 4453, ARCH 4523, and ARCH 3555. Corequisite: ARCH 4543, ARCH 3655. Focus is on wood, concrete, and steel as structural materials. Students will develop an understanding of engineering principles as they apply to each of these structural materials. Material properties, common manufactured systems, common material sections, and common connection types will be explored with students demonstrating the ability to develop technical details related to various structural systems. No student may earn credit for both 4233 and 5233. (Sp)
ARCH	4333	Advanced Structures	(Slashlisted with 5333) Prerequisite: ARCH 4233, ARCH 4623, and ARCH 3655; Corequisite: ARCH 4723, and ARCH 4755. Continuation of engagement with wood, concrete, and steel structural systems and introduces complex structural systems and their developed connections. Building materials and systems will be related to building detailing and structural connections. Code and life safety issues will be introduced as they relate to structural systems. Cost effectiveness and system selection are included in course material. No student may earn credit for both 4333 and 5333.(F)
ARCH	4353	LEED Seminar	Prerequisite: senior standing. Gives a comprehensive understanding of leadership in energy and environmental design (LEED) and the certification process. Students acquire first-hand experience in the process of "greening up" a campus. Prepares students with the knowledge necessary to sit for and pass the LEED certification exam. (F, Sp)

ARCH 4363	Sustainability: Ethics, Efficiency, Community & Design	Prerequisite: senior standing. Addresses sustainability in terms of ethics, efficiency, community and design. Readings and discussions expose students to a macro-to-micro matrix of issues which establish a context for 'sustainability'. (F)
ARCH 4433	Rendering	Prerequisite: senior standing. Helps students develop a more advanced understanding of graphic presentation principles and the use of pen and pencil, marker, and water color in developing presentation floor plans, sections, elevations and 3-D renderings. (Sp)
ARCH 4443	History of the American Built Environment	Prerequisite: EN D 2413 and 2423 or permission. Survey of the American built environment from initial settlement and subsequent European colonization through the middle of the twentieth century. The integral nature of the built environment, the unique characteristics of the American frontier, and the heterogeneous nature of the American culture will be emphasized. Buildings, urban patterns and ideas will be studied, supported by examples ranging from the recognized standards to the commonplace. (F) [IV-WC]
ARCH 4453	Modern and Contemporary Architecture	(Slashlisted with 5453) Prerequisite: ARCH 2343, ARCH 2423, and ARCH 2454. Corequisite: ARCH 4133, ARCH 4523, ARCH 3555; Interior Design majors: I D 3753. Survey and discussion of built artifacts of 20th century architectural culture and the last 25 years of significant world architecture. Emphasis is placed upon the formal, philosophical, social, technical, and economic contexts of the projects discussed, as well as their later reinterpretations. Continues the development of critical writing skills and further develops analytical skills that act to inform design decisions related to studio projects. No student may earn credit for both 4453 and 5453. (F)
ARCH 4523	Methods V - Thermal Systems	(Slashlisted with 5523) Prerequisite: ARCH 2343, ARCH 2423, and ARCH 2454. Corequisite: ARCH 4133, ARCH 4453 and ARCH 3555. Introduction to psychometrics, heat transmission in buildings, heating, air conditioning and ventilation, solar heat gain, passive solar conditioning, plumbing, and fire protection. No student can earn credit for both 4523 and 5523. (F)
ARCH 4543	Research and Critical Writing Seminar	(Slashlisted with 5543) Prerequisite: ARCH 2243, ARCH 2343, ARCH 4453, and permission of instructor. Corequisite: ARCH 4623, and ARCH 3655. The development of research and academic writing in an urban and architectural context. Original research and/or analysis and a fully annotated term paper are required. Topics may range from periods, politics, technology, economics, religion, gender, and culture. A continuation of the development of critical writing skills and further develops analytic skills that act to inform design decisions related to studio projects. Open to non-architecture majors to encourage interdisciplinary research/writing. No student may earn credit for both 4543 and 5543. (Sp) [IV-WC]
ARCH 4585	Architectural Design/Special Topics	Prerequisite: 3555 or 4575. Studio-based investigation of special topics in architecture or field study in a placement approved by the instructor. (Sp)
ARCH 4623	Methods VI - Auxiliary Systems	(Slashlisted with 5623) Prerequisite: ARCH 4133, ARCH 4453, ARCH 4523, ARCH 3555. Corequisite: ARCH 4233, ARCH 3655; Interior Design majors: I D 3723 and I D 3793. Introduction to lighting, acoustics, and other auxiliary systems that impact the Creating-Making of the built environment. These systems are discussed in relation to issues of sustainability and human comfort. Codes and standards that effect building design will be introduced and discussed. No student may earn credit for both 4623 and 5623. (Sp)
ARCH 4723	Methods VII - Advanced Systems	(Slashlisted with 5723) Prerequisite: ARCH 4233, ARCH 4623, ARCH 3655. Corequisite: ARCH 4333, ARCH 4755. Introduction to advanced issues of structure, building systems, sustainability, and integrated building management systems. Course material will develop advanced understanding of the theories and practices of these complex systems and their effects on the built environment. No student may earn credit for both 4723 and 5723. (F)

ARCH	4733	Architectural Structures III	Prerequisite: Architecture majors and completion of ARCH 3433, ARCH 3443, ARCH 3533, ARCH 3554, ARCH 3633. Extension of the study of architectural structures through structural design of continuous building frameworks; loads, concrete structural systems, foundations, connections and structural detailing. Laboratory (Sp)
ARCH	4754	Studio VII	Prerequisite: 3433, 3443, 3533, 3554, 3633, 3654. Continuation of 3654. Introduces issues of building systems. Individual and/or team architectural projects at an advanced level focusing on the comprehensive integration of social, cultural, theoretical, environmental and technical influences on architecture. Application of professional techniques of representation and communication required. Laboratory (F) [V]
ARCH	4755	Design VII - Systems and Context	Prerequisite: ARCH 4233, ARCH 4623, ARCH 3655. Corequisite: ARCH 4333, ARCH 4723. Emphasizes the relationship of schematic design to contract documents in order to understand structural, mechanical, electrical, plumbing, and other systems within buildings. Students demonstrate an understanding of drafting conventions, the production of traditional contract documents, Building Information Modeling, and the communication of additional solutions necessary for construction. A major component of the course is dedicated to developing interdisciplinary and collaborative skills through team-based projects and other small group exercises. (F)
ARCH	4783	Architectural Acoustics	(Slashlisted with 5783) Prerequisite: 3rd, 4th or 5th year student in the College of Architecture. Focuses primarily on the nature of architectural acoustics based on material choices, surface arrangement, and the overall shaping of space to promote natural acoustics. There will also be some discussion concerning natural lighting and how design decisions for lighting and acoustics can work in unison. Students may not earn credit for both 4783 and 5783. (Irreg.)
ARCH	4823	Methods VIII - Architectural Analytics	(Slashlisted with 5823) Prerequisite: ARCH 4333, ARCH 4723, ARCH 4755. Corequisite: ARCH 4855. Seminar format course introduces students to less common structural systems: pneumatics, shells, folded plate, high-rise structures, manufactured components and assemblies, and long span systems in buildings. Course also focuses on the Design Development phase of architectural production with the introduction of limits of responsibility for architects, various specification types, integrated project delivery, preliminary cost estimating, etc. Studio project will be utilized to demonstrate alternative proposal methods and evaluation as part of the design decision-making process. No student may earn credit for both 4823 and 5823.(Sp)
ARCH	4833	Environmental Controls II	Prerequisite: Architecture major and completion of 3433, 3443, 3533, 3554, 3633; or Construction Science major. Introduction to acoustics, electrical design, lighting design, alarm and life safety systems. (Sp)
ARCH	4854	Studio VIII	Studio Viii. Prerequisite: 3433, 3443, 3533, 3554, 3633, 3654. Continuation Of 4754. Introduces Issues Of Environmental Sustainability. Individual And/Or Team Architectural Projects Focusing On The Comprehensive Integration Of Social, Cultural, Theoretical, Environmental And Technical Influences On Architecture. Application Of Professional Techniques Of Representation And Communication Required. Capstone Course; First Of Three Required. Laboratory (Sp)
ARCH	4855	Design VIII - Architectural Synthesis	Prerequisite: ARCH 4333, ARCH 4723, and ARCH 4755, all with a grade of C or better. Corequisite: ARCH 4823. Emphasizes the development of a complete project from schematic design through design development and construction detailing. Students develop a building of limited programmatic complexity through more complete technical development. The application of Building Information Modeling software will be required. Also addresses and builds upon the collaborative and analytic knowledge developed in ARCH 4755. (Sp)

ARCH	4940	Field Work	1 to 4 hours. Prerequisite: senior standing and permission of instructor. Field study related to the student's area of interest in a position approved by the instructor. One hour credit per 120 hours of field work or equivalent. Documentation and evaluation is required. (F, Sp, Su)
ARCH	4960	Directed Readings	1 to 4 hours. Prerequisite: senior standing and permission of instructor. May be repeated with change of subject; maximum credit 12 hours. (F, Sp, Su
ARCH	4970	General Departmental Seminar	1 to 6 hours. Prerequisite: senior or graduate standing, or permission of instructor. May be repeated with change of content. Special topics in architecture. (F, Sp, Su)
ARCH	4990	Independent Study	1 to 3 hours. Prerequisite: four courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
ARCH	5022	Methods X - Leadership in Practice	Prerequisite: ARCH 5922, ARCH 5955, or permission of graduate liaison. Corequisite: ARCH 5055. Explores innovative practices in contemporary architectural practice. Issues of cultural and environmental sustainability, political activism, and the changing role of the architecture profession are discussed. Innovative methods of digital prototyping and performance modeling related to project delivery will also be explored. Emphasis is placed upon the leadership role that architects can assume in the design and construction disciplines in the community and in education. Local regional, national, and global leadership opportunities are examined. (Sp)
ARCH	5023	Architectural Seminar	Prerequisite: junior standing or permission of instructor. May be repeated with change of subject matter; maximum credit 12 hours. Investigation and discussion based upon the following topics: design methods, architectural research, history and theory, environmental processes, structural theory, visual perception, urban design and other related topics. (F, Sp)
ARCH	5043	Project Management	Prerequisite: 4033 or permission. Continuation of 4033. Management of the various phases within a project sequence: schematic design, design development, construction documents, bid/negotiation, construction administration. Emphasis on owner/architect relationships. (F)
ARCH	5052	Professional Practice	(Crosslisted with L A 5052) Prerequisite: 5043 or permission of instructor. Survey of career options, internship, registration, firm organization, office management, professional conduct and ethics within the practice of architecture. (F, Sp)
ARCH	5055	Design X - Comprehensive Architecture II	Prerequisite: ARCH 5922, ARCH 5955, or permission of graduate liaison. Corequisite: 5022. A continuation of ARCH 5955 and the project development begun in that course. Students are expected to further develop their project to a level of Design Development and limited Construction Detailing. The course encourages the continued exploration, speculation, and experimental innovation begun in Design IX extended into materials detailing, construction methods, mechanical systems, and creative spatial and aesthetic development. Component and assembly prototyping and performance modeling are a significant component of the course.(Sp)
ARCH	5083	Advanced Architectural Computer Applications	Prerequisite: permission of instructor. The advanced use of computers in three-dimensional modeling, rendering and animation. (F, Sp)
ARCH	5133	Architectural Structures I	(Slashlisted with 4133) Prerequisite: Program admission or permission of graduate liaison. Introduction to the basic physics, forces within structural systems, material strength, and associated structural engineering principles. This course will develop both intuitive and empirical knowledge of forces within structural systems that serve as a foundation for future courses within the structures sequence. The course will engage and influence exercises in ARCH 5516 in order to develop intuitive understanding of structures and to introduce analytical tools necessary to creating-making. No student may earn credit for both 4133 and 5133. (F)

ARCH	5143	Architectural History	Prerequisite: Program admission or permission of graduate liaison. A theoretical investigation of the cultural, political, and aesthetic values of diverse Western and non-Western cultures and how these affect the built environment. This course continues the development of critical writing skills and further develops analytic skills that act to inform design decisions related to studio projects. (F)
ARCH	5160	Preceptorship	Prerequisite: ARCH 3655 and permission of instructor. Provides students a significant work experience to gain exposure to and experience of the professional practice of architecture. Course content will be approved through a faculty coordinator (Board of Exception) and may be student initiated. While the preceptorship normally involves work experience in an architectural office, it may include experience in the construction trades, community service, volunteer activities, or other experiences relevant to Creating-Making. Students are required to engage in environments outside the academic setting. The Preceptorship experience requires a full commitment for 8 weeks during the summer session or equivalent time during a regular semester. Submission of journals, self-assessment, other demonstrated evidence, and presentation of activity to the college are required during the following semester. (F, Sp, Su)
ARCH	5163	Professional Practice I	Prerequisite: 4733, 4754, 4833, and 4854 or graduate standing and permission. Principles and procedures for practice of architecture and related professions. Exploration of professional ethics and services, project documents and management, project delivery methods and contractual relationships. (F)
ARCH	5173	Cinema and Architecture of the City	Prerequisite: graduate standing or permission of instructor. An examination of urban morphology and city life from antiquity through the capital cities of the 21st century. Investigates the understanding of cities, civic culture and ritual, public and private space, the role of the architect and the city planner, cultural and formal complexity, and adaptation to change. Fosters conceptualization of the urban physical system, and general theories that purport to explain its form and function. No student may earn credit for both 4173 and 5173. (Sp)
ARCH	5183	Survey of Middle Eastern Architecture	(Slashlisted with 4183) Prerequisite: Graduate standing or permission of instructor. Survey of Middle Eastern architecture and the impact architects and architecture from this time and region had upon the advancement of environmental/urban design throughout the rest of history. No student may earn credit for both 4183 and 5183. (Irreg.)
ARCH	5233	Architectural Structures II	(Slashlisted with 4233) Prerequisite: Program admission or permission of graduate liaison. Focus is on wood, concrete, and steel as structural materials. Students will develop an understanding of engineering principles as they apply to each of these structural materials. Material properties, common manufactured systems, common material sections, and common connection types will be explored with students demonstrating the ability to develop technical details related to various structural systems. No student may earn credit for both 4233 and 5233. (Sp)
ARCH	5263	Professional Practice II	Prerequisite: 4733, 4754, 4833, 4854, 5162 or 5163 or graduate standing and permission. A continuation of 5163. Principles and procedures for practice of architecture and related professions. Exploration of professional ethics and services, project documents and management, project delivery methods and contractual relationships. (Sp)

ARCH	5333	Advanced Structures	(Slashlisted with 4333) Prerequisite: Program admission or permission of graduate liaison. Continuation of engagement with wood, concrete, and steel structural systems and introduces complex structural systems and their developed connections. Building materials and systems will be related to building detailing and structural connections. Code and life safety issues will be introduced as they relate to structural systems. Cost effectiveness and system selection are included in course material. No student may earn credit for both 4333 and the 5333. (F)
ARCH	5343	Urban Facilities Planning	(Crosslisted with RCPL 5343) Prerequisite: upper-division or graduate standing. Long- and short-term considerations in urban facilities planning. Tactical facility planning and management in organizational environment; site, layout, economic criteria, human factors, facility planning-programming standards.
ARCH	5453	Modern and Contemporary Architecture	(Slashlisted with 4453) Prerequisite: Program admission or permission of graduate liaison. Survey and discussion of built artifacts of 20th century architectural culture and the last 25 years of significant world architecture. Emphasis is placed upon the formal, philosophical, social, technical, and economic contexts of the projects discussed, as well as their later reinterpretations. This course continues the development of critical writing skills and further develops analytic skills that act to inform design decisions related to studio projects. No student may earn credit for both 4453 and 5453. (F)
ARCH	5505	Architectural Design/Comprehensive Project	Prerequisite: 4243, 4253, 4333, 4343, 5595. Major individual design Project. Emphasis on comprehensive, integrated design solution to the human, environmental and technological concerns encountered in a complex architectural problem. Laboratory (Sp)
ARCH	5516	Graduate Architectural Design I	Prerequisite: Program admission or permission of the graduate liaison. Introduces projects of moderate complexities demonstrating intermediate design principles within the context of the built environment. Application of both physical and virtual communication skills as professional techniques of representation and communication are required. (F)
ARCH	5523	Methods V-Thermal Systems	(Slashlisted with 4523) Prerequisite: Program admission or permission of graduate liaison. Introduction to psychometrics, heat transmission in buildings, heating, air conditioning and ventilation, solar heat gain, passive solar conditioning, plumbing, and fire protection. No student may earn credit for both 4523 and 5523. (F)
ARCH	5526	Graduate Architectural Design II	Prerequisite: Program admission or permission of graduate liaison. Continuation of ARCH 5126 with an introduction to passive and active forms of lighting, acoustics, conveyance systems, and electrical systems. An emphasis will be placed on the relation between these auxiliary building systems and Creating-Making. Issues of sustainability including environmental impacts, resource utilization, ethical resource efficiencies and performance-based design will be related to concepts of Creating-Making. Codes and standards that effect the built environment will be explored. (Sp)
ARCH	5536	Graduate Architectural Design III	Prerequisite: Program admission or permission of graduate liaison. Emphasis is on the relationship of schematic design to contract documents in order to understand structural, mechanical, electrical, plumbing, and other systems within buildings. Students demonstrate an understanding of drafting conventions, the production of traditional contract documents, Building Information Modeling, and the communication of additional solutions necessary for construction. A major component of the course is dedicated to developing interdisciplinary and collaborative skills through team-based projects and other small group exercises. (F)

ARCH	5543	Research and Critical Writing Seminar	(Slashlisted with 4543) Prerequisite: Program admission or permission of graduate liaison. Focus is on the development of research and academic writing in an urban and architectural context. Original research and/or analysis and a fully annotated term paper are required. Topics may range from periods, politics, technology, economics, religion, gender, and culture. A continuation of the development of critical writing skills and further develops analytic skills that act to inform design decisions related to studio projects. Open to non-architecture majors to encourage interdisciplinary research/writing. No student may earn credit for both 4543 and 5543. (Sp)
ARCH	5546	Graduate Architectural Design IV	Prerequisite: Program admission or permission of graduate liaison. Emphasis is on the development of a complete project from schematic design through design development and construction detailing. Students will develop a building of limited programmatic complexity through more complete technical development. The application of Building Information Modeling software will be required. This course addresses and builds upon the collaborative and analytic knowledge developed in ARCH 5423.(Sp)
ARCH	5595	Architectural Design/Urban Design	Prerequisite: 4585, 4243 or 4253, 4333 or 4343. Studio-based investigation of interbuilding relationships; team and individual projects. Emphasis on the relationship of architecture to urban design, landscape architecture and regional/city planning. Laboratory
ARCH	5623	Methods VI-Auxiliary Systems	(Slashlisted with ARCH 4623) Prerequisite: Program admission or permission of graduate liaison. Introduction to lighting, acoustics and other auxiliary systems that impact the Creating-Making of the built environment. These systems are discussed in relation to issues of sustainability and human comfort. Codes and standards that effect building design will be introduced and discussed. No student may earn credit for both 4623 and 5623. (Sp)
ARCH	5643	Urban Design Analytics	(Crosslisted with RCPL 5643) Prerequisite: graduate standing in architecture or regional and city planning. A survey of analysis techniques applicable to the field of urban design, including the interpretation of basic demographic statistics, an introduction to survey and observation research techniques, visual survey methodologies, environmental assessment strategies, forecasting, gaming and decision analysis. (Sp)
ARCH	5653	Urban Design Seminar	(Crosslisted with RCPL 5653) Prerequisite: permission of instructor. May be repeated with change of content; maximum credit six hours. Advanced seminar in urban design problems and issues through an in-depth and on-site investigation and evaluation of significant national and international urban development projects. Topics covered will be announced by instructor in the term prior to course offerings. (F, Sp)
ARCH	5723	Methods VII-Advanced Systems	(Slashlisted with 4723) Prerequisite: Program admission or permission of graduate liaison. This course introduces students to advanced issues of structure, building systems, sustainability, and integrated building management systems. Course material will develop advanced understanding of the theories and practices of these complex systems and their effects on the built environment. No student may earn credit for both 4723 and 5723. (F)
ARCH	5733	Marketing	Prerequisite: graduate standing or permission of instructor. Introduction to the principles, and their application required for the marketing of professional services. (Sp)
ARCH	5743	Legal Framework for Design	Prerequisite: graduate standing or permission of instructor. Introduction to the legal principles relevant to real estate planning, financing, development, operation, and disposal of real property and real estate projects. (F)
ARCH	5753	Value Analysis	Prerequisite: graduate standing or permission of instructor. The concept and application of value engineering is explained along with its specialized techniques. (Sp)

ARCH	5763	Landscape Architecture for Architects	Prerequisite: graduate standing or permission of instructor. Analysis and organization of the site together with the use of plant materials in landscape design. (Sp)
ARCH	5783	Architectural Acoustics	(Slashlisted with 4783) Prerequisite: Graduate standing and permission of instructor. Focuses primarily on the nature of architectural acoustics based on material choices, surface arrangement, and the overall shaping of space to promote natural acoustics. There will also be some discussion concerning natural lighting and how design decisions for lighting and acoustics can work in unison. Students may not earn credit for both 4783 and 5783. (Irreg.)
ARCH	5823	Methods VIII-Architectural Analytics	(Slashlisted with 4823) Prerequisite: Program admission or permission of graduate liaison. Seminar format course introduces students to less common structural systems: pneumatics, shells, folded plate, high-rise structures, manufactured components and assemblies, and long span systems in buildings. Course also focuses on the Design Development phase of architectural production with the introduction of limits of responsibility for architects, various specification types, integrated project delivery, preliminary cost estimating, etc. Studio project will be utilized to demonstrate alternative proposal methods and evaluation as part of the design decision-making process. No student may earn credit for both 4823 and 5823. (Sp)
ARCH	5922	Methods IX - Contemporary Practice	Prerequisite: ARCH 4823, ARCH 4855, or permission of graduate liaison. Corequisite: ARCH 5955. Explores issues in contemporary architectural practice including the role of the client, contracts, practice and project management, leadership skills, legal responsibilities, ethics and professional judgment, and community and social responsibilities. Emphasis is placed upon issues of cultural and environmental sustainability, political activism, and the changing role of the architecture profession. Knowledge of techniques is developed for project justification from establishing the scope of projects to cultural, sustainable, and financial feasibility. The course contains program specific research and support related to studio projects. (F)
ARCH	5930	Independent Study with Computer Applications	Prerequisite: END 1012 and permission of instructor. Contracted independent study with emphasis on computer applications in architecture. Documentation and presentation varies with nature of the problem or project.
ARCH	5955	Design IX - Comprehensive Architecture I	Prerequisite: ARCH 4823, ARCH 4855 or permission of graduate liaison. Corequisite: ARCH 5922. The first of a two-semester sequence; includes the design of a moderately complex building on a contextual site. Encourages innovative exploration, analysis, speculation, and experimentation in developing schematic proposals. Students will develop an architectural program, establish pro-forma attributes, conduct feasibility studies for their chosen project, develop solutions with refined mechanical, electrical, structural, and material components. Both active and passive energy systems, issues of sustainability, issues of site and context, life safety issues, and traditional functional and aesthetic requirements will be integral to design solutions. Includes a significant focus on ethical, environmental, sustainable, social, material, and historical issues related to Creating-Making within the built environment. (F)
ARCH	5960	Directed Readings	1 to 4 hours. Prerequisite: fifth year or graduate standing in architecture and permission of instructor. May be repeated with change of subject; maximum credit nine hours. Studies in major field as approved by instructor. (F, Sp, Su)
ARCH	5970	General Departmental Seminar	1 to 4 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Advanced professional topics in architecture, construction science, urban design or environmental design. Lectures, team and individual assignments. (F)
ARCH	5980	Research for Master's Thesis	Prerequisite: Graduate standing. Variable enrollment, two to nine hours; Laboratory (F, Sp, Su)

ARCH	5990	Special Studies in Architecture	1 to 6 hours. Prerequisite: fifth year or graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Subject as assigned by instructor will be explored in depth. Documentation and presentation varies with nature of problem. Laboratory (Sp, Su)
ARCH	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ARCH	6133	Sustainable Design Analytics	Prerequisite: Program admission or permission of instructor. Advanced level survey course investigating the wide variety of computer-based applications available for making sustainable design decisions. Case studies are used to clarify information presented. (F)
ARCH	6143	Theory of Sustainability	Prerequisite: Program admission or permission of instructor. Historical and contemporary topics in sustainable design goals, concepts, theories, and philosophies. (F)
ARCH	6156	Graduate Studio I	Prerequisite: Permission of graduate liaison. The class introduces fundamental design and visual communication skills through the use of material, formal, and spatial properties of architecture. Fabrication safety, craft, and techniques will be introduced and developed through the making. Ideas involving creating-making are explored through exercises in the formal, spatial and material qualities of human environments.(Su)
ARCH	6233	Sustainable Technology	Prerequisite: Program admission and 6133. In depth exploration of special topics in sustainable architecture. Subjects may be drawn from criteria for sustainable sites, water and energy efficiency, resources management, materials manufacture, and environmental quality. Documentation and presentation varies with nature of topic. (Sp)
ARCH	6243	Research Methods and Programming	Prerequisite: Program admission and 6133 and 6143. Research methodology applied to relevant topics resulting in the development of a design program for the professional project in sustainable architecture. (Sp)
ARCH	6256	Graduate Studio II	Prerequisite: Program admission and 6133 and 6143, and 6156. Intermediate study of sustainability and regional response: Continuation at a more informed level of readings and precedents, studio projects and field trips. Focus is on sustainable architecture that is responsive to regional conditions of custom, culture, materiality, and place. (Sp)
ARCH	6356	Graduate Studio III	Prerequisite: Program admission and 6233 and 6243, and 6256. Advanced study of sustainability and regional response: Application of theory and practices to a professional project of the individual student's choosing. A faculty committee guides the student's progress to completion of a schematic design. Emphasis is on demonstrating a comprehensive understanding and integrative capability in creating architecture that is contextually responsive and environmentally responsible in promoting a sustainable future. (F)
ARCH	6456	Graduate Studio IV	Prerequisite: Program admission and 6356. Continues project development of the schematic design. Previously gained awareness, understanding and ability are applied to bring the project to the level of design development. Emphasis is on improving the ability to make value judgments and critically review, test and refine architectural concepts in relation to regional distinctions and sustainable imperatives that reflect current social, economic and cultural demands. (Sp)
ARCH	6590	Professional Project Research	1 to 4 hours. Prerequisite: permission of instructor. Research and development on subjects related to the professional project in architectural studies, architectural technology, historic preservation, urban design or other approved topics. (F, Sp, Su)
ARCH	6643	Urban Design Theory	(Crosslisted with L A 6643 and RCPL 6643) Prerequisite: graduate standing. A survey of theory relevant to the urban design process, including social and behavioral concepts, visual and aesthetic theory, spatial and geographic factors of urban form. (Sp)

ARCH	6680	Advanced Architectural Design III	Prerequisite: 5505 or 5546. May be repeated for credit; maximum credit six hours. Advanced architectural design projects with an emphasis in architectural studies, architectural technology, historic preservation, urban design or other approved topics. Laboratory (F, Sp)
ARCH	6690	Professional Project	1 to 6 hours. Prerequisite: 5595 or 6680. May be repeated; maximum credit six hours. A terminal professional project demonstrating comprehensive understanding and integrative capabilities in architectural studies, architectural technology, historic preservation, urban design or other approved topics. Laboratory (F, Sp, Su)
ARCH	6930	Independent Study with Computer Applications	Prerequisite: END 1012 and permission of instructor. Contracted independent study with emphasis on computer applications in architecture. Documentation and presentation varies with nature of the problem or project.
ARCH	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ARCH	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ARCH	6990	Special Studies in Architecture	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. The candidate will thoroughly explore the particular phase of architecture selected for advanced study by the student and the graduate committee; presentation of the work will be determined by the nature of the contribution. Laboratory (F, Sp, Su)
ARNM	1003	Art For Non-Majors: Two-Dimensional	May be repeated; maximum credit six hours. Provides students who are not art majors with an introduction to the basic studio processes of painting and drawing. (Irreg.)
ARNM	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ARNM	2003	Art for Non-Majors: Three-Dimensional	Prerequisite: 1003. May be repeated; maximum credit six hours. Provides students who are not art majors with an introduction to the basic studio processes of three-dimensional design and construction. (Irreg.)
ARNM	2843	Photography for Non Art Majors	This course will introduce the non art major to camera controls and traditional darkroom operations including film processing, contact printing, enlarging and processing of black and white material, matting and presentation. Students enrolling in this course do not need to have any previous photographic or art skills. This course will complete a portfolio of images to complete the course. Textbook required. (Irreg.)
ARNM	2970	Special Topics/Seminar	1 to 3 hours. Prerequisite: sophomore standing or permission of instructor. May be repeated; maximum credit six hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ARNM	3003	Three-Dimensional Art for Non-Majors	Prerequisite: 2003 or permission of instructor. This studio course offers continued study of more advanced tools and techniques in order to learn basic formal elements of line, mass, composition and surface relationships in the context of three-dimensional space. (Irreg.)
ARNM	3013	Two-Dimensional Art for Non-Majors	Prerequisite: 1003 or permission of instructor. This studio course offers continued study of more advanced tools and techniques in drawing, painting and print in order to gain experience in the creative process and better appreciate various forms of art. (Irreg.)

ARNM	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ARNM	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers topics not usually presented in the regular courses.
ARNM	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses.
ARNM	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ARNM	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ARNM	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ARNM	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: junior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ARNM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ART	1033	Core Studio I: Surface	Prerequisite: majors only; co-requisite: ART 1043. Core Studio I: Surface is a foundation level course that introduces students to a variety of experiences using two-dimensional design and drawing practices. The course will focus on developing conceptual imagery as expressed through the organization of spatial relationships using design elements and principles, visual observation, color relationships, and the investigation of line, perspective, the figure, gesture, and space.(F)
ART	1043	Core Studio II: Space and Time	Prerequisite: majors only; co-requisite: ART 1033. A foundation level course that introduces students to a variety of experiences using interdisciplinary spatial relationships and three-dimensional design practices. The course will focus on developing a keen awareness of space, form, and time via the application of design principles to handmade forms. Students will create artworks through a variety of media investigations to enhance awareness of the interconnections within visual art and design disciplines. The course emphasizes ideation and process, and exploring and exploiting subject matter and media as a means of obtaining individual conceptual goals.(F)
ART	1133	Core III: Technology	Prerequisite: majors only; ART 1033 and ART 1043. Co-requisite: ART 1143. A foundation level course that introduces students to a variety of experience using electronic tools, processes and techniques. The course will focus on image, interactivity, and motion using core concepts & principles. (Sp)

ART	1143	Core IV: Integrated Studio	Prerequisites: majors only; ART 1033 and ART 1043. Co-requisite: ART 1133. Integrated Studio is a foundation level art practice course that introduces students to the broad dialogues driving activity in the world of contemporary art. Students learn to structure their work around core concepts and make practical decisions that propel critical discourse within the context of an art or design practice. (Sp)
ART	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ART	2253	Beginning Ceramics	Prerequisite: majors only; ART 1033 and ART 1043. Introduction to various hand-building, glazing and firing techniques. Emphasis placed on developing an understanding of working in three dimensions (with clay as the medium), and on interpreting shape by combining surface color and three-dimensional form. Conceptual and critical issues introduced. (F, Sp)
ART	2313	Beginning Drawing	Prerequisite: majors only; ART 1033 and ART 1043. Uses representational drawing to increase observational abilities. Perspective, value, form, texture, proportion and scale are studied using still life, the figure and outside drawing assignments. (Irreg.)
ART	2413	Beginning Painting	Prerequisite: majors only; ART 1033 and ART 1043. The aqueous media used in various approaches to painting problems (processes and concepts); lectures, group criticism and individual instruction assist the student in studying the fundamentals of painting. (Irreg.)
ART	2523	Beginning Sculpture: Figurative	Prerequisite: majors only; ART 1033 and ART 1043. Creating in oil base clay the human skull and a life-size portrait; creating a waste mold and making a plaster cast from it. (Irreg.)
ART	2533	Sculpture: Material, Space, and Process	Prerequisites: majors only; ART 1033 and ART 1043. This course will introduce students to the methods of creating sculptural and designed objects. This includes material exploration, space investigation and digital fabrication technologies associated with object making. Material relationships, craft, scale, and content will be fundamental aspects covered during the semester. Students will be encouraged to formulate elements of self-expression, topical research associated with specific projects, and develop a vocabulary for constructive communication and criticism. (Irreg.)
ART	2723	Beginning Lithography	Prerequisite: 15 hours of foundation courses. Designed to introduce the student to a variety of lithographic hand and photo techniques in the production of multiple images. Each student will produce a body of work with strong emphasis on drawing skills, design and personal creativity. (Irreg.)
ART	2733	Beginning Serigraphy	Prerequisite: 15 hours of foundation courses. This course will involve the implementation of both hand and photo stencil methods. During the semester each student will produce a body of work exploring the image-making potential of screen printing techniques. Strong emphasis will be placed on exploring color, design and personal creativity. (Irreg.)
ART	2743	Beginning Printmaking	Prerequisites: majors only; ART 1033. This course is a formal introduction to the art of printmaking and the disciplines that comprise it. Students learn to create repeatable matrices in various media, including relief, screen, lithography, and intaglio printing. Technical demonstrations combine with lectures to provide students a sense of the materials, tools, and skills involved in printing as well as printmaking's history and the role it has played in our culture. (Irreg.)
ART	2803	Media Arts Fundamentals	Prerequisite: permission of department. Art majors only. Introduction to concepts and practices in media arts with exposure to a variety of media including film, video, photography, and new media. (Irreg.)
ART	2813	Filmmaking I	Prerequisite: majors only; ART 1033 and ART 1043. Beginning 16mm filmmaking covering basic technical and aesthetic properties of film. Students work in b/w 16mm film and non-synchronous sound. The course is taught through a combination of lecture, hands-on lab, and film screening. (Irreg.)

ART	2853	Introduction to Photography	Prerequisite: ART 1013, ART 1023, ART 1113, ARTC 1003, ARTC 1103. An introduction to contemporary photographic theory and practice. Instruction will focus on development of the technical, formal, and critical skills central to lens-based imaging, including camera operation, image production and presentation. An examination of the photograph as cultural construct and its relation to our media driven society will also be emphasized. (Irreg.)
ART	2873	Video for the Artist I	Prerequisite: majors only; ART 1013, ART 1023, ART 1113, ARTC 1003, ARTC 1103. Emphasis on developing video production and post-production skills. Training exercises in studio and field production, camera work, lighting and sound. Instruction and practice in analog and digital editing. Exploration of digital media. Students will produce a number of short projects. (Irreg.)
ART	2970	Studio Special Topics	Prerequisite: majors only; ART 1033 and ART 1043. May be repeated with change of content; maximum credit nine hours. Special topics course for content not currently offered in regular scheduled courses. (Irreg.)
ART	3253	Intermediate Ceramic Design	Prerequisite: 2253. Continued exploration of various hand-building, glazing and firing techniques. Primarily low fire processes. Formal issues such as sculptural composition, form and surface development, and the interpretation of function addressed. Emphasis placed on developing a personal language of materials and ideas. Progression through the range of ceramic-making skill sets. Conceptual and critical issues expanded. (F, Sp)
ART	3263	Intermediate Ceramic Processes	Prerequisite: 2253. Continued exploration of various hand-building, glazing and firing techniques. Primarily high fire processes. Utilitarian and sculptural concerns, creative problem solving, art making strategies addressed. Emphasis placed on developing a personal language of materials and ideas. Progression through the range of ceramic-making skill sets. Conceptual and critical issues expanded. (F, Sp)
ART	3313	Intermediate Drawing Processes	Prerequisite: 2313 or permission of instructor. Intermediate life drawing in various media with use of the human figure as the primary subject. The development of drawing processes and proficiency is stressed. (Irreg.)
ART	3323	Experimental Drawing Practices	Prerequisites: majors only; junior standing; ART 2313. Drawing will be explored as a unique visual language. An emphasis will be placed on experimentation, exploration and the development of a personal drawing practice. (Irreg.)
ART	3413	Intermediate Painting Studio I	Prerequisite: majors only; junior standing; ART 2413. Personal painting issues are developed in a variety of media. An emphasis on experimentation, exploration, development of imagery and personal expression. (Irreg.)
ART	3423	Intermediate Painting Studio 2	Prerequisites: majors only; junior standing; ART 2413. Individual painting issues are pursued through an intense exploration of ideas and technical risk taking. Students will develop research methodologies that will influence their visual and conceptual problem solving. (Irreg.)
ART	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ART	3513	Intermediate Sculpture: Contemporary Process	Prerequisite: ART 2513 or ART 2523 or permission of instructor. Examination of metal fabrication, welding, woodworking (construction and carving), and advanced assembly with nontraditional materials. Concerns in the development of formal visual issues, presentation, concept and theory of contemporary sculpture will be emphasized. (Irreg.)
ART	3523	Intermediate Sculpture: Figurative Processes	Prerequisite: 2513, 2523 or permission of instructor on a space available basis. Creating a bas-relief and sculpting the human hand and foot in oil based clay; creating a slip cast mold of the bas-relief for water base clay castings. (Irreg.)

ART	3533	Sculpture: Digital Fabrication for Artists and Designers	Prerequisites: majors only; junior standing; ART 2533. Focuses on digital fabrication technologies associated with CAD modeling and vector based digital production. Students will be involved in developing projects that will be constructed using a variety of 3D printing and CNC technologies using plastic, acrylic, metal, wood, and fabrics. Students will be expected to develop a vocabulary of digital production as it relates to contemporary art and design. (Irreg.)
ART	3543	Intermediate Sculpture: Figurative Small Projects	Prerequisite: 2513 or 2523 or permission of the instructor. Creating a plaster sculpture(s) with a foam core; students will sculpt several small figurative sculptures from oil based clay. Armatures for smaller sculptures are designed and developed for more complex compositions. (Irreg.)
ART	3553	Intermediate Sculpture: Figurative Large Projects	Prerequisite: 2523. Larger sculptures will be created in oil based clay and plaster; larger armatures are designed and developed for the larger compositions. (Irreg.)
ART	3563	Sculpture: Functional Design Studio	Prerequisites: majors only; junior standing; ART 2533. Investigate function as a means for creative experience and interaction. This includes furniture design, product development, utilitarian objects, and other associated objects that exist functionally within our environment. Design principles, construction techniques, and craft will be emphasized. Students will employ traditional construction techniques as well as digital fabrication to plan, design and build projects that approach utility from various practical and experimental approaches. (Irreg.)
ART	3743	Intermediate Printmaking I	Prerequisites: majors only; junior standing; ART 2743. May be repeated; maximum credit 6 hours. Intensive instruction in rigid matrix print processes including lithography, intaglio, and relief printing. Students explore the relationship between the drawn and printed image and deepen their practical knowledge of both. Instructors place an emphasis on technical and conceptual improvement as well as building consistency in student work. (Irreg.)
ART	3753	Intermediate Printmaking II	Prerequisite: majors only; ART 2743. May be repeated; maximum credit 6 hours. Intensive instruction in screen, photo, and technology based print processes including screenprinting, photopolymer plate making, and digitally assisted relief printing. Students work from photographic, technology derived, and hand drawn source materials and explore various means of translating them to print. Instructors place an emphasis on technical and conceptual improvement as well as building consistency in student work. (F, Sp)
ART	3763	Intermediate Printmaking III	Prerequisites: majors only; junior standing; ART 2743. May be repeated; maximum credit 6 hours. Intensive instruction in book arts, letterpress printing, and structural processes that relate to printmaking. Students learn formal techniques in paper manipulation and bookbinding while exploring relationships between content and structure as they relate to artist books and print based sculpture and installation. Instructors place an emphasis on technical and conceptual improvement as well as building consistency in student work. (Irreg.)
ART	3813	Filmmaking II	Prerequisite: 2813. Continuation of Filmmaking I with an introduction to use of color film stock and an emphasis on the use of lighting and sound. Raw footage will be transferred to a digital video format for editing on nonlinear edit systems. The course will be taught through a combination of lecture, hands-on lab, film screenings and project critiques. (Irreg.)

ART	3823	Concepts in Electronic Media	Prerequisite: Majors only; ATC 2823. Consideration of conceptual and aesthetic issues within technological systems, which may include interactive media, immersive virtual environments, experimental games, visualization & simulation, and 3-D object development. Exposure to a variety of possible technical processes as they consider visual strategies regarding the constraints of visual spaces. Topics may include, but are not limited to 3-D modeling, real-time processing, database/interactive narrative, game play, and strategies for designing objects and environments. A personal laptop is required. (Irreg.)
ART	3833	Concepts in Digital Fabrication	Prerequisites: Majors only; ATC 2823. May be repeated with change of content; maximum credit 6 hours. Examines translations between virtual and physical artistic processes. Topics may include, but are not limited to: physical computing, reactive objects, kinetic sculpture, and form and code. A personal laptop is required. (Irreg.)
ART	3853	Intermediate Traditional Photography	Prerequisites: Majors only; ATC 2853. May be repeated with change of content; maximum credit 6 hours. This course will explore traditional photographic practices. It focuses on the development of concepts in the imagemaking process and explores various means for producing a cohesive body of work. Instructor will determine the content and methodology, but all courses will include refinement of ideas and informed discussion with referential context. Readings and writings will supplement class discussion. Laboratory (Irreg.)
ART	3863	Intermediate Digital Photography	Prerequisite: majors only; Art 2853. Explores digital photographic practices. Focus on the development of concepts in the image making process, and explores various means for producing a cohesive body of work. The content and methodology will be determined by the instructor, but all courses will include refinement of ideas and informed discussion with referential context. Readings and writings will supplement class discussion. Laboratory (Irreg.)
ART	3873	Video for the Artist II	Prerequisite: Majors only; ATC 2873. Continuation of ATC 2873. Introduction to advanced imaging and editing techniques. (F)
ART	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject matter; maximum credit six hours. Consists of either reading topics or independent study designated by the instructor in keeping with the student's major program. The topics of study will cover materials not usually presented in the regular courses. (F, Sp)
ART	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program, junior or senior standing. May be repeated with change of subject matter; maximum credit six hours. The projects covered will vary. The content will deal with concepts not usually presented in regular coursework. (Irreg.)
ART	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Provides an opportunity for the gifted honors candidate to work at a special project in the student's field. (F, Sp)
ART	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ART	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

ART	4253	Advanced Ceramics	Prerequisite: 3253, 3263. May be repeated, maximum credit twelve hours. Emphasis on articulating and developing individual projects in ceramics. Students are expected to research materials and techniques pertinent to development and exploration of personal direction of form and ideas. Each student is expected to create a body of work building on prior exploration of color and form in clay and glazes, traditional and/or non-traditional techniques. Emphasis is on students' individual area of interest. (F, Sp)
ART	4263	Ceramic Studio Processes and Procedures Training	Prerequisites: majors only; ART 2253, ART 3253 or ART 3263. May be repeated; maximum credit 12 hours. Loading of kilns along with techniques and schedules for firing gas, electric, salt and raku kilns. Students learn to mix and maintain stoneware, salt, and raku glazes. Additional ceramic techniques may include: technical information for mixing and pouring plaster for molds; ceramic studio design; ceramic glaze calculation; and photographing of ceramic work. A binder, handouts, and notes from this course will provide students with a manual for ceramic studio operation. (Irreg.)
ART	4313	Advanced Drawing Processes	Prerequisite: 3313, 3323. Students are directed in the development of a personal portfolio of works representing drawing proficiency and professional maturity. (Irreg.)
ART	4323	Advanced Drawing Concepts	Prerequisite: 2313, 2323, 3313, or 3323, 4313. Students are encouraged to refine their portfolio of work representing drawing proficiency and professional maturity. (Irreg.)
ART	4413	Advanced Painting Studio	Prerequisites: majors only; junior standing; ART 2413, ART 3413, ART 3423. May be repeated; maximum credit 6 hours. This course is structured to help students articulate their ideas through a variety of paint media while developing a personal visual language for the creation of culturally aware contemporary paintings. Emphasis will be placed not only on developing a specific formal language that best reinforces, or even creates, a student's intended content but also on having students develop their ability to articulate the issues surrounding their studio practice. The creation of painted work with relationships to an artistic series are explored. (Irreg.)
ART	4423	Advanced Painting Concepts	Prerequisite: 4413. A series of paintings are created representing a body of work of a professional nature. (Irreg.)
ART	4433	Alternative Painting Practices	Prerequisites: majors only; junior standing; ART 2413, ART 3413, ART 3423. May be repeated; maximum credit 6 hours. Advanced-level topics to be determined by department and which may include materials and techniques; landscape painting; figurative painting or related topics. Each option will permit concentration and encourage realization of conceptual goals. (Irreg.)
ART	4503	Sculpture: Object, Message, and Content	Prerequisites: majors only; junior standing; Art 3533, or ART 3563. May be repeated; maximum credit 6 hours. This course will address contemporary issues related to object making. This includes theoretical examination of the role of objects and the dialogue between sculpture, design objects, and architecture. An emphasis will be placed on evaluating the role of material as a communication device and the expansive critical context amongst sculpture, media, and technology. Site specificity, temporary objects, commercial objects, and installation will be investigated. (Irreg.)
ART	4513	Advanced Sculpture: Contemporary	Prerequisite: ART 3513 or ART 3533 or permission of instructor. May be repeated twice; maximum credit nine hours. Self-directed research objectives in terms of sculpture technique, process and concept. Progress relating to personal artistic growth and professional discipline will be expected. Emphasis will be placed on producing a unique body of work for portfolio development and exhibition. (Irreg.)

ART	4523	Sculpture: Advanced Studio Portfolio	Prerequisites: majors only; junior standing; ART 3533, or ART 3563, or ART 4503. May be repeated; maximum credit 6 hours. This course will address advanced sculptural issues, practice and production through self-directed research interests. An emphasis will be placed on idea development, execution, and presentation of finished works for group critiques. Students will be expected to investigate ideas, subject matter or themes in a sophisticated and coherent manner representative of university level work. Students will also develop visual documentation techniques, and professional practices associated with exhibition & resume development. (Irreg.)
ART	4533	Advanced Sculpture: Figurative I	Prerequisite: 2513, 3513, 3523. Develop the student's awareness of form through the modeling of the human figure. The students will study the fundamentals of sculpture such as armature, design, materials, tools and techniques. (Irreg.)
ART	4543	Advanced Sculpture: Figurative II	Prerequisite: 4533. Continuation of the techniques developed in 4533. Students will explore more complex compositions and armature designs while modeling the human form. There will be more emphasis on human and animal anatomy. Will expand into the study and application of bas-reliefs. (Irreg.)
ART	4573	Monumental Sculpture	Prerequisite: 4543. Students will be introduced to various enlarging techniques, taking a sculpture from the maquette (small version) to life-size or monumental scale. Focus on enlarging with the grid method. Use of a pantograph and the wafer method will also be discussed. Emphasis will be placed on the professional aspects of working with foundries, installations, and clientele. (F)
ART	4733	Advanced Serigraphy	Prerequisite: 3733. May be repeated, maximum credit nine hours. This course involves further advanced studies in screenprintmaking. Although the exploration of color, design and creativity will still be of major importance, the development of ideas will be of greatest importance. (Irreg.)
ART	4743	Advanced Printmaking Studio	Prerequisites: majors only, junior standing; Art 3743, ART 3753 or ART 3763. May be repeated; maximum credit 6 hours. Offers advanced instruction in all areas of printmaking. Through discussion, lecture, and demonstration, instructors work closely with students to improve their technical and conceptual acuity. Students expand their formal understanding of print processes as they deepen their focus on the concepts that drive their art practice. (Irreg.)
ART	4813	Media Arts Special Topics	Prerequisite: 3810 or 3873. May be repeated with change of topic; maximum credit twelve hours. Explores various advanced-level topics in production, style and technique. Topics to be determined by department. Individual topics may include but are not limited to animation concepts, documentary, experimental, narrative, digital media, as well as editing, lighting, sound, and other production-related concerns. (F, Sp)
ART	4823	Advanced Art and Technology	Prerequisite: Majors only; ART 3823. May be repeated with change of content; maximum credit 12 hours. Advanced-level topics are determined by department. Individual topics may include, but are not limited to: Interactive Objects and Environment, Experimental Electronics, Sound Synthesis, Virtual Space, and hardware/software/wetware. (Irreg.)
ART	4833	Experimental Art and Technology	Prerequisite: Majors only; ART 3823. May be repeated with change of content; maximum credit 12 hours. Experimental topics determined by department, and may include, but not limited to: Art & Science, Expanded Narrative, Game Art, Critical Play, Tactical Media, Sensory Systems, Networks, Bio-media and Participatory Media. (Irreg.)
ART	4843	Applied Photo Practice	Prerequisite: 2853 and 3853. May be repeated; maximum credit 15 hours. Explores various applied and practical topics of photography to be determined by department. Topics may include view camera technique, zone system, photo illustration, studio experience and extended research and presentation of related topics. Each option will permit concentration and encourage realization of conceptual goals. (Irreg.)

ART	4853	Advanced Photo Practices	Prerequisite: 2853 and 3853. May be repeated with change of content; maximum credit 15 hours. Advanced-level topics to be determined by department and which may include advanced B&W; color; books and portfolios. Extended research and presentation of related topics. Each option will permit concentration and encourage realization of conceptual goals. (Irreg.)
ART	4863	Alternative Photo Practices	Prerequisite: majors only; ART 2853 and ART 3853. May be repeated; maximum credit 15 hours. Topics of historical processes, contemporary explorations, and alternatives to traditional photo methods to be determined by department (nonsilver I and II; process imagery, alternative color, digital imaging, extended research and presentation, etc.). Each method will permit concentration and encourage realization of conceptual goals. (Irreg.)
ART	4873	Advanced Media Arts	Prerequisite: majors only; ART 4810 and permission of instructor. May be repeated; maximum credit six hours. Students create advanced-level work in media arts within a group-critique setting. (F, Sp)
ART	4913	Ceramics Studio Topics	Prerequisite: majors with junior standing or permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in ceramics for content not currently offered in regularly scheduled courses. (Irreg.)
ART	4916	BFA Senior Studio I	Prerequisites: majors only; senior standing; BFA studio majors having completed a minimum of 12 hours of 3000 or 4000 level studio courses and permission of the instructor. The BFA Senior Studio is an immersive experience of art making, creativity, and thinking. This intensive studio experience is focused on studio practice and research related to the artist's discipline. The expectation is that BFA seniors are working towards a professional career and/or the MFA degree. This experience is designed to provide students with critical analysis of the their work with faculty and peers, intensive critique expectations for developing a substantial body of work, and preparation for the MFA degree through critical reading, theory and articulation of written and verbal motivations for the artwork. (F)
ART	4923	Drawing Studio Topics	Prerequisite: majors with junior standing or permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in drawing for content not currently offered in regularly scheduled courses. (Irreg.)
ART	4926	BFA Senior Studio II	Prerequisites: majors only; senior standing; ART 4916 and permission of the instructor. Co-requisite: ART 4983. The BFA Senior Studio II is a continuation of creative work established in BFA Studio I. Building on their ideas and personal expression, students will refine theoretical and conceptual ideas, expand their research interests, and further develop new work. Students will be challenged to exert professional maturity that will result in a substantial portfolio that presents technical dexterity, creative insight, and well developed subject matter as it relates to medium, process, and content. Co-requisite'd with ART 4983, Capstone, this senior studio is the culminating studio experience to prepare students for participating in the professional marketplace or proceeding into the professional MFA degree. Aside from studio practice and faculty instruction, visiting art professionals will provide feedback and advice during some critique sessions or evaluations. (Sp)
ART	4930	Internship	1 to 6 Hours. Prerequisite: permission of instructor; majors only. May be repeated; maximum credit six hours. Students arrange and participate in a professional work experience with an approved internship site. (Irreg.)
ART	4933	Painting Studio Topics	Prerequisite: majors with junior standing or permission of the instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in painting for content not currently offered in regularly scheduled courses. (Irreg.)

ART	4943	Printmaking Studio Topics	Prerequisite: majors with junior standing or permission of the instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in printmaking for content not currently offered in regularly scheduled courses. (Irreg.)
ART	4953	Sculpture Studio Topics	Prerequisite: majors with junior standing or permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in sculpture for content not currently offered in regularly scheduled courses. (Irreg.)
ART	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ART	4963	Photography Studio Topics	Prerequisite: majors with junior standing or permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in photography for content not currently offered in regularly scheduled courses. (Irreg.)
ART	4970	Special Topics	1 to 3 hours. Prerequisite: majors with junior standing or permission of instructor. Special topics course for content not currently offered in regular scheduled courses. (Irreg.)
ART	4973	Film and Video Studio Topics	Prerequisite: majors with junior standing or permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in film and video for content not currently offered in regularly scheduled courses. (Irreg.)
ART	4983	Senior Capstone Experience	Prerequisite: senior classification. May not be repeated for credit. Primary objective is to provide a culminating experience for the senior-year student. Satisfies the University-wide General Education Requirement for a capstone course for art majors. [V]
ART	4990	Independent Study	Prerequisite: junior standing or permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. Title is variable only to reflect specific discipline area within the School of Art. (Irreg.)
ART	5013	Graduate Studio Ceramics I	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5033	Graduate Studio Painting I	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5043	Graduate Studio Printmaking I	Graduate Studio Printmaking I. Prerequisite: Graduate Standing In Art Individual Problems In The Printmaking Studio Area (Irreg)
ART	5053	Graduate Studio Sculpture I	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5063	Graduate Studio Photography I	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5073	Graduate Studio Film/Video I	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5083	Graduate Studio Art & Technology I	Prerequisite: graduate standing in the School of Art & Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5093	Graduate Studio Visual Communications I	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5113	Graduate Studio Ceramics II	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5133	Graduate Studio Painting II	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5143	Graduate Studio Printmaking II	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)

ART	5153	Graduate Studio Sculpture II	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5163	Graduate Studio Photography II	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5173	Graduate Studio Film/Video II	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5183	Graduate Studio Art & Technology II	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5193	Graduate Studio Visual Communications II	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5213	Graduate Studio Ceramics III	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5233	Graduate Student Painting III	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5243	Graduate Studio Printmaking III	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5253	Graduate Studio Sculpture III	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5263	Graduate Studio Photography III	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5273	Graduate Studio Film/Video III	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5283	Graduate Studio Art & Technology III	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5293	Graduate Studio Visual Communications III	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5313	Graduate Studio Ceramics IV	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5333	Graduate Studio Painting IV	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5343	Graduate Studio Printmaking IV	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5353	Graduate Studio Sculpture IV	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5363	Graduate Studio Photography IV	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5373	Graduate Studio Film/Video IV	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5383	Graduate Studio Art & Technology IV	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5393	Graduate Studio Visual Communications IV	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5413	Graduate Studio Ceramics V	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5433	Graduate Studio Painting V	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5443	Graduate Studio Printmaking V	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5453	Graduate Studio Sculpture V	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5463	Graduate Studio Photography V	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5473	Graduate Studio Film/Video V	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)

ART	5483	Graduate Studio Art & Technology V	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5493	Graduate Studio Visual Communications V	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5513	Graduate Studio Ceramics VI	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5533	Graduate Studio Painting VI	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5543	Graduate Studio Printmaking VI	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5553	Graduate Studio Sculpture VI	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5563	Graduate Studio Photography VI	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5573	Graduate Studio Film/Video VI	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5583	Graduate Studio Art & Technology VI	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5593	Graduate Studio Visual Communications VI	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5613	Graduate Studio Ceramics VII	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5633	Graduate Studio Painting VII	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5643	Graduate Studio Printmaking VII	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5653	Graduate Studio Sculpture VII	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5663	Graduate Studio Photography VII	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5673	Graduate Studio Film/Video VII	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5683	Graduate Studio Art & Technology VII	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5693	Graduate Studio Visual Communications VII	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5713	Graduate Studio Ceramics VIII	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5733	Graduate Studio Painting VIII	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5743	Graduate Studio Printmaking VIII	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5753	Graduate Studio Sculpture VIII	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5763	Graduate Studio Photography VIII	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5773	Graduate Studio Film/Video VIII	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5783	Graduate Studio Art & Technology VIII	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5793	Graduate Studio Visual Communications VIII	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5813	Graduate Studio Ceramics IX	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)

ART	5833	Graduate Studio Painting IX	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5843	Graduate Studio Printmaking IX	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5853	Graduate Studio Sculpture IX	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5863	Graduate Studio Photography IX	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5873	Graduate Studio Film/Video IX	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	5883	Graduate Studio Art & Technology IX	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5893	Graduate Studio Visual Communications IX	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5910	Studio Projects	1 to 9 hours. Prerequisite: graduate standing in art. May be repeated with change of subject; maximum credit twelve hours. Individual problems in major studio area, with a choice of medium. (F, Sp, Su)
ART	5913	Graduate Studio Ceramics X	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	5933	Graduate Studio Painting X	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	5940	Studio Projects	1 to 9 hours. Prerequisite: graduate standing. May be repeated with change of subject; maximum credit twelve hours. Individual problems in major studio area, with a choice of medium. (F, Sp)
ART	5943	Graduate Studio Printmaking X	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	5953	Graduate Studio Sculpture X	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ART	5963	Graduate Studio Photography X	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ART	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
ART	5983	Graduate Studio Art & Technology X	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ART	5993	Graduate Studio Visual Communications X	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ART	6010	Graduate Studio	1 to 6 hours. Prerequisite: graduate standing - 30 hours. May be repeated with change of subject; maximum credit twelve hours. Individual problems in major studio area, with a choice of medium. (F, Sp, Su)
ART	6013	Graduate Studio Ceramics XI	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)

ART	6033	Graduate Studio Painting XI	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	6043	Graduate Studio Printmaking XI	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	6053	Graduate Studio Sculpture XI	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	6063	Graduate Studio Photography XI	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	6073	Graduate Studio Film/Video XI	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	6083	Graduate Studio Art & Technology XI	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	6093	Graduate Studio Visual Communications XI	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	6113	Graduate Studio Ceramics XII	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	6133	Graduate Studio Painting XII	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	6143	Graduate Studio Printmaking XII	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	6153	Graduate Studio Sculpture XII	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	6163	Graduate Studio Photography XII	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	6173	Graduate Studio Film/Video XII	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	6183	Graduate Studio Art & Technology XII	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	6193	Graduate Studio Visual Communications XII	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
ART	6213	Graduate Studio Ceramics XIII	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	6233	Graduate Studio Painting XIII	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	6243	Graduate Studio Printmaking XIII	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	6253	Graduate Studio Sculpture XIII	Graduate Studio Sculpture Xiii. Prerequisite: Graduate Standing In Art. Individual Problems In The Sculpture Studio Area. (Irreg.)
ART	6263	Graduate Studio Photography XIII	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	6273	Graduate Studio Film/Video XIII	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	6283	Graduate Studio Art & Technology XIII	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	6293	Graduate Studio Visual Communications XIII	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
ART	6313	Graduate Studio Ceramics XIV	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	6333	Graduate Studio Painting XIV	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	6343	Graduate Studio Printmaking XIV	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	6353	Graduate Studio Sculpture XIV	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)

ART	6363	Graduate Studio Photography XIV	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	6373	Graduate Studio Film/Video XIV	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	6383	Graduate Studio Art & Technology XIV	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	6393	Graduate Studio Visual Communications XIV	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
ART	6413	Graduate Studio Ceramics XV	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	6433	Graduate Studio Painting XV	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	6443	Graduate Studio Printmaking XV	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	6453	Graduate Studio Sculpture XV	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	6463	Graduate Studio Photography XV	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	6473	Graduate Studio Film/Video XV	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	6483	Graduate Studio Art & Technology XV	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	6493	Graduate Studio Visual Communications XV	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
ART	6513	Graduate Studio Ceramics XVI	Prerequisite: graduate standing in Art. Individual problems in the ceramics studio area. (Irreg.)
ART	6533	Graduate Studio Painting XVI	Prerequisite: graduate standing in Art. Individual problems in the painting studio area. (Irreg.)
ART	6543	Graduate Studio Printmaking XVI	Prerequisite: graduate standing in Art. Individual problems in the printmaking studio area. (Irreg.)
ART	6553	Graduate Studio Sculpture XVI	Prerequisite: graduate standing in Art. Individual problems in the sculpture studio area. (Irreg.)
ART	6563	Graduate Studio Photography XVI	Prerequisite: graduate standing in Art. Individual problems in the photography studio area. (Irreg.)
ART	6573	Graduate Studio Film/Video XVI	Prerequisite: graduate standing in Art. Individual problems in the film/video studio area. (Irreg.)
ART	6583	Graduate Studio Art & Technology XVI	Prerequisite: graduate standing in the School of Art and Art History. Individual problems in the art and technology studio area. (Irreg.)
ART	6593	Graduate Studio Visual Communications XVI	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
ART	6880	Graduate Exhibition	1 to 4 hours. Prerequisite: at least 30 hours of graduate credit successfully completed. May be repeated; maximum credit four hours. A special project course culminating in a graduate exhibition presented by the candidate for the Master of Fine Arts degree. Students enrolled will be following the "no thesis" plan. (F, Sp, Su)
ART	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ART	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)

ART	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ARTC	1003	Introduction to Contemporary Art Theory I	Corequisite: ART 1013 and ART 1023. Emphasis on critical thinking and a broad introduction to the aesthetic vocabulary of form, concept, criticism, and historical theories in the visual arts. Students will develop skills to articulate and defend a critical position about an artist, piece of work, or an exhibition through written and oral presentation. One of five foundation courses in the School of Art and Art History. (F, Sp)
ARTC	1103	Introduction to Contemporary Art Theory II	Prerequisite: ARTC 1003; corequisite: ART 1113. Continuation of 1003. Emphasis on development of higher-level critical thinking skills learned from Introduction to Art Theory I. Further discourse of art theories, content, and meaning with emphasis on interpretation and judgment. One of five foundation courses in the School of Art and Art History. (F, Sp)
ARTC	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ARTC	2813	Introduction to Visual Culture and Media Literacy	Prerequisite: ENGL 1213. An introduction to the study of media in relationship to modern society and culture. Establish methodologies for describing and analyzing diverse forms of media, including print, television, cinema, and digital communication. Critically examines the historical scholarship, theory, and media practice that informs current conversations in the fields of media and cultural studies. (Irreg.)
ARTC	2913	Media Arts: Critical History and Analysis	Prerequisite: 2010 Or 2803 or permission of instructor. May be repeated once with change of topic. Critical review of the Media Arts. Rotating topics may view Media Arts in the context of history, genre, medium, cultural reference, or other related areas. (Irreg.)
ARTC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ARTC	3930	Special Topics In Theory & Criticism	Prerequisite: junior Standing. May be repeated with change of content; maximum credit six hours. Covers various topics dealing with diverse issues relating to the visual arts. (Irreg.)
ARTC	3933	Business of Art: Professional Practice	Prerequisite: Junior standing and majors only. Students will participate in exercises and assignments designed to improve written, verbal and visual abilities vital to exhibition opportunities, gallery practice, employment in art related fields, and future career aspirations including pursuing an MFA terminal degree. Additionally, this course will touch on some related legal issues associated with art production, commissions and contracts. (Irreg.)
ARTC	3943	Media Arts Seminar	Prerequisite: 2010 or 2803 or permission of instructor. May be repeated with change of topic; maximum credit nine hours. Seminar presents topics that are related to the media arts which may not utilize production as an element of the course. Topics may include, but are not limited to critical viewing of specific genres of work, producing methods, and current issues within media arts culture. (Irreg.)
ARTC	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

ARTC	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
ARTC	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ARTC	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ARTC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ARTC	4853	Photography: Theory and Criticism	Prerequisite: majors with junior standing or permission of instructor. May be repeated with change of content; maximum credit 9 hours. Covers various topics related to critical issues in photographic thought and cultural studies. Students will examine literary resources, view various media sources and participate in a variety of interactions with peers and available guests. (Irreg.)
ARTC	4893	Contemporary Native American Artist II	(Slashlisted with 5893) Prerequisite: junior standing. A continuation of 4693. Explores the modern sensibilities that make up the contemporary diversity of arts and people of this hemisphere. No student may earn credit for both 4893 and 5893. (Sp) [IV-NW]
ARTC	4923	Special Topics In Theory And Criticism	Special Topics In Art Theory And Criticism. Prerequisite: Junior Standing. May Be Repeated With Change Of Content; Maximum Credit Six Hours. Covers Various Topics Dealing With Diverse Issues Relating To The Visual Arts. (Irreg.)
ARTC	4930	Special Topics in Theory and Criticism	(Slashlisted with 5930) Prerequisite: Junior standing. May be repeated with change of content; maximum credit six hours. Covers various topics dealing with diverse issues relating to the visual arts. No student may earn credit for the same topic for both 4930 and 5930. (Irreg.)
ARTC	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ARTC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ARTC	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ARTC	5013	Graduate Seminar	Prerequisite: graduate standing. A required course during the first semester that focuses upon developing an informed approach to the art making process. It will utilize readings, writings, and visual references to form a basis for discussions. Each student will conduct a presentation on the aesthetic basis of their own work to the class. (F, Sp)
ARTC	5930	Special Topics in Theory & Criticism	Prerequisite: graduate standing. May be repeated with change of content; maximum credit six hours. Covers various topics dealing with diverse issues relating to the visual arts. No student may earn credit for the same topic for both 4930 and 5930. (Irreg.)
ARTC	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)

ARTC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ARTC	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ARTC	5999	Graduate Level Transfer	NULL
ARTC	6881	Thesis Proposal/Statement	Prerequisite: 5013. Provides guidance for the development of the thesis exhibition proposal and the written statement required to accompany the exhibition of visual work. The student enrolls in this course the semester prior to the thesis exhibition and may enroll again for completion of the written component. (F, Sp)
ARTH	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ARTH	3403	Theory and Application of Art Therapy	Prerequisite; junior standing, not for Art or Art History majors. Class considers the underlying principles, prevailing theories, current practice and evolving uses of art therapy with a focus on the theory and interdisciplinary nature of art therapy. In addition, the social and interpersonal applications of art, which are on a continuum with art therapy, will be addressed liking the disciplines of art and therapy. The primary approaches of art psychotherapy and art as therapy will be contrasted and students will create and discuss art within both theoretical frameworks. (Irreg.)
ARTH	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ARTH	3503	Theory and Application of Creative Therapies	Prerequisite: junior standing, not for Art or Art History majors. Class covers a broad range of therapeutic methods which all draw from a theoretical base in the arts, creativity, and expression. A strong focus will be on creativity theory and how it is applied through creative therapy disciplines such as art, music, dance and drama therapy. These creative therapies will be linked in terms of physical and mental outcomes expected and that are documented in the literature and research. Students will be required to take a critical look at both the theoretical basis and the practical applications of these creative modes. (Irreg.)
ARTH	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers topics not usually presented in the regular courses.
ARTH	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
ARTH	3980	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ARTH	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

ARTH	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ARTH	4950	Art Therapy Practicum	Prerequisite: junior standing, two courses in social sciences; not for Art or Art History majors. Class covers a broad range of therapeutic modalities which all draw from a theoretical base in creativity and expression. A strong focus will be on creativity theory and how it is applied through creative therapy modalities. Modalities taught will be linked in terms of physical and mental outcomes expected and that are documented in the creative therapies literature and research. Students will be required to take a critical look at both the theoretical basis and practical application of these creative modes. (Irreg.)
ARTH	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ARTH	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ARTH	4973	Special Topics in Art Therapy	Prerequisite; 3403 or 3503, not for Art or Art History majors. May be repeated with change of content; maximum credit six hours. Covers various topics dealing with diverse issues relating to the visual arts in therapeutic applications. Special topics allows a focus on one particular area or application of art therapy through readings, artwork (arts-based research protocols), and class discussion. Individualized readings and assignments may focus on a student's interdisciplinary interest. (Irreg.)
ARTH	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ARTH	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ASTR	1504	Astronomy: Exploring the Universe	An introduction to the concepts of modern astronomy. The solar system, the sun and stars, the Milky Way and other galaxies, current theories of the origin, evolution and fate of the universe. Not for major credit. Students cannot receive credit in both 1504 and 1514. (F, Sp, Su) [II-NL]
ASTR	1514	Astronomy: Exploring the Universe with Laboratory	An introduction to the concepts of modern astronomy. The solar system, the sun and stars, the Milky Way and other galaxies, current theories of the origin, evolution, and fate of the universe. Not for major credit. Students cannot receive credit in both 1504 and 1514. Laboratory (F, Sp, Su) [II-LAB]
ASTR	1523	Life in the Universe	Introductory astronomy course focusing on general physical conditions under which life is thought to arise and evolve in the universe. Topics include historical astronomy, gravitation and planetary orbits, the solar system. The earth's geology and atmosphere, stellar evolution, theories for the origin of life on earth, the discoveries of extrasolar planets, and the search for extraterrestrial life. Course is not for major credit in physics and astronomy, however it is appropriate for Journalism and Mass Communications, Zoology, Education and Chemistry majors as well as others who want an introduction to our current understanding of life in the universe. (Sp) [II-NL]
ASTR	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

ASTR	2513	Introductory Astrophysics	Prerequisite: PHYS 1215 or 2524, or permission of instructor. An introduction to solar system astronomy and basic astrophysical concepts for majors and students with a knowledge of introductory physics and calculus. Includes planetary system formation, asteroids, comets, terrestrial planets and giant planets. Astrophysical concepts including Keplers laws, blackbody radiation, hydrostatic equilibrium and heat transfer. Elements of astronomy, including time, celestial coordinates, telescopes and detectors, magnitudes and color indices. (F)
ASTR	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
ASTR	3103	Stars	Prerequisite: 2513 or permission of instructor. Stellar properties and stellar evolution. Includes fundamental properties of stars (temperature, luminosity, mass) and how to determine them, star formation, main sequence, post main sequence, supernovae, black holes, neutron stars, white dwarfs, binary stars. (F)
ASTR	3113	Galaxies and Cosmology	Prerequisite: 2513 or permission of instructor; 3103 strongly recommended. Galactic and extragalactic astronomy. Includes the Milky Way galaxy, the interstellar medium, normal and active galaxies, clusters of galaxies, cosmology. (Sp)
ASTR	3190	Topics in Astronomy	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. (F, Su)
ASTR	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ASTR	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
ASTR	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
ASTR	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ASTR	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Sp, Su)
ASTR	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ASTR	4303	Stellar Astrophysics	Prerequisite: 3113 or permission of instructor. Physics of stars: gas and radiation laws, stellar atmospheres and spectra, stellar interiors and evolution. (F)

ASTR	4523	Advanced Observatory Methods	Prerequisite: 2513 and 3103. Techniques of multiwavelength observational astronomy. Includes time and coordinates, physics of astronomical ccds, telescopes, photometry, extinction correction, technical feasibility calculations, optical spectroscopy, and x-ray astronomy. Introductions to gamma-ray, infrared, UV radio astronomy. No student may earn credit for both 4523 and 5523. (Irreg.)
ASTR	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ASTR	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ASTR	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
ASTR	5403	High-Energy Astrophysics	Prerequisite: 4303 or permission of instructor. High-energy radiation processes in astronomy: synchrotron radiation, bremsstrahlung, inverse Compton-effect. New wavebands of observation, UV, X-ray and gamma-ray astronomy. Radioastronomy: supernova remnants, pulsars, neutron stars. Radiogalaxies, active galactic nuclei, quasars. Theories of the origin of cosmic rays. (Irreg.)
ASTR	5443	Galactic Astronomy	Prerequisite: 4303 or permission of instructor. Basic properties of galaxies are explored with special focus on the Milky Way. Topics include galaxy classification and morphology, stellar populations, clusters and kinematics, interstellar medium, distributions of mass and light, spiral structure, chemical evolution, systemic rotation and galaxy mass, and distance-determining methods. (Irreg.)
ASTR	5453	Extragalactic Astronomy and Cosmology	Prerequisite: 3113 or 4303 or permission of instructor. Basic properties of stars. Review of observational tools for extragalactic work. Stellar content and interstellar medium in normal galaxies. Introduction to the theory of Big Bang cosmology. Comparison of observational data to cosmological predictions. The extragalactic distance scale and the age of the universe. Large scale structure: galaxy clusters and superclusters. Active galaxies -- radio galaxies and quasars. (Irreg.)
ASTR	5463	Stellar Atmospheres	Prerequisite: 4303 or permission of instructor. Local thermodynamic equilibrium. Radiative transfer, continuous absorption coefficient and model stellar atmospheres. Atomic and molecular spectroscopy and the quantitative analysis of stellar spectra. Atomic processes and departures from local thermodynamic equilibrium. Extended and expanding atmospheres, novae, supernovae. (Irreg.)
ASTR	5473	Stellar Interiors	Prerequisite: 4303 or permission of instructor. Evolution and energy balance of stars including gravitational attraction, nucleosynthesis, radiative and convective energy, transport and equilibrium, construction of stellar models for pre-main sequence and main sequence stars, and the theory of giants and white dwarfs. (Irreg.)
ASTR	5513	Interstellar Medium	4303 or permission. Processes in low-density media are explored, including the physics relevant to emission line objects such as HII and HI regions, molecular clouds, and active galaxies. Techniques for deriving chemical abundances are explored, as are interstellar absorption by gas and dust and radiation transfer. (Irreg.)

ASTR	5523	Advanced Observatory Methods	Prerequisite: 2513 and 3103. Techniques of multiwavelength observational astronomy. Includes time and coordinates, physics of astronomical ccds, telescopes, photometry, extinction correction, technical feasibility calculations, optical spectroscopy, and x-ray astronomy. Introductions to gamma-ray, infrared, UV radio astronomy. No student may earn credit for both 4523 and 5523. (Irreg.)
ASTR	5900	Seminar in Astrophysics	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. A research seminar devoted to the study of specialized topics in astronomy and astrophysics. Topics selected will reflect the interest of the instructor and students. (Irreg.)
ASTR	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ASTR	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ASTR	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ASTR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ATC	2823	Space - Introductory Studio Practice	Prerequisite: Majors only; ART 1033 and ART 1043. Establishes a foundational perspective that considers embodiment and space in the digital age. Examines how networked information spaces might be understood, intervened with, repurposed, and inhabited as socially navigable spaces. This examination will be supported by an equal commitment to the physical via site specificity and emerging forms of public art practice. The goal is first of all, to engage the term 'space', and secondly, to examine possibilities as that engagement is extended into practice. (Irreg.)
ATC	2853	Image - Introductory Studio Practice	Prerequisites: Majors only; ART 1033 and ART 1043 or concurrent enrollment. An introduction to light and lens-based imaging with a specific emphasis on photography and the photographic image. Instructor determines content and methodology; all courses will include refinement of basic technical skills as well as critical engagement with photography and its ontology. Readings and writings will supplement class discussion.(Irreg.)
ATC	2873	Time - Introductory Studio Practice	Prerequisites: Majors only; ART 1033 and ART 1043. Introduces students to a variety of temporal experience given form in film, video, and uses of the Internet. Time is conceived in terms of: (1)a succession of passing frames, (2) the mediated presence of another consciousness, (3) the inscription of testimony for an archive,(4) the live performance in bodily or vocalized sound, and (5) the re-marking of community over the course of technological change. Basic instruction is provided in the various technologies necessary to explore these topics. (Irreg.)
ATC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

ATC	4863	BFA Studio	Prerequisites: Majors only; ATC 2823, ATC 2853, and ATC 2873; admission to ATC major. May be repeated with change of content; maximum credit 12 hours. In this course, students develop research techniques in support of their studio practice. Seemingly diverse concentrations(for example: photography, performance, and robotics) synthesize with a common intent to investigate and communicate ideas. Students are exposed to experiences involving professional practices, including critical critique, proposed solutions and examinations of problems, public speaking/discourse, writing about art, and the formal presentation of artworks. Students' effort are concentrated through the series of Studio/Seminar courses that culminate in the public presentation of their thesis.(Irreg.)
AVIA	1003	Introduction to Computer Concepts and Applications	Prerequisite: permission of instructor. Students learn to navigate in Windows, Microsoft Office: Word, Excel, Powerpoint, Access and Outlook. (F, Sp, Su)
AVIA	1013	Introduction to Air Traffic Control	The purpose of this course is to learn about the air traffic control system from both the pilot and controller's perspectives. This course is the first of six courses for the ATC minor and a prerequisite for basic air traffic control regulations. (F, Sp)
AVIA	1111	Aviation Orientation	Prerequisite: must be a declared aviation major. Required orientation course for all declared Aviation Majors during their first semester. Orients students to the department, curriculum, resources, and provides an overview of the various aviation professions. Guest lecturers will include departmental instructors covering all aspects of the industry, as well as the advising staff. (F)
AVIA	1113	Introduction to Aviation	Prepares student to take the FAA private pilot written examination. Covers FAR's, meteorology, aerodynamics, flight physiology, performance charts, radio navigation techniques. (F, Sp, Su)
AVIA	1213	Basic Air Traffic Control Regulations	Prerequisite: 1013. This course is a progressive continuation of introduction to air traffic control and a prerequisite for general air traffic control procedures. This course is more narrowly focused on study and interpretation of the FAA orders and regulations that govern the air traffic control system and the national airspace system. (Sp, Su)
AVIA	1222	Primary Flying	Prerequisite: 1113 or permission of department. Includes in-flight instruction with effort directed toward obtaining FAA certification as a private pilot. Third class medical must be obtained prior to flying. (F, Sp, Su)
AVIA	1313	Introduction to Unmanned Aerial Systems	Prerequisite: permission of the department. Introduces students to Unmanned Aerial Systems (UAS). Includes the history of UAS and survey current UAS platforms, terminology, challenges to airspace integration and operational theory. (F, Sp)
AVIA	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
AVIA	2013	General Air Traffic Control Procedures	Prerequisite: 1213. This course will present the study of "general control" procedures used in the terminal and en route control options as well as FAA flight service processes and procedures. This course will serve as a prerequisite for airport traffic control procedures. (F, Sp)
AVIA	2231	Advanced Flying	Prerequisite: 1222 or private pilot certificate. (F, Sp, Su)
AVIA	2341	Secondary Flying	Prerequisite: 2231. Consists of cross-country experience under the direct supervision of an instructor pilot. Part of the FAA Part 141 commercial certification course. (F, Sp, Su)
AVIA	2513	The History of Aviation	Chronicles the history of aviation through an in-depth study of powered flight and focus on the development of civil, commercial, and military aviation. The course will cover significant events and people throughout aviation history from the first powered flight through present day developments and a brief look into the future. Also examines the impact of aviation on recreation, transportation, warfare, and exploration. (F, Sp)

AVIA	2613	Aviation Safety	Prerequisite: 1113 and 1222. This course will examine all aspects of accidents/incidents involving airline and general aviation flights. It examines those areas from the perspective of pilots, crew members, air traffic controllers and National Transportation Safety Board (NTSB) findings. Each accident/incident is dissected with the goal of determining what went wrong and lessons that can be learned. (F, Sp)
AVIA	3013	Career Development for Aviation Professionals	Prerequisite: completed 36 or more college credit hours. This course will provide an overview of the career planning process for aviation students. Students will master the techniques of self-assessment, resume and letter writing, interviewing, researching companies, proper writing techniques, ethics and etiquette, and networking. This course is intended to help students prepare for internship interviews or entering the aviation industry as a professional. (F, Sp)
AVIA	3103	Flight Deck Environmental Issues	Prerequisite: departmental permission. Human-machine interface issues in today's modern flight deck are the focus of the course. Leading to that end, the student will explore the cognitive and psychomotor domains of learning, review studies of aircrew interface problems, learn coping mechanisms used by today's best aviation trainers to overcome design-induced problems in cockpit advanced technology. (F, Sp)
AVIA	3111	Advanced Flight Maneuvers	Prerequisite: 1222 or FAA private pilot certificate. Increase the student's knowledge and understanding of advanced flight maneuvers. Accelerated stalls, spins, inverted flight, and recovery from unusual altitudes. Advanced aerodynamics will be discussed and demonstrated. (F, Sp, Su)
AVIA	3113	Commercial Aviation	Prerequisite: 3133 or instrument rating. Course provides the student the knowledge required to obtain a commercial pilot certificate. (F, Sp, Su)
AVIA	3133	Fundamentals of Instrument Flight	Prerequisite: 2231 and private pilot license. Federal aviation regulations as pertain to instrument flight rules (IFR), weather and forecast products, interpretation of en route low altitude charts and terminal instrument approach procedures, instrument flight procedures and techniques. (F, Sp, Su)
AVIA	3213	Airport Traffic Procedures	Prerequisite: 2013. The primary focus of this course is to study visual air traffic control procedures, specifically, to learn the principles of operation and the separation methods required in the air traffic control tower environment. This course will serve as a prerequisite for IFR Air Traffic Control Procedures. (Sp)
AVIA	3313	IFR Air Traffic Procedures	Prerequisite: 3213. Focus on the requirements and procedures used in the IFR air traffic control environment. The students will study all of the separation standards and rules used in radar and non-radar environments in the approach control and air route traffic control facilities. This course will serve as a prerequisite for Air Traffic Simulation. (F)
AVIA	3333	Survey of Aviation Law	Prerequisite: 1113 or junior standing. Survey of legal issues in aviation. The student will review legislation, regulatory agencies, and case studies dealing with legal issues in the medium of airspace above the ground-predominantly over the United States. The student will be able to identify and comprehend the historical events and technical terms that describe national and international legal precedents that have shaped aviation law. (F, Sp)
AVIA	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

AVIA	3513	Airport Operations Management	Prerequisite: 1113 and junior standing. Provides the student with an in-depth analysis of airport management, operations and planning functions necessary to operate, develop, and maintain safe and efficient airport facilities as is the practice in the United States. Also introduces air traffic control (ATC) concepts. (F, Sp)
AVIA	3572	Instrument Flying	Prerequisite: 3133 and private pilot certificate. Individual flight simulator instruction in the technique of flying solely by reference to instruments. Ground instruction in radio navigation, meteorology, instrument approach procedures, air traffic control procedures and federal aviation regulations. (F, Sp, Su)
AVIA	3581	Multi-Engine Flying	Prerequisite: 4552 or commercial pilot certificate. A study of the design, construction and flight characteristics of multiengine aircraft. Inflight instruction in pilotage and operation of multiengine airplanes. Designed to qualify the student for certification as a multiengine pilot. (F, Sp, Su)
AVIA	3591	Flight Management Systems	Prerequisite: 4552 and permission of department. The programming and operation of a typical turbine aircraft system. Instructor uses pc-based program to demonstrate programming and operation of the flight management systems used in modern corporate, regional, and major airline aircraft. Students are expected to master the program using the system. (F, Sp, Su)
AVIA	3913	Aerospace Contract Administration	Prerequisite: junior standing. Survey and study of specialized procedures used in the management and administration of aerospace (aviation) contracts, particularly associated with commercial and defense systems acquisitions. Students will use case study analysis, involving aerospace development and acquisition procedures, to enhance the learning experience and prepare them for future employment in the aerospace industry. (F)
AVIA	3923	Aerospace Operational Research	Prerequisite: junior standing. Students will be introduced to the fundamental methods and techniques employed by the aviation/aerospace industry when researching and analyzing operational issues. Case studies will concentrate on procedures of data acquisition and analysis where research leading to problem solutions is commonplace. Students will be able to use specialized research methods to collect data, analyze it, and then draw logical conclusions. Knowledge, skills, and abilities learned in this course will prepare students for Senior Capstone (F).
AVIA	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
AVIA	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
AVIA	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
AVIA	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
AVIA	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
AVIA	4004	Air Traffic Control Tower Simulation	Prerequisite: AVIA 3213 with minimum grade of C. Provides students an opportunity to apply knowledge learned in previous air traffic control courses, specifically AVIA 3213, and expand the knowledge base of terminal ATC procedures. The application and expansion of knowledge will occur in lectures and through working in a high fidelity, simulated ATC tower environment. Laboratory (F, Sp)

AVIA	4015	Air Traffic Simulation	Prerequisite: 3313. Lab to prepare student for on-the-job training in an FAA air traffic control facility. Course will consist of dynamic simulation exercises in an ATC computer lab as well as classroom briefings. Students will run scenarios as the controller and as a pseudo pilot. (Sp)
AVIA	4113	CFI Seminar	Prerequisite: 3133, 3113. Increase student knowledge of theories of learning, flight instructor authority, and responsibility and classroom and flight techniques. Emphasis on principles of instruction, student motivation and maneuver error analysis. (F, Sp, Su)
AVIA	4313	Turbine Transition	Prerequisite: 3581 and 4552. Introduce the student to the procedures of flying a turbine aircraft and the concepts of crew resource management. Emphasis is placed on the basic terminology and procedures and emergency operations. (F, Sp, Su)
AVIA	4423	Crew Resource Management	Prerequisite: 1113 and junior standing. To teach the student the principles and procedures of a two or more person cockpit. Includes: briefings, call-outs, and emergency procedures. (F, Sp)
AVIA	4552	Commercial Flying	Prerequisite: 3113. The final stage of the FAA Part 141 commercial pilot certification course. Designed to polish pilot skills in commercial aircraft maneuvers.(F, Sp, Su)
AVIA	4602	Flight Instructor-Airplane	Prerequisite: commercial pilot certificate and instrument rating. Flight instruction in preparation for FAA flight instructor certificate. (F, Sp, Su)
AVIA	4613	Instrument Flight Instructor	Prerequisite: commercial pilot certificate and flight instructor-airplane certificate. Consists of lecture and flight instruction in the specialized teaching techniques and procedures required of an instrument flight instructor. At the end of the course, the student will meet the requirements for certification by the FAA as an instrument flight instructor. (F, Sp, Su)
AVIA	4622	Multiengine Flight Instructor	Prerequisite: commercial multiengine pilot certificate and flight instructor -- airplane certificate. Instruction in the specialized teaching techniques and procedures required of a multiengine flight instructor. At the end of the course, the student will meet the requirements to take the flight test for certification by the FAA as a multiengine flight instructor. (F, Sp, Su)
AVIA	4663	Survey of Aerospace Ethical Issues	A survey of past and present ethical issues influencing the development of ethical behavior among U.S. aerospace companies and commercial and corporate aviation. Individual development of defense mechanisms to ensure ethical behavior in competitive environments.
AVIA	4713	Senior Capstone	Prerequisite: senior standing, permission of department, and all major upper-division courses or concurrent enrollment. This project course builds on the accumulated knowledge from all courses to date. Lectures will cover problem identification, analysis, generation of alternatives, cost/benefit studies, interviews and presentations. Student teams will analyze and make recommendations on an actual problem for an aviation related organization, such as the FAA. (F, Sp) [V]
AVIA	4803	Aviation Mental Health: Psychological Implications for Air Transportation	Prerequisite: junior standing. Students will learn about mental health issues relevant to passengers, cabin crew, and flight deck crew--that have far-reaching psychological implications for all those who travel by means of air transportation--through the experiences of flight attendants, pilots, clinicians, researchers, trainers, and professors. (Sp, Su)
AVIA	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
AVIA	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

AVIA	4983	Airline Management	Prerequisite: junior or graduate standing. Study of the managerial aspects of the airline industry to include economic and organizational characteristics, marketing, operational scheduling, fleet planning, and labor relations. Students participate in management simulation as senior executives of a regional domestic carrier. (F, Sp)
AVIA	4990	Special Studies in Aviation	1 to 4 hours. Prerequisite: departmental permission. Will encompass various aviation-related topics including many specialty flight programs; such as, aerobatic instruction, multiengine training, pilot refresher training, etc. (F, Sp, Su)
AVIA	5213	Air Transportation Systems	Prerequisite: admission to graduate program in Aviation Management. Provide students with a broad view of the air transportation industry, how it evolved, and where current trends indicate the industry is headed. The course traces the history of aircraft development and the rise of air carriers, with particular attention to the legislative impact. Emphasis will be placed on the economic characteristics, financing and marketing of both cargo and passenger air carriers, the structure and managerial functions of the airlines, labor relations, and the international dimension of the industry. (Irreg.)
AVIA	5313	Aviation History	Prerequisite: admission to graduate program in Aviation Management. In-depth study of five specific topics in aviation history. Included will be significant civilian, commercial, and military events as well as important people, places, and technological development. (Irreg.)
AVIA	5940	Graduate Research or Applied Project in Aviation	Prerequisite: graduate course in electronic access to research resources and theory or equivalent. May be repeated; maximum credit four hours. Designed to provide the application of theory to practice in the field of aviation management. Students are encouraged to begin developing a research interest or service project idea early in their course of study. The project is approved and supervised by a faculty adviser. Working from the perspective of consultant, the student thoroughly investigates the issues and proposes specific actions, using analysis, planning and management tools developed during their course of study. Continuous guidance and feedback are provided by the faculty adviser and sponsor during the project. The completed project will require a comprehensive written report. (F, Sp, Su)
AVIA	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
AVIA	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
AVIA	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
AVIA	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
B AD	1001	Personal Computing Productivity Tools	Computer-assisted introduction to personal computing technology for spreadsheets, word processing, and presentation software. (F, Sp, Su)
B AD	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

B AD	2091	Business and Professional Basics	Prerequisite: Declared Business major. Introduces students to the professional world of business. Emphasizes important aspects such as business culture, communications, ethics, social responsibility and business skills development. Prepares students for a professional future and to identify and address strengths and weaknesses for earning that first job. Includes Career Services registration, creation of a usable resume, and exploration of people skills necessary for success in today's workplace. (F, Sp)
B AD	2110	Topics in Business for Non-Majors	1 to 3 hours. May be repeated with change of content; maximum credit six hours. Course is designed to familiarize and present business related topics to majors in other disciplines of study. Topics will vary and may encompass all divisions within the Price College of Business. (Irreg.)
B AD	2113	Introduction to Business I	Designed for non-Business majors. Gives each student a comprehensive introduction to the study of business. Focuses on creation and maintenance of a long-term strategic vision for the firm. Introduces and builds an understanding of the functional business areas such as management, marketing, accounting, finance, and information systems. The concepts learned are essential in managing business activities in an increasingly competitive business world. (F, Sp)
B AD	2203	Personal Finance	Prerequisite: Sophomore standing. Problems and applications in personal finance, financial planning and budgeting covering savings, thrift institutions, financial sources, interest rates, life, property and casualty insurance, personal investments, tax planning, real estate financing, public and private annuities and retirement and estate planning. (F, Sp)
B AD	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
B AD	3013	Integrated Business Core Practicum	Prerequisite: junior standing; Corequisite: enrollment in Integrated Business Core (L S 3323, MGT 3013, MKT 3013). Students will apply concepts from the corequisite courses to their own start-up business ventures and to community service projects. (F, Sp)
B AD	3023	International Financial Statement Analysis	(Crosslisted with ACCT 3023) Prerequisite: Accounting 2113 and 2123. A review of international financial reporting development, procedures and standards with an emphasis on financial statement interpretation and analysis. Open to accounting majors only as an elective. (Sp)
B AD	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
B AD	3513	International Business	Prerequisite: student must be approved for degree candidacy in the Price College of Business. The nature and economic role of the multinational corporation including the impact of legal, political, educational, sociological, and cultural variables upon firm performance and managerial activity; case studies illustrate managerial, marketing, financial and accounting activities projected across national boundaries. (F, Sp)

B AD	3613	Digital Media	Prerequisite: junior standing, student must be approved for degree candidacy by Price College. Students will gain real-world, hands-on skills creating, editing, storing and disseminating digital media resources using applications such as Photoshop, Sound Forge, Movie Maker, and PowerPoint. Students will create digital images, digital audio, digital video and self-running narrated presentations. Students also will examine current digital media concepts, terminology, formats, requirements, trends, and the demands that digital media resources place on business infrastructure. (Su)
B AD	3700	Internship in Business Administration	1 to 3 hours. Prerequisite: student must be approved for degree candidacy by Price College; permission showing approval from the designated faculty or advisor overseeing internships for credit. (F, Sp, Su)
B AD	3710	Topics in Business Administration	1 to 3 hours. Prerequisite: student must be approved for degree candidacy in Price College of Business. May be repeated; maximum credit nine hours. Permits students to study topics in business administration not included in standard course offerings. Subject of course will vary. (F, Sp, Su)
B AD	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted honors candidate to study materials not usually presented in regular courses.(F, Sp, Su)
B AD	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
B AD	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program; junior standing. May be repeated; maximum credit six hours. Independent research on special projects. (F, Sp)
B AD	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
B AD	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
B AD	4013	Business Strategy and Policy	Prerequisite: senior standing and completion of all other College of Business core courses. Administrative decision making with emphasis on analyzing business problems, formulating policies and implementing plans for action; comprehensive cases provide the opportunity to study the proper interrelationships among production, finance, marketing and the many other functions involved in managing a business enterprise. Should be taken in student's final semester. (F, Sp, Su) [V]
B AD	4091	Career Planning and Placement for Business Students	Prerequisite: junior or senior standing. An overview of the career planning process for business students including self-assessment of individual qualifications, interests and goals; development of personal skills in resume development, letter writing and the interviewing process; exploration of a variety of business careers. Should be taken prior to job search and interviewing. (F, Sp)
B AD	4363	Business Infrastructure and Cyber Security	(Crosslisted with MIS 4363 and HCB 4363) Prerequisites: junior standing, senior standing; MIS 2113; MGT 3013; MKT 3013; LS 3323; FIN 3303. Focuses on the foundation concepts necessary to gain an understanding of the industry, data communications and telecommunications networks and cyber security concepts. Key topic areas of the course are: OSI and Internet network models, Standards & Protocols, Business Infrastructure Design (LAN, WLAN, Backbone Networks, WAN, Connection to the Internet), Cyber Security Concepts, Basic technical and managerial aspects of business infrastructure, Practitioners concerns and perspectives. (F, Sp)

B AD	4700	Internship in Business Administration	1 to 3 hours. Prerequisite: junior standing, permission of department and Price College. May be repeated; maximum credit three hours. Application of the theory and principles of business in practical, on-the-job situations. (F, Sp, Su)
B AD	4710	Special Problems in Business Administration	1 to 3 hours. Prerequisite: junior standing and permission. May be repeated; maximum credit six hours. Permits students to study topics in business administration not included in standard course offerings. Subject of course will vary. (F, Sp, Su)
B AD	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
B AD	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
B AD	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
B AD	5001	Quant Methods & Modeling I	Prerequisite: graduate standing. An elementary review of important mathematical concepts used in business decision making with emphasis on problem solving. The electronic spreadsheet is used as the principal device for building models, and the course covers the concepts of effective spreadsheet design and use. Through development and use of specific spreadsheet computer skills, the student will become well-versed in verbalizing, visualizing, forming equations, and finally, calculating answers to key types of business problems. (Irreg.)
B AD	5023	Management Science	Prerequisite: permission (Director-CBA Graduate Programs). A quantitative methods course to prepare students for MBA functional courses. Includes elements of statistics and management science. (F, Sp)
B AD	5032	Business Integration	Prerequisite: graduate standing and permission of instructor. Integrates the concepts of the functional areas of business and applies them to current events and current issues of concern. (F)
B AD	5033	Statistical Modeling For Decision-Making	Prerequisite: graduate standing or permission of instructor. Covers basic statistical methods used in business decision-making. Topics include probability distributions, confidence intervals, hypothesis testing, regression analysis, correlation, fundamentals of decision theory, and utility theory. (Irreg.)
B AD	5100	MBA Professional Development-Part A	Prerequisite: admission to full-time MBA program. Designed to hone leadership capabilities and polish professional skills. The seminars cover topics such as oral communication and report writing, networking, team dynamics and facilitation, resume writing, effective negotiations, career planning and development, business etiquette, interview technique and skills, and other contemporary business topics as they arise. Also offers access to a variety of innovative leaders, experts and advisors. Opportunities also arise which may include speakers ad networking events. (F)
B AD	5101	MBA - Professional Development	Prerequisite: admission to MBA program. Stresses professional development skills. Designed to prepare students for their professional careers and the job search process in particular. Topics include: resume writing, job search and interview, negotiation skills, business etiquette, career decisions, and project and career management. (F)

B AD	5102	Managerial Economics	Prerequisite: graduate standing. Microeconomic concepts and analysis as used in managerial decision-making with emphasis on marginal analysis, comparative advantage, resource allocation, opportunity cost, demand and supply, elasticity, economic efficiency, price discrimination, welfare analysis, production and cost functions, productivity, market structures, externalities and public goods, game theory, information asymmetry, market signaling, and government regulation of anti-competitive behavior. (Irreg.)
B AD	5112	Global Economics	Prerequisite: graduate standing and Economics 5102. Macroeconomic analysis of the global environment of business and its impact on management decision making. The course analyzes the extent, character, and consequences of globalization with emphasis on how any economy operates in the aggregate to affect real output, unemployment, the price level, interest rates, business cycles, economic growth, foreign exchange rates, trade patterns, international financial flows and foreign investment through its fiscal, monetary, and exchange stabilization and trade policies. (Irreg.)
B AD	5122	Quantitative Methods and Modeling II	Prerequisite: B AD 5001 and graduate standing. Introduces students to the basic tools in building models and using data to make informed management decisions. Covers introductory probability, decision analysis, basic statistics, hypothesis testing, correlation, regression, simulation, linear and nonlinear optimization, and discrete optimization. Computer spreadsheet exercises, cases, and examples drawn from marketing, finance, operations management, and other management functions. Requires extensive use of spreadsheet statistical analysis software. (Irreg.)
B AD	5123	Organizational Behavior & Human Resource Management	Prerequisite: admission to MBA program. Concepts and theories of organizational behavior and human resources management for MBAs. (Sp)
B AD	5133	Accounting for MBAs - Part A	Prerequisite: admission to MBA program. Financial and managerial accounting concepts useful to the MBA. The use of financial and management information systems will be emphasized. (F)
B AD	5142	Introduction to Energy	Prerequisite: Graduate standing in Price College of Business. Corequisite: FIN 5162. Provides a broad look at the fundamentals (political, cultural, regulatory, weather, legal and environmental) of world energy supply and demand, detailed study of the complete value chain for all commodities including a look at existing and emerging strategies for refining and marketing power options, and an understanding of the technology drivers for the energy industry and the roles of various energy professionals. (Sp)
B AD	5143	Quantitative Business Analysis - Part A	Prerequisite: admission to MBA program. Statistics and management science techniques. Applications across all the functional areas of business and have a strong managerial focus will be included. Extensive use of computers will be required. (F)
B AD	5152	Energy Accounting and Regulations	Prerequisite: B AD 5142 and graduate standing in Price College of Business. Provides an overview of (A) federal and state regulatory law in the US affecting natural gas and oil producers and developers, interstate and intrastate pipelines, gas and power marketing companies, and power generating and transmission companies, and (B) the major accounting and tax issues affecting the energy industry. (F)
B AD	5153	Management Information Systems	Prerequisite: admission to MBA program. Concepts, theories and the strategic role of information systems as applied to business organizations will be covered. This course is to be highly integrative/cross-functional in nature. (F)
B AD	5163	Legal and Ethical Environments of Business	Prerequisite: admission to MBA program. Review of the American legal process and ethical frameworks for gauging business decisions. (F)

B AD	5200	MBA Professional Development-Part B	Prerequisite: 5100, admission to full-time MBA program. Designed to hone leadership capabilities and polish professional skills. The seminars cover topics such as oral communication and report writing, networking, team dynamics and facilitation, resume writing, effective negotiations, career planning and development, business etiquette, interview technique and skills, and other contemporary business topics as they arise. Also offers access to a variety of innovative leaders, experts and advisors. Opportunities also arise which may include speakers and networking events. (Sp)
B AD	5212	Macroeconomics for MBAs	Prerequisite: 5112. Macroeconomic issues emphasizing and understanding of the U.S. and world economics and on applications of economic concepts to management problems. Inflation, unemployment, production or GDP, productivity, the business cycle, interest rates, exchange rates, the budget deficit, the trade deficit, monetary policy, fiscal policy, and economic forecasting. U.S., Japan, and European economies are analyzed and compared. (F)
B AD	5233	Accounting for MBAs - Part B	Prerequisite: 5132, admission to MBA program. Continuation of the financial and managerial accounting concepts useful to the MBA. The use of financial and management information systems will be emphasized. (Sp)
B AD	5242	Quantitative Business Analysis - Part B	Prerequisite: 5143, admission to MBA program. Continuation of statistics and management science techniques. Contains applications across all the functional areas of business and has a strong managerial focus. Requires extensive computer use. (Sp)
B AD	5262	Production and Operations Management	Prerequisite: admission to MBA program. Production and operations management techniques most applicable for MBAs will be covered. Topics include the design of systems and procedures to support organizational strategies such as product/process design, facilities layout/location, world class operations, and demand forecasting methodologies. (Sp)
B AD	5273	Marketing Management	Prerequisite: admission to MBA program. Covers marketing concepts of use to MBAs. How management information systems can be useful to marketing managers will be included. Topics include pricing, product offerings, promotion, distribution and consumer behavior, as well as market segmentation and strategic marketing. (Sp)
B AD	5283	Financial Management	Prerequisite: admission to MBA program. Principles and practice of financial management in corporations. Topics include the valuation of cash flows using risk adjusted required rates of return, the evaluation of domestic and international capital budgeting projects, working capital management, and domestic and international sources of financing. Personal computers are used to model financial management problems. (Sp)
B AD	5313	Strategic Management	Prerequisite: completion of MBA core courses. The study of management decisions and actions to improve an organization's competitiveness in global business environments. Uses a variety of pedagogies to integrate strategies. Students develop skills to formulate, implement, and evaluate organizational strategies in rapidly changing environments. This course is an integrative/cross-functional course. (F, Sp)
B AD	5470	Applied Business Project	Prerequisites: MBA graduate standing in Price College; permission. Provides students an opportunity to synthesize and apply the knowledge and skills gained in the MBA coursework. Project must be a special project in the sense it should not be a part and parcel of regular responsibilities. Project report is vehicle for students to demonstrate ability to produce a complete professional business document. (Irreg.)
B AD	5480	Research in Business Administration	1 to 3 hours. Prerequisite: graduate standing and permission. May be repeated with change of topic; maximum credit nine hours. Guided research in business administration. (Sp, Su)

B AD	5490	Readings in Business Communication and Business Administration	1 to 3 hours. Prerequisite: graduate standing and permission. May be repeated; maximum credit 12 hours. Preparation and submission of a research report on an assigned comprehensive topic relating to the business enterprise or to its ethical environment. (F, Sp, Su)
B AD	5902	Strategic Management	Prerequisite: graduate standing. The study of management decisions and actions to improve an organization's competitiveness in global business environments. Uses a variety of pedagogies to integrate strategies. Students develop skills to formulate, implement, and evaluate organizational strategies in rapidly changing environments. This course is an integrative/cross-functional course. (Irreg.)
B AD	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
B AD	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
B AD	5973	Seminar	Prerequisite: graduate standing, permission (Director-CBA Graduate Programs). May be repeated with change of topic; maximum credit nine hours. A seminar for graduate students with topics to be announced each time the course is offered. (F, Sp, Su)
B AD	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
B AD	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
B AD	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
B AD	6243	Applied Univariate Statistics	(Crosslisted with MKT 6243) Prerequisite: Ph.D. standing or permission of instructor, permission (director-CBA graduate programs). Probability, algebra of expectations, random sampling, sampling distributions, point and interval estimation, tests of hypotheses, parametric and nonparametric, sampling methods, survey design, general linear model, computer applications, statistical analysis system. (F)
B AD	6253	Applied Multivariate Statistics	(Crosslisted with MKT 6253) Prerequisite: 6243 or permission of instructor, permission (director-CBA graduate programs). Multivariate data analysis with computer applications -- introduction, survey, and computer applications -- factor analysis, multidimensional scaling, cluster analysis, regression, analysis of variance, canonical analysis, discrimination analysis. (Sp)
B AD	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
B AD	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
B AD	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
B AD	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

B C	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
B C	2813	Business Writing	Prerequisite: ENGL 1213 or EXPO 1213 or equivalent. Business Writing introduces the strategies, processes, and resources necessary for writers in business and professional contexts. Students practice informative and analytical business genres while gaining expertise in research, writing, and revision. (F, Sp, Su)
B C	3000	Special Topics in Business Communication	1 to 3 hours. Prerequisite: 2813. May be repeated with change of content; maximum credit six hours. Content varies but may cover topics such as presentations and performance, intercultural business communications, communications in team building, leadership and managerial communications, organizational communication, business communication ethics, communication strategy and persuasion and others, depending on instruction. Course will be writing intensive. (Irreg.)
B C	3003	Workplace Skills	Prerequisite: Student must be approved for degree candidacy by Price college. Available for non-business student with approval. This hands-on, engaging course will familiarize students with the soft skills necessary to successfully meet the people-to-people challenges of today's workplace. Each student will complete a personal communication style assessment. (F, Sp, Su)
B C	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
B C	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
B C	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
B C	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
B C	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
B C	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
B C	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
BARI	2000	Freshman and/or Sophomore Secondary Baritone	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)

BARI	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
BARI	6020	Doctoral Baritone for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
BASN	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
BASN	2000	Freshman and/or Sophomore Secondary Bassoon	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASN	2020	Bassoon for Music Majors; Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
BASN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
BASN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
BASN	4000	Junior and/or Senior Secondary Bassoon	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASN	4020	Bassoon for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
BASN	5000	Master's Level Secondary Bassoon	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASN	5010	Master's-Level Bassoon for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
BASN	5020	Master's-Level Bassoon for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
BASN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
BASN	6000	Doctoral Secondary Bassoon	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)

BASN	6010	Doctoral Bassoon for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
BASN	6020	Doctoral Bassoon for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
BASS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
BASS	2000	Freshman and/or Sophomore Secondary Bass	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASS	2020	Bass for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
BASS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
BASS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
BASS	4000	Junior and/or Senior Secondary Bass	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASS	4020	Bass for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
BASS	5000	Master's Level Secondary Bass	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASS	5010	Master's-Level Bass for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
BASS	5020	Master's-Level Bass for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
BASS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
BASS	6000	Doctoral Secondary Bass	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
BASS	6010	Doctoral Bass for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)

BASS	6020	Doctoral Bass for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
BIOL	1003	Contemporary Issues in Biology	An introduction to biology, focusing on the scientific background needed to understand selected issues related to cells, genetics and inheritance, evolution and ecology. Not open to students with credit for BIOL 1005, BIOL 1013, BIOL 1114, BIOL 1124, BIOL 1134, or PBIO 1114. Cannot be used for major credit in Biology, Microbiology, or Plant Biology. (F, Sp) [II-NL]
BIOL	1005	Concepts in Biology	Prerequisite: None, but high school or college chemistry is recommended. An introduction to the life sciences, focusing on the structure and function of organisms and their relationship to the environment. Fulfills general education laboratory science requirement. Not open to students with credit for BIOL 1003 or BIOL 1134, or PBIO 1114, BIOL 1114 or BIOL 1124. Cannot be used for major credit in Biology, Plant Biology, or Microbiology. Field trips. Laboratory. (F, Sp) [II-LAB]
BIOL	1013	Introduction to Biology	Introductory survey of the fundamental concepts that underlie biological phenomena from the cellular to the ecosystem level. Not open to students with credit for 1003, 1005, or 1134, or Zoology 1114, or Zoology 1124. Cannot be used for major credit in Zoology, Botany or Microbiology. (F, Sp) [II-NS]
BIOL	1114	Introductory Zoology	Major biological principles and concepts as illustrated in the structure, function and evolution of animals. Emphasis is on self-regulatory mechanisms, especially in the vertebrates, and their adaptive significance. (F, Sp, Su) [II-NL]
BIOL	1121	Introductory Zoology Lab	Prerequisite: previous completion or concurrent enrollment in 1114. Laboratory study of structure and development of organ systems. Experiments on physiological process of selected vertebrates and invertebrates. (F, Sp, Su) [II-LAB]
BIOL	1124	Intro Biol: Molecule/Cell/Phys	Content is focused toward life science majors. Major principles and concepts are presented in the function and physiology of animals, plants, fungi and microbes. Emphasis is on biological chemistry, cell structure and function, cellular energetics, molecular genetics, homeostasis and physiology. Includes biological laboratory experience with emphasis on critical thinking and problem solving, and topics include biochemistry, molecular genetics, cell processes and physiology. Laboratory. (F) [II-LAB]
BIOL	1134	Introductory Biology: Evolution, Ecology and Diversity	Prerequisite: Life science majors only. Major biological principles and concepts as illustrated in a survey of the diversity, behavior, and ecological functions of animals, plants, fungi, and microbes. Emphasis is on evolution, ecology, and diversity. Will include biological laboratory experience with emphasis on problem solving. Problems will be derived from topics in evolution, ecology, and diversity. Will include training in scientific procedures, including laboratory technical skills, writing skills, and introduction to statistical analysis. Recitation will include discussion and case study analysis of the major biological principles presented in the lecture within the context of health and the environment. Will involve problem sets, primary journal articles, and writing assignments. Includes both online and classroom activities. Laboratory (Sp) [II-LAB]
BIOL	1203	The Age of Dinosaurs	(Crosslisted with GEOL 1203) Introduction to basic principles and theories in biology (evolution, systematics, vertebrate morphology and relationships) and geology (geologic time, earth history, plate tectonics, sedimentation and stratigraphy), focusing on the evolutionary history of Dinosauria. May not be counted for major coursework in Biology or Geology. (F) [II-NL]
BIOL	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

BIOL	2011	Critical Eval of Biol Research	Prerequisite: 1114 and 1121, or 1124, and 2012 or concurrent enrollment. Emphasis will be placed on understanding the scientific method, how it applies to biological research, and implications for biomedical issues. The course will also introduce students to research in the four core areas of study in the Zoology department (physiology, ecology and systematics, animal behavior, and cellular, genetic, and developmental biology) while emphasizing three basic themes in biology (homeostasis, biological diversity, and evolution). (Sp)
BIOL	2012	Foundations in Biomed Sciences	Prerequisite: 1114 and 1121, or 1124. An introduction to professional aspects of the biomedical sciences including basic biostatistics and data interpretation, critical evaluation of scientific literature, and discussion of case studies in biomedical ethics. Emphasis will be placed on the medical relevance of important generalizing themes in biology, including evolution, homeostasis, and biodiversity. Critical thinking and evaluation of current issues in medicine and medical research will be incorporated into class activities. (Sp)
BIOL	2013	Evolution	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134. Process of evolutionary change. Topics include origin of species, evolution above the species level, major transitions of life on earth, application of evolutionary principles in medicine and conservation. (F, Sp)
BIOL	2103	Everyday Evolution	Prerequisite: sophomore standing. Overview of the on-going processes of biological evolution, with emphasis on how current and past evolution affects our daily life (e.g., in agriculture, medicine, the law, conservation, and human social interactions). Processes of the origin of biodiversity and species extinction are examined within the context of life's past history on earth and prospects for its future. Not available for major credit in Plant Biology, Microbiology or Biology. (Irreg. Every other year) [II-NL]
BIOL	2124	Human Physiology	Prerequisite: BIOL 1114 and BIOL 1121 with a grade of C or better, or BIOL 1124 with a grade of C or better; a course in chemistry or physics with a grade of C or better. May not be applied for biology major credit. Open only to majors in nursing, physical therapy, health and exercise science, and selected fields. See http://biology.ou.edu/human_anatomy-physiology.htm for complete list. Function of vertebrate organ systems in homeostasis. Circulation, digestion, endocrine and nervous control, metabolism, muscle action and respiration, with emphasis on humans. Laboratory (F, Sp, Su)
BIOL	2234	Introduction to Human Anatomy	Prerequisite: BIOL 1114 and BIOL 1121 with a grade of C or better, or BIOL 1124 with a grade of C or better, sophomore standing. (Cannot be enrolled concurrently with BIOL 2255). Open only to majors in health and exercise science, physical therapy, nursing and selected fields. See http://biology.ou.edu/human_anatomy-physiology.htm for complete list. An introduction to the gross morphology of the human body. The course will use a lab/lecture format with extensive use of models, videos, and computer-assisted instruction as well as prosected cadavers. Not for biology major credit. (F)
BIOL	2255	Human Anatomy	Prerequisite: BIOL 1114 and BIOL 1121 with a grade of C or better, or BIOL 1124 with a grade of C or better, sophomore standing. (Cannot be enrolled concurrently with BIOL 2234). Open only to majors in health and exercise science, physical therapy, nursing and selected fields. See http://biology.ou.edu/human_anatomy-physiology.htm for complete list. The development and gross morphology of the human body and its systems. Laboratory dissection of human cadavers. Not for biology major credit. Laboratory (F, Sp)
BIOL	2404	Ecology/Environmental Quality	(Crosslisted with BOT/PBIO 2404) Prerequisite: sophomore standing. Study of ecological principles and their applications to human systems, study of population, air pollution, water pollution, energy issues, etc. Laboratory exercises focus on learning scientific methods of measurement of environmental quality factors. Laboratory (Sp) [II-LAB]

BIOL	2913	Intro to Quantitative Biology	Prerequisite: 1114 and 1121, or 1124, or Biology 1134, Mathematics 1523 or 1643 or higher, or permission of instructor. The connections between basic mathematics and how biological data are organized, tested, and interpreted. Includes review of probability theory, introduction to parametric and non-parametric biostatistics, fundamentals of experimental design, and sketches of how optimality theory can be used to generate biological questions. (Sp even-numbered years)
BIOL	2970	Special Topics	1 to 3 hours. Prerequisite: BIOL 1134 and BIOL 1124; or BIOL 1134 and BIOL 1114 and BIOL 1121; or BIOL 1124, BIOL 1134, or BIOL 1114 and BIOL 1121, and either Plant Biology 1114 or Chemistry 1315; or permission of instructor. May be repeated with change of content; maximum credit nine hours. Seminar or special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
BIOL	3013	Evolution	Prerequisite: Eight hours of Zoology and/or Botany/PBIO, or five hours of Zoology or Botany/PBIO and permission of instructor. Process of evolution. Differentiation and natural selection in populations, the nature of species, the origins of species, and evolution above the species level. (F)
BIOL	3053	Biology of Invertebrates	Prerequisite: BIOL 1114 and BIOL 1121, or BIOL 1124 or BIOL 1134; or permission of instructor. A survey of invertebrates featuring their classification, diversity, morphology, life history, ecology, conservation, and evolution. Laboratory (Sp)
BIOL	3054	Invertebrate Zoology	Prerequisite: ZOO/BIOL 1114 and ZOO/BIOL 1121, or BIOL 1134. A survey of the invertebrate animals featuring their classification, morphology, life history, ecology, conservation considerations and evolution. Laboratory (Sp)
BIOL	3063	Veterinary Entomology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134. The study of insects and their near relatives, such as ticks, as they relate to the causation of economic loss and transmission of disease organisms in livestock and companion animals. Insect biology, disease transmission, and methods of control will be stressed in lecture. Laboratory emphasizes 1) collection, preservation, and pathogens, and 2) toxicological methods used to control and evaluate insecticides and acaricides. Laboratory (December Intersession)
BIOL	3073	Medical Entomology	Prerequisite: 1114 and 1121, or Biology 1134. Medical entomology investigates the relationship of insects and other arthropods to the health of humans, domestic animals, and wildlife. Laboratory. (Sp)
BIOL	3083	Animal Behavior	(Crosslisted with PSY 3083) Prerequisite: 2013 or permission of instructor. Animal behavior from an evolutionary perspective. The effects of natural selections on mechanisms underlying behavior and on diversity of behavior among and within species. (F, Sp)
BIOL	3092	Animal Behavior Laboratory	(Crosslisted with PSY 3092) Prerequisite: junior standing; concurrent or previous enrollment in 3083. Laboratory and field studies on the adaptive nature of animal behavior, illustrating basic principles of experimental design, data analysis, and scientific writing. Laboratory (F)
BIOL	3101	Principles of Physiology Lab	Prerequisite: 3103 or concurrent enrollment. Provides students with an introduction to the methods and procedures used in physiological research. Topics covered include data acquisition, analysis and basic statistics, effects of temperature on living systems, nervous system functions, muscle mechanics and physiology, and studies of metabolic rates. In addition to hands-on laboratory experience, library projects and written research papers are used to introduce students to methods of scientific communication. Laboratory (F, Sp)

BIOL	3103	Principles of Physiology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134, or permission of instructor. One semester of physics and organic chemistry strongly recommended. Introduction to basic concepts of physiology; relation of functions of organisms to physical and chemical principles, and to the environment; discussion of experimental design, constituents of tissues, energy, growth, homeostasis, cellular and organ functions. (F, Sp)
BIOL	3113	Cell Biology	(Crosslisted with PBIO and MBIO 3113) Prerequisite: 1114, or 1124, or Biology 1134, or Botany 1114, and Chemistry 3053. Introduction to the cell as a unit of life. A chemical and physical comparison of procaryotic and eucaryotic cells to include a discussion of cell metabolism, types of metabolic regulation, and an analysis of ultrastructure. Emphasis will be placed on the dynamic changes in metabolism and ultrastructure which occur during the life of a cell. (F, Sp)
BIOL	3201	Animal Development Lab	Prerequisite: 3203 or concurrent enrollment. Laboratory study of the development and embryology of a variety of animals. Developmental concepts and mechanisms will be illustrated through the use of prepared materials and hands-on experiments. Laboratory (F, Sp)
BIOL	3203	Animal Development	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and ZOO/BIOL 3333; and BIOL 1134. Study of animal development from gamete formation through organogenesis and postembryonic phases in different animal models. Concepts and mechanisms at the tissue, cellular and molecular levels will supplement descriptive analyses of development. (Sp)
BIOL	3214	Comparative Vertebrate Anatomy	Prerequisite: BIOL 1114 and BIOL 1121; or BIOL 1124; or BIOL 1134; or equivalent. A study of the anatomy and evolutionary development of vertebrate organ systems. Representative vertebrates are studied in laboratory. Laboratory (F)
BIOL	3333	Genetics	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; Biology 1134 recommended. Principles of inheritance at gene, chromosome, and population levels; nature of the genetic material and its involvement in the determination of structure and function. (F, Sp)
BIOL	3342	Genetics Laboratory	(Crosslisted with BOT/PBIO 3342) Prerequisite: 3333 or concurrent enrollment, or equivalent. The demonstrations, crosses and experiments are designed to illustrate various genetic phenomena, including Mendelian laws, recombination, mutation, natural and artificial selection, and interaction of genotype with environment. The primary organism studied is Drosophila, with some use of corn, Neurospora, and others. Laboratory (F)
BIOL	3403	Principles of Ecology	Prerequisite: BIOL 1114 and BIOL 1121, or BIOL 1134, or PBIO 1114. Patterns of environments and biological communities; the processes maintaining these patterns. Field trips. Some overnight trips. Laboratory (F, Sp)
BIOL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
BIOL	3463	Water and Ecological Sustainability	Prerequisite: junior standing and ENGL 1213 or EXPO 1213 or permission of instructor. Allows students to examine and discuss important historical and current issues relating to the interactions between socio-economic use of water resources and ecosystem biodiversity, function, and sustainability. Cannot be used for major credit in Biology. (F) [II-NL]

BIOL	3483	Remote Sensing and Phenology	(Crosslisted with GEOG 3483) Prerequisite: junior standing. Focus on the analysis of phenology both on the ground and from space. Phenology is the study of the timing of biological phenomena, with a particular emphasis on the linkages between abiotic drivers and biological responses of particular organisms. Land surface phenology explores how quasi-periodic events in terrestrial vegetation appear when observed with satellite images. The course has a field component and the students will be trained as phenological observers. Field trips. (Sp)
BIOL	3563	Biological Conservation	Prerequisite: BIOL 1114 and BIOL 1121, or BIOL 1134, or BOT/PBIO 1114. Active learning format course for exploring ecological, legal, and societal issues affecting biodiversity at local, regional, and global scales. (F-even numbered years)
BIOL	3833	Introduction to Neurobiology	Prerequisite: BIOL 1124. Introduction to cellular and behavioral neurobiology. Topics covered will include cellular neurobiology, neurophysiology, neuroanatomy, sensory processing, movement, and neurobiology of behavior. (Sp)
BIOL	3960	Honors Reading (HONORS)	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor. The content will emphasize work not presented in other courses. (F, Sp, Su)
BIOL	3980	Honors Research (HONORS)	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project under the guidance of a professor in the student's field. Laboratory (F, Sp, Su)
BIOL	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
BIOL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
BIOL	4034	Mammalogy	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134. Classification, distribution and natural history of mammals with emphasis on Oklahoma species. Mammals are collected and prepared for scientific collections. Field trips. Some overnight camping. Laboratory. (F even-numbered years)
BIOL	4044	Ornithology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and 1121; and BIOL 1134. Biology of birds. Identification of birds in North America with emphasis on Oklahoma; relationships, natural history and behavior or birds. Field trips. Laboratory (Sp odd-numbered years)
BIOL	4053	Forensic Entomology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134. Lecture will explore the use of insects in the science of forensic entomology and its impact on death scene investigation, neglect or abuse; contamination of food products and other marketable goods and subsequent litigation. Lab will be centered on a "death scene investigation" in which students will collect data from a pig carcass to determine factors that affect the rate of decomposition. Laboratory (May Intersession)
BIOL	4073	General Entomology	Prerequisite: Sophomore standing, and ZOO/BIOL 1114 and ZOO/BIOL 1121, or Biology 1134, or Botany/PBIO 1114, or Biology 1005, or permission of instructor. Introduction to the world of insects. Morphological and physiological adaptations; taxonomy, life histories, and methods of collection. Field trips. Laboratory (F)

BIOL	4083	Herpetology	Prerequisite: 2013 and Biology 1134 or permission of instructor. An introduction to the study of amphibians and reptiles. Taxonomy, ecology, behavior and life histories of amphibians and reptiles, with emphasis on local forms. Field trips. Laboratory (F odd-numbered years)
BIOL	4093	Behavioral Ecology	Prerequisite: 3083 or permission of instructor. Ecological basis of animal behavior and the role of behavior in adaptation, speciation, and co-evolution. Topics include behavioral genetics, decision making, sexual selection and sexual conflict, sociality, and human behavior and ecology. (F)
BIOL	4113	Cellular Pathology	(Slashlisted with 5113) Prerequisite: 3113 or permission of instructor. The course focus is on the molecular and cellular bases of disease and alterations in cellular processes that lead to the development of various pathological conditions. Topics include symptoms of cellular disease, pathology of organelles, cell injury, cell death, immunopathology, neoplasia and genetic disorders. No student may earn credit for both 4113 and 5113. (F)
BIOL	4153	Endocrinology	(Slashlisted with 5153) Prerequisite: 3103; 3113 strongly recommended. The major emphasis of the course is how hormones work at the molecular, cellular, and physiological levels. The course examines the molecular biology of hormonal mechanisms and the integration of those mechanisms to maintain crucial homeostatic control systems. Hormones and their receptors are considered in terms of chemistry, biosynthesis, and mechanisms of action. The course focuses primarily on vertebrate hormones. No student may earn credit for both 4153 and 5153. (Sp)
BIOL	4172	Cellular-Molecular Techniques	Prerequisite: ZOO/BIOL 3113 or permission of instructor. A hands-on introduction to molecular techniques used in modern cell/molecular laboratories and discussed in cell biology courses. No student may earn credit for both ZOO/BIOL 4172 and ZOO/BIOL 5172. (Sp)
BIOL	4193	Life History	(Slashlisted with 5193) Prerequisite: senior standing or permission of instructor. Overview of theory and empirical studies of life history evolution. Includes lecture, discussion of the primary literature, and analysis of some basic life history problems. No student may earn credit for both ZOO/BIOL 4193 and 5193. (Sp Odd-numbered years)
BIOL	4204	Vertebrate Paleobiology	(Crosslisted with GEOL 4204; Slashlisted with 5204) Prerequisite: 1114 and 1121, or 1124 or Biology 1134; 3214; or permission of instructor. Field trips. Systematics, relationships, zoogeography and evolutionary morphology of the major groups of vertebrates. No student may receive credit for both 4204 and 5204. Laboratory (Sp - odd-numbered years)
BIOL	4213	Neurobehavioral Development	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134. Specific developmental issues will be discussed from both the behavioral and biological levels of analysis. Cannot be taken for credit if 6213 has been previously taken. (Irreg.)
BIOL	4223	Cell & Molecular Neurobiology	NULL
BIOL	4233	Neurobiology of Disease	Prerequisite: ZOO/BIOL 4833 (preferred), or ZOO/BIOL 3113 and ZOO/BIOL 3333, or ZOO/BIOL 2124 or ZOO/BIOL 3103; or permission of the instructor. Cellular and molecular mechanisms underlying both normal neuronal function and neuronal disorders. Includes a review of basic concepts in neuroscience through traditional lectures, and reading and discussion of original research articles. Students are required to give oral presentations, write critiques and term papers, and present research posters. No student may earn credit for both ZOO/BIOL 4233 and ZOO/BIOL 5233. (F)
BIOL	4244	Animal Histology	Prerequisite: ZOO/BIOL 3103 and ZOO/BIOL 3113, or permission of instructor. Structure and function of animal tissues with emphasis on the cellular basis of tissue and organ function. Laboratory emphasizes the identification of cells and tissues with the use of the light microscope. Laboratory (Sp)

BIOL	4253	Evolution of Development	(Slashlisted with 5253) Prerequisite: 3013 and 3203, or permission of the instructor. Introduction to evolutionary developmental biology (EVO DEVO), study of the developmental basis of evolutionary changes and how developmental mechanisms and developmentally important genes evolve. Latest techniques and methods in evolutionary biology, embryology, developmental biology, molecular genetics, population biology, phylogenetics and genomics. No student may earn credit for both 4253 and 5253. (Sp-odd numbered years)
BIOL	4353	Molecular Tech-Field Biology	(Slashlisted with 5353) Prerequisite: 1114 and 1121, or 1124 and permission of instructor; 3333 or 3403 recommended. Selected protocols and data interpretation using molecular techniques to study protein and DNA variation in natural populations and the application of molecular techniques to research problems in ecology, systematics, animal behavior, conservation biology, and related areas. Graduate students enrolled in 5353 will have additional project expectations and written work. Taught at the OU Biological Station. No student may earn credit for both 4353 and 5353. Field trips. Laboratory (Su)
BIOL	4361	Experimental Genetics and Cell Biology Lab	Prerequisite: BIOL 3333 or BIOL 3113. Students will be introduced to experimental design and techniques including types of microscopy such as SEM and TEM, cell and tissue culture, DNA isolation, protein and DNA electrophoresis, PCR, and introductory bioinformatics. (Sp-odd numbered years)
BIOL	4383	Functional Genomics	(Slashlisted with 5383) Prerequisite: 3113 and either 3203 or 3333 or 4843 or Chemistry 3653 or permission of the instructor. Introduction to how to study the functions (broadly including biochemical activity, cell biological function or organismal function) of all the genes in a genome. Latest techniques and methods in genetics, molecular biology, microarrays, proteomics and computation biology. No student may earn credit for both 4383 and 5383. (F)
BIOL	4413	Tropical Ecology	Prerequisite: 3013 or 3083 or 3403. Focuses on unique features of tropical ecosystems. Topics include: abiotic features that give rise to tropical forests, gap dynamics, tropical biodiversity, plant-animal interactions, value of tropical forests, causes and consequences of tropical deforestation. (Irreg.)
BIOL	4423	Stream Ecology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134; junior or senior standing, or permission of instructor. A combined lecture/laboratory course that focuses on the physical, chemical, and biological features of stream ecosystems, including current theories explaining species interactions and stream function. Course requirements/evaluation including a midterm and final examination, individual research papers and presentations, participation in group laboratory and field experiments, and reading and discussing the primary literature. No student may earn credit for both 4423 and 5423. Field trips. Laboratory (F-odd numbered years)
BIOL	4463	Ecology of Lakes	Prerequisite: 3403 or Botany/PBIO 3453, Chemistry 1315, Chemistry 1415, Physics 1114, Physics 2414 or Physics 2514, or permission of instructor. An introduction to the biology, chemistry, physics and geology of freshwater environments, with emphasis on ecology. (Sp, even-numbered years)
BIOL	4471	Ecology of Lakes Laboratory	Prerequisite: 4463 or concurrent enrollment. Experience in the use of the basic limnological methods and application of these methods to a variety of freshwater environments. Field trips. Laboratory (Sp, even-numbered years)
BIOL	4493	Ichthyology	Prerequisite: BIOL 1124, or BIOL 1114 and BIOL 1121; and BIOL 1134. Taxonomy, morphology, ecology and distribution of fishes, with emphasis on those of the region. Field trips. Some overnight trips. Laboratory. (Sp)

BIOL	4573	Conservation Genetics	Prerequisite: 3333 or permission of the instructor. This lecture/discussion course will examine the use of population genetic/ecological genetic principles in the study and management of populations of threatened and/or endangered species. No student may earn credit for both 4573 and 5573. (Sp)
BIOL	4623	Animal Nutrition	Prerequisite: 8 hours of Biological Sciences. Animal Nutrition is an exploration of how nutrients are acquired and used by different animals through the breakdown and absorption of various food items. The course compares and contrasts the digestion strategies of monogastrics, ruminants, and hind gut fermentors. Lecture will also explore the impact of current feeding techniques on economics, the environment and ultimately human health. (Su)
BIOL	4653	Parasitology	Prerequisite: BIOL 1124, or BIOL 1114 and BIOL 1121; and BIOL 1134. Parasitology is an introduction to the biological relationships known as parasitism. Although there are many different types of parasites, this course will focus on primarily protozoan and helminthes parasites that cause disease in humans and domestic animals. Field trips. Laboratory (Sp odd-numbered years)
BIOL	4663	Advanced Limnology	Prerequisite: 4423 or 5423, or 4463 and 4471, or permission of instructor. May be repeated with change of content; maximum credit 6 hours. Detailed study of fundamental or contemporary topics within limnology, such as biogeochemistry, nutrient cycling, ecological stoichiometry, biodiversity, and predatory-prey and food-web dynamics in aquatic communities. No student may earn credit for both 4663 and 5663 on the same topic. (Sp)
BIOL	4753	Molecular Evolution and Phylogenetics	(Slashlisted with 5753) Prerequisite: BIOL 2013 or BIOL 3333 or permission of instructor. Theory and practice of inferring evolutionary history from molecular and morphological data. Applications of the phylogenetic approach in systematics, comparative biology, molecular evolution, and genomics will be covered. No student may earn credit for both 4753 and 5753. (F even-numbered years)
BIOL	4813	Hormones and Behavior	(Slashlisted with 5813) Prerequisite: 3083 or 3103 or permission of instructor. The relationship between hormones and behavior from an evolutionary perspective. Focus on reproductive and social behavior, with coverage of biological rhythms, food and water intake, and learning. No student may earn credit for both 4813 and 5813. (F)
BIOL	4833	Neurobiology	(Slashlisted with 5833) Prerequisite: permission of instructor. Advanced examination of cellular and behavioral neurobiology. Topics covered will include membrane biophysics, cellular neurobiology, neurophysiology, neuroanatomy, sensory processing, movement, and neurobiology of behavior. No student may earn credit for both 4833 and 5833. (F)
BIOL	4843	Intro to Molecular Biology	(Crosslisted with PBIO/BOT and MBIO 4843; Slashlisted with 5843) Prerequisite: 1114 or 1124, or Botany/PBIO 1114, or Microbiology 3813 and 3812, and one course in organic chemistry. Introduction to the characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of microbial genetics transformation, transduction and conjugation; and emphasis on molecular immunology and genetic engineering/recombinant DNA technology. No student may earn credit for both 4843 and 5843. (F)
BIOL	4853	Neurobiology of Memory	(Crosslisted with PSY 4853) Prerequisite: 3103 or Psychology 3073. Advanced seminar dealing with current research on how the nervous system responds to, and is changed by, experience. Experience is broadly defined and may include learning, maturation and/or pathology.

BIOL	4863	Neural Control of Movement	(Slashlisted with 5863) Prerequisite: BIOL 3103, or BIOL 3113, or BIOL 3833, or BIOL 4833, or BIOL 5833, or permission of instructor. Introduction to neural control of movement through reading and discussion of key original research articles from the 19th century to the present. Students lead discussions and write essays addressing a general question, utilizing data from the articles; students in 5863 write an additional essay. Topics include localization of function, sensory vs. central contributions, roles of single neurons, effects of neuromodulators, and motor learning. No student may earn credit for both 4863 and 5863. (Sp)
BIOL	4871	Current Topics in Neurobiology	(Slashlisted with 5871) Prerequisite: BIOL 3833 or permission of instructor. May be repeated with change of content; maximum credit three hours. A seminar course designed to develop a student's abilities to interpret and critically evaluate research in cellular and behavioral neurobiology. Involves both public seminars and journal club style discussions of contemporary literature. No student may earn credit for both 4871 and 5871 on the same topic. (F, Sp)
BIOL	4893	Behavioral Neurobiology	(Slashlisted with 5893) Prerequisite: BIOL 3103, or BIOL 3113, or BIOL 3833, or BIOL 4833, or BIOL 5833, or permission of instructor. Examines neurobiological mechanisms of natural animal behaviors (i.e. neuroethology), utilizing textbook and lectures as well as in-depth reading, discussion, and student presentation of original research articles. No student may earn credit for both 4893 and 5893. (F)
BIOL	4913	Quantitative Biology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134; a course in statistics recommended. Techniques for complex data analysis and experimental design. No laboratory. (F)
BIOL	4933	Introduction to Matlab Programming for Life Sciences	(Slashlisted with 5933) Prerequisite: permission of instructor. Introduce students to the foundational concepts and skills necessary to use Matlab programs for life science research. Topics include acquisition and processing of time-series and spatial data, experimental control, and visual display of data. No student may earn credit for 4933 and 5933. (Sp odd-numbered years)
BIOL	4943	Multivariate Analysis	(Slashlisted with 5943) Prerequisite: BIOL 4913 or permission of instructor. An introduction to the concepts and underpinnings of multivariate statistics used commonly in the life sciences. It includes sections on regression, central tendency, data reduction, cluster analyses, and ordination and treats both parametric and non-parametric approaches. No student may earn credit for both 4943 and 5943. (Sp)
BIOL	4953	BioWriting	(Slashlisted with 5953; Crosslisted with MBIO/PBIO 4953) Prerequisite: permission of instructor. This course provides students engaged in research with the information and skills needed to effectively communicate as professional biologists. Students will learn to report the results of their own research in the format of a journal article, conference-style presentation, and poster. No student may earn credit for 4953 and 5953 (Irreg.)
BIOL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
BIOL	4961	Undergraduate Seminar	Prerequisite: Senior standing in Zoology/Biology or permission of department. May be repeated; maximum credit two hours. Survey of current research programs in environmental biology, cell biology, physiology, animal behavior and other fields presented in weekly public seminars by visiting and local experts in biology. (F, Sp)
BIOL	4970	Special Topics in Biology	1 to 3 hours. Prerequisite: permission of instructor and department. May be repeated with change of content; maximum credit nine hours. Seminar or special topic course; may include laboratory or field work. No student may earn credit for 4970 and 5970 on the same topic. (F, Sp, Su)

BIOL	4983	Senior Seminar	Prerequisite: ZOO/BIOL major with senior standing, or permission. An interdisciplinary approach will be used to synthesize ideas from the major fields of zoology. Readings and discussion will focus on contemporary social, ethical and economic issues. (F, Sp) [V]
BIOL	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
BIOL	5093	Evolutionary Ecology	Prerequisite: graduate standing, or ZOO/BIOL 2013 or permission of instructor. Study of ecological forces important in evolutionary change in plants and animals. Evolution of sex, breeding systems, life history, speciation, coevolution of animal/plant interactions. (F even-numbered years)
BIOL	5113	Cellular Pathology	(Slashlisted with 4113) Prerequisite: 3113 or permission of instructor. The course focus is on the molecular and cellular bases of disease and alterations in cellular process that lead to the development of various pathological conditions. Topics include symptoms of cellular disease, pathology of organelles, cell injury, cell death, immunopathology, neoplasia and genetic disorders. No student may earn credit for both 4113 and 5113. (F)
BIOL	5153	Endocrine Physiology	(Slashlisted with 4153) Prerequisite: 3103; 3113 strongly recommended. The major emphasis of the course is how hormones work at the molecular, cellular, and physiological levels. The course examines the molecular biology of hormonal mechanisms and the integration of those mechanisms to maintain crucial homeostatic control systems. Hormones and their receptors are considered in terms of chemistry, biosynthesis, and mechanisms of action. The course focuses primarily on vertebrate hormones. No student may earn credit for both 4153 and 5153. (Sp)
BIOL	5172	Cellular-Molecular Techniques	Prerequisite: ZOO/BIOL 3113 or graduate standing or permission of instructor. A hands-on introduction to molecular techniques used in modern cell/molecular laboratories and discussed in cell biology courses. No student may earn credit for both 4172 and 5172. (Sp)
BIOL	5193	Life History	Prerequisite: graduate standing or permission of instructor. Overview of theory and empirical studies of life history evolution. Includes lecture, discussion of the primary literature, and analysis of some basic life history problems. No student may earn credit for both 4193 and 5193. (Sp, Odd-numbered years)
BIOL	5204	Vertebrate Paleobiology	(Slashlisted with 4204) Prerequisite: graduate standing and permission of instructor. Systematics, relationships, zoogeography and evolutionary morphology of the major groups of vertebrates. Field trips. No student may earn credit for both 4204 and 5204. Laboratory (Sp odd-numbered years)
BIOL	5223	Celllular & Molecular Neurobio	(Slashlisted with 4223) Prerequisites: ZOO/BIOL 3103, ZOO/BIOL 3113, ZOO/BIOL 3203, or ZOO/BIOL 3333, or permission of instructor. Introduction to cellular and molecular neurobiology through reading and discussion of landmark research papers in five current areas of research. Emphasis will be on understanding modern cellular and molecular research methods and on critical interpretation of scientific data. No student may earn credit for both 4223 and 5223. (Sp).
BIOL	5233	Neurobiology of Disease	Prerequisite: ZOO/BIOL 4833 (preferred), or ZOO/BIOL 3113 and ZOO/BIOL 3333, or ZOO/BIOL 2124 or ZOO/BIOL 3103; or permission of the instructor. Cellular and molecular mechanisms underlying both normal neuronal function and neuronal disorders. Includes a review of basic concepts in neuroscience through traditional lectures, and reading and discussion of original research articles. Students are required to give oral presentations, write critiques and term papers, and present research posters. No student may earn credit for both 4233 and 5233. (F)

BIOL	5253	Evolution of Development	(Slashlisted with 4253) Prerequisite: permission of the instructor. Introduction to evolutionary developmental biology (EVO DEVO), study of the developmental basis of evolutionary changes and how developmental mechanisms and developmentally important genes evolve. Latest techniques and methods in evolutionary biology, embryology, developmental biology, molecular genetics, population biology, phylogenetics and genomics. No student may earn credit for both 4253 and 5253. (Sp-odd numbered years)
BIOL	5333	Ecological Genetics	Prerequisite: 3333 required; 3013 recommended. History of population and ecological genetics; genetic systems; emphasis on experimental aspects of population genetics and measurement of selection and levels of genetic variation in different ecological situations; development of quantitative characters; genetic load; drift; enzyme variation; chromosome variation. (Irreg.)
BIOL	5343	Developmental Genetics	Prerequisite: 3333. Covers the regulatory control of development in simple viral and bacterial operons, but emphasizes eukaryotic development and genetic organization. Topics will include DNA and chromosome structure, intron processing, nuclear-cytoplasmic interaction, pattern formation and aging. (Sp)
BIOL	5353	Molecular Tech-Field Biology	(Slashlisted with 4353) Prerequisite: permission of instructor. Selected protocols and data interpretation using molecular techniques to study protein and DNA variation in natural populations and the application of molecular techniques to research problems in ecology, systematics, animal behavior, conservation biology, and related areas. Graduate students enrolled in 5353 will have additional project expectations and written work. Taught at the OU Biological Station. No student may earn credit for both 4353 and 5353. Field trips. Laboratory (Su)
BIOL	5364	Transmission Electron Microscopy	(Crosslisted with PBIO and MBIO 5364) Prerequisite: permission of instructor. Introduction to the theory of transmission electron microscopy and practical instruction in specimen preparation, ultramicrotomy, instrument operation, photography and quantitative methods. Laboratory. (F)
BIOL	5374	Scanning Electron Microscopy	(Crosslisted with PBIO and MBIO 5374) Prerequisite: basic chemistry; basic physics; demonstrated need; permission of instructor. Principles of scanning electron microscopy are combined with training in the operation of the SEM and ancillary equipment. Students will be certified in the operation of all equipment. Sample preparation on a variety of samples and darkroom procedures will be performed. Independent project with oral report and poster required. Laboratory (Irreg.)
BIOL	5383	Functional Genomics	(Slashlisted with 4383) Prerequisite: permission of the instructor. Introduction to how to study the functions (broadly including biochemical activity, cell biological function or organismal function) of all the genes in a genome. Latest techniques and methods in genetics, molecular biology, microarrays, proteomics and computation biology. No student may earn credit for both 4383 and 5383. (F)
BIOL	5403	Population Ecology	Prerequisite: graduate standing. History, demography, environmental factors, density-dependent factors, genetics and population ecology, theories of population and community organization (ideas of Elton, Williams, Preston, MacArthur, Smith, Hairston, and Slodbodkin). No laboratory. (Sp even-numbered years)
BIOL	5413	Community Ecology	Prerequisite: 3403 and Mathematics 1743 or 1823, or permission. Theoretical and empirical study of the structure and organization of natural communities. Topics include competition, predation, disturbance, abiotic gradients, species equilibria.

BIOL	5423	Stream Ecology	Prerequisite: graduate standing or permission of instructor. A combined lecture/laboratory course that focuses on the physical, chemical, and biological features of stream ecosystems, including current theories explaining species interactions and stream function. Course requirements/evaluation including a midterm and final examination, individual research papers and presentations, participation in group laboratory and field experiments, and reading and discussing the primary literature. No student may earn credit for both 4423 and 5423. Field trips. Laboratory. (F-odd numbered years)
BIOL	5443	Physiological Ecology	Prerequisite: 12 hours of biology, including a course in physiology and in ecology, or permission. A study of the physiological adjustments made by animals to changes in their external environment. (Sp)
BIOL	5453	Advanced Ecology/Evol Biology	(Crosslisted with PBIO and MBIO 5453) Prerequisite: ZOO/BIOL 3403. Required for students in the ecology and evolutionary biology doctoral program. An introduction to current research opportunities and research programs in ecology and evolutionary biology at the University of Oklahoma. Specific topics and lecturers will vary from week to week to give students a broad overview of ongoing research projects. (F)
BIOL	5462	Molecular Methods in Ecology and Evolution	Prerequisite: graduate standing and permission of instructor. Laboratory-based course designed to develop skills commonly used in molecular population genetics, ecology and systematics. Emphasis will be on DNA-based methods such as PCR, DNA sequencing, and microsatellite DNA procedures. Theoretical, physical and biochemical bases of methods will be stressed. Appropriate applications of methods and basic data analysis will also be covered. Laboratory (F - even years)
BIOL	5471	Seminar-Ecology & Evol Biology	(Crosslisted with PBIO and MBIO 5471) Prerequisite: graduate standing. Two semesters of enrollment are required for students in the ecology and evolutionary biology doctoral program. An intensive, student-based seminar in which students present both proposals and ongoing progress reports on doctoral level research projects in ecology and evolutionary biology. (F, Sp)
BIOL	5483	Fish Ecology	Prerequisite: ZOO/BIOL 1124, or ZOO/BIOL 1114 and ZOO/BIOL 1121; and Biology 1134, or permission of instructor. Emphasizes fundamental ecology of freshwater and marine fishes worldwide. Focus will be on the historical literature and development of fish ecology, as well as modern comparative and experimental approaches in distributional ecology, fish community structure/function, abiotic and biotic interactions affecting fishes, and direct and indirect effects of fishes in ecosystems. (F odd-numbered years)
BIOL	5494	Biology of Fishes	Prerequisite: ZOO 4463 or permission of instructor. Natural history and ecology of freshwater fishes. Field trips. Laboratory (F odd-numbered years)
BIOL	5503	Introduction to Fish Culture	Prerequisite: ZOO/BIOL 4463 or permission of instructor. Principles of warm water fish culture, practical culture and field trips. Laboratory. (F even-numbered years)
BIOL	5563	Biological Conservation	(Slashlisted with 4563) Prerequisite: permission of instructor. The human economy currently entrains more than 40% of global net primary production. This human demand for energy and the effluent subsequently produced have pervasive effects on natural systems and human welfare. This course uses primary literature to guide discussion of ecological, legal, and societal issues affecting biodiversity in North America and globally. Topics range from organism centered approaches to conservation to broader implications of alterations of global processes such as elemental cycles and atmospheric temperatures. No student may earn credit for both 4563 and 5563. (F-even numbered years)
BIOL	5573	Conservation Genetics	Prerequisite: 3333 or permission of the instructor. This lecture/discussion course will examine the use of population genetic/ecological genetic principles in the study and management of populations of threatened and/or endangered species. No student may earn credit for both 4573 and 5573. (Sp)

BIOL	5663	Advanced Limnology	Prerequisite: 4423 or 5423, or 4463 and 4471, or permission of instructor. May be repeated with change of content; maximum credit 6 hours. Detailed study of fundamental or contemporary topics within limnology, such as biogeochemistry, nutrient cycling, ecological stoichiometry, biodiversity, and predator-prey and food-web dynamics in aquatic communities. No student may earn credit for both 4663 and 5663 on the same topic. (Sp)
BIOL	5693	Fishery Management	Prerequisite: 4462, 5494 or permission of instructor. Relationship of ecological principals to the management of fisheries. Influence of physico-chemical factors in the environment will be emphasized. A combination of field and laboratory exercises will relate basic fishery biology techniques to applications in management. (F, odd years)
BIOL	5753	Molecular Evolution and Phylogenetics	(Slashlisted with 4753) Prerequisite: BIOL 2013 or BIOL 3333 or permission of instructor and graduate standing. Theory and practice of inferring evolutionary history from molecular and morphological data. Applications of the phylogenetic approach in systematics, comparative biology, molecular evolution, and genomics will be covered. No student may earn credit for both 4753 and 5753. (F - even-numbered years)
BIOL	5813	Hormones and Behavior	(Slashlisted with 4813) Prerequisite: 3083 or 3103 or permission of instructor. The relationship between hormones and behavior from an evolutionary perspective. Focus on reproductive and social behavior, with coverage of biological rhythms, food and water intake, and learning. No student may earn credit for both 4813 and 5813. (F)
BIOL	5833	Neurobiology	Prerequisite: graduate standing or permission of instructor. Advanced examination of cellular and behavioral neurobiology. Topics covered will include membrane biophysics, cellular neurobiology, neurophysiology, neuroanatomy, sensory processing, movement, and neurobiology of behavior. No student may earn credit for both 4833 and 5833. (F)
BIOL	5843	Intro to Molecular Biology	(Crosslisted with PBIO and MBIO 5843; Slashlisted with 4843) Prerequisite: permission of instructor. Introduction to the characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of microbial genetics transformation, transduction and conjugation; and emphasis on molecular immunology and genetic engineering/recombinant DNA technology. No student may earn credit for both 4843 and 5843. (F)
BIOL	5863	Neural Control of Movement	(Slashlisted with 4863) Prerequisite: ZOO/BIOL 3103 or ZOO/BIOL 3113 or ZOO/BIOL 4833/5833 or permission of instructor. Introduction to neural control of movement through reading and discussion of key original research articles from the 19th century to the present. Students lead discussions and write essays addressing a general question, utilizing data from the articles; students in 5863 write an additional essay. Topics include localization of function, sensory vs. central contributions, roles of single neurons, effects of neuromodulators, and motor learning. No student may earn credit for both 4853 and 5863. (Sp)
BIOL	5871	Current Topics in Neurobiology	(Slashlisted with 4871) Prerequisite: Permission of the instructor. May be repeated; maximum credit three hours. A seminar course designed to develop a student's abilities to interpret and critically evaluate research in cellular and behavioral neurobiology. Involves both public seminars and journal club style discussions of contemporary literature. No student may earn credit for both 4871 and 5871 concurrently. (F, Sp)
BIOL	5893	Behavioral Neurobiology	Prerequisite: ZOO/BIOL 3103 or ZOO/BIOL 3113, or ZOO/BIOL 4833/5833 or permission of instructor. Examines neurobiological mechanisms of natural animal behaviors (i.e., neuroethology), utilizing textbook and lectures as well as in-depth reading, discussion, and student presentation of original research articles. No student may earn credit for both 4893 and 5893. (F)

BIOL	5903	Bioinformatics: Applications	Prerequisites: Plant Biology/Biology/Botany/Zoology 3333 or 3113, or Plant Biology/Botany/Microbiology/Biology/Zoology 4843/5843, or Microbiology 3813, or Chemistry 3653 or 5853, or equivalent and basic statistics (Psychology 2003 or 2113, or Zoology/Biology 2913, or Biostatistics and Epidemiology 5163, or equivalent) and permission of instructor. This course is designed to provide an understanding of theory and application of computational methods for molecular biology research. The course will cover the following topics: Linux basics, genome sequencing and databases, sequence alignment, database searching for similar sequences, gene analysis, protein analysis, genome analysis, phylogenetic prediction, and a brief introduction to PERL programming. (F)
BIOL	5913	Bioinformatics: Programming	Prerequisites: 5903 and permission of instructor. This course is designed to provide programming skills needed to perform large-scale genomic analysis in research and professional settings. The PERL programming language will be taught by introducing features of the PERL programming language in the context of and with applications to bioinformatics. (Sp)
BIOL	5923	Programming in R for Biology	Prerequisite: graduate standing or permission of instructor. R is a data analysis and graphics platform that has become increasingly popular in the sciences because of its power and versatility. This course provides an introduction to programming using R for applications in the biological sciences, with an emphasis on implementation. (F)
BIOL	5933	Introduction to Matlab Programming for Life Sciences	(Slashlisted with 4933) Prerequisite: graduate standing or permission of instructor. Introduces the foundational concepts and skills necessary to use Matlab programs for life science research. Topics include acquisition and processing of time-series and spatial data, experimental control, and visual display of data. No student may earn credit for both 4933 and 5933. (Sp odd-numbered years)
BIOL	5943	Multivariate Analysis	(Slashlisted with 4943) Prerequisite: BIOL 4913 or permission of instructor. Introduces the concepts and underpinnings of multivariate statistics used commonly in the life sciences. The following topics will be included: regression, central tendency, data reduction, cluster analyses, and ordination and treats both parametric and non-parametric approaches. No student may earn credit for both 4943 and 5943. (Sp)
BIOL	5953	BioWriting	(Slashlisted with 4953; Crosslisted with MBIO/PBIO 5953) Prerequisite: permission of instructor. This course provides students engaged in research with the information and skills needed to effectively communicate as professional biologists. Students will learn to report the results of their own research in the format of a journal article, conference-style presentation, and poster. Graduate students have additional assignments beyond those completed by undergraduates. No student may earn credit for both 4953 and 5953. (Irreg.)
BIOL	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
BIOL	5970	Special Topics in Biology	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of topic; maximum credit 12 hours. Special topics course; may include laboratory or field work. No student may earn credit for 4970 and 5970 on the same topic. (F, Sp, Su)
BIOL	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. Laboratory (F, Sp, Su)
BIOL	5983	Programming in R for Biology	Prerequisite: graduate standing or permission of instructor. R is a data analysis and graphics platform that has become increasingly popular in the sciences because of its power and versatility. This course provides an introduction to programming using R for applications in the biological sciences, with an emphasis on implementation. (F)

BIOL	5990	Independent Study	1 to 6 hours. Prerequisite: permission. May be repeated in different fields; maximum credit 12 hours. Directed readings. Written report required. No laboratory. (F, Sp, Su)
BIOL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
BIOL	6003	Ecological Modeling	(Crosslisted with PBIO and MBIO 6003) Prerequisite: one computer course, one course in ecology, or permission of instructor. Trains students to use modeling tools in their research and to gain greater ability to understand, appreciate, and criticize modeling work. Students will learn general procedure and principles with case studies of successful models in ecology and participate in course projects to gain hands-on experience in model development. (Irreg.)
BIOL	6012	Professional Aspects-Biology	Prerequisite: graduate standing in biological sciences. Scientific writing, the process of publication, literature retrieval and bibliographical procedures, research grant proposals, professional job placement, scientific organization, university and college organization and government, scientific photography and illustrations, social responsibilities and professional ethics for the biologist. (F)
BIOL	6083	Evolution of Social Behavior	Prerequisite: 3083 and permission of instructor. History of sociobiological concepts; relationships of ecology, ethology, and evolution. (F even-numbered years)
BIOL	6213	Developmental Behavioral Neuroscience	Prerequisite: graduate standing or permission of instructor. Discussion of specific developmental issues from both the behavioral and neurobiological perspectives of analysis. Can not be taken for credit if 4213 has been previously taken. (Irreg.)
BIOL	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
BIOL	6970	Seminar	1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit 12 hours; no more than six hours may be in any one field. No laboratory. (F, Sp, Su)
BIOL	6980	Research Doctoral Dissertation	(F, Sp, Su)
BIOL	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
BME	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
BME	2333	BME Fundamentals	Prerequisite: MATH 1914; and CHEM 1415. Introduction to material, energy, charge, and momentum balances in biological systems. Steady state and transient conservation equations for mass, energy, charge, and momentum will be derived and applied using basic mathematical principles, physical laws, stoichiometry, and thermodynamic properties. (F)
BME	2433	Circuits and Systems for Biomedical Engineering	Prerequisite: BME 2333. Students learn circuits and linear systems concepts necessary for analysis and design of biomedical systems. Theory is motivated by examples from biomedical engineering. Topics covered include electrical circuit fundamentals, operational amplifiers, frequency response, electrical transients, impulse response, transfer functions, and convolution, all motivated by circuit and biomedical examples. Elements of continuous time domain-frequency domain analytical techniques are developed. (Sp)
BME	3111	Bioimaging Lab	Prerequisite: Completion or concurrent enrollment in BME 3113. Hands-on lab that teaches students technical skills associated with bioimaging. Lab components include hypothesis testing and analysis, computer simulation, lab safety and instrument training, and technical communication. (F, Sp)

BME	3113	Bioimaging	Prerequisite: BME 2333; BME 2433; PHYS 2524 and MATH 3113. Introduction to medical imaging techniques such as x-ray, computed tomography, magnetic resonance, and ultrasound. (F, Sp)
BME	3121	Biotransport Lab	Prerequisite: Completion or concurrent enrollment in BME 3123. Hands-on lab that teaches students technical skills associated with biotransport. Lab components include hypothesis testing and analysis, computer simulation, lab safety and instrument training, and technical communication. (F, Sp)
BME	3123	Biotransport	Prerequisite: BME 2333; PHYS 2524 and MATH 3113. Covers key transport concepts in biomedical engineering. Emphasis is put on mass and momentum transport with applications related to biology, medical science and biotechnology. (F, Sp)
BME	3131	Bioelectricity Lab	Prerequisite: Completion or concurrent enrollment in BME 3133. Hands-on lab that teaches students technical skills associated with electrobiology. Lab components include hypothesis testing and analysis, computer simulation, lab safety and instrument training, and technical communication. (F, Sp)
BME	3133	Bioelectricity	Prerequisite: BME 2333; 2433; PHYS 2524 and MATH 3113. The electrophysiology of excitable cells from a quantative perspective. Topics include the ionic basis of action potentials, quantitative models for nerve and muscle including the Hodgkin-Huxley equations, impulse propagation, synaptic dynamics, source-field relationships, and an introduction to functional electrical stimulation. (F, Sp)
BME	3141	Biomechanics Lab	Prerequisite: Completion or concurrent enrollment in BME 3143. Hands-on lab that teaches students technical skills associated with biomechanics. Lab components include hypothesis testing and analysis, computer simulation, lab safety and instrument training, and technical communication. (F, Sp)
BME	3143	Biomechanics	Prerequisite: BME 2333; PHYS 2524 and MATH 3113. Mechanical characterization of biological tissues at the cellular, organ, and system level; exploration of biomechanical factors of physiological and pathological conditions. (F, Sp)
BME	3151	Molecular, Cellular, Tissue Lab	Prerequisite: Completion or concurrent enrollment in BME 3153. Hands-on lab that teaches students technical skills associated with molecular, cell, and tissue engineering. Lab components include hypothesis testing and analysis, computer simulation, lab safety and instrument training, and technical communication. (F, Sp)
BME	3153	Molecular, Cellular & Tissue	Prerequisite: BME 2333; CHEM 3653 and MATH 3113. Application of engineering methods to study, measure, repair, or replace biological functions at the molecular, cellular, or tissue-level length scales. (F, Sp)
BME	3161	Biomedical Micro-/Nano-Technology Lab	Prerequisite: Completion or concurrent enrollment in BME 3163. Hands-on lab that teaches students technical skills associated with BME micro/nanotechnology. Lab components include hypothesis testing and analysis, computer simulation, lab safety and instrument training, and technical communication. (F, Sp)
BME	3163	Biomedical Micro-/Nano-Technology	Prerequisite: BME 2333; PHYS 2524; MATH 3113 and concurrent enrollment in 3233. Introduction to micro/nanotechnology in biomedical settings, including micro/nanotechnologies used to investigate biological systems, physiological responses to nanotherapeutics, and first principles of microfluidics and microfabrication. (F, Sp)
BME	3233	Biomaterials	Prerequisite: PHYS 2524; CHEM 3653, and junior or senior standing in the college of Engineering or permission of instructor. Introduction to materials used in biomedical environment, the design and use of implantable materials, such as metals, polyethylene, ceramics, and composites, biocompatibility, test methods, and tissue growth on biomaterials. (F)

BME	3533	Biomedical Instrumentation	Prerequisite: BME 2433. Measurement and analysis of biopotentials and biomedical transducer characteristics; electrical safety applications of FET's; integrated circuits, operational amplifiers for signal processing and computer interfacing; signal analysis and display on the laboratory minicomputer. (Sp)
BME	3722	Numerical Methods in Biomedical Engineering	Prerequisite: C S 1313, and MATH 3113. Introduces principles and techniques of numerical analysis of biomedical engineering problems. Covers numerical methods of integration, differentiation, interpolation, curve fitting, data analysis, sampling and estimation, error analysis, analysis of ordinary differential equations, numerical modeling of biomedical engineering systems, symbolic computation, and scientific visualization. (F)
BME	3823	Quantitive Physiology	Prerequisite: BME 3722. Introduces students to the mathematical and numerical techniques used to develop, solve, and analyze quantitative models of physiology systems.
BME	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
BME	4713	Biomedical Engineering Design I	Prerequisite: Senior standing in the BS in BME curriculum. Structured methodologies for designing systems or to interface with living systems. Creative design, analysis, selection, development, and fabrication of biomedical components and systems. (F)
BME	4823	Biomedical Engineering Design II	Prerequisite: BME 4713. Development of team projects in biomedical engineering with emphasis on prototype development and quantitative analysis, and written and oral reporting of the outcome. Capstone. (Sp)
BME	5203	Bioengineering Principles	Prerequisite: MATH 3113 and PHYS 2524. Principles of bioengineering for the areas of the biomechanics of solids and fluids, mass transfer, biomaterials, electrical networks, imaging, and ionizing radiation as they apply to the human body. (F)
BME	5213	Biomechanics I	(Crosslisted with AME 5213) Prerequisite: AME 3143 and AME 3153 or permission of instructor. Introduction to physiological systems with emphasis on structure and function of tissues and organs; application of continuum mechanics to understanding of tissue and organ behavior at microscopic and macroscopic levels; viscoelastic behavior at microscopic and macroscopic levels; viscoelastic and solid biomaterials. (F)
BME	5223	Biomechanics II	(Crosslisted with AME 5223) Prerequisite: AME 3143 and AME 3153 or permission of instructor. Biofluid mechanics; non-Newtonian behavior of blood and body fluids; basic mechanical properties of muscle, bone, cartilage, and other living tissues; application of continuum mechanics to circulation; growth and change of living organs in response to stress and strain. (Sp)
BME	5233	Biomaterials	(Crosslisted with AME 5233) Prerequisite: junior or senior standing in the college of Engineering or permission of instructor. Introduction to materials used in biomedical environment, the design and use of implantable materials, such as metals, polyethylene, ceramics, and composites, biocompatibility, test methods, and tissue growth on biomaterials. (Sp)
BME	5243	Biochemical Engineering	Prerequisite: CH E 3123 or permission of instructor. Current bioprocesses for reaction and separation with emphasis on fundamental principles of chemical engineering, biochemistry, and microbiology. (Sp)
BME	5253	Implantable Devices	Prerequisite: AME 3153 or permission of instructor. Provides student with a basic understanding of design, testing and application of implants/implantable devices and current development of implantable prostheses and devices in heart, cardiovascular system, soft tissue, bone and joint replacements, sensory system (ear and eye), and drug delivery system. (Irreg.)
BME	5293	Transport in Biological Systems	Prerequisite: CH E 3123 or permission of instructor. Theoretical and practical aspects of transport phenomena in living organisms and biomedical technologies. Applications include hemorheology, drug delivery, extracorporeal circulation and artificial organs. (Irreg.)

BME	5373	Tissue Engineering	Prerequisite: graduate standing or permission of instructor. Examines the background and recent advances in the science of combining multiple cell types with an appropriate support to provide a construct that can replace or support damaged tissue. (Irreg.)
BME	5393	Introduction to Computer-Aided Tissue Engineering	Prerequisite: graduate standing or permission of instructor. Designed for graduate and senior undergraduate students in Engineering majors. Describes advanced computer-aided technology for medical implant design and tissue engineering applications. Topics include reverse engineering, biomodeling and layered manufacturing. Course content is delivered through lecture- and laboratory-based hands-on training. (Sp)
BME	5693	Cellular Aspects in Tissue Regeneration	Prerequisite: graduate standing or permission of instruct. Introduce novel technological advancements utilizing cells in tissue regeneration. Issues covered in class include adult and embryonic stem cells, cell differentiation, cell culture, transplantation of engineered tissues and cells, ethical and FDA considerations. (Irreg.)
BME	5703	Biology for Engineers	Prerequisite: graduate standing or permission of instructor. Provides engineering students with an understanding of key biological concepts, where the interface between biology and engineering is broadened. Introduces engineers to the biological science by an integrated approach. (Irreg.)
BME	5723	Biosensors	Prerequisite: graduate standing or permission of instructor. Introduction to the fundamental principles of biosensors within the medical field. Topics covered include electrochemical sensing potentiometric and amperometric biosensors, fiberoptic biosensors, immobilization of biorecognition molecules (enzymes, antibodies, receptor proteins), semiconductor electrodes and ion-selective electrodes. (Irreg.)
BME	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of department. May be repeated; maximum credit sic hours. Directed readings and/or literature reviews under the direction of a faculty member. (Irreg.)
BME	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
BME	5980	Research for Master's Thesis	1 to 6 hours. Prerequisite: graduate standing or permission by instructor. May be repeated; maximum credit toward degree six hours. (F, Sp, Su)
BME	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
BME	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
BME	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
BME	6970	Advanced Topics in Bioengineering	1 to 6 hours. Prerequisite: graduate standing or instructor permission. May be repeated with change of topic; maximum credit towards degree six hours. Selected topics of current faculty research interest at the PhD level not covered by regularly scheduled courses. (Irreg.)
BME	6980	Research for Doctoral Dissertation	1 to 12 hours. Prerequisite: graduate standing or permission of instructor. May be repeated. (F, Sp, Su)
BME	6990	Independent Study	1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

C D	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
C D	3433	Intro-Speech Pathology	NULL
C D	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
C D	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
C S	1303	The Power and Elegance of Computational Thinking	Introduction to computational thinking for students without a computer science background. Topics include using computing tools creatively, the role of abstraction, using data to gain insight, developing and expressing algorithms, programming and the impact of computing. (F, Sp) [I-O]
C S	1313	Programming for Non-Majors	Prerequisite: Mathematics 1523 or concurrent enrollment. Introduction to the design and implementation of computer programs. Emphasis on problem solving. (F, Sp)
C S	1323	Introduction to Computer Programming	Prerequisite: MATH 1523 or concurrent enrollment, or placement into MATH 1743 or MATH 1823 or higher. Introduction to the design and implementation of computer software with an emphasis on abstraction and program organization. (F, Sp)
C S	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
C S	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, ECE, ENGR, EPHY, G E, I E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
C S	2334	Programming Structures and Abstractions	Prerequisite: C S 1323 and MATH 1523 or higher. The design and implementation of computer programs using disciplined methodologies. Use of abstract data types such as stacks, queues, lists, sets, maps. Software reuse through encapsulation, composition, aggregation, inheritance, polymorphism, and generics. Structured approaches to graphical user interface development and error handling. Binary and character based file processing. A program design tool will be used. Introduction to ethics in computer science, including philosophical ethics theories. Discussion of intellectual property rights and privacy. (F, Sp)
C S	2413	Data Structures	Prerequisite: C S 2334 and MATH 1823 or 1914; and C S 2813 or MATH 2513, or concurrent enrollment in C S 2813 or MATH 2513. Representation, analysis and implementation of widely used data structures and associated algorithms. Discussion of algorithms employing data structures with analysis. Written communications required in some projects. Discussion of ethical issues including computer crime, abuse, and hacker ethics. Tools and techniques used in writing secure applications will also be discussed. Windows operating system will be used. A debugging tool will be used. (F, Sp)
C S	2603	Applied Logic for Hardware and Software	Prerequisite: C S 1323 and MATH 1823 or MATH 1914 with a C or better. Applications of logic in the analysis of hardware and software components. Topics include propositional and predicate calculus, Boolean algebra, combinational and sequential circuits, number systems and circuits for arithmetic, sets, inductive definitions, proof techniques including natural deduction, equational reasoning and mathematical induction. (F, Sp)
C S	2613	Computer Organization	Prerequisite: 2603. An introduction to the architecture, organization and design of uniprocessor-based computer systems. Topics include processor, control and memory design and organization, pipelining and vector processing, computer arithmetic, I/O organization, and computer systems security. (F, Sp)

C S	2813	Discrete Structures	Prerequisite: 2603 or Electrical and Computer Engineering 2213 or 2214. Introduction to the theory of discrete structures useful in computer science. Topics include combinatorics, relations, functions, computational complexity, recurrences, and graph theory. (F, Sp)
C S	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
C S	3053	Human Computer Interaction	Prerequisite: 2413, and 2813 or Mathematics 2513. An introduction to human-computer interaction and graphical user interfaces. Topics include principles of human-computer interaction, human cognitive abilities, interface analysis and design, window systems, and social implications of computing. Current interface programming tools will be described and used. Oral presentations are required for some assignments. (Sp)
C S	3113	Introduction to Operating Systems	Prerequisite: C S 2413 and C S 2813 or Math 2513, and either C S 2613 or ECE 3223. An introduction to the major concepts (including memory management, process management, information management, and computer security) and techniques of designing and implementing operating systems. Class projects require the design of medium-scale software systems. The Unix operating system will be used. A performance evaluation tool will be used. (F)
C S	3202	Software Requirements and Specifications	Prerequisite: C S 2413 and C S 2813 or MATH 2513. Students gain technical and non-technical professional skills by performing requirements engineering, and learn the tools, techniques, and methods for modeling software systems. Topics include requirements elicitation, prototyping, functional and non-functional requirements, and tracking. Students practice written and oral communication skills in eliciting and documenting requirements from users, consider the impact of computing on individuals, organizations and society in the creation of requirements and specifications for a computational system, and demonstrate their ability to engage in lifelong learning by gaining background in a domain outside of their own. (F)
C S	3323	Principles of Programming Languages	Prerequisite: C S 2413, and C S 2813 or MATH 2513, and ENGL 3153 or BC 2813 as a prerequisite or concurrent enrollment. Study of the theoretical foundations and principles that form the basis of programming language design; introduction to the functional programming paradigm. (Sp)
C S	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
C S	3723	Numerical Methods for Engineering Computation	(Crosslisted with AME, CH E 3723) Prerequisites: 2413 and 2813 or Mathematics 2513 and Mathematics 3333 and Mathematics 3113 or Mathematics 3413. Basic methods for obtaining numerical solutions with a digital computer. Included are methods for the solutions of algebraic and transcendental equations, simultaneous linear equations, ordinary and partial differential equations, and curve fitting techniques. The methods are compared with respect to computational efficiency and accuracy. Any student who earns credit in C S 3723 cannot receive duplicate credit for AME 3723, CH E 3723, or P E 3723. This course may not be taken for graduate credit. (Sp)
C S	3823	Theory of Computation	Prerequisite: CS 2813 or CS 5005 or MATH 2513. Introduction to abstract machine theory and formal language theory. Topics include Turing machines, finite/pushdown automata, deterministic versus nondeterministic computations, context-free grammars, and mathematical properties of these systems. (F)

C S	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp)
C S	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject matter; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in the student's field. (F, Sp, Su)
C S	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
C S	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
C S	4005	Computing Structures	Prerequisite: permission of graduate liaison. This course has three parts: discrete mathematics, object-oriented programming in C++, and data structures in C++. As part of the discrete mathematics students will be introduced to combinatorics, logic, relations, functions, computational complexity, automata, and graph theory. Students will be introduced to the fundamentals of object-oriented programming and learn to design, build, and analyze data structures using object-oriented principles and techniques. Credit hours earned for this course cannot be used to fulfill degree requirements for the M.S. or Ph.D. programs in computer science. (Irreg.)
C S	4013	Artificial Intelligence	(Slashlisted with 5013) Prerequisite: CS 2413 or CS 5005, and CS 2813 or CS 4005 or MATH 2513. Study of the methods of search, knowledge representation, heuristics, and other aspects of automating the solution of problems requiring intelligence. No student may earn credit for both 4013 and 5013. (Sp)
C S	4023	Introduction to Intelligent Robotics	(Slashlisted with 5023) Prerequisite: C S 2413, and C S 2813 or MATH 2513. History of intelligent robotics; functional models approach; reactive robots; ethology for robotics; architectures and methodologies; implementation; sensing; hybrid deliberative/reactive robotics; multi-robot systems; navigation; topological path planning; metric path planning; localization and mapping. No student may earn credit for both 4023 and 5023. (F)
C S	4033	Machine Learning	(Slashlisted with 5033) Prerequisites: 2413, and 2813 or MATH 2513, and MATH 4753 or Engineering 3293 or Industrial Engineering 3293 or Mathematics 4743, and Mathematics 3333. Topics include decision trees, relational learning, neural networks, Bayesian learning, reinforcement learning, multiple-instance learning, feature selection, learning appropriate representations, clustering, and kernel methods. No student may earn credit for both 4033 and 5033. (F)
C S	4053	Computer Graphics	(Slashlisted with 5053) Prerequisite: C S 2413, and C S 2813 or MATH 2513, and MATH 3333. An introduction to computer graphics. Topics include coordinate systems, transformations, rendering in both two and three dimensions, and graphical programming. No student may earn credit for both 4053 and 5053. (F)
C S	4073	Computer Game Development	Prerequisite: CS 4053 and CS 3113 and MATH 3333 and PHYS 2514. Introduction to the process of developing, maintaining, enhancing, adapting, or refactoring a computer based game. Students will work in project teams using an existing game engine. A software development process will be used. Software development tools will be used. Students will practice oral and written communication skills. (Sp)

C S	4113	Operating Systems Theory	(Slashlisted with 5113) Prerequisite: 3113 and Mathematics 4753 or Industrial Engineering 3293 or Mathematics 4743 or Engineering 3293. Continuation of study from 3113. Advanced topics and examples and simulation techniques used in performance evaluation. No student may earn credit for both 4113 and 5113. (Sp)
C S	4133	Data Networks	(Slashlisted with 5133) Prerequisite: 3113 or permission of instructor. Comprehensive treatment of data networking principles including: layered protocol design and their functions, tools for performance analysis, multi-access communication, routing and flow control. No student may earn credit for both 4133 and 5133. (F)
C S	4163	Embedded Systems	(Slashlisted with 5163) Prerequisites: 2613 and 3113 and Mathematics 3333. Theory and practice of connecting computational systems to the physical world through sensors and actuators. (Sp)
C S	4173	Computer Security	(Slashlisted with 5173) Prerequisite: CS 3113. An introduction to computer security. Topics include applied cryptography, access control, programming and software security, operating system security, network security protocols, and the legal and ethical aspects of security software. (F)
C S	4263	Software Engineering I	Prerequisite: C S 3323 and COMM 2613 and ENGL 3153 or B C 2813, and Computer Science major or minor. No students may obtain credit for CS 4263 and CS 5213. Methods and tools for software specification, design, and documentation. Emphasis on architectural modularity, encapsulation of software objects, and software development processes such as design review, code inspection, and defect tracking. Students working in teams apply these ideas to design and document software products. Study of professional ethics, responsibility, and liability. (F)
C S	4273	Software Engineering II	Prerequisite: CS 3053 and CS 4263 and CS major or CS minor. No student may obtain credit for CS 4273 and CS 5213. Methods and tools for software development, testing, and delivery. Emphasis on data abstraction and reusable components. Students working in teams implement a significant software product, including design documents, user's guide, and process reports, using methods and processes studied in Software Engineering I. Students will practice oral and written communication skills. (Sp)
C S	4323	Compiler Construction	Prerequisite: 2413 and 3823. Introduction to the theory and implementation of programming language compilers and interpreters. Class projects require the design of medium scale software systems. (Sp)
C S	4410	Programming Competition	Prerequisite: Permission of Instructor. Prepare students to participate in regional, national, and international computer programming competitions. Students will work in teams to solve challenging computer programming problems. (F, Sp)
C S	4413	Algorithm Analysis	Prerequisite: CS 2413 or CS 5005, and CS 2813 or CS 4005 or MATH 2513. Design and analysis of algorithms and measurement of their complexity. (F)
C S	4433	Computational Methods in Discrete Optimization	(Slashlisted with 5433) Prerequisite: MATH 3333 and MATH 4413 or concurrent enrollment in 4413. Linear programming: simplex method for LP problems, degeneracy and anticycling strategies, duality theory and complementary slackness conditions, revised simplex method, sensitivity analysis and simplex method for general LP problems. Network optimization: the transshipment problem, network simplex method, shortest path algorithms, the maximum flow problem, and the primal dual method. No student may earn credit for both 4433 and 5433. (F)

C S	4513	Database Management Systems	Prerequisite: CS 2413 or CS 5005, and CS 2813 or CS 4005 or MATH 2513. The design and implementation of a DBMS including data models, query languages, entity-relationship diagrams, functional dependencies, normalization, storage structures, access methods, query processing, transaction management, web-enabled applications, and administration. The impact of databases on individuals, organizations, and society, and legal and professional responsibilities including security and privacy will be discussed. A commercial DBMS is used. Students practice written communication skills. (F)
C S	4613	Computer Architecture	(Crosslisted with ECE 4613) Prerequisite: 2613 or Electrical and Computer Engineering 3223, or 4004. Covers basic concepts of computer system design and communication between components, along with current and historical examples of computer architecture. (F, Sp)
C S	4743	Scientific Computing I	(Slashlisted with 5743) Prerequisite: MATH 3333. Interaction between applications, architectures, and algorithms. Review of linear algebra, serial, pipelined vector processors, cluster of processors. Measures of proformance of parallel algorithms. Parallel algorithms for the solution of linear systems. No student may earn credit for both 4743 and 5743. (F)
C S	4823	Cryptography	(Slashlisted with 5823) Prerequisite: 3823 and 4413. Elementary number theory, time complexity for doing arithmetic, finite fields, RSA, discrete logarithm and Diffie-Hellman, zero-knowledge protocols and oblivious transfer. Basic elliptic curve cryptosystems, elliptic curve factorization and primality proving. No student may earn credit for both 4823 and 5823. (Sp)
C S	4910	Senior Reading and Research	1 to 3 hours. Prerequisite: senior standing, permission of instructor. May be repeated with change of subject matter; maximum credit six hours. Individually supervised reading and research in computing science for gifted seniors. (F, Sp, Su)
C S	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
C S	4970	Undergraduate Seminar	0 to 3 hours. May be repeated with change of subject matter; maximum credit three hours. A special type of seminar necessitated by the rapidly changing nature of modern data processing information science and computing sciences. (Irreg.)
C S	4973	Special Topics	Prerequisite: 2413 and permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. A special topics course necessitated by the rapidly changing nature of computer sciences. Topics offered under this number will be accepted as approved Computer Science electives for Computer Science majors. (Irreg.)
C S	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours but total credit applicable to any degree may be limited. Individual or group research and development projects involving original laboratory, analytical or theoretical investigations and syntheses. Specific objectives and work requirements are established by prior agreement of the instructor and student. Students should expect to spend at least 48 hours for each credit hour and to submit appropriate reports or papers (F, Sp, Su).

C S	5005	Computing Structures	Prerequisite: permission of graduate liaison. This course has three parts: discrete mathematics, object-oriented programming in C++, and data structures in C++. As part of the discrete mathematics students will be introduced to combinatorics, logic, relations, functions, computational complexity, automata, and graph theory. Students will be introduced to the fundamentals of object-oriented programming and learn to design, build, and analyze data structures using object-oriented principles and techniques. Credit hours earned for this course cannot be used to fulfill degree requirements for the B.S., M.S. or Ph.D. programs in computer science. (Irreg.)
C S	5013	Artificial Intelligence	(Slashlisted with 4013) Prerequisite: graduate standing and C S 2413 or C S 5005, and C S 2813 or C S 4005 or MATH 2513. Study of the methods of search, knowledge representation, heuristics, and other aspects of automating the solution of problems requiring intelligence. No student may earn credit for both 4013 and 5013. (Sp)
C S	5023	Introduction to Intelligent Robotics	(Slashlisted with 4023) Prerequisite: graduate standing and C S 2413, and C S 2813 or MATH 2513. History of intelligent robotics; functional models approach; reactive robots; ethology for robotics; architectures and methodologies; implementation; sensing; hybrid deliberative/reactive robotics; multi-robot systems; navigation; topological path planning; metric path planning; localization and mapping. No student may earn credit for both 4023 and 5023. (F)
C S	5033	Machine Learning	Prerequisites: graduate standing and C S 2413, and C S 2813 or MATH 2513, and MATH 4753 or ENGR 3293 or I E 3293 or MATH 4743, and MATH 3333. Topics include decision trees, relational learning, neural networks, Bayesian learning, reinforcement learning, multiple-instance learning, feature selection, learning appropriate representations, clustering, and kernel methods. (F)
C S	5043	Advanced Machine Learning	Prerequisite: graduate standing, C S 4033 or C S 5033 and MATH 3333. Advanced topics in machine learning. Possible topics include graphical models, kernel methods, and statistical relational learning. (Irreg.)
C S	5053	Computer Graphics	Prerequisite: graduate standing and C S 2413, and C S 2813 or MATH 2513, and MATH 3333. An introduction to computer graphics. Topics include coordinate systems, transformations, rendering in both two and three dimensions, and graphical programming. (F)
C S	5083	Knowledge Discovery and Data Mining	Prerequisite: graduate standing, C S 4033 or C S 5033 or permission of instructor. An application oriented course that gives students the tools to develop and apply appropriate data mining and knowledge discovery techniques to real world problems. (Irreg.)
C S	5093	Visual Analytics	Prerequisite: permission of instructor. Exploration and analysis of complex information through visual interactive computational tools and techniques. Topics include analytic reasoning, sense-making, knowledge dissemination, data representation and transformation, visual abstraction, coordinated interaction, visual query languages, spatiotemporal visualization, and applications of visual analysis. (Sp)
C S	5113	Operating Systems Theory	(Slashlisted with 4113) Prerequisite: 3113 or 4004, and Mathematics 4753 or Industrial Engineering 3293 or Mathematics 4743 or Engineering 3293. Continuation of study from 3113. Advanced topics and examples, and simulation techniques used in performance evaluation. No student may earn credit for both 4113 and 5113. (Sp)
C S	5133	Data Networks	(Slashlisted with 4133) Prerequisite: 3113 or 5004 or permission of instructor. Comprehensive treatment of data networking principles including: layered protocol designs and their functions, tools for performance analysis, multi-access communication, routing and flow control. No student may earn credit for both 4133 and 5133. (F)

C S	5143	Network Design and Management	Prerequisite: 4133 or 5133, or equivalent. Basic concepts in networks; modeling and evaluation techniques; network analysis: delay, loss and throughput, centralized network design; distributed network design, network reliability; applications to local area wireless, wide area, multi-service networking, etc.; network management: SNMP, OSI management, distributed network management and architectures. (Sp)
C S	5153	Network Security	Prerequisite: 4133 or 5133. Topics in network security including the inter-network security model, introduction to cryptography, public key encryption and hash functions, network security practice, and system security. (Sp)
C S	5163	Embedded Systems	Prerequisite: graduate standing and C S 2613 and C S 3113 and MATH 3333. Theory and practice of connecting computational systems to the physical world through sensors and actuators. (Sp)
C S	5173	Computer Security	Prerequisite: CS 3113. An introduction to computer security. Topics include applied cryptography, access control, programming and software security, operating system security, network security protocols, and the legal and ethical aspects of security software (F)
C S	5213	Software Engineering Processes	Prerequisite: graduate standing, C S 3113 or C S 3823 or C S 5004. No student may obtain credit for CS 4263 or CS 4273 and CS 5213. Effective processes for software requirements specification, planning, design, documentation, development, review, defect tracking, testing, product delivery, and product evaluation. Emphasis on resource tracking and software quality. Students work in teams to develop, deliver, and evaluate software products. (F)
C S	5413	Computational Complexity	Prerequisite: 4413 and 3823 or 5813. Computational complexity theory dealing with various models of computation and a detailed analysis of P and NP hard problems. (Sp)
C S	5433	Computational Methods in Discrete Optimization	(Slashlisted with 4433) Prerequisite: mathematics 3333 and 4413 or concurrent enrollment in 4413. Linear programming: simplex method for LP problems, degeneracy and anticycling strategies, duality theory and complementary slackness conditions, revised simplex method, sensitivity analysis and simplex method for general LP problems. Network optimization: the transshipment problem, network simplex method, shortest path algorithms, the maximum flow problem, and the primal dual method. No student may earn credit for both 4433 and 5433. (F)
C S	5443	Advanced Discrete Optimization and Networks	Prerequisite: 4413. Review of basic algorithm techniques: DFS, BFS, shortest paths, min-cost spanning tree, etc.; maximum flow problem: labeling and preflow-push algorithms, maximum flow in unit capacity networks and complexity analysis; min cost-flow problems: duality theory, network simplex, primal-dual and relaxation methods; matching: bipartite matching, weighted matching and optimum assignment problems; connectivity: biconnectivity and K-connectivity algorithms; heuristics and approximation algorithms; applications: network design, network reliability and Q0s routing etc. (Sp)
C S	5453	Empirical Methods	Prerequisite: Mathematics 4743 or 4753 or 5743, or Industrial Engineering 3293 and permission of the instructor. Topics include the proper construction of experimental questions, the design of methods to get at these questions, and the evaluation of the empirical results. We will discuss the formulation of empirically-testable hypotheses as applied to different sub-fields of computer science and engineering, the design of experiments in order to test these hypotheses, and a range of statistical methods that are available for the evaluation and analysis of experimental results. (F)
C S	5463	Advanced Computer Architecture	(Crosslisted with ECE 5463) Prerequisite: C S 4613. The design of modern programmable computer systems with emphases on exploiting parallelism at all levels, designing within constraints, including energy consumption, and the impact of architecture on software design. Covers state of the art computer architecture, case studies and trends. (Sp)

C S	5513	Advanced Database Management	Prerequisite: 4513. An advanced course dealing with both current database applied research subjects and theoretical aspects of relational databases. Selected topics such as distributed databases, object-oriented databases, real-time databases, and multimedia databases will be discussed. (Sp)
C S	5593	Data Mining	Prerequisite: graduate standing and permission from the instructor or department. Covers the process, concepts and techniques in data mining, including advanced techniques that deal with Big Data. It provides students with the necessary background to conduct data mining tasks for real world problems. The topics covered include understanding and preprocessing data, classification, association analysis, cluster analysis, anomaly detection, and Big Data mining. (F)
C S	5613	Computer Networks and Distributed Processing	Prerequisite: 4613. Provides a comprehensive treatment of the analysis and design of computer networks. Data communication techniques and distributed processing in a network architecture will be examined. (Sp)
C S	5743	Scientific Computing I	(Slashlisted with 4743) Prerequisite: graduate standing and MATH 3333 and AME 3723 or MATH 4073 or ENGR 3723 or C S 3723. Interaction between applications, architectures, and algorithms. Review of linear algebra, serial, pipelined vector processors, cluster of processors. Measures of proformance of parallel algorithms. Parallel algorithms for the solution of linear systems. No student may earn credit for both 4743 and 5743. (F)
C S	5753	Scientific Computing II	Prerequisite: 5743. Special research topics in scientific computing. Possible topics include optimization algorithms, time series modeling, Kalman filtering techniques, and multivariate statistical techniques. (Sp)
C S	5813	Formal Languages	Prerequisite: 3823. Theory of formal languages. Mathematical modeling of natural or artificial objects, events, and phenomena. Topics include systems for linear/nonlinear objects, their language-theoretical properties, and the related machine theory. (F)
C S	5823	Cryptography	(Slashlisted with 4823) Prerequisite: 3823 and 4413. Elementary number theory, time complexity for doing arithmetic, finite fields, RSA, discrete logarithm and Diffie-Hellman, zero-knowledge protocols and oblivious transfer. Basic elliptic curve cryptosystems, elliptic curve factorization and primality proving. No student may earn credit for both 4823 and 5823. (Sp)
C S	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
C S	5970	Graduate Seminar	Prerequisite: permission of instructor. May be repeated with a change of subject matter; maximum credit six hours. Selected topics of current research interest not covered by regularly scheduled coursework. (F, Sp, Su)
C S	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
C S	5990	Independent Studies	1 to 3 hours. Prerequisite: graduate standing, permission of instructor. May be repeated with change of topic; maximum graduate credit nine hours. Supervised individual reading and research in computer science for graduate students. (F, Sp, Su)
C S	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
C S	6143	Wireless and Mobile Networks	Prerequisite: 4133 or 5133 or permission of instructor. A complete treatment of the issues related to wireless networks, mobility in wireless networks, protocols in wireless and mobile networks, location management, quality of service in wireless networks; application in wireless and mobile networks including distributed applications, middleware, mobile transactions, mobile multimedia, and remote execution. (Sp)
C S	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

C S	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
C S	6973	Advanced Topics in Computer Science	Prerequisite: graduate standing. May be repeated with change of subject matter. Selected topics of current faculty research interest at the Ph.D. level not covered by regularly scheduled coursework.
C S	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
C S	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CAS	1023	The Scientific Method	Elements of the Scientific Method, including naturalism, induction, observation and experimentation, repeatability, and falsifiability, developed from an historical approach. Greek and Roman science and philosophy, Christianity, Islam, Scholasticism, the black death, the witch mania, invention of the printing press, the reformation, the renaissance, the scientific revolution, Hume's problem, Karl Popper, paradigms and revolutions. (Sp) [IV-WC]
CAS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CAS	2033	Fundamentals of Nonprofit Management I	A comprehensive overview of the nonprofit sector, its characteristics, and how to manage a nonprofit organization. Examines a wide range of management issues today's nonprofits face in pursuing their missions and daily operations. (F, Sp)
CAS	2043	Introduction to Leadership	The general purpose of this course is to learn about contemporary thinking regarding leadership in organizations and the applications of these insights to the individual students for their growth as leaders. (F, Sp)
CAS	3003	Journey to China	Prerequisite: English 1213 or Expository Writing 1213. Academic component of the "Journey to China" program, a summer study abroad program run by the University of Oklahoma. The program promotes cultural understanding between the peoples of China and the United States. Participants in the program will be hosted by OU partner universities in cities across China and will have the opportunity to experience some of the country's rich culture and history. Guided field trips and experiential activities will play an integral role in the program, giving students the opportunity to meet Chinese people from a variety of backgrounds. The Journey to China takes place in collaboration with Xi'an International Studies University in the ancient Chinese capital of Xi'an, Yunnan University in Kunming, and Peking University in Beijing. (Su)
CAS	3033	Fundamentals of Nonprofit Management II	Prerequisite: CAS 2033 and junior standing or permission. A more detailed look at how to manage or govern a well-run nonprofit organization efficiently. This course combines academic theory with real-life experience equipping students with the tools required to effectively lead a nonprofit organization. (F, Sp)
CAS	3403	Death, Grief, and Growth	Prerequisite; junior standing or permission of instructor. Explores the universal human experience of dying, death, and grief. Using an interdisciplinary approach, student will discuss such topics as the dying process, grief, mourning, American attitudes toward death and dying, religious perspectives on death, the funeral, suicide, euthanasia, and war. (F) [IV-WC]

CAS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CAS	3900	Study Abroad	1-6 hours. Prerequisite: sophomore standing and completion of ENGL 1213, or permission of instructor. May be repeated; maximum credit 12 hours. Content/location varies. Enrollment in this course indicates that the student is participating in an OU study abroad program run by the College of Arts and Sciences, taught by OU faculty. They will study various cultural, historical, political, social, economic or linguistics issues relevant to understanding their study abroad environment in the specific country chosen and reflected in the course title. (Su)
CAS	3901	Arts and Sciences Co-Op Program	Prerequisite: concurrent participation in A&S Co-Op Program. Program allows students to work outside the university in a job related to the major. Enrollment in this course will be during a term in which a student is working full-time, with the cooperation of the employer, with the intent of returning to OU to continue with the degree requirements. Upon completion of the term's work, the student will write a paper describing their work experience and the relevance to their major. (F, Sp, Su)
CAS	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
CAS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
CAS	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
CAS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
CAS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CAS	4033	Managing the Nonprofit Organization II	Prerequisite: 3033 or permission of instructor. A continuation of nonprofit organization management, with emphasis on board members, volunteers, paid staff, accountability, interactions, risk management, finances, and trending. (Sp)
CAS	4091	Career Planning for Arts and Sciences Students	Prerequisite: junior standing in College of Arts and Sciences. Assist students in the College of Arts and Sciences to determine personal career goals, explore career opportunities beyond graduation, develop a strategy for the job search process, and improve job search techniques as life-long resource tools. (F, Sp)
CAS	4113	Life After OU: A Survival Course	Prerequisite: senior standing. Introduces students to practical aspects of life after college. Includes interviewing; legal aspects of employment; money, banking and finances; insurance; mortgages; estate planning; and civic involvement. (Irreg.)
CAS	4630	CAS Internship	1 to 6 hours. Prerequisite: must have completed at least 30 hours; permission of instructor. May be repeated; maximum credit six hours. Provides hands-on experience for students in chosen field of study. (F, Sp, Su)

CAS	4703	Multidisciplinary Capstone	Prerequisite: senior standing and permission. Explores interdisciplinary topics through research, analysis, and writing. It will incorporate instruction in appropriate research methods, focus on contemporary issues from a global perspective, and prepare students to function as informed citizens in a democracy. Required readings will provide a common basis for discussion. (F, Sp) [V]
CAS	4710	Entrepreneurship Internship	Prerequisite: Student must have declared minor in enterprise studies. May be repeated for up to six hours credit. (F, Sp, Su)
CAS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CAS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CAS	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CAS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
CAS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CAS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CAS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CD	1999	Undergrad Transfer Work	NULL
CD	3433	Intro-Speech Path	NULL
CEE	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CEE	2103	Energy and the Environment	Prerequisite: sophomore standing. Energy and its consequences on the environment, the economy, geopolitics, nuclear power, hydropower, renewables, energy efficiency and mileage requirements for cars; these are issues that are part of the national debate. The course will give students a basic understanding of energy and power, and the consequences, in order to have an informed opinion. (Sp) [II-NL]
CEE	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CEE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

CEE	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CEE	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CEE	4990	Independent Study	1 to 3 hours. Prerequisite: senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CEE	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
CEE	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CEE	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CEE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CEES	1000	CEES Seminar	Seminar provides a common meeting time for students and faculty for department activities, such as invited speakers, project presentations, educational surveys, cross-course project coordination, and policy announcements. Students must enroll every semester that they are matriculated in CEES at OU after the freshman year, but in no case can a student graduate without successfully completing four semesters of seminar. (F, Sp)
CEES	1112	Introduction to Civil Engineering and Environmental Science	Prerequisite: Freshman only. Introduction to fundamental concepts (mass/flow balance), problem solving and design, and simple computing software for architectural, civil or environmental engineers and environmental scientists. (F)
CEES	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CEES	2113	Statics	Prerequisite: PHYS 2514 and MATH 2433 or MATH 2934 or concurrent enrollment in MATH 2433 or MATH 2934. Vector representation of forces and moments; general three-dimensional theorems of statics; centroids and moments of area and inertia. Free-body diagrams, equilibrium of a particle and of rigid bodies, distributed loads, friction and internal shear and moment loads. Analysis of trusses, frames, and machines. (F)
CEES	2153	Mechanics of Materials	Prerequisites: 2113 or AME 2113 or PE 2113. Basic principles of mechanics, including the definition of stress and strain, transformations and principal values for the stress and strain tensors, kinematic relations, review of conservation equations and the development and application of constitutive laws for idealized materials. Elementary elastostatics utilizing Hooke's law; constitutive relations for a linear-elastic continuum, including elastic parameters such as Young's modulus, shear and bulk moduli and Poisson's ratio. Solution of elementary one- and two-dimensional mechanics problems, including thermal stresses and strains, beam flexure, shear and deflections, pressure vessels and buckling of columns. (Sp)

CEES	2213	CADD Fundamentals	Prerequisite: Sophomore level standing in CEES. Introduction to computer aided design and drafting with a focus on the AutoCAD and MicroStation platforms. This course is primarily about learning to use the software and learning how to convey an engineering design graphically. (F)
CEES	2223	Fluid Mechanics	Prerequisites: 2113 or AME 2113 or PE 2113, and Math 3113 or concurrent enrollment. Coverage of the fundamentals of fluid statics and dynamics. Formulation of the equation of fluid flow, i.e., Navier-Stokes equation, Eulers equations, Bernoulli equations, etc. and their application. Examples of ideal fluid flow, such as flow in open and closed conduits. (Sp)
CEES	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, C S, ECE, ENGR, EPHY, G E, I E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
CEES	2313	Water Quality Fundamentals	Prerequisite: CHEM 1415, MATH 2423 or MATH 2924. Introduction to environmental mass balance and fate processes. Studies of mass and energy transfer, introductory environmental chemistry, water quality parameters, mathematics of growth, statistics and data analysis, introduction to environmental laws and regulations. (F)
CEES	2323	Environmental Transport and Fate Process	Prerequisite: 2313. Physicochemical and biological processes controlling contaminant distribution and fate; hydrological processes controlling contaminant transport; sources, prevention and remediation of environmental pollutants. (Sp)
CEES	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
CEES	3213	Water Resources Engineering	Prerequisite: 2223 or permission of instructor. Municipal water demands, surface water hydrology, ground water hydrology, water distribution systems, pump design, wastewater collection systems, storm water management, water law. (F)
CEES	3243	Water and Wastewater Treatment Design	Prerequisite: CEES 2223. Design of municipal water and wastewater treatment plants. Emphasis is placed on the characterization of water and wastewater and physical, chemical and biological treatment methods. Sludge processing advanced treatment methods and treatment plant hydraulics are also considered. (Sp)
CEES	3251	WaTER Center Integrated Seminar	Prerequisite: permission of instructor. This course is a weekly hour-long seminar in which students will hear from guest speakers discussing WASH projects in emerging regions, present their intercultural experience in the form of a case study, and listen to other case study presentations. Students may also read and discuss assigned readings (e.g., published peer-reviewed papers of other researchers doing similar work). (F,SP)
CEES	3253	Introduction to Continuum Mechanics	Prerequisite: CEES 2153 or PE 2153 and MATH 3113. Mechanics of a deformable continuum, including applications of plane stress, plane strain and an introduction to three-dimensional elastostatics. Thermodynamics of deformable media, including energy formulations suitable for closed-form applications and for computational approximations. Constitutive relations for engineering materials, including nonlinear stress-strain relations and multiphysics problems with coupling of the behavior of solids and fluids within the framework of poromechanics. Considerations for structural mechanics, micromechanics and nanomechanics. (F)

CEES	3263	Introduction to Dynamics for Architectural and Civil Engineers	Prerequisite: CEES 2153 and MATH 3113. Kinematics and kinetics of rigid bodies; free and forced vibrations of undamped and damped single degree-of-freedom systems; concept of mass, stiffness, and damping for typical structures; introduction to vibrations of two and more degrees-of-freedom systems; and determination of loads on structures from dynamic events such as earthquakes. (F)
CEES	3334	Measurements in CEES	Prerequisites: Math 2423, Physics 2424 or Physics 2524. Introduction to measurement (laboratory and field) techniques, data analysis and interpretation and applications to architectural, civil or environmental engineering and environmental science problems. Topics include statistics, land surveying, remote sensing, GIS, environmental sampling and analysis and sensors. Laboratory (Sp)
CEES	3364	Soil Mechanics	Prerequisite: CEES 2153 or PE 2153. General treatment of the physical and mechanical properties of soils. Theories of effective stress, consolidation, lateral earth pressure, bearing capacity, slope stability and groundwater flow. Laboratory (F)
CEES	3403	Materials	Prerequisite: CEES 2153 or PE 2153 or concurrent enrollment. Study of the properties of materials utilized by architectural and civil engineers; analyses of aggregates, concrete, masonry, steel, asphalt, plastics and wood. Laboratory. (Sp)
CEES	3413	Structural Analysis I	Prerequisite: CEES 2153 or PE 2153. Loads, reactions and force systems; introduction to design codes; analysis of frames and trusses; calculation of structural deformations; and analysis of indeterminate structures. Emphasis on classical solutions and time-tested approaches to structural engineering. Introduction to structural analysis computer programs to solve complex problems. (F)
CEES	3422	Intercultural Immersion Experience in an Emerging Region	Prerequisite: permission of instructor. This course is an immersion experience for a three to six week period, which could encompass part or all of a summer period. The experience must have a WaTER component - i.e., must include a technological, cultural, and/or business lens on water, sanitation and/or hygiene in a particular context. Students will initiate and design their own experience, either alone or with other students in the program. Prior to starting the experience/internship, students will write a proposal of planned activities and secure the approval from a CEES faculty member to serve as an advisor. After completion of the internship, the students will then submit a written report and make an oral presentation for a three-member review committee that includes the faculty advisor. The immersion experience is intended to be international (outside of the U.S.), but a student may make the case for and receive permission for a domestic setting that is impoverished and underdeveloped, such as an inner city, a tribal reservation, etc., as long as there is a WaTER component to the experience.
CEES	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CEES	3453	Introduction to Construction Management	Prerequisite: CEES 2213 and junior level standing in CEES. Introduction to methods for managing construction projects including scheduling, cost estimating, contracts, pay request, change orders, and requests for information. Students will also learn how to read construction documents and understand project specifications. (Sp)

CEES	3663	Structural Design - Steel I	Prerequisite: CEES 3413 and CEES 3403 or concurrent enrollment in CEES 3403. Design of steel structural members including tension elements, columns, beams, and beam-columns; bolted and welded connection design; composite beam design; introduction to plastic design. Laboratory. (Sp)
CEES	3673	Structural Design - Concrete I	Prerequisite: CEES 3403, CEES 3413. Analysis and design of reinforced concrete beams, columns, slabs, footings, etc., along with discussion of current building practice. Laboratory (F or Sp)
CEES	3774	Structural Design--Concrete and Steel	Prerequisite: CEES 3403 or concurrent enrollment, and CEES 3414. Design of structural members constructed of reinforced concrete and/or steel. Concrete design will include beams in flexure/shear, one way slabs, development length, serviceability and an introduction to columns. Steel design will include tension elements, columns, beams, beam columns and an introduction to connections. Laboratory (Sp)
CEES	3883	Transportation Engineering	Prerequisite: CEES 2153 or PE 2153. Introduction to transportation planning, design, construction, operations and maintenance emphasizing the highway/street mode. Includes demand modeling, route location and design, pavements including hot mix asphalt volumetrics and stability, drainage, and traffic control devices. Laboratory (Sp)
CEES	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
CEES	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. The projects covered will vary. Deals with concepts not usually presented in regular coursework. (Irreg.)
CEES	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in the field. (Sp)
CEES	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
CEES	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CEES	4113	Building Lighting and Electrical Systems	Prerequisite: MATH 2423 or MATH 2924; PHYS 2524; and ENGR 2431 or concurrent enrollment. Fundamentals of building lighting and electrical systems. Lighting topics include the determination of appropriate lighting quantity and quality, luminaires and lighting design procedures for residential, commercial and industrial buildings. Electrical topics will include service voltages, overcurrent protection, short circuit analysis and branch circuit design for residential, commercial and industrial buildings. (F or Sp)
CEES	4114	Aquatic Chemistry	(Slashlisted with 5114) Prerequisite: senior standing and one year of general chemistry. Environmental kinetics and thermodynamics in aquatic systems; acid/base, precipitation/solubility, metal complexation and oxidation/reduction reactions; environmental colloidal and solid-liquid interface chemistry. No student may earn credit for both 4114 and 5114 or Environmental Science 4114 and 5114. Laboratory. (F)
CEES	4123	Open Channel Flow	Prerequisite: 2223. Theory, analysis and design of channels, aqueducts, headworks, siphons, spillways and hydraulic structures. An in-depth study of critical flow and measurement techniques. Backwater analysis by analytical, calculator and computer methods. Special emphasis on practical problems of general interest. (Sp)

CEES	4234	Applied Environmental Microbiology	(Slashlisted with 5234) Prerequisite: 2323 and 3243. Basic environmental microbiology and bioenvironmental engineering. Presentation of the diversity and importance of organisms involved in solid and liquid waste reduction. The course examines basic microbiology, biodegradation mechanisms, bioavailability, biotreatability studies, groundwater remediation (both oxic and anoxic), and bioengineering process technologies. No student may earn credit for both 4234 and 5234. Laboratory. (F)
CEES	4243	Water Technologies for Emerging Regions	Prerequisite: 2223 or 2323 or equivalent or instructor permission. Students will gain an understanding of water and sanitation issues in remote villages of developing countries. Explore and design sustainable technologies appropriate to these settings including cultural, political and economic factors. (Sp)
CEES	4253	Statistics and Probability	Prerequisite: MATH 2423 or 2924 and PHYS 2524 or 2424. Designed to help students understand the fundamentals of probability, statistics, reliability, and risk methods in support of decision making for future engineers and scientists. Fundamental concepts in probability and statistics will be reviewed and used throughout the course. Engineering decisions are often based on data that contain uncertainty; future scientists and engineers should understand how uncertainty affects calculated quantities, accuracy, precision, and reliability. (Sp)
CEES	4263	Hazardous and Solid Waste Management	Prerequisite: junior or above status in CEES or permission of instructor. Sources and types of solid wastes; identification and classification of hazardous wastes; waste handling, transportation, treatment and disposal techniques, federal and state legislation; and environmental and health effects. (F)
CEES	4273	WaTER Technical Field Methods	Prerequisite: permission of instructor. This course is a hands-on practicum covering skills necessary for construction and implementation of water and sanitation projects in developing countries. Course modules are chosen to reflect the typical projects and types of skills needed by development workers in organizations such as Peace Corps, USAID, Engineers Without Borders, and faith-based organizations. The emphasis will be on sustainable technologies using methods and materials appropriate to emerging regions. Non-engineering students are encouraged to participate. Basic physical principles will be presented as needed. (Su)
CEES	4324	Environmental Biology and Ecology	(Slashlisted with 5324) Prerequisite: CEES 2323. Examines applied environmental biology; biological consequences of environmental impacts; mitigation of environmental impacts via biogeochemical, ecological and microbial processes. No student may earn credit for both 4324 and 5324. Laboratory (F)
CEES	4333	Foundation Engineering	Prerequisite: 3364. Substructure analysis and design to meet various soil conditions; footings and rafts, shoring and underpinning, piles, cofferdams, caissons, breakwaters, piers, wharves, vibratory effects on foundations. (Sp)
CEES	4423	CEES Professional Internship or Co-op	Prerequisite: completion of at least 19 hours of Civil Engineering and Environmental Science (CEES) coursework (for Civil Engineering and Environmental Engineering majors); or completion of at least 19 hours of CEES and science coursework (for Environmental Science majors); or completion of at least 19 hours CEES and Architecture (ARCH) coursework (for Architectural Engineering majors). Provides three hours of professional elective credit for 400 hours of internship. Prior to starting the internship, students should write a proposal of planned activities and secure the approval from a CEES faculty member to serve as an of the advisor. After completion of the internship or co-op, the students should enroll in this course. The student must then submit a written report, and make an oral presentation for a three-member review committee that includes the faculty advisor. (F, Sp, Su)

CEES	4453	Geomatics Engineering	Prerequisites: CEES 1213 and MATH 2433 or MATH 2934, or permission of instructor. Geomatics engineering deals with the science of determining relative positions of features for mapping, engineering and construction plans. Topics include digital leveling, orientation, distance measurement, traversing and control surveys, accuracy, error sources, precise horizontal and zenith angle measurements, and introduction of global navigation satellite system. Laboratory (F)
CEES	4463	Environmental Evaluation and Management	(Slashlisted with 5463) Prerequisite: senior standing. Broad overview of natural resources management with attention to techniques used in decision making and analysis. Class discussion and readings include a review of measures used to value natural systems (e.g. benefit cost analysis) and the role of private and public institutions in management. No student may earn credit for both 4463 and 5463. (Sp)
CEES	4473	Soil Science	Prerequisite: senior standing, graduate option. Discusses basic physical, chemical, and biological properties of soils. Soil formation, clay mineralogy, organic matter and action exchange capacity are included. Current environmental problems of soil pollution are also covered. Laboratory. (F)
CEES	4603	Environmental Protection	(Slashlisted with 5603) Prerequisite: senior standing or permission of instructor. Mitigation of human health and environmental problems with a focus on differences between developing and developed countries. Topics include baseline health indicators, population growth, toxicology, epidemiology, and risk assessment, water and wastewater, air quality, solid and hazardous waste, and environmental management systems. No student may earn credit for both 4603 and 5603. (F)
CEES	4663	Introduction to Matrix Methods in Structural Analysis	Prerequisite: CEES 3413. Review of matrix algebra and solution of linear equations; energy concepts and principle of virtual work; fundamentals of flexibility and stiffness methods; coordinate transformation and matrix assemblage; computer-oriented direct stiffness method and computer code developments; secondary effects; support settlement and temperature change; method of finite differences and application to beam and plate problems. Laboratory (F or Sp)
CEES	4753	Structural Design - Wood	Prerequisite: CEES 3413 or equivalent. Material properties and behavior of wood. Analysis and design of solid and laminated structural members, connections, systems, trusses and arches. Current developments in structural wood design and research. (F)
CEES	4803	Civil Engineering Professional Practice	Prerequisites: senior standing in Architectural or Civil Engineering. Architectural engineers must also have Engineering 2431 or concurrent enrollment. Introduces students to both technical and non-traditional aspects of professional practice. Technical emphases include discipline-specific instruction on the design process. Architectural engineers are trained in design of building plumbing and electrical systems. Civil engineers are trained on structural and foundation design. Both disciplines receive training on non-technical aspects of professional practice including organization, project management, ethics and communications. (F)
CEES	4813	Envir Science and Envir. Engineering Professional Practice	Prerequisite: senior standing in environmental science or environmental engineering. Nature of profession, duties and administrative responsibilities. Organization and management of operating divisions with emphasis on role of environmental professional. Functional approach to planning and implementing public works needs with emphasis on role of environmental professional. (F)
CEES	4863	Environmental Assessment Methodologies	(Slashlisted with 5863; Crosslisted with RCPL 4863) Prerequisite: senior standing in CEES or permission of instructor. Develop knowledge of various environmental assessment methodologies or "tools," including assessments of socio-economic, physical/chemical and biological impacts at the pre-project, operational and post-project phases on human and non-human components of the environment. No student may earn credit for both 4863 and 5863. (Sp)

CEES	4903	Civil Engineering Design	Prerequisite: CEES 3213, CEES 3364, CEES 3663 or CEES 3673 and CEES 4803. Solution of major design problems by a team approach of disciplines. Problems to be varied within the areas of civil engineering (structural; geotechnical; and transportation) according to the student's major interest. The capstone project will be under direct faculty supervision. (Sp) [V]
CEES	4913	Environmental Science Capstone	Prerequisite: CEES 4114, CEES 4324, CEES 4813; and CEES 4253 or concurrent enrollment. Solution of major environmental problems by a team approach of disciplines. Problems to be varied within the area of Environmental Science. The Capstone project will be under direct faculty supervision. (Sp) [V]
CEES	4923	Environmental Engineering Capstone	Prerequisite: CEES 3213, CEES 4114, CEES 4324, CEES 4813; CEES 4253 or concurrent enrollment. Solution of major design problems by a team approach of disciplines. Problems to be varied within the area of Environmental Engineering (Water Resources; Water and Wastewater Treatment; Environmental Remediation; Hazardous and Solid Waste Design). The capstone project will be under direct faculty supervision. (Sp) [V]
CEES	4943	Air Quality Management	Prerequisite: MATH 2423 or MATH 2924; and CHEM 1315. Important aspects of air quality will be covered, including air quality legislation, major sources and effects of air pollutants, monitoring, atmospheric dispersion, and air quality modeling. (Sp)
CEES	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CEES	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CEES	4980	Environmental Science Senior Research	Prerequisite: senior standing. Maximum credit twelve hours. Intensive research investigation of a special project under the direction of a faculty member. (F, Sp, Su)
CEES	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CEES	4993	Architecture Engineering Capstone	Prerequisite: CEES 3663, CEES 3673, CEES 4803 and AME 4653; CEES 4113 and CEES 4333 or concurrent enrollment. A capstone course emphasizing design of structural components and environmental systems of buildings. Requires students to have knowledge and skills from prerequisite courses to address a real-world, open-ended design problem. Required for Architectural Engineering students. The capstone project will be under direct faculty supervision. (Sp) [V]
CEES	5010	Civil Engineering Problems	Prerequisite: senior or graduate standing and permission of instructor. May be repeated; maximum credit four hours for a master's program or six hours for a doctoral program, including hours taken as part of another graduate program. Independent or small group study under the supervision of one or more faculty members. (F, Sp, Su)
CEES	5020	Special Topics in Civil Engineering	1 to 6 hours. Prerequisite: senior or graduate standing and permission of instructor. May be repeated with change of topic; maximum credit twelve hours. Examines subject matter in civil engineering not covered by existing course offerings as a regular course. (F, Sp, Su)

CEES	5021	Technical Communications	Prerequisite: CEES graduate standing or permission of instructor. Focused on enabling students to improve oral and written communications skills. Examines appropriate formats for various technical publications, as well as methods and practices for developing effective oral presentations. Each student will be required to develop an oral presentation about his/her written product. (Sp)
CEES	5023	Corporate Environmental Management	Prerequisite: CEES graduate standing or permission of instructor. This course examines the growing importance of environmental science and technology for business and industry. Student will gain an appreciation of the dimensions of the natural environment in today's business climate with the express goal of providing a sense of what issues are of central policy importance as well as what career opportunities may be available to civil engineering and environmental science students. (F)
CEES	5114	Aquatic Chemistry	(Slashlisted with 4114) Prerequisite: graduate standing, one year general chemistry. Environmental kinetics and thermodynamics in aquatic systems; acid/base, precipitation/solubility, metal complexation and oxidation/reduction reactions; environmental colloidal and solid-liquid interface chemistry. No student may earn credit for both 4114 and 5114 or Environmental Science 4114 and 5114. Laboratory. (F)
CEES	5234	Applied Environmental Microbiology	(Slashlisted with 4234) Prerequisite: 2323, 3243, or permission of instructor. Basic environmental microbiology and bioenvironmental engineering. Presentation of the diversity and importance of organisms involved in solid and liquid waste reduction. The course examines basic microbiology, biodegradation mechanisms, bioavailability, biotreatability studies, groundwater remediation (both oxic and anoxic), and bioengineering process technologies. No student may earn credit for both 4234 and 5234. Laboratory (F)
CEES	5244	Physicochemical Water Treatment Processes	Prerequisite: graduate standing or permission of instructor. Physical and chemical processes for drinking water, ground water and industrial water treatment. Processes discussed include coagulation/flocculation, gravity separation, filtration, disinfection, adsorption, advanced oxidation, and phase transfer (e.g., air stripping). (Sp even years)
CEES	5253	Environmental Administration and Law	Prerequisite: senior or graduate standing or permission of instructor. An introduction to the political, legal, and administrative aspects of environmental management. A study of the processes involved in environmental policy development and promulgation. Overview of major environmental laws and regulations. (F)
CEES	5273	Wetlands Science and Management	Prerequisite: senior or graduate standing. A comprehensive field-based examination of wetland science, ecology, and management. Major wetland types and resources are examined and the biogeochemical and ecological diversity of wetland waters, soils, vegetation and fauna is investigated. Biological, physical, chemical, and hydrological aspects of wetland ecosystem structure and function are explored through visits to several field sites. Current issues in wetland valuation, classification, management and identification are considered as well as the evaluation of created, restored and constructed wetlands. Laboratory (Su)
CEES	5283	Environmental Organic Chemistry	Prerequisite: 4114 or permission of instructor. Solubility, partitioning, and sorption of organic compounds in aqueous systems; linear free energy relationships; natural organic matter chemistry and characterization; environmentally pertinent hydrolysis, oxidation, and reduction reactions; disinfection reactions; and aqueous photochemistry. (Sp)
CEES	5303	Asphalt Materials and Mix Design	Prerequisite: 3403 and 3884. May be repeated once with change of content. Asphalt cement, cutbacks, emulsions, testing procedures and grading; aggregate properties, blending; asphalt concrete mix design (Marshall, Hveen and Superpave); MHA construction; HMA pavement performances; special asphalt mixes; recent developments. Laboratory (Sp)

CEES	5313	Engineering Geology	Prerequisite: 3364 and permission of instructor. Understanding geology in engineering design and mitigation: topics include weathering and soil-forming processes; engineering properties of rock; landslides and debris flow (slope stability); fluvial processes and hazards; land subsidence; expansive soil; hazard, risk and land-use planning. (F)
CEES	5323	Geosynthetics	Prerequisite: CEES 3364. To introduce students to concepts and design methods involving the use of geosynthetics in geotechnical and transportation engineering applications. (F)
CEES	5324	Environmental Biology and Ecology	(Slashlisted with 4324) Prerequisite: graduate standing in Environmental Science. Examines applied environmental biology; biological consequences of environmental impacts; mitigation of environmental impacts via biogeochemical, ecological and microbial processes. No student may earn credit for both 4324 and 5324. Laboratory (F)
CEES	5343	Advanced Soil Mechanics	Prerequisite: 3364, Mathematics 3113. Advanced treatment of theories and principles of shearing strength, stress distribution and settlement analysis. (F)
CEES	5353	Introduction to Soil Dynamics	Prerequisite: 3364 or permission of instructor. Review of basic concepts (single- and multi-degree of freedom system, wave propagation, behavior of dynamically loaded soils), liquefaction, vibrations of footings on elastic half space, analog models, dynamics of pile foundations, machine foundations, design of foundations for dynamic loads including earthquake loading. (Irreg.)
CEES	5363	Ecological Engineering Science	Prerequisite: senior or graduate standing. Defined as the design of sustainable ecosystems that integrate human society with its natural environment for the benefit of both. It is distinct from both environmental engineer and ecology and uses a systems perspective based on the premise that sustainable solutions require working with natural ecological and biogeochemical process and not against them. Ecologically engineered systems are designed to require less fossil fuel input, produce less pollution and represent cost-effective alternatives to traditional energy-and resource-intensive technologies. (Sp)
CEES	5383	Earthquake Engineering	Prerequisite: senior or graduate standing. To provide students with an understanding of the effects of earthquakes on civil engineering structures and analytical tools for their seismic analysis. (F)
CEES	5393	Reinforced Soil Structures	Prerequisite: CEES 3364. Introduce students to the analysis and design methods related to geotechnical structures reinforced with geosynthetics. The main focus of this course will be on reinforced soil walls, slopes and embankments. (Sp)
CEES	5404	Soil Stabilization	Prerequisite: 3403, 3364. Principles and methods of soil stabilization; soil-aggregate, soil-chemical stabilization; grouting; design and laboratory testing of stabilized soils. Laboratory (Irreg.)
CEES	5413	Soil-Structure Interaction	Prerequisite: 3364 or permission of instructor. Introduction-definition, methods of solution; beams on deformable foundations; analysis and design of axially loaded structures -- single pile, pile groups, retaining walls; plates on deformable foundations; role of interfaces and joints; wave equation for pile behavior. (Irreg.)
CEES	5423	Environmental Geotechnology	Prerequisite: 3243 and 3364, or permission of instructor. Covers geotechnical issues in environmental problems and solutions. Site characterization; laboratory and in-situ testing for environmental applications; soil mineralogy and fabric; design and construction of contaminant barriers and landfill liners. (Sp)
CEES	5433	In-Situ Soil Testing	Prerequisite: 3364. This is a "hands-on" course that focuses on conducting and interpreting laboratory and in-situ tests for geotechnical engineering. Topics can include but are not limited to drilling, sampling, soil characterization, triaxial shear testing, one-dimensional compression, flexible wall permeability testing, pressuremeter, cone penetrometer, borehole shear, and pile load testing. Laboratory (Sp)

CEES	5443	Unsaturated Soil Mechanics	Prerequisite: CEES 3364. Provide students with an understanding of the theoretical and practical fundamentals of unsaturated soil mechanics with applications in geotechnical engineering. (F)
CEES	5453	Public Mass Transportation Systems	(Crosslisted with RCPL 5453) Prerequisite: 3884 or permission of instructor. Service characteristics of the principal modes of public mass transportation with emphasis on urban transit (fixed-route bus, light rail, subways, commuter rail, paratransit, taxi); legislation and regulations; institutional structures; financing; need and demand studies; planning strategies; management; operations and record keeping; case studies of leading systems. (Irreg.)
CEES	5463	Environmental Evaluation and Management	(Slashlisted with 4463) Prerequisite: graduate standing. Broad overview of natural resources management with attention to techniques used in decision making and analysis. Class discussion and readings include a review of measures used to value natural systems (e.g. benefit cost analysis) and the role of private and public institutions in management. No student may earn credit for both 4463 and 5463.
CEES	5473	Forensic Geotechnical Engineering	Prerequisite: CEES 3364. Examines methods for investigating and analyzing geotechnical failures. Examples include slope failures, pavement subgrade failures, foundation failures, excessive seepage from earth dams, and excavation failures. The course also addresses the role of the engineer as a consultant and/or expert witness in legal cases involving geotechnical failures. (F or Sp)
CEES	5483	Urban and Regional Transportation Planning	(Crosslisted with RCPL 5483) Prerequisite: graduate standing or permission. Characteristics of urban and regional passenger and freight demand; travel demand forecasting methodologies; long- and short-range planning strategies; role of governments; characteristics of major modes of transport; decision-making strategies; case studies. (Sp)
CEES	5493	Transportation and Land Development	(Crosslisted with RCPL 5493) Prerequisite: graduate standing or permission. Study of interactions between land development activity and the transportation network. Application of planning and design techniques to manage the impacts of development upon the transportation system.
CEES	5600	Environmental Quality Management Field Training	1 to 4 hours. Prerequisite: graduate standing or permission of instructor. A practical problem in environmental quality control is chosen and the class participates in its solution. Laboratory (Su)
CEES	5603	Environmental Protection	(Slashlisted with 4603; Crosslisted with RCPL 5603) Prerequisite: instructor permission. Mitigation of human health and environmental problems with a focus on differences between developing and developed countries. Topics include baseline health indicators, population growth, toxicology, epidemiology, and risk assessment, water and wastewater, air quality, solid and hazardous waste, and environmental management systems. No student may earn credit for both 4603 and 5603. (F)
CEES	5624	Biological Waste Treatment	Treatment of waste using biological processes; emphasis on treatment kinetics, municipal wastewater treatment processes, and design of municipal wastewater unit processes; application of biological treatment concepts to other wastes including industrial wastes, groundwater, and solid or hazardous wastes. Laboratory (F)
CEES	5653	Advanced Mechanics of Materials	Prerequisite: Engineering 2153 and senior or graduate standing. Principal stresses and strains; theories of failure; introduction to elasticity; unsymmetrical bending and shear; torsion of noncircular solid cross sections, cellular sections and open sections; introduction to plate bending and buckling. (F)
CEES	5673	Colloid and Surface Science	(Crosslisted with CH E) Prerequisite: graduate standing or permission of instructor. Capillarity, surface thermodynamics, adsorption from vapor and liquid phases, contact angles, micelle formation, solubilization, emulsions and foams. Applications to be discussed include detergency, enhanced oil recovery and adsorption for pollution control. (Irreg.)

CEES	5683	Dynamics of Structures	Prerequisite: 3253, 3414. Free vibration, forced vibration and transient response of structures having one, multiple or infinite number of degrees-of-freedom; structural damping effects; numerical solution techniques; Lagrange's equation of motion, Rayleigh-Ritz method. General matrix formulation for multiple degrees-of-freedom, modal coordinate transformation. Introduction to earthquake engineering concepts. (F)
CEES	5693	Structural Design of Pavements	Prerequisite: 3364, 3884. Effect of load and climate on the design of rigid and flexible pavements and interaction of pavement components. (Irreg.)
CEES	5763	Introduction to Finite Element Method	(Crosslisted with AME 5763) Prerequisite: graduate standing. Weighted residual and variational approaches. Finite element formulation for rod, truss and beam elements; plane stress and plane strain problem; axi-symmetric and three-dimensional analysis; isoparametric elements; conforming and nonconforming plate and shell elements. (Sp)
CEES	5773	Structural Design--Steel II	Prerequisite: CEES 3663. Advanced structural steel design including steel deck diaphragms, column and beam bracing, composite beam design, rigid frame design, torsional member design, plate girder design, and design of building connections. (F or Sp)
CEES	5783	Structural Design--Concrete II	Prerequisite: CEES 3673. Advanced reinforced concrete behavior and design including limit design, anchorage slender columns, truss models for shear and torsion on beams, two-way and flat slabs, and the art of detailing. (F or Sp)
CEES	5793	Design of Prestressed Concrete Structures	Prerequisite: CEES 3673. Design procedures for pretensioned and post-tensioned concrete structures, with emphasis on the behavior of prestressed concrete. Topics include methods of analysis, time dependent effects, fabrication and construction procedures, connections, highway bridges, frames, composite construction, continuous structures, and anchorage zone detailing. (Irreg.)
CEES	5823	GIS Applications in Environmental Modeling	Prerequisite: MATH 3113, graduate standing or instructor permission. Consideration of the many spatially distributed parameters affecting such processes as transport and fate of contaminants, hydrologic processes, and many other environmental phenomena. Geographic information systems are increasingly used as an indispensable tool for analysis, management, and modeling. (Sp)
CEES	5833	Ground Water Quality Protection	Prerequisite: graduate standing or permission. Introduction to ground water quality protection. Covers sources of ground water, ground water hydrology, ground water information sources, ground water pollution sources, subsurface transport and fate processes and monitoring of ground water systems. (F)
CEES	5843	Hydrology	Prerequisite: MATH 3113, graduate standing, or permission of instructor. An applied course on hydrology dealing with environmental water problems; principles of hydrologic systems, their structure and components; methods of analysis and their application to various purposes of water resources planning and development. (Sp)
CEES	5853	Groundwater and Seepage	(Crosslisted with GEOL 5853) Prerequisite: graduate standing in civil engineering, environmental science or geology or permission. An applied course dealing with properties of aquifers, modeling of groundwater flow, groundwater hydrology and its interrelation with surface water, well hydraulics, pumping tests and safe yield of aquifers. (F)
CEES	5863	Environmental Assessment Methodologies	(Slashlisted with 4863; Crosslisted with RCPL 5863) Prerequisite: graduate standing or permission of instructor. Develop knowledge of various environmental assessment methodologies or "tools," including assessments of socio-economic, physical/chemical and biological impacts at the pre-project, operational and post-project phases on human and non-human components of the environment. No student may earn credit for both 4863 and 5863. (Sp)

CEES	5873	Water Quality Management	Prerequisite: MATH 3113, and graduate standing, or instructor permission. Water quality in lakes, rivers, estuaries; chemical, physical and biological aspects of marine and fresh waters; waste assimilation; system modeling; water quality management; waste load allocation, and engineer controls. (Sp)
CEES	5883	Environmental Modeling	Prerequisite: MATH 3113, graduate standing or instructor permission. Introduction to theoretical and practical issues of computer-based environmental modeling. Covers problem formulation, implementation, and application. Topical areas include conceptualizing problems, conservation laws, partial differential equations, numerical methods, and applications ranging from coastal hydrodynamics to contaminant transport. Emphasis on understanding the model process rather than using "canned" models. (F)
CEES	5903	Remote Sensing Hydrology	Prerequisite: senior standing, or graduate standing, or permission of instructor. Overview of various orbital satellite platforms/sensors and introduces advances in remote sensing hydrology from space-borne observations, state-of-the-art retrieval algorithms for hydrological variables, and ground validation strategies. Required for Hydrology minors. (Sp)
CEES	5933	Climate Change, Water, and Natural Hazards	Prerequisite: senior standing, or graduate standing, or permission of instructor. A workshop style course for undergraduate and graduate students who wish to have a correct understanding of the Earth's climate history, climate variability, and climate extremes. With an overview of the climate change's causes, effects, and solutions, this course further examines how abrupt climate changes impact on natural hazards occurrences and water sustainability. (F)
CEES	5953	Computational Hydrology and Water Resource System	(Crosslisted with GIS 5953) Prerequisite: senior or graduate standing, or permission of instructor. Covers fundamental theory and modeling of hydrological processes and basin-based water systems. Emphasis is placed on the application of quantitative methods to the analysis of interactions of hydrology, engineering, and socioeconomics in regional water resources systems. Users will learn how to solve a range of problems from simple linear hydrologic system, multi-objective optimization and distributed model calibration, to fairly complex energy flux and water balance in hydrology and water cycle. MATLAB is used to better understand and analyze numerical solutions for nonlinear hydrologic systems. (F)
CEES	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
CEES	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CEES	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
CEES	5982	CEES Non-Thesis Project	Prerequisite: graduate standing and instructor permission. This is for all CEES non-thesis students to take as their final project for their non-thesis defense. Each student with their faculty advisor will determine what the project will cover. Each student will be required to develop an oral presentation about his/her written project. (F, Sp, Su)
CEES	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CEES	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

CEES	6210	Environmental Science Special Topics	1 to 6 hours. Prerequisite: graduate standing. May be repeated with change of topic; maximum credit four hours for master's candidate, six hours for a doctoral candidate. Research-oriented problems dealing with current topics of special interest in environmental science. (F, Sp, Su)
CEES	6663	Advanced Finite Element Methods	(Crosslisted with AME 6663) Prerequisite: 5763. Selected topics such as: nonlinear material problems, plasticity, creep (visco-plasticity), fracture, etc.; geometrically nonlinear problems, large displacement and structural stability; dynamic problems and analytical solution procedures; soil-structure interactions; application of finite element method to fluid and heat transfer problem. (Irreg.)
CEES	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
CEES	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
CEES	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
CEES	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CELO	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CELO	2000	Freshman and/or Sophomore Secondary Cello	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CELO	2020	Cello for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
CELO	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CELO	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CELO	4000	Junior and/or Senior Secondary Cello	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CELO	4020	Cello for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
CELO	5000	Master's-Level Secondary Cello	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)

CELO	5010	Master's-Level Cello for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
CELO	5020	Master's-Level Cello For Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
CELO	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CELO	6000	Doctoral Secondary Cello	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CELO	6010	Doctoral Cello for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
CELO	6020	Doctoral Cello for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
CH E	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CH E	2002	Introduction to Chemical Engineering Computing	Prerequisite: MATH 1823 or 1914 or concurrent enrollment. Introduction to engineering computing and programming using prevalent engineering computing software; program design and development; computer application exercises in engineering. (F, Su)
CH E	2033	Chemical Engineering Fundamentals	Prerequisite: Chemistry 1415 or 1425 or equivalent. Material balances involving physical equilibria and chemical reaction; energy balances; gas behavior including vapor pressure and Raoult's Law. (F)
CH E	2133	Sustainable Energy for the Future	Prerequisite: CHEM 1415 and MATH 1823 or 1914 or equivalent or permission of instructor. The course will begin by reviewing the history of supply and use of energy through the 19th and 20th century and the transition from coal to wood to oil, gas and nuclear. It will cover the existing and potential energy supplies for the future and discuss their positive and negative impacts, including environmental impacts. This will include the potential for a new generation of nuclear power, wind, solar, and biomass. (Irreg.)
CH E	2153	Electrical and Mechanical Engineering Concepts and Applications	Prerequisite: Physics 2524; Mathematics 2433. Review of electrical circuits and statics and dynamics; application to engineering systems, including motors, power systems, electrical safety, and design of flanges, spans, vessels and other mechanical systems. (Sp)
CH E	2281	Engineering Co-Op Program	(Crosslisted with AME, CEES, C S, ECE, ENGR, EPHY, G E, I E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the university, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
CH E	3113	Momentum, Heat and Mass Transfer I	Prerequisite: CH E 2033; MATH 2443 or 2934 or concurrent enrollment in 2443 or 2934; completion or concurrent enrollment in PHYS 2524 and completion or concurrent enrollment in MATH 3113. The common mathematical and physical basis of these processes is presented. Calculation methods for all three processes are developed. Design procedures of equipment for fluid flow, heat transfer and diffusional processes are given. (Sp)

CH E	3123	Momentum, Heat and Mass Transfer II	Prerequisite: CH E 3113 and MATH 3113 or concurrent enrollment in MATH 3113. The common mathematical and physical basis of these processes is presented. Calculation methods for all three processes are developed. Design procedures of equipment for fluid flow, heat transfer and diffusional processes are given. (F)
CH E	3313	Structure and Properties of Materials	Prerequisite: CHEM 1415 or CHEM 1425, PHYS 2524, and CHE 3473 or instructor permission. The behavior of materials under various conditions and environments is correlated to atomic and molecular structure and bonding. (Sp)
CH E	3333	Separation Processes	Prerequisite: 3123, 3473, 3723. Coverage of the fundamentals and modeling techniques of various separation processes found in the chemical process industries. Discussion of various computational approaches for binary and multicomponent separations; factors affecting efficiency, capacity and energy requirements. (Sp)
CH E	3432	Unit Operations Laboratory	Prerequisite: CH E 3123, CH E 3333 or concurrent enrollment in CH E 3333, and CH E 3473. Experimental examination of processes involving fluid flow, heat and mass transfer, kinetics and process control. Process parameters and physical properties are measured. Laboratory. (Sp)
CH E	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CH E	3473	Chemical Engineering Thermodynamics	Prerequisite: CH E 2033, CH E 3113, MATH 2443 or 2934. Application of the first and second laws of thermodynamics to the analysis of phase change, solution behavior and chemical equilibria and reaction. (F)
CH E	3723	Numerical Methods for Engineering Computation	(Crosslisted with AME, C S 3723) Prerequisites: 2002 or Aerospace and Mechanical Engineering 2401 or 2402, or Engineering 2002 or 2003, or Computer Science 1313 or 1323, and Mathematics 3113 or 3413. Course uses specific software applications tailored toward chemical engineering. Basic methods for obtaining numerical solutions with a digital computer. Included are methods for the solutions of algebraic and transcendental equations, simultaneous linear equations, ordinary and partial differential equations, and curve fitting techniques. The methods are compared with respect to computational efficiency and accuracy. Any student who earns credit for CH E 3723 cannot receive duplicate credit for AME 3723, C S 3723, or P E 3723. This course may not be taken for graduate credit within the College of Engineering. (F)
CH E	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
CH E	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in the student's field. Laboratory (F, Sp, Su)
CH E	3990	Undergraduate Research Experience	Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Individual research projects for undergraduates in Chemical Engineering before their junior year, and for high performing undergraduates not in the Honors Program. (F, Sp, Su)
CH E	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

CH E	4153	Process Dynamics and Control	Prerequisite: 4473. Formulation of first-order models for storage tanks, chemical reactors and heated, stirred tanks; transient and steady-state process dynamics; three-mode control of unit operations; higher-order systems and counter-current operations; analog simulation and digital control of chemical processes. (F)
CH E	4163	Catalysis	(Slashlisted with 5163) Prerequisite: CH E 4473. Physical characterization of heterogeneous catalysts; catalytic activity of metals, semiconductors, solid acids, and shape-selective materials. Theories of catalytic activity, catalytic reactors, basics of catalyst surface characterization and activity measurement. No student may earn credit for both 4163 and 5163. (Irreg.)
CH E	4253	Process Design & Safety	Prerequisite: CH E 3333, CH E 4473. Processes and process equipment design; technical design of units combined into plants. (F)
CH E	4262	Chemical Engineering Design Laboratory	Prerequisite: CH E 3432 and CH E 4253 or concurrent enrollment in CH E 4253. Experimental techniques for the acquisition of pilot plant data, using unit operations equipment and reactors for use in process design. Laboratory. (F)
CH E	4273	Advanced Process Design	Prerequisite: CH E 3333, CH E 4253, CH E 4262, CH E 4473, CH E 4153. Process and process equipment design, complete design of process plants including complete flow sheets, estimated plant costs, costs of process development, economics of investment. (Sp) [V]
CH E	4473	Kinetics	Prerequisite: 3473, 3723, Mathematics 3113. Fundamentals of rates, homogeneous isothermal reactions, non-isothermal reactions, reactors and design, heterogeneous reactions, fixed and fluidized bed reactors, experimental data reduction, non-ideal flow reaction systems. (Sp)
CH E	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CH E	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CH E	4980	Senior Research	1 to 4 hours. Prerequisite: senior standing, permission. Selected students work with individual faculty members on research problems. Laboratory (F, Sp, Su)
CH E	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CH E	5163	Catalysis (Slashlisted with 4163)	Prerequisite: CH E 4473. Physical characterization of heterogeneous catalysts; catalytic activity of metals, semiconductors, solid acids, and shape-selective materials. Theories of catalytic activity, catalytic reactors, basics of catalyst surface characterization and activity measurement. No student may earn credit for both 4163 and 5163. (Irreg.)
CH E	5183	Graduate Transport Phenomena	Prerequisite: 3123. Fundamentals of the theory of transport process; heat, mass, momentum transfer combined with chemical reactions, derivation of different equations to describe processes and process units, analytical and numerical solutions of systems of describing equations. (F)
CH E	5203	Bioengineering Principles	(Crosslisted with AME 5203) Prerequisite: Mathematics 3113 and Physics 2524. Principles of bioengineering for the areas of the biomechanics of solids and fluids, mass transfer, biomaterials, electrical networks, imaging, and ionizing radiation as they apply to the human body. (F)
CH E	5243	Biochemical Engineering	Prerequisite: 3123 or permission. Current bioprocesses for reaction and separation with emphasis on fundamental principles of chemical engineering, biochemistry and microbiology. (Irreg.)

CH E	5293	Transport in Biological Systems	(Crosslisted with AME 5293) Prerequisite: 3123 or permission of instructor. Theoretical and practical aspects of transport phenomena in living organisms and biomedical technologies. Applications include hemorheology, drug delivery, extracorporeal circulation, and artificial organs. (Irreg.)
CH E	5373	Tissue Engineering	Prerequisite: graduate standing or permission of instructor. Examines the background and recent advances in the science of combining multiple cell types with an appropriate support to provide a construct that can replace or support damaged tissue. (Irreg.)
CH E	5453	Polymer Science	(Crosslisted with CHEM 5453) Prerequisite: graduate standing or permission. Nomenclature, synthesis, structure and properties of high polymers, survey of production, processing and uses of commercial polymeric materials. (Sp)
CH E	5463	Polymer Processing	Prerequisite: senior or graduate standing. The theory and practice of the production of finished polymer shapes (tubes, sheets, fibers, bottles, etc.) from polymeric raw materials. (Alt. F)
CH E	5480	Seminar In Selected Topics In Chemical Engineering	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Seminar course in specialized topics in chemical engineering. (Irreg.)
CH E	5513	Surface Characterization	Prerequisite: graduate standing or permission of instructor. Characterization of surfaces by (i) modern methods of instrumental analysis including diffraction, microscopic techniques, electron and ion spectroscopies and by (ii) absorption methods including physi- and chemisorption, combined with calorimetry, spectroscopy and temperature-programmed experiments. (Irreg.)
CH E	5523	Advanced Mathematical Methods in Science and Engineering	(Crosslisted with METR 5523) Prerequisite: graduate standing, CH E 3113 and MATH 2443 or MATH 2934. Scale and vector field theory. Ordinary and partial differential equations. Matrix algebra. Complex analysis. (F)
CH E	5563	Properties and Applications of Porous Materials	Prerequisite: graduate standing or permission of instructor. Introduces the structure-properties relationships of several porous media (e.g. carbon nanotubes, zeolites, xerogels, etc.) with the intent of surveying some of the most important applications for each material. Includes discussion as to how experimental and theoretical tools are currently employed to investigate synthesis and properties of porous materials. (Irreg.)
CH E	5643	Natural Gas Utilization	Prerequisite: graduate standing or permission of instructor. Covers the uses of natural gas for combustion, power, LNG, gas conversion to chemicals and fuels, and gas transportation. (Alt. F)
CH E	5673	Colloid and Surface Science	(Crosslisted with CEES 5673) Prerequisite: graduate standing or permission of instructor. Capillarity, surface thermodynamics, adsorption from vapor and liquid phases, contact angles, micelle formation, solubilization, emulsions and foams. Applications to be discussed include detergency, enhanced oil recovery and adsorption for pollution control. (Irreg.)
CH E	5693	Cellular Aspects in Tissue Regeneration	Prerequisite: graduate standing or permission of instruct. Introduce novel technological advancements utilizing cells in tissue regeneration. Issues covered in class include adult and embryonic stem cells, cell differentiation, cell culture, transplantation of engineered tissues and cells, ethical and FDA considerations. (Irreg.)
CH E	5703	Biology for Engineers	Prerequisite: graduate standing or permission of instructor. Provides engineering students with an understanding of key biological concepts, where the interface between biology and engineering is broadened. Introduces engineers to the biological science by an integrated approach. (Irreg.)
CH E	5723	Biosensors	Prerequisite: graduate standing or permission of instructor. Introduction to the fundamental principles of biosensors within the medical field. Topics covered include electrochemical sensing potentiometric and amperometric biosensors, fiberoptic biosensors, immobilization of biorecognition molecules (enzymes, antibodies, receptor proteins), semiconductor electrodes and ion-selective electrodes. (Irreg.)

CH E	5823	Advanced Numerical Methods	Prerequisite: CH E 3723 or equivalent and CH E 2002 or other introductory programming course or Permission of the Instructor or Graduate Standing. Students will learn numerical techniques not normally covered in undergraduate numerical methods courses, such as Rhomberg Integration, Chebyshev interpolation, and automatic step-size adjustment for numerical integration. Students will improve their proficiency in formulating the numerical solution to a mathematical problem using Excel with Visual Basic (VB). Students will develop a self-directed project involving numerical solution of a significant problem of interest to them personally or in their research. (Irreg.)
CH E	5843	Advanced Chemical Engineering Thermodynamics	Prerequisite: 3473 or permission. Advanced thermodynamics as applied to engineering problems and design. (F)
CH E	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
CH E	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CH E	5971	Seminar in Chemical Engineering Research	May be repeated; maximum credit four hours for the master's degree, 10 hours for the doctoral degree. Speakers from academia and industry elaborate on methods and results from research in their areas of expertise to provide the student with an appreciation of the problems of current interest in chemical engineering. (F, Sp)
CH E	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. Laboratory (F, Sp, Su)
CH E	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CH E	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CH E	6723	Advanced Kinetics and Reaction Engineering	Prerequisite: 4473 or graduate standing. Understanding and anaylsis of complex kinetics and reactor systems: free radical and cracking reactions, polymerization, biokinetics and catalytic kinetics with mass heat transfer limitations. Advanced reactor systems such as a catalytic fixed bed reactors in one- and two-dimensions, equilibrium limited reaction systems, fluidized and trickle bed reactors, etc. are considered. (F)
CH E	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
CH E	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
CH E	6980	Research for Doctoral Dissertation	Laboratory (F, Sp, Su)
CH E	6990	Special Chemical Engineering Problems	1 to 2 Hours. Prerequisite: permission. May be repeated; maximum credit four hours. Special research problems are pursued by the students either as individuals or as a group under staff direction. (F, Sp, Su)
CHEM	1315	General Chemistry	Prerequisite: Mathematics 1503 or 1643, or math ACT equal to or greater than 23. First of a two-semester sequence in general chemistry. Topics covered: basic measurement, gas laws and changes in state, stoichiometry, atomic theory, electron configuration, periodicity, bonding, molecular structure and thermochemistry. Laboratory (F, Sp, Su) [II-LAB]

CHEM 1415	General Chemistry (Continued)	Prerequisite: 1315 with a minimum grade of C or a satisfactory score on the chemistry placement examination. Topics covered include: nature of solutions, equilibrium, thermodynamics, acid and base properties, kinetics and electrochemistry. Laboratory (F, Sp, Su) [II-LAB]
CHEM 1425	General Chemistry for Majors	Prerequisite: chemistry major, three years of high school math, high school chemistry, permission of instructor. Designed for chemistry majors well prepared in high school chemistry and math. Laboratory (F) [II-LAB]
CHEM 1613	General Chemistry for Non-Science Majors	Prerequisite: Math 0123. Content includes introduction, basic concepts, chemical bonds/names/properties, chemical equations/reactions, acids and bases, nuclear chemistry, organic chemistry, food chemistry, and chemical toxicology. Students may not earn credit for both 1613 and 1315 or 1614. (F, Sp) [II-NL]
CHEM 1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CHEM 2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
CHEM 3005	Quantitative Analysis	Prerequisite: CHEM 1415 or CHEM 1425 or equivalent. Analysis by quantitative procedures. Laboratory (F, Sp)
CHEM 3033	Chemistry in Art	Prerequisite: ENGL 1213 or EXPO 1213 or equivalent. The major objectives of the new course are to provide an understanding of fundamental scientific principles within an art context and to enable the student to comprehend and to communicate their understanding of the "stuff of art." A particular emphasis will be placed on understanding materials used during the Italian Renaissance. (Irreg.) [II-NL]
CHEM 3053	Organic Chemistry I: Biological Emphasis	Prerequisite: CHEM 1415 or CHEM 1425. Intended for life science majors. First course in a two-semester sequence (3053 and 3153). This course will cover the concepts of organic structure, nomenclature, and reactivity with an emphasis on biological applications. (F, Sp, Su)
CHEM 3064	Organic Chemistry I	Prerequisites: CHEM 1415 or CHEM 1425. Intended for chemistry and biochemistry majors. First course in a two-semester sequence (3064 and 3164). This course will cover the concepts of organic structure, nomenclature, reactivity, and synthesis. The laboratory will use selected experiments to develop the fundamental techniques used in organic research including utilization of spectroscopy and to demonstrate the application of the scientific approach to laboratory work. Laboratory (F)
CHEM 3152	Organic Chemistry Laboratory: Biological Emphasis	Prerequisite: CHEM 3053 or concurrent enrollment. Intended for life science majors. Laboratory course designed to accompany CHEM 3053 and CHEM 3153. Selected experiments designed to illustrate the fundamental techniques used in organic chemistry, to develop familiarity with the properties of organic compounds and to introduce analytical techniques including spectroscopy. (F, Sp, Su)
CHEM 3153	Organic Chemistry II: Biological Emphasis	Prerequisite: CHEM 3053 with a grade of C or better. Intended for life science majors. Second course in a two-semester sequence (3053 and 3153). This course will cover the concepts of organic chemical reactivity with an emphasis on carbohydrates, lipids, and proteins. (F, Sp, Su)
CHEM 3164	Organic Chemistry II	Prerequisite: CHEM 3064, or both CHEM 3053 and CHEM 3152; with a grade of C or better. Intended for chemistry and biochemistry majors. Second course in a two-semester sequence (3064 and 3164). This course will continue the development of organic chemical reactivity, with an emphasis on synthesis, polymers, and biomolecules. The laboratory will use selected experiments to continue the development of techniques used in organic research with an emphasis on synthesis. Laboratory (Sp)

CHEM	3421	Physical Chemistry Laboratory	Prerequisite: 3423 or concurrent enrollment. Physiochemical measurements and calculations. (F, Sp, Su)
CHEM	3423	Physical Chemistry I	Prerequisite: CHEM 1415 or CHEM 1425; MATH 2423 or MATH 2924 or concurrent enrollment. States of matter, chemical thermodynamics, equilibria, etc. (F, Sp, Su)
CHEM	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CHEM	3451	Basic Physical Chemistry Laboratory	Prerequisite: 3453 or concurrent enrollment. Laboratory application of physical chemical principles and techniques. (F, Sp)
CHEM	3453	Basic Physical Chemistry	Prerequisite: 1415 or 1425; Mathematics 2423; Physics 2524 or 2424. The application of physical chemical principles and methods. (F, Sp)
CHEM	3521	Physical Chemistry Laboratory	Prerequisite: CHEM 3523 or concurrent enrollment and CHEM 3421 with a grade of C or better. To perform experiments which illustrate important principles in physical chemistry. (F, Sp, Su)
CHEM	3523	Physical Chemistry II	Prerequisite: 3423 with a grade of "C" or above. Continuation of 3423. Kinetics, electrochemistry, atomic and molecular states of matter, etc. (F, Sp)
CHEM	3653	Introduction to Biochemistry	Prerequisite: CHEM 3013, CHEM 3053, or CHEM 3064. Chemistry of proteins, carbohydrates, lipids, and nucleic acids; enzyme kinetics; biochemical energetics; intermediary metabolism; regulatory processes. (F)
CHEM	3753	Introduction to Biochemical Methods	Prerequisite: 3653 or concurrent enrollment. A survey of current and routinely used methods in biochemistry. Students attend lecture twice weekly and a three-hour lab per week. Laboratory (Sp)
CHEM	3960	Honors Reading	1 to 3 hours. Prerequisite: permission of instructor and permission of Honors College. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
CHEM	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. The projects covered in this course will vary. The content will deal with concepts not usually presented in regular coursework. (Irreg.)
CHEM	3980	Honors Research	1 to 3 hours. Prerequisite: permission of instructor and permission of Honors College. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
CHEM	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
CHEM	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CHEM	4023	Instrumental Methods of Chemical Analysis	Prerequisite: CHEM 3005. Introduction to instrumental methods of analysis, with emphasis upon electrometric and spectroscopic techniques and instruments. Includes sampling procedures, requirements of reagents and standards, and evaluation of errors. (F)
CHEM	4033	Instrumental Methods of Chemical Analysis Laboratory	Prerequisite: 4023. Selected experiments illustrating the principles developed in 4023. Two four and a half hour laboratories per week. Laboratory (Sp)

CHEM 4232	Laboratory Glassblowing	(Crosslisted with EPHY 4232) Prerequisite: permission. Discussion of materials and techniques with demonstrations of procedures. Exercises will be performed in the laboratory with a special emphasis upon the different types of seals required in the construction of glass apparatus. One hour of lecture and three hours of laboratory will be scheduled each week. (F, Sp)
CHEM 4333	Advanced Inorganic Chemistry-Periodic System	Prerequisite: CHEM 3053 or CHEM 3064. A survey of all elements and important compounds based on atomic structure and position in the Periodic System; effect of atomic size, ionic size and charge on the properties of elements. Inorganic nomenclature. (F)
CHEM 4444	Advanced Synthesis and Spectral Characterization	Prerequisite: CHEM 3164, or both CHEM 3152 and CHEM 3153. Lectures cover spectroscopic analysis, thermodynamics of synthesis and fundamentals of advanced techniques, and hands-on spectroscopic identification of reaction products. Two lecture and six laboratory hours per week. Laboratory (Sp)
CHEM 4503	Applied Oceanography	(Crosslisted with G E 4503) Prerequisite: Geology 1124 or 2233, permission of instructor. Interdisciplinary approach in physical, chemical and biological oceanography, whereby ocean processes affect erosion, deposition, development of coastlines and ocean bottoms, and dictate construction practices. Economic factors of life forms in each zone of ocean; controlling chemical aspects of water depths, temperatures, salinities, oxygen content in the ecological system. (Irreg.)
CHEM 4753	Principles of Biochemistry I	Prerequisite: CHEM 3153 or CHEM 3164, CHEM 3423 or CHEM 3453, CHEM 3653 or equivalent. The first semester of a two-semester sequence covering the fundamental principles of protein structure and function, enzymology, carbohydrate and lipid metabolism, biochemical energetics, membranes, nucleic acid and protein metabolism, information transfer and the genetic code, and the interdependence of biochemical pathways. (Sp)
CHEM 4913	Senior Thesis	Prerequisite: permission of instructor and permission of department. Capstone Course. Research project, theoretical or experimental, to be arranged with individual faculty member, leading to a senior thesis. Each student will present an oral report in a lecture presentation or poster format to an audience of students and faculty. Laboratory (F, Sp) [V]
CHEM 4923	Senior Project	Prerequisite: permission of instructor and permission of department. Capstone Course. Topics of current interest and importance in chemistry or biochemistry, requiring indepth reading or individual laboratory work, extensive literature search, and report writing. Laboratory (F, Sp) [V]
CHEM 4933	Current Topics in Biochemistry	Prerequisite: CHEM 3653, CHEM 3753, and one semester of physical chemistry with lab. Capstone course for biochemistry majors. Topics of current interest in biochemistry. Students will attend lectures and will be involved in literature search, group discussion, oral presentation, laboratory work, and report writing. Laboratory (Sp) [V]
CHEM 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CHEM 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CHEM 4980	Undergraduate Research	Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Provides an opportunity for student to work on a special project under the supervision of faculty in the student's field. (F, Sp, Su)
CHEM 4990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)

CHEM 5001	Practicum in Chemical Education	Prerequisite: graduate standing in the Department of Chemistry and Biochemistry, or permission of instructor. Explores the pedagogical issues associated with teaching chemistry at the undergraduate level. Includes: administration of instruction, student and teacher behavior, goals of instruction, instructional strategies, student thinking processes, problem solving and grading. (F)
CHEM 5011	Fundamentals I	Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. Designed to provide all students entering the graduate program with the skills required to succeed in the Ph.D. program. (F)
CHEM 5021	Fundamentals II	Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. Designed to provide all first-year graduate students with the skills required to succeed in the Ph.D. program. (Sp)
CHEM 5080	Laboratory Rotations	1 to 2 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry. May be repeated; maximum credit 3 hours. Seven-week rotations per credit hour in research laboratories, normally during the first semester of graduate school. (F, Sp)
CHEM 5090	Departmental Colloquium	Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. Enrollment is expected during each semester of graduate study. Oral presentations on recent developments in chemistry and biochemistry by invited speakers, faculty, advanced graduate students, and postdoctoral fellows. (F, Sp)
CHEM 5100	Instrumental Methods of Analysis	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for the Analytical Program. Topics will provide an overview of various instrumental methods employed for qualitative and quantitative chemical analysis. (F, Sp)
CHEM 5110	Spectroscopic Chemical Analysis	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for the Analytical Program. Theory and operation of instruments employed for optical spectroscopy. (F, Sp)
CHEM 5120	Separation Methods	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for the Analytical Program. Basic principles underlying methods employed for chemical separations with emphasis on chromatographic methods. (F, Sp)
CHEM 5160	Special Topics in Analytical Chemistry: Instrumentation	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5100, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics will focus on instrumentation and applications of selected chemical analysis techniques. (Irreg.)
CHEM 5170	Special Topics in Analytical Chemistry: Methodology	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5100, or permission of the instructor. May be repeated with change in subject matter for a maximum of 12 credit hours. Selected topics will focus on details of specific methodologies employed for chemical analysis. (Irreg)
CHEM 5180	Practicum in Analytical Chemistry	1 to 2 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5100, or permission of the instructor. May be repeated with change of content; maximum credit four hours. Study and training in practical methods relevant to analytical chemistry. (F, Sp)

CHEM	5191	Seminar in Analytical Chemistry	Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated; maximum credit 12 hours. Oral presentations and discussions of topics relevant to the current state-of-the-art in analytical chemistry research. (F, Sp)
CHEM	5200	Principles of Biochemistry	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for graduate Biochemistry Program. Fundamental principles of biomolecules, protein structure and function, enzymology, carbohydrate and lipid metabolism, nucleic acid and protein metabolism, membranes and signal transduction, expression and transmission of genetic information, and the interdependence of biochemical pathways. (F, Sp)
CHEM	5210	Molecular Biology	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for graduate Biochemistry Program. Characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of genetic engineering/recombinant DNA technology. (F, Sp)
CHEM	5240	Biochemical and Biophysical Methods	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5200, or permission of the instructor. Basic principles and practical applications of the analytical and preparative techniques used in current biochemical and biophysical research. (F, Sp)
CHEM	5260	Special Topics in Biochemistry I	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5240, or permission of the instructor. May be repeated with change of content; maximum credit 12 hours. Selected contemporary topics that investigate the frontiers of knowledge in biochemistry. (Irreg.)
CHEM	5270	Special Topics in Biochemistry II	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5240, or permission of the instructor. May be repeated with change of content; maximum credit 12 hours. Selected contemporary topics that focus on applications of biochemical knowledge. (Irreg.)
CHEM	5280	Practicum in Biochemistry	1 to 2 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5240, or permission of the instructor. May be repeated with change of content; maximum credit four hours. Study and training in practical methods relevant to biochemistry. (F, Sp)
CHEM	5291	Seminar in Biochemistry	Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated; maximum credit 12 hours. Research seminar in which graduate students and invited speakers present and discuss current advances in biochemical research. (F, Sp)
CHEM	5300	Intermediate Inorganic Chemistry	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Fundamental concepts and an introduction to modern inorganic chemistry. Topics may include: atomic structure and relation to properties of the elements, bonding theory, coordination and bioinorganic compounds, organometallic compounds and catalysis, symmetry and applications to spectroscopy, magnetic materials. (F, Sp)

CHEM 5330	Advanced Inorganic Chemistry	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5300, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. For students majoring in inorganic chemistry. Selected topics for this course may include: physical and experimental methods in inorganic chemistry, modern spectroscopic methods in inorganic chemistry, bioinorganic and organometallic reactions, advanced kinetics and inorganic reaction mechanisms, catalysis, and advanced experimental design for mechanistic evaluation. (F, Sp)
CHEM 5360	Frontiers in Inorganic Chemistry	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5300, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics concerning the theory, synthesis, reactivity and applications of inorganic and coordination compounds. Topics may include: computational chemistry, electrochemistry, metals in biology and medicine, industrial and biological main group chemistry, environmental chemistry, applications of inorganic compounds in alternative energy (nuclear cycle, hydrogen cycle, photovoltaics), and inorganic materials science (metal-organic frameworks, metallopolymers, inorganic polymers). (F, Sp)
CHEM 5380	Practicum in Inorganic Chemistry	1 to 2 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5300, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Study and training in practical methods relevant to inorganic chemistry. (F, Sp)
CHEM 5391	Seminar in Inorganic Chemistry	Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5300, or permission of instructor. May be repeated; maximum credit 12 hours. Graduate student research seminar and related activities, with a selection of topics related to research preparation and research outcomes. (F, Sp)
CHEM 5400	Organic Chemistry I: Mechanisms and Reactivity	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for graduate Program of Study in Organic Chemistry. Introduction to the study of organic reaction mechanisms and reactivity. (F, Sp)
CHEM 5430	Organic Chemistry II: Reactions and Synthesis	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5400, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Core course for graduate Program of Study in Organic Chemistry. Detailed treatment of reactions used in organic synthesis and the design of synthetic strategy. (F, Sp)
CHEM 5450	Structural Characterization of Organic Compounds	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5400, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Application of current methods to problems of structure determination in organic chemistry. (F, Sp)
CHEM 5460	Special Topics in Chemical Reactivity and Physical Organic Chemistry	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5400, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics in the study and application of specialized chemical reaction methods. Topics may include: theoretical or computational aspects of organic chemistry; advanced study of reaction mechanisms; study and application of novel chemical methods such as photochemical methods, organometallic chemistry, chemical catalysis, reagent design and application. (Irreg.)

CHEM 5470	Special Topics in Bioorganic and Specialized Organic Compounds	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5400, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics in the study and preparation of specialized classes of organic compounds including biologically related aspects of organic chemistry. Topics may include: specialized synthesis and design strategies; medicinal chemistry; study and application of biosynthetic methods; advanced synthetic design for targeted organic compounds; study of specialized classes of compounds including natural products, medicinal compounds, bioactive compounds, polymers, functional materials and devices. (Irreg.)
CHEM 5480	Practicum in Organic Chemistry	1 to 2 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5400, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Study and training in practical methods relevant to organic chemistry. Topics may include: use of modern instrumental methods for organic structural determination; acquisition and interpretation of spectral data for structural determination; optimization of measurement techniques; specialized preparative laboratory methods; specialized methods for separation and analysis of organic compounds. (F, Sp)
CHEM 5491	Seminar in Organic Chemistry	Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5400, or permission of instructor. May be repeated; maximum credit 12 hours. Research and literature seminar for presenting and discussing a selection of topics from current literature or research in organic chemistry. (F, Sp)
CHEM 5500	Topics in Quantum Chemistry	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 6 hours. Review of classical mechanics; introduction to wave mechanics and applications to atoms and molecules. This is a core course for graduate majors. (F, Sp)
CHEM 5510	Topics in Molecular Symmetry	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 6 hours. Development of the concept of symmetry elements will be followed by the development of point group theory and applications to molecular systems. (F, Sp)
CHEM 5520	Topics in Physical Chemistry Kinetics	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry or permission of instructor. May be repeated with change of content; maximum credit 6 hours. Empirical treatment of reaction rate data, collision and transition state theories of homogeneous and heterogeneous reactions, mechanisms of chemical reactions. (F, Sp)
CHEM 5530	Topics in Statistical Thermodynamics	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5500 or concurrent enrollment, or permission of the instructor. May be repeated with change of content; maximum credit 6 hours. Chemical thermodynamics, statistical thermodynamics, chemical kinetics, applications of quantum chemistry, structure of matter. This is a core course for graduate majors. (F, Sp)
CHEM 5550	Topics in Colloid and Surface Science	1 to 3 hours. Prerequisite: graduate standing in the Department of Chemistry and Biochemistry and CHEM 5500 or CHEM 5520, or permission of instructor. May be repeated with change of content; maximum credit 6 hours. Selected topics related to capillarity, surface physical chemistry, or phenomena in colloidal systems. (F, Sp)

CHEM 5560	Topics in Nanotechnology and Bionanotechnology	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5500 or CHEM 5520, or permission of instructor. Design and synthesis of nanomaterials. Characterization of nanomaterials using physical and chemical methods. Properties of nanomaterials. Imaging nanomaterials at atomic, molecular and nano scales. New devices designed and fabricated using nanomaterials. Application of nanomaterials to life sciences. Exploitation of biochemistry and biology in developing areas of nanotechnology. (F, Sp)
CHEM 5570	Selected Topics in Physical Chemistry	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5500 or CHEM 5520, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Studies in special areas of physical chemistry not covered in the regular course curriculum. (F, Sp)
CHEM 5580	Practicum in Physical Chemistry	1 to 2 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5500 or CHEM 5520, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Study and training in practical methods relevant to physical chemistry. (F, Sp)
CHEM 5591	Seminar in Physical Chemistry	Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5500 or CHEM 5520, or permission of instructor. May be repeated; maximum credit 12 hours. Participation is required of all graduate students majoring in physical chemistry. Research seminar, with a selection of topics from current or projected research at the University of Oklahoma. Discussion of contemporary topics in physical chemistry and related disciplines. (F, Sp)
CHEM 5730	Macromolecular Crystallography	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5210, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Principles of diffraction, symmetry, reciprocal space, data collection, data reduction and absorption corrections; methods for structure solution and refinement; and interpretation of data and limitations thereof. (F, Sp)
CHEM 5740	Biological NMR Spectroscopy	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5210, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Nuclear magnetic resonance (NMR) spectroscopy as a tool to address biological questions regarding macromolecular structure and dynamics in solution and/or in the solid state. Theory of NMR, chemical shifts and coupling, one-dimensional and multidimensional NMR methods, ligand-binding effects on NMR spectra. (F, Sp)
CHEM 5750	Macromolecular Structure and Function	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5200, or permission of instructor. May be repeated with change of content; maximum credit 4 hours. Principles of protein architecture and levels of organization, nucleic acid structure, functional roles of intermolecular interactions, structure-function in protein and nucleic acid complexes. (F, Sp)
CHEM 5760	Special Topics in Structural Biology	1 to 3 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5200, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Content may include the structural basis of signal transduction, structural dynamics, computational methods for biological macromolecules, microscopy, structural basis for gene regulation, and structure-guided drug discovery and design. (Irreg.)

CHEM	5780	Practicum in Structural Biology	1 to 2 hours. Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5730 or CHEM 5740, or permission of instructor. May be repeated; maximum credit four hours. The X-ray practicum (with CHEM 5730 as prerequisite) will include hands-on crystallization, advanced checkout and operation of X-ray diffractometers, data collection using research samples, structure solution and refinement, and evaluation of crystal structure quality. The NMR practicum (with CHEM 5740 as prerequisite) will include hands-on sample preparation of a biological macromolecule on a research sample, advanced checkout and operation of NMR spectrometers, structure determination and dynamics, and evaluation of structure quality. (F, Sp)
CHEM	5791	Seminar in Structural Biology	Prerequisite: Graduate standing in the Department of Chemistry and Biochemistry and CHEM 5200, or permission of instructor. May be repeated; maximum credit 12 hours. Research seminar in which graduate students and invited speakers present and discuss current advances in structural biology research. (F, Sp)
CHEM	5960	Directed Readings in Chemistry	1 to 2 hours. Prerequisite: permission. May be repeated with change of content; maximum credit six hours. Selected from topics of current interest in any of the areas of chemistry. (F, Sp, Su)
CHEM	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CHEM	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
CHEM	5990	Independent Studies	1 to 3 hours. May be repeated with change of subject matter; maximum credit nine hours. Staff members in the student's field of interest supervise research and/or library studies which closes gaps in student's training or builds on this training in specialized areas. (F, Sp, Su)
CHEM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CHEM	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
CHEM	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
CHEM	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CHER	1715	Beginning Cherokee	Introduction to the structure of the Cherokee language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
CHER	1725	Beginning Cherokee-Continued	Prerequisite: 1715. A continuation of the study of the structure of the Cherokee language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community are emphasized. (Sp) [I-FL]
CHER	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CHER	2733	Intermediate Cherokee	Prerequisite: 1723. A systematic review of the structure of the Cherokee language. Syntactic control and vocabulary expansion are emphasized. Conversational practice and traditional oral texts are used to develop proficiency. (F)

CHER	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CHER	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CHER	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CHEY	1713	Beginning Cheyenne	Beginning Cheyenne. Introduction To The Structure Of The Cheyenne Language With Special Attention To Its Phonology, Morphology, And Syntax. Conversational Practice, Vocabulary-Building, And The History And Culture Of The Native Speech Community Are Also Emphasized. (F, Sp) [I-FL]
CHEY	1723	Beginning Cheyenne-Continued	Beginning Cheyenne-Continued. Prerequisite: 1713. A Continuation Of The Study Of The Structure Of The Cheyenne Language With Special Attention To Its Phonology, Morphology, And Syntax. Conversational Practice, Vocabulary-Building, And The History And Culture Of The Native Speech Community Are Emphasized. (F, Sp) [I-FL]
CHEY	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CHEY	2733	Intermediate Cheyenne	Intermediate Cheyenne. Prerequisite: 1723. A Systematic Review Of The Structure Of The Cheyenne Language. Syntactic Control And Vocabulary Expansion Are Emphasized. Conversational Practice And Traditional Oral Texts Are Used To Develop Proficiency. (F, Sp)
CHEY	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CHEY	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CHEY	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CHIN	1115	Beginning Chinese	An elementary course in understanding, speaking, reading and writing Mandarin Chinese. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F) [I-FL]
CHIN	1225	Beginning Chinese (Continued)	Prerequisite: 1115. Continued training in understanding, speaking, reading and writing elementary Mandarin Chinese. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (Sp) [I-FL]
CHIN	1999	Lower Division Transfer Work	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CHIN	2113	Intermediate Chinese	Prerequisite: 1225. Combination of basic Chinese grammar and vocabulary and their application to spoken and written Mandarin Chinese. (F)
CHIN	2223	Intermediate Chinese (Continued)	Prerequisite: 2113. Continued training in the use of grammar and vocabulary in both spoken and written Mandarin Chinese. (Sp)

CHIN	2323	Intermediate Listening and Speaking	Prerequisite: permission of department. Serves as the prerequisite for Chinese 3113 (Advanced Chinese I.) Assignments and class activities include immersion in daily family-type communication, conversations and functioning in daily business activities, travel and functioning at the intermediate proficiency level. Upon completion, students will have developed the languages skills that will allow them to function with most daily situations in a Chinese-speaking country. (F, Sp)
CHIN	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
CHIN	3113	Advanced Chinese I	Prerequisite: CHIN 2223 and CHIN 2323 or equivalent. An integrated advanced course designed to improve skills in the four aspects of learning Mandarin Chinese as a foreign language: listening, speaking, reading, and writing. Emphasis is on the phonetics of standard Mandarin Chinese and conversation on topics in daily life. (F)
CHIN	3223	Advanced Chinese II	Prerequisite: 3113 or equivalent. Continue to improve skills in the four aspects of learning Mandarin Chinese as a foreign language: listening, speaking, reading, and writing. Emphasis on composition and advanced-level reading comprehension. (Sp
CHIN	3323	Advanced Listening and Speaking	Prerequisite: 2223. Develops listening and speaking skills of students who have taken intermediate Chinese. Conversations are presented in authentic and naturally-paced language. Lessons are constructed to support existing knowledge and develop mastery of new vocabulary, grammatical patterns, and sociocultural formalities in ways that are compatible with genuine communication. (F)
CHIN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CHIN	3623	Business Chinese	Prerequisite: permission of department. Designed for students who have completed at least two years basic Chinese language learning and have an interest in business-related communications with Chinese- speaking people. Aims to prepare students with the language skills and cultural knowledge for a globalized economy through learning the vocabulary, usages, customs and conventions required for business activities with China. (F)
CHIN	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
CHIN	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
CHIN	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
CHIN	3990	Independent Study	1 to 3 hours. Prerequisite: two courses in Chinese; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp)

CHIN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CHIN	4113	Advanced Reading and Writing	Prerequisite: 3223. Advanced reading and comprehension of authentic Chinese texts. Development of good writing skills with correct usage of grammar. (Sp)
CHIN	4533	Topics in Chinese Media	Prerequisite: CHIN 3113 or equivalent. Intended for advanced students to enhance their reading/listening proficiency in modern Chinese language and further develop their self-learning skills. Students will be immersed in a simulacrum of Chinese media by reading Chinese news reports; watching Chinese news videos, short films, and TV programs; and using the Chinese encyclopedia. (F)
CHIN	4543	Study of Classical Chinese and Calligraphy	Prerequisite: CHIN 3223. Major aspects covered include 1) grammatical structures of classical Chinese compared to modern Chinese; 2) lexical and semantic features of most commonly used words and phrases; 3) reading and understanding of simple texts from the classics; 4) cultural perspectives to appreciate Chinese heritage texts, paintings and calligraphy. (F)
CHIN	4643	The Study Of Chinese Characters	Prerequisite: 3223. Major topics of this course are 1) the world's writing systems in comparison with the word writing system of Chinese; 2) the evolution of Chinese characters; 3) the structures of and rules in writing Chinese characters; 4) the pinyin phonetic system for the pronunciation of Chinese characters; and 5) the reform and policy of Chinese characters. (Sp)
CHIN	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CHIN	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CHIN	4990	Independent Study	1 to 3 hours. Prerequisite: four courses in Chinese and general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
CHIN	4993	Senior Capstone for Chinese	Prerequisite: Senior standing or permission of instructor. Designed to serve as the senior capstone experience for the Chinese major. Students will study linguistic theory, technique, and methodology. Includes reading in critical analysis as preparation for writing assignments and final project to be written in Chinese. (F) [V]
CHIN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CHOC	1715	Beginning Choctaw	Introduction to the structure of the Choctaw language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
CHOC	1725	Beginning Choctaw-Continued	Prerequisite: 1715. A continuation of the study of the structure of the Choctaw language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community are emphasized. (Sp) [I-FL]
CHOC	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CHOC	2733	Intermediate Choctaw	Prerequisite: 1723. A systematic review of the structure of the Choctaw language. Syntactic control and vocabulary expansion are emphasized. Conversational practice and traditional oral texts are used to develop proficiency. (F)

CHOC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CHOC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CHOC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CL C	1113	Introduction to Classical Studies	Introduces students to the art, culture, history, literature, and philosophy of ancient Greek and Roman civilization. (F) [IV-WC]
CL C	1413	Word Power	Study of basic Latin and ancient Greek elements (bases, prefixes, suffixes) in order to analyze words in English and enlarge the student's vocabulary. (F, Sp)
CL C	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CL C	2213	Introduction to Classical Archaeology	Introductory survey of the archaeological discovery of the ancient civilizations of the Near and Middle East and the Mediterranean World, including the Mesopotamian, Egyptian, Hebrew, Roman, Minoan, Mycenaean, and Greek civilizations. Attention is given to principal sites for each civilization, their discovery, and the techniques and methodology of classical archaeology. (F, Sp) [IV-WC]
CL C	2383	Classical Mythology	Classical Mythology. Prerequisite: sophomore standing. Lectures, with assigned readings. The origin and development of Greek and Roman myths indispensable for the understanding of ancient and modern literature; with allusion to their influence on art and religion. (F, Sp, Su) [IV-WC]
CL C	2413	Medical Vocabulary	Prerequisite: sophomore standing. Designed to be of special use to students of the biological sciences. Study of basic Greek and Latin elements of medical terminology through the analysis of select vocabularies and word lists. (F, Sp, Su)
CL C	2603	Survey Of Ancient Greek Culture	Traces the development of the democratic ideal in Greece through the classical period. Aspects of culture such as literature, religion, art and architecture, education, science and technology, intellectual life and the role of women are emphasized. [IV-WC]
CL C	2613	Survey of Ancient Roman Culture	Examines the development and dissemination of Roman civilization in ancient times and its influence on the modern world. Aspects of Roman culture such as literature, law, religion, art and architecture, education, intellectual life, popular entertainment, and the role of women are emphasized. (Sp) [IV-WC]
CL C	2623	Civilization Ancient and Modern	Prerequisite: ENGL 1213 or EXPO 1213. What is specifically human about civilization? What is specifically ancient about Roman civilization, and how did life under Roman rule differ from life in the modern world? A range of interrelated themes in the material history of Homo sapiens are covered: family and sex, economy and technology, death, environment, and migration. For each topic, (1) evolutionary models, (2) comparative examples from early civilizations, (3) Roman society and history, and (4) comparative examples from modern civilization. (F) [IV:WC]
CL C	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

CL C	3013	Cinematic Representations of the Ancient World	Prerequisite: junior standing or permission of the instructor. Study of the way that the ancient Greeks and Romans are depicted in cinema. Cinematic representations will be studied in conjunction with the ancient sources upon which they are based and in the light of modern research. (Sp)
CL C	3023	Greek Literature in English Translation	Prerequisite: sophomore standing or permission of instructor. Readings in a selected genre (e.g., history, lyric poetry, philosophy, biography), with lectures on the history and development of greek literature. (Irreg.) [IV-WC]
CL C	3033	Latin Literature in English Translation	Prerequisite: sophomore standing. May be repeated; maximum credit six hours. readings in a selected genre (e.g. epic, drama, satire, lyric) with lectures on the history and development of latin literature. The Greek background to Latin literature and the Romans' influence on later works. [IV-WC]
CL C	3053	Origins of Christianity: Jesus to Augustine	Prerequisite: English 1213. A survey of early Christian history that aims to set the Christian scriptures in their cultural and political context. Canonical, non-canonical, Jewish, and pagan sources are read alongside one another in order to consider the interrelationships among various religious ideas in the Roman world. (F) [IV-WC]
CL C	3113	Ancient Epic Poetry in English Translation	Prerequisite: junior standing or permission of instructor. The epic poetry of Homer, Hesiod, Vergil and other Greek and Roman writers in its literary and historical context. The epic tradition in later European literature. (F) [IV-WC]
CL C	3123	Ancient Drama in English Translation	Prerequisite: junior standing or permission of the instructor. Lectures on the development of the ancient Greek and Roman drama. Lectures with readings and discussion from the works of Aeschulus, Sophocles, Euripides, Aristophanes, Plautus, Terence, and Seneca and from Aristole's poetics. The influence of ancient drama on European literature. (F) [IV-WC]
CL C	3133	Plato and the Platonic Tradition	A study of the major ideas in the central works of Plato and of their influence on the Neoplatonists. (Sp) [IV-WC]
CL C	3153	Vice and Virtue in Ancient Rome	Prerequisite: sophomore standing. The transformation of the character of ancient romans from the early Republican period through the Empire. Focus on changes in their value system brought about through the acquisition of an empire, intrusion of Greek ideas, results of specific historical events, and actions of specific individuals.
CL C	3163	Visions of Heaven and Hell: Virgil, Dante, and Milton	Prerequisite: sophomore standing. Focuses on Virgil's influence on Dante. Virgil celebrates, in both The Georgics and The Aeneid, the outcome of the struggle against external furor and passion and those elements within the individual. Dante, with Virgil as his spiritual guide in The Inferno, presents a series of spiritual exercises. (F, Sp) [IV-WC]
CL C	3173	Freedom in Greece	The ideas and institutions of liberty in Greece. Focus is on the Athenian democracy and the relationship between democracy and the art and literature of Athens. (F) [IV-WC]
CL C	3183	Hellas, the Civilization of Ancient Greece	Prerequisite: junior standing and permission of instructor. Hellas examines the human factor dominating western history, philosophy, literature and political science as Greek civilization chronologically evolves. Responsible behavior, balance and control are the lessons of all Greek literature, art, philosophy and social institutions. (Sp) [IV-WC]
CL C	3193	Freedom in Rome	Covers the ideas and institutions of liberty in Rome. Focus is on the balanced constitution of the Roman republic individual and the emergence of new forms and conceptions of liberty. These ideas are taken from within the framework of the intellectual, social, and political currents of the Roman Empire. (Sp) [IV-WC]
CL C	3213	Classical Art & Archaeology: Greek Art to the Death of Alexander	Prerequisite: sophomore standing. Lectures, occasionally illustrated and assigned readings. Survey of the architecture, sculpture, painting and minor arts in the Greek regions of the Eastern Mediterranean in the successive stages of their development; with analyses of dominant styles and detailed study of select masterpieces and monuments. (F) [IV-AF]

CL C	3223	Classical Art & Archaeology: Hellenistic Greek Art; Roman Art	(Crosslisted with A HI 3223) Prerequisite: sophomore standing. Continuation of 3213. Survey of Hellenistic art with particular attention to the individuality of style and diversity of matter. Early Etruscan and Roman art. The development of Roman art in native and assimilated forms; studies in domestic and national monuments. (Sp) [IV-AF]
CL C	3233	The Roman Forum and its Monuments	Focus on the excavation of the Roman Forum, the central part of ancient Rome. concentrate study on archaeological methodology, specific excavations, topography of Rome, and the cultural significance of Roman urban development on the ancient world.
CL C	3243	The Ancient City: Urban Development in the Mediterranean World	Prerequisite: permission of instructor. This course deals with the development of urban centers in the ancient Mediterranean world, principally Greek and Roman, from their origins to their highest level of architectural, administrative and cultural expressions. Attention is given to urban planning, city administration, maintenance of public facilities, protection and entertainment of the populace. (Su)
CL C	3253	Practicum in Mediterranean Archaeology	Prerequisite: permission of instructor. Introduces students to the methodology of Mediterranean archaeology through participation in excavating an ancient site. (Su)
CL C	3263	Seminar on Roman Provinces	Prerequisite: permission of instructor. Students research and report on different aspects, such as history, politics, and economics, of selected provinces of the Roman Empire. (F)
CL C	3313	Religions of Rome	Prerequisite: junior standing. This course survey the religions that flourished in ancient Rome, from its beginnings to the establishment of Christianity. Particular attention will be given to syncretism and the key role that it played in the evolution of religious life at Rome. (F) [IV-WC]
CL C	3403	Law and Justice	Prerequisite: junior standing or permission of the instructor. With Aristotle's politics as the principal guide, course follows development of justice throughout the Greco-Roman experience. (F) [IV-WC]
CL C	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CL C	3510	Selected Topics in Classical Culture	2 to 3 Hours. May be repeated; maximum credit nine Hours. A study of selected topics in the civilizations and cultures of the Romans, Greeks and Hebrews. (F, Sp, Su)
CL C	3613	Classical Influence on Modern Literature	Prerequisite: ENGL 1213 or EXPO 1213. May be repeated with change of content; maximum credit 6 hours. Identifies the continuing importance of the classical tradition in modern literature. (F, Sp, Su) [IV-WC]
CL C	3713	Women in Ancient Greece	Prerequisite: junior standing. Survey of the roles of women in ancient Greece from the Bronze Age through the Hellenistic Period. Primary and secondary sources are utilized to provide students with both a literary and historical perspective of women in this time frame. (Irreg.) [IV-WC]
CL C	3723	Women in Ancient Rome	Prerequisite: junior standing or permission of instructor. Survey of the roles of women from the founding to the fall of ancient Rome. Primary and secondary sources are utilized to provide students with both a literary and historical perspective of women in this time frame. (Irreg.) [IV-WC]
CL C	3960	Honors Reading	1 to 3 Hours. Prerequisite: admission to honors program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

CL C	3980	Honors Research	1 to 3 Hours. Prerequisite: admission to honors program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
CL C	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
CL C	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CL C	4503	Classical Languages Capstone	Prerequisite: senior standing in major. Students will work on an individual basis in conjunction with a member of the Classics faculty; and the student will write a senior paper on a topic to be chosen in consultation with the faculty member, using primary sources to demonstrate a comprehensive understanding of one of the major areas of Greco-Roman civilization. (Sp) [V]
CL C	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
CL C	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CL C	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
CL C	5990	Special Studies	1 to 3 Hours. Prerequisite: graduate standing. May be repeated; maximum credit six hours. Reading and research, arranged and directed in consultation with the instructor, in specified areas of classical civilization and culture. (F, Sp, Su)
CL C	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CLAR	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CLAR	2000	Freshman and/or Sophomore Secondary Clarinet	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CLAR	2020	Clarinet for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
CLAR	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CLAR	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

CLAR	4000	Junior and/or Senior Secondary Clarinet	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CLAR	4020	Clarinet for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
CLAR	5000	Master's-Level Secondary Clarinet	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CLAR	5010	Master's-Level Clarinet for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
CLAR	5020	Master's-Level Clarinet for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
CLAR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
CLAR	6000	Doctoral Secondary Clarinet	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
CLAR	6010	Doctoral Clarinet for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
CLAR	6020	Doctoral Clarinet for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
CLD	3233	Principles of Food Preparation	NULL
CNS	1112	Cultures of Collaborating, Creating and Constructing	Prerequisite: Construction Science major. Introduction to the foundations of the various planning, design, and construction disciplines. Focus on the collaborative process for creating and constructing the built environment. Histories of expertise areas such as planning, architecture, landscape architecture, interior design, construction science, engineering, and graphic environmental design will be explored and related to how these have evolved to their contemporary conditions. (F)
CNS	1113	Construction Industry: Impact on Society	Overview of the construction industry including the major participants, the job opportunities, the various delivery methods, and the construction process. (F)
CNS	1212	Computers in Construction	introductory course providing students with basic computer application knowledge. Familiarizes students with current applications of spreadsheet, 2D and 2D Cad software for use in the construction industry. (Sp)
CNS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
CNS	2713	Construction Materials and Methods	Prerequisite: 1212. Survey of materials, methods, and procedures used in a variety of building types. Students gain an understanding of the basis for choosing different materials and methods, how different building systems are installed, work sequencing, quality control and equipment selection in the building process. Sustainable high performance systems and products are explored. (F)

CNS	2714	Materials and Methods I	Prerequisite: CNS 1212. Focuses on materials and methods used to construct a commercial building through the exterior wall system and roof. Content includes field management basics, the submittal process, product and process sustainability, quality basics, inspections and building permitting, inspecting and basic commissioning. Building processes include mobilization, heavy earth moving and excavating equipment selection and use, concrete, steel, masonry and wood building frame and exterior wall construction and roof system types and installation. (F)
CNS	2812	Construction Fundamentals Lab	Prerequisite: CNS 1212, CNS 2714; corequisite: CNS 2813. Practical exercises reinforce concepts discussed in CNS 2714 and 2813 to improve students' understanding and ability to interpret construction drawings and specifications, use drawing and modeling techniques and understand actual installation of common materials and systems used in buildings. (Sp)
CNS	2813	Construction Documents and Quantity Surveying	Prerequisite: CNS 2714. Develops students' ability to understand and interpret the construction drawings and specifications commonly encountered in building construction. Reinforces visual communication skills through sketching and computer graphics to develop the ability to visualize a set of 2D drawings as a 3D building. Drawings, specifications, and sketching are used to learn basic material takeoff processes. (Sp)
CNS	2822	Materials and Methods II	Prerequisite: CNS 2714. Corequisite: CNS 2812 and CNS 2813. Focuses on materials and methods used to construct a building from the roofed frame to flooring installation. Content includes exterior cladding, finishes and waterproofing, exterior glazing systems, electrical, plumbing and mechanical system installation basics and above the ceiling installation, interior walls and finishes, interior doors and hardware, dropping ceilings and flooring. (Sp)
CNS	2823	Construction Management Fundamentals	The exploration of construction equipment, construction accounting, and ethics in the management of the day to day operations of a construction project as they relate to the manager's decision making process. (F)
CNS	2913	Construction Equipment and Methods	Prerequisite: 1212. Performance, relative cost, depreciation and use of equipment in construction. Class reports are required on construction equipment. Field trips are made to view and evaluate construction equipment. (Sp)
CNS	3103	Construction Surveying	Prerequisite: Construction Science major or special permission. The practical application of taping, differential, profile, trigonometric leveling, angle measurement, traversing, and other instrument layout techniques for vertical and horizontal construction project control and layout. (F)
CNS	3113	Project Construction Administration	Prerequisite: 2813. Introduction to construction project administration procedures and necessary documentation; including simplified project accounting, contract administration, project permitting, daily administration, field documentation, and progress and cost reporting. (F)
CNS	3123	Statics and Strengths of Materials	Prerequisite: Math 1823, Physics 2414, and Physics 1311. Provide an understanding of concepts, knowledge and methods of statics and strengths of materials for constructors and architects. (F)
CNS	3223	Structures I	Prerequisite: 3123 or special permission. The study of structural design including simple building frames, simple structural systems for gravity, lateral and seismic loads in steel, wood and masonry; basic structural detailing. (Sp)
CNS	3433	Mechanical, Electrical and Plumbing Systems I	Prerequisite: Construction Science major. Introduces basic mechanical, electrical and plumbing (MEP) terminology, concepts and systems. Building systems are related to the constructed building and the required relationships with the skilled trades for the construction of the MEP systems. (F)

CNS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CNS	3443	Mechanical, Electrical and Plumbing Systems II	Prerequisite: CNS 3433. Course requires a basic understanding of building Mechanical, Electrical and Plumbing (MEP) systems. Content includes advanced evaluation of different building systems - including site utilities, temperature controls, fire protection, fire alarms, security/signal systems, elevators/transportation/conveyance and acoustics for mechanical and electrical systems. Course includes quest presentations on particular aspects of the topics covered. (Sp)
CNS	3512	Cost Estimating	Prerequisite: 2813. Content is designed to familiarize students with the estimating process. Including coordinating the quantity survey with the estimate, quantitative elements of both direct and indirect cost. Price loading, bid preparation, and the ability to visualize the project. Students will perform cost estimates with estimating software. (F)
CNS	3612	Project Controls Lab I	Prerequisite: CNS 1212, CNS 2714, and CNS 2813. Applies the concepts in cost estimating and project planning and scheduling to a construction project. (F)
CNS	3812	Project Planning and Scheduling	Prerequisite: CNS 2813; corequisite: CNS 3512 and CNS 3612. Application of scheduling techniques in an integrated construction planning, scheduling and control system. Students will gain knowledge of scheduling theory, scheduling options, legal implications and practical applications of scheduling software. Students will schedule a building project using computer software. (F)
CNS	3821	Project Controls Lab II	Prerequisite: CNS 3512, CNS 3612 and CNS 3812; corequisite: CNS 3824. Lab applies the concepts learned in project management and controls to a construction project. (Sp)
CNS	3823	Project Management and Controls	Prerequisite: 3512, 3612 and 3812. Focuses on the management of a commercial building project after the contract is awarded. Content includes required project communication and documentation and setup and use of a cost accounting system to track and manage the project - including field productivity, work sequence, cost and profitability, construction finance, payment and cash flow, schedule compression and updating change process and closeout. (Sp)
CNS	3824	Project Controls Management	Prerequisite: CNS 3512, CNS 3812. Corequisite: CNS 3821. Examines how basic accounting principles and procedures relate to the construction project budget and cost reporting after the contract is awarded. Focus on project cost classification, cost codes, logs and cost reports required to maintain a cost control system. Students prepare required project communication and documentation, and set-up and use of a system to track and manage the project including field productivity, work sequence, cost and variance, earned value and profitability, payment and cash flow, schedule compression, change and closeout. (Sp)
CNS	3943	Field Work	Prerequisite: junior standing and permission. Utilize a construction work experience to prepare for construction management functions. Student is responsible for finding the construction-related activity and proposing a work-related project. Written and oral presentation is required. (F, Sp, Su)
CNS	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

CNS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
CNS	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
CNS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
CNS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CNS	4112	Understanding Design Services	Prerequisite: CNS 3824. Course explores the roles and responsibilities of the owner, architect/engineer, design consultants and their interface with the constructor from project conception to completion. (F)
CNS	4113	Structures II	Prerequisite: 3223. Extension of the study of building structures through structural design of continuous building frameworks; loads, concrete structural systems, foundations, connections, and structural detailing. (F)
CNS	4122	Building Information Modeling for Construction	Prerequisite: CNS 3824. Emphasizes the skills and knowledge required by the constructor to participate in the creation, projection, and execution of a project using BIM. Students combine knowledge of materials, methods, drafting, estimating and scheduling with BIM computer applications. (F)
CNS	4123	Construction Economics	Prerequisite: 3813. Learn to work with the time value of money, present value, and sensitivity analysis. Develop both graphic and computer-based cash flow models of typical income-producing construction projects. (F)
CNS	4153	Legal Issues in Construction	Prerequisite: Prerequisite: 4523 and Legal Studies 3323. An examination of current construction law as it pertains to the day-to-day management of the construction contract. Includes legal ramifications of construction bidding, contracts, changes, delays, and dispute resolution. Emphasis on the reduction of disputes through knowledge. (Sp)
CNS	4523	Pre-Construction Services	Prerequisite: CNS 3824. Explores the role of the constructor, the services they offer during the design process, and their collaboration with design professionals and owners during the pre-construction phase of a project. (F)
CNS	4613	Soils and Foundations	Prerequisite: 3223. Content includes identification and classification of soil properties as they pertain to a construction project, the role of the geotechnical engineer, soils reports, soil preparation, foundation design, soil testing, and the causes of building settlement. Practical exercises are emphasized. (F)
CNS	4832	International Construction	Prerequisite: senior standing in Construction Science major. Through lectures, field trips and guest lecturers, class explores a variety of historical and modern international construction projects and the impact of globalization on the American construction market. Primarily conducted as an overseas travel-study course in a variety of settings. (Irreg.)
CNS	4842	Leadership in the Construction Industry	Prerequisite: senior standing in Construction Science major. Using a variety of activities, lectures, field trips and guest lecturers, the class will explore the meaning of leadership. The importance of being a team leader and the role of teams in the AEC industry will be analyzed as students study current leaders in the AEC industry. (Sp)
CNS	4852	Heavy-Civil Management	Prerequisite: 4523. Familiarizes students with the peculiarities of the heavy-civil construction industry and gives them the analytical tools to compete for projects in that area. Skills include unit price estimating, construction equipment fleet design, linear scheduling, and major components of highways, bridges, and engineered facilities. (Sp)

CNS	4862	Residential Construction	Prerequisite: 4523. Residential construction processes, scheduling, subcontracting, financing, estimating, project control, and current trends in site selection, design, and energy efficiency in the residential construction industry. (Sp)
CNS	4881	Construction Safety Management	Prerequisite: 4523. Emphasizes the importance of safety in the construction industry through guest speakers, readings and other safety materials. Emphasis will be placed on safety as it relates to entry-level management positions and the professional's responsibility in creating a safe jobsite. (Sp)
CNS	4960	Directed Readings	1 to 4 hours. Prerequisite: senior standing, permission. May be repeated with change of subject matter; maximum credit eight hours. Subjects proposed by students or instructors may be used to expand knowledge beyond the normal core construction curriculum. Verbal or written presentation may be required to demonstrate successful completion of a subject unit. (F, Sp, Su)
CNS	4970	Undergraduate General Departmental Seminar	1 to 4 hours. Prerequisite: senior standing, permission. May be repeated with change of subject matter; maximum credit 12 hours. Special topics in construction science. (Irreg.)
CNS	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CNS	4993	Construction Science Capstone	Prerequisite: CNS 4112, 4113, 4122, 4523, 4613. All CNS classes in the CNS curriculum prior to the final semester of the senior year must be successfully completed before enrolling in the CNS capstone class. The capstone course is the culmination of the construction science undergraduate experience. Students apply all aspects of the construction project management process in an integrated manner to a single construction project. Class interaction requires participants to utilize and extend knowledge of all areas of expertise used by construction managers. Teamwork, interdisciplinary collaboration, and cooperation is emphasized. (Sp) [V]
CNS	5003	Construction Fundamentals I	Prerequisites: Graduate standing. Construction Management Fundamentals is designed to familiarize students with the basic foundations of construction management. These concepts include reading and understanding construction plans and specifications, implementing cost estimating techniques, as well as developing and manipulating project schedules as applied to design and construction project management. (F)
CNS	5013	Construction Fundamentals II	Prerequisite: Graduate standing. Construction Management Fundamentals 2 is designed to continue to familiarize students with the basic foundations of the project management and control mechanisms from the owner's, the designer's and the construction contractor's perspective. These concepts include terms, vocabulary, and paperwork used in the construction industry, as well as construction site safety and construction methods. (Sp)
CNS	5023	Research Methods in Planning, Design and Construction	Prerequisite: graduate standing, and introductory 5000-level statistics class, including CNS 5113 and RCPL 5113. Framework for understanding the processes, components and methods of empirical research used in the design and evaluation of planning, design and construction problems. Emphasis is placed on understanding the primary types of research methods, evaluating the pros and cons of each and developing the skills necessary to identify both research questions and appropriate ways to answer research questions. The course will be of interest to master's level thesis students and all students who are beginning their graduate projects. (Sp)
CNS	5103	Construction Market Analysis	Prerequisite: graduate standing. Familiarizes students with the cyclical natural of the U.S. real property industry, its impact on the construction industry, techniques for analyzing the industry, and strategic planning for a competitive advantage. (F)

CNS	5123	Fundamentals of BIM	Prerequisite: CNS 5003 or permission of graduate liaison. This is a Building Information Modeling (BIM) course designed for the construction professional. Students will gain knowledge about the concepts, core business processes, and software involved in a building information model. BIM is presented as a methodology and a tool that provides for shared information across the facility's lifecycle. This course goes beyond the software applications in BIM to emphasize the knowledge required by the constructor to participate in the creation, production, and execution of a project using BIM. (F)
CNS	5143	Legal Issues in Construction	Prerequisite: Graduate standing. The course will explore what constitutes a contract and learn about the different types of delivery systems. The course will examine the legal issues that are important to each phase of a construction project and learn how to avoid and resolve construction disputes. (Sp)
CNS	5203	Emerging Trends in Building Processes	Prerequisite: CNS 5003, CNS 5123 or concurrent enrollment or permission of graduate liaison . Explores emerging sustainable construction practices, building methods, systems and products. Evaluate LEED/sustainable building opportunities using value engineering and life cycle assessment to determine the benefit and cost in an integrated project delivery approach. (Sp)
CNS	5303	Lean Construction Management	Prerequisite: CNS 5003, CNS 5123, and CNS 5013 or concurrent enrollment in CNS 5013, or permission of graduate liaison. The purpose of this course is to explore the Lean concepts specifically tailored to the AEC industry. The students will learn how lean concepts along with creative transformational thinking and technological advancement can improve and sustain performance of the construction industry. (Sp)
CNS	5313	Advanced BIM	Prerequisite: CNS 5123, CNS 5203, and CNS 5303. The Advanced Building Information Modeling course is designed to develop in depth knowledge of BIM as a tool and as a method for the design, construction, and operations and maintenance phases in a facility's lifecycle of a project. Strategies for implementation and adoption are emphasized throughout the course. (F)
CNS	5353	Leadership in the Construction Industry	Prerequisite: Graduate standing. Students will define leadership and its importance in the Architecture, Engineering and Construction (AEC) industry as they explore their own leadership style. The study of past and current construction industry leaders is used as the basis for analyzing the role of teams and required leadership in the rapidly changing AEC Industry. (Sp)
CNS	5403	Leadership in the Construction Industry	Prerequisite: graduate standing and CNS 5303. May include lectures, guest lecturers, movies, and case studies to provide a definition of leadership and its relevance in the architecture, engineering, and construction industry. The study of past and current construction industry leaders is used as the basis for analyzing the role of teams and required leadership in the future architecture, engineering, and construction (AEC) industry.(Sp)
CNS	5513	Project Management and Controls	Prerequisite: 3013, 3813, 5523, 5613, 5623; graduate standing or permission. Detailed application of earned value theory for project control with advanced scheduling and value analysis. Synthesis of construction management and control simulation. (F)
CNS	5523	Pre-Construction Services	Prerequisite: CNS 5003 or permission of graduate liaison. Pre-construction services provide owners with greater project clarity and expectations before their project begins. Efforts from the contractor begin well ahead of the first construction crew arriving at the jobsite. This course covers the practices performed during pre-construction to increase project success from both the owner's and contractor's side. Students will be introduced to pre-planning tools that are performed pre-construction, for example: developing feasibility reports, managing project risk, preparing a Quality Control plan, and estimating conceptually. (F)

CNS	5613	Information Technology Applications for Construction	Prerequisite: graduate standing or permission. Participants utilize industry and classroom interaction to explore the application of available digital information management technologies in the construction process, create and incorporate digital resources into linear and nonlinear presentation formats, and explore communication potential in the construction marketplace for the World Wide Web. (F)
CNS	5623	Construction Contracts and Finance	Prerequisite: 3113, 3513, 5823, and graduate standing or permission. Development of techniques for economic analysis in construction. Exploration of the legal issues most critical to construction administration. (Sp)
CNS	5813	Facilities Acquisition Planning	Prerequisite: graduate standing or permission. How to buy building design and construction services from the owner's perspective. (F)
CNS	5823	Quality Management in Construction	Prerequisite: 3113, 3513 or concurrent enrollment, graduate standing or permission. Quality management, productivity evaluation and problem solving skills for construction decision making. Students complete the ten-hour OSHA construction safety class. (F)
CNS	5940	Construction Industry Practicum	1 to 3 hours. Prerequisite: graduate standing and permission. Utilize construction work experience to prepare for construction management functions. Student is responsible for finding the activity and proposing a work-related project. (Sp)
CNS	5952	Special Studies Presentation	Prerequisite: permission of committee chair. May be repeated; maximum credit six hours. Completion of research for the required special studies project selected by the student and advisory committee. (Irreg.)
CNS	5960	Directed Readings	1 to 4 hours. Prerequisite: Permission of instructor and senior or graduate standing. May be repeated once with change of content, maximum credit six hours. Studies in major field as approved by the individual instructor. (F, Sp, Su)
CNS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
CNS	5980	Research for Master's Thesis	2 to 9 hours. May be repeated; maximum credit towards degree, five hours. (F, Sp, Su)
CNS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
CNS	5993	Special Studies Research	Prerequisite: permission of committee chair. May be repeated; maximum credit six hours. Credit for applied research for the special studies project selected by the student and advisory committee. (Irreg.)
CNS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
COMM	1113	Principles of Communication	Introductory study of human communication emphasizing both theoretic understanding of the process as well as skillful application of communication principles and techniques within a variety of settings. (F, Sp, Su) [I-O]
COMM	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
COMM	2003	Communication in Non-Western Culture	Designed to broaden students' perspectives on human communication beyond the boundaries of Western cultural traditions. Patterns of perception, language, verbal behavior, nonverbal behavior, and interpersonal orientation in Asian, Middle Eastern, African and Latin American traditions are studied. (F, Sp) [IV-NW]
COMM	2111	Practicum in Forensics	May be repeated; maximum credit four hours. Develop performance materials (speeches, interpretive cuttings, debate briefs) for use in speech/debate contests. Practice sessions with critiques of performances are given. (F, Sp)

COMM 2113	Business and Professional Communication	Seeks to enhance the student's awareness and appreciation of communication processes in business and professional settings. An emphasis is placed on improving skills in interpersonal relations, professional oral presentations, interviews, and group processes. Career opportunities in business and professional contexts are discussed. (F, Sp) [I-O]
COMM 2213	Interpersonal Communication	Introduces the student to the complex interaction of social and psychological forces operating in human communication. Theories will be considered, but in the context of real communication situations in industry, education, medical and legal practice, etc., as well as in empirical research. The most recent laboratory and field research results will be discussed. (F, Sp)
COMM 2323	Survey of Health Communication	An introduction to one of the fastest-growing areas of the communication discipline: health communication. Surveys current issues, theory, and research surrounding health communication and it will focus on a variety of issues, such as perceptions of health, provider-patient relationships, health organizations, health campaigns, intercultural issues, and the use of new communication technologies in health care. (Irreg.) [III-SS]
COMM 2413	Media Literacy	Students will develop the ability to question media content and to think critically about how media generate meaning and affect our lives. Topics include: social impact of popular culture, influence of advertising on media content, mass media as a global industry, how to read the news, and media as a source of information and entertainment. (Irreg.) [III-SS]
COMM 2423	Gender and Communication	Introduction to theories and research about how cultural constructions of gender shape communication, power relations, and lifestyles in different historical and geographical contexts. Two major areas in the field of communication: 1) interpersonal/intercultural communication: how different ethnic/cultural communities produce diverse notions of the masculine and the feminine, gender hierarchies, gender roles, and gendered communication; and 2) international communication: How different national media systems have reified gender representations that reproduce, maintain, resist, or question gender ideologies will be emphasized. (Irreg.) [III-SS]
COMM 2513	Introduction to Statistics	Prerequisite: Mathematics 0123 or a satisfactory score on the math placement test. This course introduces statistics with the purpose of providing tools for interpreting and conducting social science research. Topics include; central tendency, variability, normal distributions, sampling distributions, correlation, regression, T-tests, anovas, and nonparametric statistics. (F, Sp) [I-M]
COMM 2613	Public Speaking	Develops skill in the composition and delivery of speeches suitable to various common speech situations and criteria for judging speeches heard or read. Topics include: nature of public speaking; choosing and presenting a topic; analyzing an audience; organizing and outlining. (F, Sp, Su) [I-O]
COMM 2713	Communication Theory	Prerequisite: 1113. Examines the formats, roles, strategies and constraints of human communication in varied social contexts. (F, Sp)
COMM 2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
COMM 3003	Political Campaign Processes	Prerequisite: 1113 and junior standing. Teaches students to apply communication skills including public speaking, debating, mass media news and advertising to political campaigns. (F, Sp)
COMM 3023	Communication Research Methods	Prerequisite: COMM 1113, and MATH 0123 or a satisfactory score on the Math placement test. Studies the goals, objects and methods of communication research. Emphasis is on the student's role as a critical consumer of research; exploration of vocational/professional applications of communication study. (F, Sp)

COMM 3223	Small Group Communication	Prerequisite: 1113 and junior standing. Examination of communication principles in the small group setting. Includes consideration of task and interpersonal dimensions, cohesiveness, conformity and approaches to leadership. (F, Sp)
COMM 3243	Communication and Social Change	Prerequisite: 1113 and junior standing. Critical analysis and evaluation of persuasive strategies employed in historical and contemporary social movements, especially situations involving agitation and counter-agitation. (F, Sp)
COMM 3253	Persuasion Principles	Prerequisite: 1113 and junior standing. Study of the humanistic and social scientific approaches to attitude change through discourse. Rhetorical and psychological theories are examined. (F, Sp)
COMM 3263	Organizational Communication	Prerequisite: 1113 and junior standing. Focus on the communication patterns and strategies of private and governmental organizations, including most recent research on problems in management, motivation and communication systems. (F, Sp)
COMM 3283	Communication and Emotion	Prerequisite: 1113 and junior standing. Communication and emotion is an advanced course designed to examine the interrelationships between human communication and affective, emotional, and cognitive processes. Emphasis is on theory and research regarding the function of affect and emotion as they impact thinking, feeling, mood, memory, and expression in communication and social interaction. (Irreg.)
COMM 3313	Communication and Public Health	Prerequisite: 1113 and junior standing. Introduction to concepts fundamental to the understanding of human health behavior and health promotion. Describes prevalent health behavior, psychosocial., and psychological theories of behavior change used by health educators and researchers in a variety of contexts. Examines several individual-based, social-based, organization-based, and eco-social theories, including the health belief model, the theory of planned behavior, the transtheoretical model, decision-making, social support, social learning theory, and diffusion of innovations. (Irreg.)
COMM 3413	Interethnic Communication	Prerequisite: 1113 and junior standing. Examines the nature of communication between individuals of differing ethnic/racial backgrounds. Identifies behaviors that impede or facilitate the development of positive interethnic relationships. Explores various societal, situational, and psychological forces that influence the communication process. (Irreg.)
COMM 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
COMM 3483	Communication and Argumentation	Prerequisite: 1113 and junior standing. Seeks to acquaint the student with ways of constructing valid arguments, with application to such communication contexts as policy making, legal decision-making, organizational decision-making and personal inquiry. Fundamentals of argumentation are explored, along with methods of argument construction and numerous contextual applications. (Irreg.)
COMM 3513	Intercultural Communication	Prerequisite: 1113 and junior standing. Introduction to intercultural communication theory, research and selected applications. Topics include conceptualizing intercultural communication theoretically, trends in research, diffusion of innovation, nationality barriers and training for foreign assignments. (F, Sp) [IV-WC]

COMM 3523	Communication in Relationships	Prerequisite: 1113 and junior standing. Introduces and discusses various theoretical approaches (social exchange, pragmatism, social cognition, etc.) toward understanding human interaction. In addition, the following topics are covered: relationship development and termination, life-span communication, the family, friendship relationships, therapeutic relationships, and interpersonal relationships in various organizational settings. (F, Sp)
COMM 3643	Media and Society	Prerequisite: 1113 and junior standing. Examines the role of the mass media in social life. Topics include the impact of technology, economics, law, work routines, and culture on media content, and the relationship between the messages created and the audiences that receive them. Competing theories about information dissemination and reception are considered. Emphasis on providing students a framework for thinking critically about mass media content. (Irreg.)
COMM 3653	Computer Mediated Communication	Prerequisite: COMM 1113 and junior standing. An introduction to the area of computer-mediated communication (CMC). Will look at a number of contexts for CMC, including CMC and interpersonal communication, on-line communities, CMC within organizations, and CMC as mass communication. Will introduce students to the history of computer-mediated communication, theories of computer-mediated communication, and will explore communication within a variety of internet-based populations. (Irreg.)
COMM 3810	Variable Topics in Communication	1 to 6 hours. Prerequisite: 1113 and junior standing. May be repeated with change of subject matter; maximum credit six hours. (Irreg.)
COMM 3960	Honors Reading	1 to 3 hours. Prerequisite: 1113, 2713 or junior standing with permission of instructor, and admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (Irreg.)
COMM 3980	Honors Research	1 to 3 hours. Prerequisite: 1113, 2713 or junior standing with permission of instructor, and admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted honors candidate to work at a special project in the student's field. (Irreg.)
COMM 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
COMM 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
COMM 4010	Communication Internship	1 to 6 hours. Maximum credit six hours. Prerequisite: junior, senior or graduate student major who has completed two-thirds of the communication courses required for graduation, plus permission. Undergraduate applicants must have minimum overall GPA of 2.50 or higher and a minimum GPA of 2.75 in communication courses. Graduate applicants must have minimum overall GPA of 3.25 and minimum GPA for communication courses of at least 3.50. A planned work experience related to personal career and academic goals, integrated into the student's academic schedule. It includes working in an assigned workplace several hours a week in addition to completing academic assignments and meeting regularly with organizational and academic supervisors. (F, Sp, Su)
COMM 4153	Nonverbal Communication	Prerequisite: 1113 and junior standing. Seeks to expose students to recent research on nonverbal behavior, emphasizing those properties of communication which characterize social and cultural group memberships. (Irreg.)

COMM 4233	Free Speech: Responsible Communication Under Law	Prerequisite: 1113 and junior standing or graduate standing. A study of the interaction between communication and the law. A consideration of the role of law as both deterrent and protector of the communicator's efforts. Attempts to provide a better understanding of the pervasiveness of regulation of communication. (Irreg.)
COMM 4243	Family Communication	Prerequisite: 1113 and junior standing. Examines social science research related to the processes of communicating in family relationships. Focus on the impact of communication in the development, maintenance, and dissolution of family relationships. Topics include; research methods and theory in family communication, stage models of family development, diversity issues related to families, and communication patterns related to different family forms including single-parent families, nuclear families, stepfamilies, and extended family networks. (Irreg.)
COMM 4253	Strategic Communication Campaigns	Prerequisite: 1113 and junior standing. The focus of this course is on the use of influence in modern campaigns. The course attempts to apply theories and strategies of persuasion to applied campaign settings. The broad objectives of the course includes fostering a student's ability to understand and to use the theories, strategies, and methods involved in persuasive campaigns in a generic sense and in terms of specific contexts (e.g. health campaigns, political campaigns, marketing, etc.). (Irreg.)
COMM 4323	Political Communication	(Crosslisted with P SC 4323) Prerequisite: 1113 and junior standing. Considers the role of communication in political settings. Major topics include political persuasion, public speaking in political campaigns, political debating, political advertising, bias in news coverage of campaigns. (F, Sp)
COMM 4413	Issues in Health Communication	Prerequisite: 1113 and junior standing. Communication theories and principles in various contexts. Will be a thematic course, which focuses on in-depth, context-specific, health-related research and theories. Introduces various themes that are important in health communication, with particular focuses on interpersonal (e.g., social support, uncertainty management, provider-patient communication), cross-cultural (e.g., cross-cultural health care and illness ideology), and organizational (e.g., HMOs and risk communication) contexts. (Irreg.)
COMM 4423	Communication and Public Opinion	Prerequisite: 1113 and junior standing. This course examines the concept and measurement of public opinion. The purpose of the course is to provide students with the critical and analytical tools for evaluating the role of public opinion in modern times. Students will learn how public opinion is measured and learn how to interpret polling data. Other topics will include: Psychological and social psychological aspects of public opinion, impacts of mass media and interpersonal communication on public opinion, public opinion as group behavior, and the role of public opinion in democratic societies. (Irreg.)
COMM 4513	International Communication	Prerequisite: junior standing. Presentation and discussion of academic analyses of culture, politics, and ethics in various non-USA media systems. Issues covered include media ownership and concentration, ethnicity and gender in the media, media and international conflict, non-western media industries, global media audiences, and new information and communication technologies. (F)
COMM 4613	Global Communication Networks	Prerequisite: 1113 and junior standing. Explores the motivations for, the means by which, and the consequences of growing global interconnectivity and exchange. Investigates the changing nature of boundaries including ideas, tourists, armies, corporations, students, workers, capital, missionaries, diseases, criminal cartels, pollution, rare animals, entertainment, and cultural products. Explores the functional meanings and realities of sovereignty, federation, confederation, colonialism, imperialism, and international cooperation. Concepts such as connectivity, piracy, and international cooperation will be explored. (Irreg.)

COMM 4643	Mass Media Effects	Prerequisite: 1113 junior standing. Examines theories and research findings that inform conclusions about the effects of mass communication. Focuses on media use patterns, social effects (violence, pornography, and stereotyping) use and effects on children, public opinion, political effects (election campaigns), economic effects (advertising), cultural effects, new communication technologies, and long-term effects. The course also seeks to enhance the skills of critical reading, logical thinking, and use of evidence about the effects of mass communication. (F, Sp, Su)
COMM 4713	Issues in Communication Study	Prerequisite: 1113, 2713 (with a grade of C or better), 3023 (with a grade of C or better), 2513 and nine hours of Communication electives at the upper-division level. Must have earned senior standing (90 hours or more) prior to the semester of enrollment. Provides the opportunity to integrate knowledge about communication and apply it to a project culminating in a speech and senior paper. The project will develop a selected problem, issue, or controversy in communication. (F, Sp, Su) [V]
COMM 4810	Special Topics in Communication	1 to 4 hours. Prerequisite: permission of instructor and junior standing. May be repeated with change of content; maximum credit nine hours. Topics vary and are intended to acquaint the advanced communication major with specialized study involving communication theory, methodology, and research. (F, Sp, Su)
COMM 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
COMM 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
COMM 4990	Independent Study	1 to 3 hours. Prerequisite: 1113 and 2713 and three courses in general area to be studied or junior standing with permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
COMM 5003	Quantitative Research Methods	Prerequisite: Successful score on a proficiency test in statistics administered during new graduate student orientation (deficiency remedied via completion of COMM 3113 or equivalent during the first semester of graduate work at OU). Introduction to social-behavioral science processes of inquiry about human communication phenomena. Examines the relationship of theory and method, looks at various research paradigms and designs, and provides an introduction to descriptive and inferential statistics. (Sp)
COMM 5013	Introduction to Graduate Study	Prerequisite: graduate standing or permission. Traces the development of research and professions in communication, providing an integrative conception of the discipline and an introduction to research and theory formulation. Students are exposed to those skills critical to success in graduate training in communication. (F)
COMM 5023	Introduction to Quantitative Research Methods	Prerequisite: graduate standing. Introduction to social-behavioral science processes of inquiry about human communication phenomena for graduate students not pursuing a Ph.D. Examines the relationship of theory and method, between research paradigms and designs, and provides an introduction to descriptive and inferential statistics. (F, Sp, Su)
COMM 5033	Advanced Statistics	Prerequisite: permission of instructor. Advanced statistics covering topics which include: anova, ancova, manova, multiple regression, path analysis, and confirmatory and exploratory factor analysis. (F)

COMM 5043	Organizational Research Practicum	Prerequisite: graduate student major who has completed two-thirds of the communication courses required for graduation, plus permission. Applicants must have an overall grade point average of 3.25 or higher. Provides practical research experience in an organization. Student adviser and organization's sponsor must agree through a written contract about the goals, plan, and activities associated with the research project. (Irreg.)
COMM 5053	Introduction to Qualitative Research Methods	Prerequisite: graduate standing. Introduction to various qualitative methodological strategies used in the social sciences for students not pursuing a Ph.D. Examines the relationship of method and theory and the process of collecting, coding, and analyzing data. (F, Sp, Su)
COMM 5113	Nonverbal Communication: Theory and Research	Prerequisite: graduate standing; 5003 or permission. Studies social-psychological and linguistic-ethological approaches to nonverbal communication research and theory building. (Irreg.)
COMM 5213	Interpersonal Communication	Prerequisite: graduate standing or permission. Studies the research and theories in interpersonal communication with emphasis on dyads and small groups, public address, message analysis and nonverbal communication. (Irreg.)
COMM 5233	Communication and Social Change	Prerequisite: graduate standing or permission. Studies alternative theories of social change, both historical and modern, with emphasis on the role played by communication at the interpersonal, group and social levels. (F)
COMM 5243	Language Perspectives of Communication	Prerequisite: graduate standing or permission. Investigates the role of language behavior research, epistemological foundations, linguistics, speech act theory, sociolinguistics, psycholinguistics and ethnomethodology. (Irreg.)
COMM 5253	Cross-Cultural Communication: Theory and Research	Prerequisite: graduate standing or permission. Study of theory of cross-cultural communication with special attention to language, stereotyping, perception, role, power and nonverbal communication as such variables operate in cross-cultural situations. (Irreg.)
COMM 5263	Health Communication in Interpersonal Contexts	Prerequisite: graduate standing or permission of department. Provides a broad overview of theoretical and applied approaches to health communication. A variety of health communication topics including doctor-patient communication, health information campaigns, mass media influences on health, role of culture in health and disease, health care organizations, and group influences on well-being will be presented. (F)
COMM 5313	Qualitative Research Methods	(Crosslisted with SOC 5313) Prerequisite: graduate standing. Survey of different qualitative methodological strategies used in the social sciences to collect, code, and analyze information. (Sp)
COMM 5323	Advanced Qualitative Research	(Crosslisted with SOC 5323) Prerequisite: 5313. Designed to immerse students in the actual experience of conducting qualitative research in the field. Emphasis on participatory observation, ethnographic research, and textual analysis. (F)
COMM 5333	Organizational Communication	Prerequisite: graduate standing. Focuses on the communication environment of organizations, both internal and external, emphasizing implications of organizational designs for communication, communication principles to motivate employees, and the role of communication for productivity and the quality of life. (Irreg.)
COMM 5353	Conflict Management	Prerequisite: graduate standing. Examines theory and research about conflict management in various communication contexts. Takes a social scientific approach to conflict management with emphasis on cognitive processes, affective systems, interaction sequences and strategies and tactics related to how people negotiate the meaning and management/resolution of conflict. (Irreg.)

COMM 5363	Communication and Technology	Prerequisite: graduate standing or permission. Provides a comprehensive overview of emerging technologies (e.g., teleconferencing, electronic mail, videotext, electronic bulletin boards, telecommuting, distance education, media richness, voice messaging, invisible technologies, etc.) and analyzes some of the social and behavioral effects of these technologies on human interaction in interpersonal, organizational, small group, and international contexts. (F)
COMM 5373	Communication and Leadership	Prerequisite: graduate standing. Examines theory and research related to the philosophy and behaviors associated with leadership communication in various contexts. Emphasis placed on unique aspects of messages as individuals enact leadership roles. Scholarship from several areas of the social sciences will be considered, but communication theory will be given primary emphasis. (F)
COMM 5383	Survey of Political Communication	(Crosslisted with P SC 5383) Prerequisite: graduate standing. Surveys communication in the political system. Discusses theory and research on interpersonal, public and mass communication in politics, particularly political campaigns. (Irreg.)
COMM 5393	Risk and Crisis Communication	Prerequisite: graduate standing. The term "risk communication" refers to a body of knowledge and a set of practical skills that can be used in characterizing and managing issues, disseminating information, and communicating effectively in crises or emergency situations. Examines key concepts of risk communication, investigates risk communication theories and approaches as well as implements practical application in learning about communicating in risk situations. (Irreg.)
COMM 5453	Social Influence	Prerequisite: graduate standing. A social scientific approach to the study of influence (persuasion), emphasizing scholarship drawn from speech communication, mass communication and social psychology. (F)
COMM 5553	Survey of Communication Campaigns	Prerequisite: graduate standing. Theory and research about persuasive communication campaigns which involve conscious sustained communication efforts designed to influence the thinking, feelings and/or behaviors of targeted receiver groups. (Sp)
COMM 5810	Special Topics in Communication	1 to 4 hours. Prerequisite: junior standing and permission of instructor. May be repeated with change of content; maximum credit nine hours. Topics will vary and are intended to acquaint the graduate communication major with specialized study involving communication theory, methodology and research. (F, Sp, Su)
COMM 5960	Directed Readings	1 to 3 hours. Prerequisite: 12 hours of graduate work in communication and permission of instructor. May be repeated; maximum credit, six hours for the master's degree and nine hours for the Ph.D. Intensive survey of the literature in a selected area of communication under the direction of a graduate faculty member. (F, Sp, Su)
COMM 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
COMM 5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
COMM 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
COMM 6013	Special Problems in Communication Research	Prerequisite: graduate standing; 5003 and permission. Other preparation may be needed for enrollment in particular sections. May be repeated with change of topic. Explores special issues and problems in communication research which characterize areas of specialty in communication, including social and mass communication, evaluative techniques and rhetorical criticism. (F, Sp)

COMM 6023	Communication Research Task Groups	Prerequisite: graduate standing; 5003 and permission. May be repeated; maximum credit 15 hours. Designed to explore numerous topics in communication study, including the development and execution of research in communication. (F, Sp)
COMM 6233	Small Group Processes	Prerequisite: 5003 and 5323 or permission. Considers current status of small group theory and research, emphasizing leadership. Includes both the development of a tentative theory of leadership and the application of small group theory to the process of decision making. (F, Sp)
COMM 6314	History and Theory of Communication	Prerequisite: 5003, 5013, and 5313 or permission of instructor. Presents the evolution of communication theory from ancient rhetorical traditions to the present. Topics covered include: classical origins of communication; enlightenment contributions to theory; interdisciplinary roots of communication study; and contemporary theories of communication. (Sp)
COMM 6323	International Communication	Prerequisite: graduate standing or permission. An interdisciplinary survey of theory and research pertaining to issues of mass media and information and communication technologies and their interaction with culture, identity, politics, and ethics. (Irreg.)
COMM 6373	Seminar in Mass Communication	Prerequisite: 5343 or permission. May be repeated with change of topic; maximum credit nine hours. Variable content seminar. Considers differing topics in contemporary mass communication theory and research. (Sp)
COMM 6413	Interethnic Communication Seminar	Prerequisite: graduate standing or permission. An interdisciplinary survey of theory and research pertaining to issues of interethnic/interracial communication. Specific verbal and nonverbal communication behaviors are examined in conjunction with salient contextual factors of the macro-societal, situational, and psychological milieu surrounding the communication process. (Irreg.)
COMM 6423	Communication in Health Organizations	Prerequisite: graduate standing. Examines delivery and exchange of messages within health organizations with emphasis on conflict, bargaining, and negotiating, communication networks and environments, virtual systems of communication, etc. (Sp)
COMM 6433	Seminar in Intercultural Communication	Prerequisite: 5003 and 5253 or equivalent or permission. Studies communication across cultural boundaries with emphasis on comparative analysis of communication systems of various cultures, factors involved in predicting intercultural communication patterns and effects, and the role of communication in cultural and technological development. Special attention is given to communication problems between subcultures in American society. (Irreg.)
COMM 6443	Seminar in Organizational Communication	Prerequisite: graduate standing. May be repeated once with change of content; maximum credit six hours. Seminar on a specialized topic in organizational communication, such as communication networks, socialization, decision making, or organizational culture. Content focus varies with instructor. (Irreg.)
COMM 6453	Seminar in Social Influence	Prerequisite: 5453 or permission of instructor. May be repeated with change of topic; maximum credit six hours. Seminar on specialized topic in social influence. Content focus varies with instructor. (Sp)
COMM 6463	Media and Political Behavior	Prerequisite: graduate standing and permission of department. Examines the interplay of mediated communication and political behavior. Focuses on individual level psychological processes that shed light on how news, political campaigns, new media, and entertainment programming may influence socialization, attitude formation, political decision-making and participation. (Irreg.)

COMM 6473	Communication and Public Opinion	Prerequisite: graduate standing and permission of department. Focuses on how collective and individual opinions are formed, communicated, and deployed to make decisions. Examines different conceptions of public opinion, such as the aggregation of individual citizens' opinions, the development of shared values and beliefs, and the active negotiation of opinion in the public sphere. (Irreg.)
COMM 6483	Media and Civic Life	Prerequisite: graduate standing and permission of department. Focuses on the relationship between media and civic life, including campaigns and engagement in the electoral arena, as well as broader perspectives of life as part of the general body politic. Examines the changing news and media landscape, including the affordances and limitations of contemporary and emerging communication platforms in democratic politics. (Irreg.)
COMM 6493	Seminar in Interpersonal Communication	Prerequisite: COMM 5213 or permission of instructor. May be repeated once with change of content; maximum credit six hours. Seminar on a specialized topic in interpersonal communication. Content focus varies with instructor. (Irreg.)
COMM 6523	Health, Culture, and Communication	Prerequisite: graduate standing and permission of department. Examines the complex definitions and dimensions of culture and the various pathways in which culture can shape patients' illness experiences and providers' behaviors. This course focuses on three general areas: culture and health behaviors; healthcare delivery in cross-cultural contexts, and minority health. (Irreg.)
COMM 6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
COMM 6970	Seminar	1 to 4 hours. Prerequisite: graduate standing, permission of instructor. May be repeated with change of topic; maximum credit 15 hours. (F, Sp, Su)
COMM 6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
COMM 6990	Independent Study	1 to 4 hours. May be repeated; maximum credit eight hours. An individual course of intensive study with the area and problem to be determined by the student and the instructor responsible for supervising the study. (F, Sp, Su)
COMP 1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
COMP 2000	Freshman and/or Sophomore Secondary Composition	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
COMP 2010	Freshman and/or Sophomore Composition for Non-Performance Music Majors	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward the B.F.A., B.M.A., B.M.E., or B.M. degree, eight hours. For freshman and sophomore music students in the B.F.A., B.M.A., B.M.E., and B.M. (Music History or Music Theory majors) degree programs who are studying in their principal performance area. (F, Sp, Su)
COMP 2020	Freshman and/or Sophomore Composition for Performance Majors	1 to 4 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward the B.M. degree, eight hours. For freshman and sophomore music students in the B.M. (Performance or Composition majors) degree program who are studying in the major performance area. (F, Sp, Su)
COMP 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

COMP 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
COMP 4000	Junior and/or Senior Secondary Composition	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
COMP 4010	Junior and/or Senior Composition for Non-Performance Music Majors	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward the B.F.A., B.M.A., B.M.E., or B.M. degree, eight hours. For junior and senior music students in the B.F.A., B.M.A., B.M.E., and B.M. (Music History or Music Theory majors) degree programs who are studying in a principal performance area. (F, Sp, Su)
COMP 4020	Junior and/or Senior Composition for Performance Majors	1 to 4 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward the B.M. degree 14 hours. May be elected for two hours credit only during summer session. For junior and senior music students in the B.M. (Performance or Composition majors) degree program who are studying in the major performance area. (F, Sp, Su)
COMP 5000	Master's-Level Secondary Composition	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
COMP 5010	Master's-Level Composition for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
COMP 5020	Master's-Level Composition for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
COMP 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
COMP 6000	Doctoral Secondary Composition	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
COMP 6010	Doctoral Composition for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
COMP 6020	Doctoral Composition for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
CREK 1715	Beginning Creek/Seminole	Introduction to the structure of the Creek/Seminole language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
CREK 1725	Beginning Creek/Seminole-continued	Prerequisite: 1715. A continuation of the study of the structure of the Creek/Seminole language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community are emphasized. (F, Sp) [I-FL]
CREK 1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

CREK	2733	Intermediate Creek/Seminole	Prerequisite: 1725. A systematic review of the structure of the Creek/Seminole language. Syntactic control and vocabulary expansion are emphasized. Conversational practice and traditional oral texts are used to develop proficiency. (F)
CREK	2833	Creek IV	Prerequisite: 2733. Further development of Creek language skills from Creek III, including improving and increasing listening and reading comprehension, speaking skills, and some further mechanics of the language. (Irreg.)
CREK	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
CREK	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
CREK	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
DANC	1112	Tap I	(Crosslisted with MTHR 1112) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. A beginner class emphasizing tap fundamentals and terminology that includes weight change, proper placement and simple step patterns. The course concentrates on basic rhythms, counting, ear training and clarity of sound. (F, Sp)
DANC	1212	Ballet Technique I	May be repeated; maximum credit four hours. Practice of ballet technique at beginning level. This course does not count for major credit in the School of Dance. (F, Sp, Su)
DANC	1312	Modern Technique I	May be repeated; maximum credit four hours. Practice of modern dance technique at the beginning level. This course does not count for major credit in the School of Dance. (F, Sp, Su)
DANC	1411	Stage Makeup for the Dancer	To develop skill in the application of basic stage makeup for the dancer, including character analysis and traditional styles. (Irreg.)
DANC	1442	Jazz I	(Crosslisted with MTHR 1442) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. A beginner class that provides the student with a comprehensive understanding of the technical fundamentals of jazz dance including basic rhythms, vocabulary and skills. Focus is aimed towards proper placement, strength and flexibility development. (F, Sp)
DANC	1713	Understanding Dance	A course in dance appreciation covering all aspects of various theatrical dance styles. (F, Sp) [IV-AF]
DANC	1813	Introduction to Non-Western Dance Forms	An abbreviated examination of the history, evolution, and significance of dance in three regions of the non-western world which possess very distinct dance cultures. (F, Sp) [IV-NW]
DANC	1911	Rehearsal and Production	Prerequisite: open to dance majors only. May be repeated; maximum credit four hours. Study, practice and participation in every phase of dance production work and management. Laboratory (F, Sp, Su)
DANC	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
DANC	2112	Tap II	(Crosslisted with MTHR 2112) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. An advanced beginner class that maintains focus on proper placement and clarity of sound while introducing more complicated rhythms, step patterns and vocabulary. Counting and ear training continues as the student hones assimilation skills. Focus is placed on tap dynamics including accenting, shading and movement quality. A variety of styles will be introduced. (F, Sp)

DANC	2212	Ballet Technique II	Prerequisite: permission of instructor. May be repeated; maximum credit eight hours. Continuation of 1212. (F, Sp, Su)
DANC	2214	Intermediate Ballet Technique	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit twelve hours. Class includes participation in a complete ballet barre and center including adagio, pirouettes, petit allegro and grande allegro. The emphasis will be on the practice and principles of the classical ballet vocabulary. Students will be expected to develop and demonstrate the ability to perform the movements with proper body alignment and a sense of artistic expression as well as improved skill and strength. (F, Sp, Su)
DANC	2241	Pointe Class	Prerequisites: Majors only; permission of instructor. Corequisite: must be enrolled in a ballet technique class. May be repeated; maximum credit 4 hours. Technique and practice on pointe to build strength and proficiency for ballet. (F, Sp)
DANC	2292	Ballet Company Apprentice	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit eight hours. A practical analysis and application of the original and classical ballet repertoire. (F, Sp, Su)
DANC	2312	Modern Technique II	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit eight hours. Continuation of 1312. (F, Sp)
DANC	2314	Intermediate Modern Technique	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 16 hours. Intermediate modern dance technique emphasizing skill refinement, increased vocabulary, and performance capabilities, and preparation for a professional dance career. (F, Sp)
DANC	2321	Dance Improvisation	Prerequisite: majors only; permission of instructor. May be repeated; maximum credit four hours. An introduction to improvisation as a creative and choreographic tool. Students will develop the ability to comprehend, apply, and manipulate movement in order to craft creative impulses. Also explores how to convey concepts and meaning, informing and inspiring others through various methods of non-verbal communication. (F, Sp)
DANC	2392	Modern Company Apprentice	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 10 hours. A practical analysis and application of the past and present choreographic dance works within the modern dance area. (F, Sp, Su)
DANC	2412	Pilates Body Conditioning	May be repeated; maximum credit eight hours. The philosophy of awareness in movement and a total body/mind workout based on the methods developed by Joseph Pilates over 75 years ago. This method is one of physical and mental conditioning designed to work every muscle in the body in an efficient and balanced manner. (F, Sp)
DANC	2442	Jazz II	(Crosslisted with MTHR 2442) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. This advanced beginner class expands on the techniques learned in Jazz I with focus on cleanly executed technique, well connected movement quality, dynamics and increased strength and flexibility. A variety of jazz styles will be introduced. (F, Sp)
DANC	2512	Ballroom Dancing I	May be repeated; maximum credit eight hours. Instruction in traditional and popular social dances, as well as social skill and etiquette. Includes instruction in the basic ballroom dances of cha-cha, salsa, swing, tango, and waltz. Dancers take the basic skills and introduce new dances and rhythms with an added emphasis on dancing technique. (F, Sp)
DANC	2522	Ballroom Dancing II	Prerequisite: 2512 or permission of instructor. May be repeated; maximum credit eight hours. Intermediate-level ballroom dancing which builds on the basic skills of the dancer and introduces new dances and rhythms with an added emphasis on dancing techniques. Includes instruction in the foxtrot, rumba, samba, and east and west coast swings. A brief review of basic skills is presented at the beginning of the semester. (F, Sp)

DANC	2551	Yoga	May be repeated; maximum credit eight hours. The course focuses on flexibility, balance, strength, and relaxation. Using postures and breathing exercises adapted to each person's individual level, students will develop improved alignment and a balanced body/mind. Discussion includes ways to incorporate Hatha yoga techniques into the students' daily activities. (Su)
DANC	2552	Introduction to Flamenco	May be repeated; maximum credit eight hours. Class includes participation in elementary flamenco exercises. Students will be instructed in several aspects of the art of Flamenco, including footwork, arm movements, hand clapping, and choreography. Emphasis of class will be on practice, principles and vocabulary of flamenco dance. Students will be expected to perform with proper body alignment, an element of performance style and correct technical vocabulary and rhythms. (Irreg.)
DANC	2612	Belly Dance	May be repeated three times; maximum credit eight hours. A course on one of the forms of dance from the Middle East, belly dancing, as referred to in North America. The class will focus on learning the technique of the dance as well providing the history of the form. (F, Sp)
DANC	2632	Elements of Dance Composition	Prerequisite: Majors only; permission of instructor. Theoretical and practical experience with the principles of composition in the area of expressive movement. (Irreg.)
DANC	2712	Body Science for Dancers	An introduction to human anatomy and body mechanics through the study of skeletal alignment and movement efficiency in dance training, teaching and performance. This course is only open to Dance majors, and is intended to be taken during the second semester of the freshman year or the first semester of the sophomore year. (Irreg.)
DANC	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
DANC	3112	Tap III	(Crosslisted with MTHR 3112) Prerequisite: permission of instructor. May be repeated; maximum credit six hours. An intermediate class with focus placed on refinement of technical and assimilation skills while dramatically increasing tap vocabulary. Students focus on tap dynamics, performance quality, style variety and movement coordination while learning longer and more complicated step patterns. Tap improvisation is introduced. (Irreg.)
DANC	3214	Ballet Technique III	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 32 hours. Continuation of 2212. (F, Sp, Su)
DANC	3262	Ballet Variations	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit four hours. The study and practice of solo variations in the professional ballet repertoire with emphasis on individual male and female techniques. (Alt. F)
DANC	3272	Performance Practices in Ballet	Prerequisite: Majors only; permission of instructor. An introduction to and participation in performance practices in character dance and pantomime in ballet training. Emphasis on the practice, principles and style of character dance and its function as an integral part of classical ballet repertory and the use of pantomime and acting techniques for dancers. Students learn character dance technique and choreography from the classical repertoire as well as practicing individual role development through character studies culminating in the use of pantomime vocabulary and expressive movement. (Irreg.)
DANC	3292	OU Ballet Company	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 16 hours. Rehearsal and performance with the OU Ballet Company. Laboratory (F, Sp, Su)
DANC	3314	Modern Technique III	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 32 hours. Continuation of 2312. (F, Sp, Su)

DANC	3392	Contemporary Dance Oklahoma	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 16 hours. Rehearsal and performance with the Contemporary Dance Oklahoma. (F, Sp, Su)
DANC	3412	Pilates Equipment	Prerequisite: 2412 and permission of the instructor. May be repeated; maximum credit eight hours. Using Pilates equipment, the class foundation is built on that developed by Joseph Pilates as a method of physical and mental conditioning to work every muscle in one's body in an efficient and balanced manner. The basis throughout the semester is that philosophy of awareness in movement and a total body/mind workout. (F, Sp)
DANC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
DANC	3442	Jazz III	(Crosslisted with MTHR 3442) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. An intermediate class that moves at a heightened pace, this level expands on the techniques learned in Jazz II. Additional focus is placed on style variety, assimilation skills, and more advanced movement coordination and rhythms. (Irreg.)
DANC	3632	Dance Composition	Prerequisite: Majors only; permission of instructor. Theoretical and practical experience with the principles of composition in the area of expressive movement. (Irreg.)
DANC	3743	Dance History: Early Roots	Prerequisite: junior standing or permission of instructor. A survey of the development of dance from pre-historic eras in western civilization through ancient cultures in Egypt, Greece and Rome. Investigations continue through Medieval, Renaissance and Baroque periods up to the evolution of Romantic ballet in the nineteenth century. (F) [IV-WC]
DANC	3753	Dance History: Three Centuries of Development	Prerequisite: junior standing or permission of instructor. From nineteenth-century Romanticism, this course traces the development of western theatrical dancing through the current season. (Sp) [IV-WC]
DANC	3813	History of World Dance	Prerequisite: junior standing or permission of instructor. An examination of the history, evolution and significance of dance in regions which possess very distinct dance cultures throughout the non-European world. (Irreg.) [IV-NW]
DANC	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Consists of either reading topics or independent study designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
DANC	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program, junior or senior standing. May be repeated with change of subject; maximum credit six hours. The projects covered will vary. Deals with concepts not usually presented in regular coursework. (Irreg.)
DANC	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
DANC	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
DANC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

DANC	4022	Ballet Repertoire	Prerequisite: Majors only; permission of instructor. Research and analysis of some of the works of the basic classical repertoire insofar as story contents. Musical and choreographic approaches are used by renowned choreographers. (Irreg.)
DANC	4112	Tap IV	(Crosslisted with MTHR 4112) Prerequisite: 3112 or permission of instructor. May be repeated; maximum credit four hours. This advanced class furthers the tap dancer's vocabulary, refines technical skills, greatly increases assimilation ability and furthers the study of tap improvisation. (Irreg.)
DANC	4214	Ballet Technique IV	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 32 hours. Continuation of 3214. (F, Sp)
DANC	4241	Pas de Deux	Prerequisite: Majors only; permission of instructor. May be repeated; maximum credit 2 hours. Basic techniques of partnering and being a partner in ballet performance. (Irreg.)
DANC	4442	Jazz IV	(Crosslisted with MTHR 4442) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. An advanced class emphasizing strong technique and assimilation skills as well as the ability to adapt to any jazz style. Continued focus is placed on flexibility, strength, dynamics, and solid performance quality. (Irreg.)
DANC	4612	Ballet Choreography	Prerequisite: Majors only; permission of instructor. Study and practice in the principles of ballet composition, with emphasis on Romantic, Classical, Neoromantic and Neoclassical choreography. (Irreg.)
DANC	4713	Dance Production	Prerequisite: Dance major, senior or graduate standing or permission of department. Provides dance students with knowledge and skills related to the effective use of stage design and technical resources for producing dance in theatrical venues. (Sp)
DANC	4723	Senior Capstone	Prerequisite: permission of instructor. An advanced, individual project which demonstrates mastery of skills and knowledge in the student's area of interest. Taken in the senior year, the project will be selected under advisement, guided by the appropriate faculty member(s) and include required submission of a written component. [V]
DANC	4812	Teaching of Ballet Technique	Prerequisite: twelve hours of ballet or permission. Comprehensive study of the basic ballet exercises and body positions. Terminology and discussions on anatomy for the dancer. Experience in teaching of ballet. (Irreg.)
DANC	4821	Teaching Practicum - Ballet	Prerequisite: Majors only; DANC 4812. May be repeated; maximum credit three hours. Teaching children's ballet classes of various levels. Student will teach an average of twelve classes per semester, and meet with the supervising professor following observation of teaching assignments. (F, Sp)
DANC	4832	Methods in Teaching Dance	Prerequisite: Majors only; permission of instructor. Methods of teaching through the creative approach. Progressions in teaching dance studies and techniques. (Irreg.)
DANC	4851	Practical Experience in Teaching Modern Dance	Prerequisite: 4832. May be repeated; maximum credit three hours. Practical teaching experience in modern dance or creative dance for children. (F, Sp)
DANC	4900	Professional Semester	3 to 12 hours. Prerequisite: permission. May be repeated; maximum credit 24 hours. Complete assignment(s) in a professional environment either performing, choreographing, teaching or in administrative work.
DANC	4910	Professional Practices	3 to 12 hours. Prerequisite: majors only; permission required. May be repeated; maximum credit 12 hours. Complete assignment(s) in a professional environment either performing, choreographing, teaching or in administrative work subsequent to OU admission. (F, Sp, Su)
DANC	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

DANC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
DANC	4990	Special Studies	1 to 6 hours. Prerequisite: permission. May be repeated with change of subject matter; maximum credit six hours. (F, Sp, Su)
DANC	5023	Introduction to Graduate Study in Dance	Prerequisite: graduate standing. Developing research, organizational and refined skills for scholarly writing. Establishing a foundation to analyze existing materials in the dance field for purposes of debate and theory construction. Providing clarification of MFA in Dance expectations and defining a direction/program of study which will enrich knowledge within the discipline. (Irreg.)
DANC	5090	Graduate Special Studies	1 to 6 hours. Prerequisite: permission. May be repeated; maximum credit six hours. A special creative or research project course in any phase of dance adapted to the individual student. (F, Sp)
DANC	5224	Graduate Ballet Technique	Prerequisite: twelve hours of ballet, permission. May be repeated; maximum credit 16 hours. Intensive study of dance techniques for proficiency in performance and teaching. (F, Sp, Su)
DANC	5292	Advanced Ballet Company Class	Prerequisite: graduate standing, permission of adviser. Continued enrollment based on performance; maximum credit ten hours. A rehearsal situation which provides the special training required in performance. It is conducted in a practicum-laboratory situation aimed at the advanced graduate student. Laboratory (F, Sp)
DANC	5324	Graduate Modern Dance Technique	Prerequisite: twelve hours of modern dance; permission of adviser. May be repeated; maximum credit 16 hours. Intensive practice of modern dance techniques for proficiency in performance and teaching. (F, Sp)
DANC	5392	Advanced Modern Dance Company Class	Prerequisite: graduate standing, permission of adviser. Continued enrollment based on performance; maximum credit ten hours. A rehearsal situation which provides the special training required in performance. It is conducted in a practicum-laboratory situation aimed at the graduate student. Laboratory (F, Sp)
DANC	5613	Graduate Choreography	Prerequisite: 3632 or 4612 or permission. Practical application of principles of choreography in original production projects. (F, Sp)
DANC	5743	Dance History: Early Roots	Prerequisite: graduate standing or permission of instructor. A survey of the development of dance from pre-historic eras in western civilization through ancient cultures in Egypt, Greece and Rome. Investigations continue through Medieval, Renaissance and Baroque periods up to the evolution of Romantic ballet in the nineteenth century. Will have additional meeting times, research and written assignments. (F)
DANC	5753	Dance History: Three Centuries of Development	Prerequisite: graduate standing or permission of instructor. Development of western theatrical dancing from nineteenth-century Romanticism through the current season. Will have additional meetings, research and written assignments. (Sp)
DANC	5812	Advanced Teaching of Dance	Prerequisite: 4812 or 4832. Theory and practical application of dance pedagogy on different levels of proficiency. (Irreg.)
DANC	5900	Professional Semester	3 to 6 hours. Prerequisite: permission. May be repeated; maximum credit six hours. Complete assignment(s) in a professional environment either performing, choreographing, teaching or in administrative work.
DANC	5913	Graduate Project in Dance	Prerequisite: permission. May be repeated with change of subject matter; maximum credit six hours. Study and practice in assuming full responsibility of a project in the area of dance. (F, Sp, Su)
DANC	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)

DANC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
DANC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
DANC	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
DANC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
DES	2633	Visual Communication I	Prerequisite: Majors only; ART 1033, ART 1043, ART 1133, and ART 1143; corequisite: DES 2643. Introductory course in visual communication which focuses on nonverbal communication. Students are introduced to design research, theory and methods. This course explores the importance design plays in shaping meaning and interpretation through basic visual interaction. (F)
DES	2643	Design Technology	Prerequisite: majors only, ART 1033, ART 1043, ART 1133, and ART 1143; corequisite: DES 2633. Introduction to electronic tools, processes and techniques as they relate to visual communications. (F)
DES	2653	Visual Communication II	Prerequisite: Majors only; DES 2633, DES 2643; corequisite: DES 2663. Course is structured to help students apply various strategies, concepts, and form/content relationships to their work. Projects stress theory, application and an introduction to the computer as a design process tool. (Sp)
DES	2663	Typography I	Prerequisite: Majors only; DES 2633, DES 2643; corequisite: DES 2653. Introduction to the basic concepts of typographic design through studio projects, critiques and lectures. (F, Sp)
DES	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
DES	3633	Visual Communication III	Prerequisite: Majors only; DES 2653, DES 2663; corequisite: DES 3663. Exploration and application of information systems as they apply to visual communications. (F)
DES	3643	Integrated Technology	Prerequisite: Majors only; DES 3633, DES 3663; corequisite: DES 3653. Emphasis will be in developing user interfaces, experiences and outcomes in design communication, moving from the printed page to electronic media. Development of strategies using new technologies into integrated systems. (Sp)
DES	3653	Visual Communication IV	Prerequisite: Majors only; DES 3633 and DES 3663; corequisite: DES 3643. Concentration is on design problem solving in visual communication at an intermediate level. (Sp)
DES	3663	Typography II	Prerequisite: Majors only; DES 2653, DES 2663; corequisite: DES 3633. Concentrated exploration of issues within typography using word and image. Projects explore visual and verbal context and meaning through expressive and utilitarian aspects of typography. (F)
DES	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject matter; maximum credit six hours. Consists of either reading topics or independent study designated by the instructor in keeping with the student's major program. The topics of study will cover materials not usually presented in the regular courses. (F, Sp)

DES	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program, junior or senior standing. May be repeated with change of subject matter; maximum credit six hours. The projects covered will vary. The content will deal with concepts not usually presented in regular coursework. (Irreg.)
DES	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Provides an opportunity for the gifted honors candidate to work at a special project in the student's field. (F, Sp)
DES	4643	Visual Communication V	Prerequisite: Majors only; DES 3653, DES 3643; corequisite: DES 4653. Students explore contemporary and critical issues in visual communications. This course deals with the planning, design and implementation of multi-faceted design problems directed towards an understanding and integration of people and visual communication. (F)
DES	4653	Typography III	Prerequisite: Majors only; DES 3643, DES 3653; corequisite: DES 4643. Typographic problem solving, exploration, and experimentation. Emphasis is on the development of syntactic typographic relations in visual communication. (F)
DES	4663	Visual Communication VI	Prerequisite: Majors only; DES 4643. An advanced course in visual communication exploring multi-component graphic design problems that convey complex information. (Sp)
DES	4930	Internship	1 to 6 Hours. Prerequisite: permission of instructor; majors only. May be repeated; maximum credit six hours. Students arrange and participate in a professional work experience with an approved internship site. (Irreg.)
DES	4983	Senior Capstone Experience	Prerequisite: senior standing; majors only. May not be repeated for credit. Primary objective is to provide a culminating experience for the senior-year student. Satisfies the University-wide General Education Requirement for a capstone course for design majors. (F, Sp) [V]
DES	4990	Independent Study	Prerequisite: majors only; junior standing or permission of instructor. May be repeated: Maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent Study may include library and/or laboratory research and field projects. Title is variable only to reflect specific discipline area within the School of Art & Art History. (Irreg)
DES	4993	Visual Communication Topics	Prerequisite: majors only; junior standing. May be repeated with change of subject matter; maximum credit nine hours. Special topics course in visual communication for content not currently offered in regularly scheduled courses. (Irreg.)
DES	5093	Graduate Studio Visual Communication I	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5193	Graduate Studio Visual Communication II	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5293	Graduate Studio Visual Communication III	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5393	Graduate Studio Visual Communication IV	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5493	Graduate Studio Visual Communication V	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5593	Graduate Studio Visual Communication VI	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5693	Graduate Studio Visual Communication VII	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5793	Graduate Studio Visual Communication VIII	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	5893	Graduate Studio Visual Communication IX	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)

DES	5993	Graduate Studio Visual Communication X	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	6093	Graduate Studio Visual Communication XI	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	6193	Graduate Studio Visual Communication XII	Prerequisite: graduate standing in Art. Individual problems in visual communications area. (Irreg.)
DES	6293	Graduate Studio Visual Communication XIII	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
DES	6393	Graduate Studio Visual Communication XIV	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
DES	6493	Graduate Studio Visual Communication XV	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
DES	6593	Graduate Studio Visual Communication XVI	Prerequisite: graduate standing in Art. Individual problems in the visual communications area. (Irreg.)
DMAT	0113	Elementary Algebra	Prerequisite: completion of placement test. For students who score in the lowest bracket on the placement test. A review of beginning algebra including polynomial arithmetic, solving equations, graphing, inequalities, and the quadratic equation. Not acceptable for degree credit at the University of Oklahoma. (F, Sp, Su)
DMAT	0115	Fundamental Algebra	Prerequisite: placement test. Combines the course content of Math 0113 and 0123. A review of beginning algebra including polynomial arithmetic, solving equations, graphing, inequalities, rational expressions, exponents and radicals, imaginary and complex numbers, quadratic equations, systems of linear equations. Not acceptable for degree credit at the University of Oklahoma. (F, Sp, Su)
DMAT	0123	Intermediate Algebra	Prerequisite: "C" or better in DMAT 0113 at OU, or satisfactory score on the placement test, or satisfactory score on the ACT/SAT. Properties of real numbers, equations and inequalities, algebra of rational expressions, exponents and radicals, introduction to quadratic equations, functions and graphs, systems of linear equations. Not acceptable for degree credit at the University of Oklahoma. (F, Sp, Su)
DRAM	1114	Costume Construction	The theory and practice of the construction, finishing and handling of stage costumes. Includes practical production applications. Laboratory (F, Sp, Su)
DRAM	1124	Stagecraft	Stagecraft. The Theory And Practice Of The Construction, Painting And Handling Of Scenery And Props. Includes Practical Production Applications. Laboratory (F, Sp, Su)
DRAM	1133	Drawing and Rendering	Exploring methods of using freehand drawing to communicate design ideas. Skill building course: form, shape, color, texture, light. Includes some mechanical drawing. (F, Sp)
DRAM	1134	Stage Lighting	Acquaints the student with the technical procedures, instrumentation, equipment, organization and basic design of effective lighting. Includes practical production applications. Laboratory (F, Sp, Su)
DRAM	1141	Stage Management Seminar I	A weekly forum for sharing insights and solving problems on current production assignments, as well as examining the bigger picture of stage management and theatre in America today. (F, Sp)
DRAM	1411	Makeup	To direct and provide experience in the effective application of makeup materials in creating an impression of character. (F, Sp)
DRAM	1503	Acting for Non-Majors	To develop a beginning understanding and appreciation of the art and skill of acting through the study of acting principles, dramatic scenes, and basic stage techniques. (F, Sp, Su)
DRAM	1513	Introduction to Acting	To acquaint the beginning student with the fundamentals of acting and to explore the basic elements of the actor's art. Explores the physical, vocal, emotional and technical aspects of acting in a format that encourages freedom of imagination and personal growth. (F)

DRAM	1523	Character Study for the Actor	Prerequisite: 1513. To develop and exercise basic acting skills through practical application of the fundamental elements of the actor's art. The student will become familiar with the actor's tools and learn how to utilize them on a rudimentary level. Emphasis will be placed upon characterization and beginning script analysis required for character study. (Irreg.)
DRAM	1603	Voice And Diction for Non-Majors	Improves the student's voice, articulation, pronunciation and expressive intonation for effective communication. (Irreg.)
DRAM	1612	Introduction to Voice and Movement	Prerequisite: School of Drama freshmen performance majors. Skill-based course introduces the student to the foundations of voice and movement for the actor. (F)
DRAM	1643	Voice and Speech I	Prerequisite: 1523. Improves the student's voice, articulation, pronunciation and expressive intonation for effective communication, and performing for the stage. (F)
DRAM	1713	Understanding the Theatre	A service course for nonmajors that covers the history and evaluation of various forms of dramatic production offered on stage. (F, Sp, Su) [IV-AF]
DRAM	1811	Music Notation and Score Reading for Stage Managers and Designers	Introduces music notation and score reading to stage management and design students who may work on musical theatre, ballet and/or opera in their academic and professional careers. (F)
DRAM	1911	Rehearsal and Production	Prerequisite: open to drama majors only. May be repeated; maximum credit four hours. Study, practice and participation in every phase of dramatic production work and management; attendance and critical discussion of plays. Kinds of service are given unit evaluations in terms of relative difficulty and time consumption. Laboratory (F, Sp, Su)
DRAM	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
DRAM	2013	Introduction to Theatrical Design and Production	Prerequisite: Majors only. Explores the processes of theatrical design in the forms of scenery, lighting, sound and costume design as well as stage management and technical direction. Also focuses on the creation of a holistic design approach uniting script analysis, research, visual imagery and storytelling into one single artistic form of communication. (F, Sp)
DRAM	2053	Computer Aided Drafting I for the Theatre	Prerequisite: 1124 or 1133 or 1134 and sophomore standing. Teach the use of computer aided design for theatrical drafting. Drafting in Vectorworks and Spotlight. (F)
DRAM	2141	Stage Management Seminar II	Prerequisite: 1141 or permission of instructor. A weekly forum for sharing insights and solving problems on current production assignment, as well as examining the bigger picture of stage management and theatre in America today. (F, Sp)
DRAM	2153	Scene Design	Prerequisite: 1124 and 1133. Acquaints the student with the practical and aesthetic principles involved, and provides experience in designing scenery. (F)
DRAM	2223	Lighting Design	Prerequisite: 2214, permission. Acquaints the student with advanced design, presentation, visual awareness and "styles" in lighting design. Includes practical production applications. (Sp)
DRAM	2233	Introduction to Technical Production	Prerequisite: 1114, 1124, and major in drama. Survey of technical production skills in scene technology and costume technology including communications. Shop management and safety. (F)
DRAM	2243	Draping And Pattern Drafting I	Prerequisite: 2233, permission of instructor, and sophomore standing. Topics and experiences related to draping skills and pattern drafting for the theatre. Demonstrations and hands-on experience using techniques discussed. Laboratory (F)
DRAM	2253	Draping and Pattern Drafting II	Prerequisite: 2243. Continuation of 2243. Topics and experiences related to draping skills and pattern drafting for the theatre. Demonstrations and hands-on experience using techniques discussed. Laboratory (Sp)
DRAM	2323	Stage Movement	Prerequisite: 1523. To give the drama student an understanding of the use of the body as an expressive instrument through development of flexibility, strength and coordination. (F)

DRAM	2333	Advanced Stage Movement	Prerequisite: 2323 and sophomore standing. Focuses on physicality as a fundamental element of the actor's craft through manipulation of movement to explore emotional truth, create a character or convey the reality of a particular theatrical world to an audience. (Sp)
DRAM	2343	History of Costume	Prerequisite: permission. Acquaints the student with the costumes worn by people of dramatically significant periods and countries. (Sp)
DRAM	2423	Drafting for the Theatre	Prerequisite: DRAM 1133; majors only. Increases the student's skill in the technical craft of drafting as a major communication device of scenery and lighting designers. Course will use international drafting conventions and U.S.I.T.T. standards. (Irreg.)
DRAM	2503	On-Camera Acting for Non-Majors	Instructs the student on requirements, discipline and basic techniques of performing on camera, with an appreciation of the full process of creating a film or television production. Non-majors course. (F)
DRAM	2513	Scene Study for the Actor	Prerequisite: DRAM 1523; Corequisite: DRAM 1643; majors only. Designed to develop the actor's skill through the intensive study and performance of scenes from modern realistic world theatre. Emphasis will be placed upon building a character, milieu study, and scene structure. (F)
DRAM	2523	Performing Shakespeare	Prerequisite: 2513 and permission. Designed to develop the actor's skill through the intensive study and performance of scenes and monologues from Shakespeare and other verse drama. Emphasis will be placed upon handling language with believable and appropriate characterization. (Sp)
DRAM	2643	Voice and Speech II	Prerequisite: 1643; corequisite: 2523. Develops the actor's vocal instrument as an integrated and organic function of self and character. Focus on the expressive voice with verse texts. (Sp)
DRAM	2713	Introduction to Fine Arts	Lectures, illustrated with slides, motion pictures, recordings and readings, surveying the development of the fine arts (architecture, drama, the visual arts and music) from prehistoric times to the present. Background material will include the religious, political and economic conditions and changes affecting the arts. (F) [IV-AF]
DRAM	2733	Introduction to Dramaturgy	Prerequisite: DRAM 1523, ENGL 1113, and ENGL 1213; majors only. Introduces students to basic techniques of dramaturgy: research, text analysis, and collaboration for theatrical production. (F)
DRAM	2813	Stage Management	Prerequisite: sophomore standing. Designed to give theatre students the background and skills to function as a stage manager for theatre, dance, or musical productions. An introductory course covering the basics of the stage manager's process from pre-production through closing as well as discussing professional topics such as theatrical unions, production management, and job opportunities. (F)
DRAM	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
DRAM	3052	Illustration I: Dry Media	Prerequisite: 1133 and sophomore standing. Studio class intended to facilitate illustration depicting theatre scenery and costume design through the use of colored pencil and pastel media. Focus on the human form clothed for theatre performance and on scenic rendering and/or vignettes. Exercises will stress the effect of light on the objects and the creation of fullness/plasticity. (F)
DRAM	3053	Computer Aided Drafting II for the Theatre	Prerequisite: 1133 and sophomore standing. Computer aided design for the theatre. An exploration into the use of Renderworks and Spotlight as drafting and presentation tools, and Photoshop as an image manipulation tool. Covers topics of scenic renderings, lighting previsualization and costume design presentation. (Sp)

DRAM	3062	Illustration II: Wet Media	Prerequisite: 1133 and junior standing. Studio class to build illustrative skill in communicating scenic and costume ideas for the theatre through the use of watercolor, gouache, and colored inks, as well as learning to think in terms of lighted objects. (Sp)
DRAM	3141	Stage Management Seminar III	Prerequisite: 1141, 2141 or permission of instructor. A weekly forum for sharing insights and solving problems on current production assignments, as well as examining the bigger picture of stage management and theatre in America. (F, Sp)
DRAM	3213	Draping & Pattern Drafting III	Prerequisite: 2243, 2253. Advanced topics and experiences related to draping skills and pattern drafting for the theatre. Demonstrations and hands-on experience using techniques discussed. Laboratory (F)
DRAM	3223	Costume Construction Techniques	Prerequisite: 2233, 2243, junior standing and permission of instructor. Advanced work in the mechanics and technology of costume builder's draft including practical work in the costume shop. (F)
DRAM	3233	Tailoring for the Theatre	Prerequisite: 2233, 2243, junior standing and permission of instructor. Intermediate and advanced dressmaking and tailoring techniques. Application of skills in costume. (Sp)
DRAM	3323	Stage Movement: Clowning	Prerequisite: 2323 and junior standing. Develops students skills in body awareness, balance, flexibility, focus, improvisation and ensemble through the character of the clown. (Irreg.)
DRAM	3353	Costume Design	Prerequisite: 1114. Acquaints students with elementary costume design and construction, historical styles, character evaluation and design sources. (F)
DRAM	3413	Sound Design	Prerequisite: junior standing and permission of instructor. Provides theatre students with the basic skills and concepts for designing sound as support for a theatrical production. This is a design course providing the necessary skills in script analysis, research, style, sound resources, and sound scoring. (Irreg.)
DRAM	3433	Advanced Materials for Stage Scenery and Properties	Prerequisite: 2233 junior standing and permission of instructor. Application of metals, plastics and non-traditional materials in scenic and properties construction. Emphasis on safety and efficacy. (Sp)
DRAM	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
DRAM	3513	Performing Departures from Realism	Prerequisite: 2523 and juried audition. Acquaints students with performance theory and practice for non-realistic plays and forms, exploring the material through exercises, improvisations and performances of scripted scenes. (F)
DRAM	3523	Performing New Plays	Prerequisite: 2523 and juried audition. Provides practical experiences for the actor in working with playwrights on new, unpublished plays through performances in scenes, staged readings and through text readings in American acting traditions. (Irreg.)
DRAM	3533	Advanced Shakespeare Performance	Prerequisites: majors only; junior status; DRAM 2523 and DRAM 2643. Students must have passed their sophomore jury prior to enrolling in this course. Designed to help the student further their skills in rehearsing and performing Shakespeare and other classical texts. Provides advanced training in verse scansion and form, and increases students' knowledge of lesser-known Shakespearean and other Elizabethan texts. (Sp)
DRAM	3603	Speaking in Public	Prerequisite: junior standing. Provides non-majors a course in verbal skills and speech using techniques and skills employed by actors in dramatic presentations and translates them to presentational modes required by a wide variety of fields. (F, Sp)

DRAM	3613	Directing I	Prerequisite: DRAM 3733; majors only. Consists of lectures, demonstrations and exercises performed by members of the class. Includes, but is not limited to: stage management, dramatic and theatrical values of a play, play analysis and various techniques of directing. Laboratory (F)
DRAM	3623	Directing II	Prerequisite: 3613. An intensive study for majors only of the craft and techniques involved in the directing of plays. Special emphasis is placed on script analysis; communication with actors; and practical laboratory work in employing these methods. Scenes from major dramatic works are rehearsed and prepared in class with extensive critique and "in-shop training." Laboratory (Irreg.)
DRAM	3643	Voice And Speech III	Prerequisite: 2643, junior standing. Develops the actor's vocal instrument as an integrated function of self and character. Work on dialects. (F)
DRAM	3713	History of the Theatre I	Prerequisite: junior standing and permission. Acquaints the student with the development of drama, theatre and production procedures through the ages from 500 B.C. to 1780. (F) [IV-WC]
DRAM	3723	History of the Theatre II	Prerequisite: junior standing and permission. Continuation of 3713. Acquaints the student with the development of drama, theatre and production procedures through the ages from 1700 to the present. (Sp) [IV-WC]
DRAM	3820	Management Studio I	Prerequisite: junior standing in drama. May be repeated with change of content; maximum credit six hours. Base for various units of study pertaining to the fields of theatre management and stage management. (F, Sp)
DRAM	3822	Stage Management Studio I	Prerequisite: 2813 and junior standing. May be repeated; maximum credit four hours. Practical experience in stage management on university theatre productions. Laboratory (F, Sp)
DRAM	3833	Advanced Stage Management	Prerequisite: 2813 and major in Drama. Advanced studies of stage management . Topics covered include leadership, team-building, organization, communication, interpersonal relations, problem solving and creating a positive work environment. (Sp)
DRAM	3853	Theatre Management	Prerequisite: permission of instructor. A study of the history of theatre management and a current look at trends in the industry. (F)
DRAM	3870	Management Laboratory	Prerequisite: junior standing in drama and permission of instructor. May be repeated; maximum credit four hours. Practical experience in various areas of theatre and stage management production. (F, Sp)
DRAM	3910	Advanced Rehearsal and Production	1 to 2 hours. Prerequisite: DRAM 1114, DRAM 1124, and DRAM 1134; majors only. May be repeated; maximum credit four hours. Study and practice in an administrative or supervisory capacity of every phase of dramatic production work and management; attendance and critical discussion of plays. Kinds of service are given unit evaluation in terms of relative difficulty and time consumption. Laboratory (Irreg.)
DRAM	3960	Honors Reading	1 To 3 Hours. Prerequisite: admission to honors program. May be repeated with change of subject; maximum credit six hours. Consists of either reading topics or independent study designated by the instructor in keeping with the student's major program. covers materials not usually presented in the regular courses. (F, Sp, Su)
DRAM	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
DRAM	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
DRAM	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

DRAM 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
DRAM 4023	Model Building	Prerequisite: DRAM 2053; majors only. Acquaints students with the process of building the scenographic model as it relates to the design process. Lecture and Laboratory (Irreg.)
DRAM 4050	Company Workshop	2 to 6 hours. Prerequisite: permission. May be repeated with change of subject matter; maximum credit 12 hours. Study and practice in production, rehearsal and performance as members of a theatre company. Laboratory (Su)
DRAM 4073	Developing the Professional Perspective	(Slashlisted with 5073) Prerequisite: senior standing. Meant to give the artist the life tools to participate and thrive in an artistic lifestyle. No student may earn credit in both 4073 and 5073. (F)
DRAM 4113	Scene Painting	Prerequisite: 1114, 1124, 1133. The study and practice of traditional and new scene painting materials and techniques. Individual scene painting problems in the uses of dry pigments, casein, aniline dyes and texture materials. Laboratory (Sp)
DRAM 4141	Stage Management Seminar IV	Prerequisite: 1141, 2141, 3141 or permission of instructor. A weekly forum for sharing problems on current production assignments, as well as examining the bigger picture of stage management and theatre in America today. (F, Sp)
DRAM 4153	Advanced Scene Design	Prerequisite: DRAM 3053; majors only. An advanced study in scenic design for a variety of theatrical forms, including multiple scene, unit and single settings for dance, drama, musical theatre and opera. (Irreg.)
DRAM 4163	Lighting for Dance/Musical Theatre/Opera	Prerequisite: 2223, junior standing or permission. In-depth study and experimentations in lighting design of classical story ballets, contemporary modern dance, traditional American musical theatre and opera. The course will focus on design research, production graphics and paperwork, and design presentation. (Irreg.)
DRAM 4213	Lighting Styles	(Slashlisted with 5213) The course content is based on the experimentation of lighting themes found in symbolism, constructivism, expressionism and absurdism. The course will focus on concept development, execution and presentation. The course will delve deeply into advanced lighting practices and current technology. No student may earn credit in both 4213 and 5213. (Irreg.)
DRAM 4223	Costume Fabrics	Prerequisite: 2233, 2243, senior standing and permission of instructor. Comprehensive study of fabric materials and application to theatrical costume construction. (F)
DRAM 4233	Costume Crafts for Theatre	Prerequisite: 2233, 2243, 2253, senior standing and permission of instructor. Study of and work with special techniques that employ dying and painting of fabrics and other materials used in costume construction; millinery (construction of headgear). Wig-making and the construction of three-dimensional costume elements such as padding to alter the actor's physical appearance. (Sp)
DRAM 4243	Costume Shop Management	Prerequisite: 2233, senior standing and permission of instructor. Instruction and experience in shop management including budgeting of resources, time management, personnel, and organization. (Sp)
DRAM 4253	History of Decor	Prerequisite: majors only, junior standing and permission of instructor. Survey of interior and exterior decoration with particular emphasis on theatrical application. (F)
DRAM 4263	Advanced Crafts for the Theatre	Prerequisite: 2233, junior standing and permission of instructor. Topics in theatrical uses of crafts such as upholstery, drapery, mold-making, sculpting and casting. (Sp)
DRAM 4272	Lighting Production	Prerequisite: DRAM 1134, and DRAM 2223; majors only. The investigation of various lighting crafts including special effects, three-phase power, and lighting console programming. An in-depth study of the role of the master electrician's duties as they are understood in the industry including: power distribution, hang, load-in, and focus sessions. (Irreg.)

DRAM 4321	Advanced Stage Movement	Prerequisite: 2323. Designed to equip the student with an extended awareness and further control of the body through the advanced development of strength, flexibility, coordination, and expressiveness. Also, familiarize the student with specific skills used in theatre movement training which may include: masking, Commedia dell'Arte, period styles, circus skills, and/or stage combat. (Irreg.)
DRAM 4323	Stage Combat I: Unarmed Stage Combat	Prerequisite: 2323 and senior standing. Introduces students to the basic principles of unarmed stage combat. Course focuses on safety, emotional commitment and developing proficiency in techniques required for certification by society of American fight directors. (Sp)
DRAM 4333	Stage Combat: Edged Weaponry	Prerequisite: 2323 and senior standing. Introduces students to the basic principles of armed stage combat using edged weaponry. Course focuses on safety, emotional commitment and developing proficiency in techniques required for certification by society of American fight directors. (Sp.)
DRAM 4353	Costume Design II	Prerequisite: DRAM 2343, DRAM 3353; majors only. Promotes an understanding of style as a design consideration and encourages an awareness of the relationships between theatrical styles and historical styles. (Irreg.)
DRAM 4363	Costume Design III	Prerequisite: DRAM 2343, DRAM 3353, DRAM 4353; majors only. To further develop costume design students presentation and illustration skills. Also, allows the student to explore every facet of the design process. (Irreg.)
DRAM 4513	Professional Preparation	Prerequisite: 2523 and juried audition. Teaches the audition process including selection and preparation of audition pieces, preparation of photos and resumes, training for interviews, preparation for advanced training programs and an introduction to issues unique to the performance profession. (F)
DRAM 4523	Acting for the Camera	Prerequisite: 2523 and jury auditions. Designed to instruct the student in the requirements, discipline, and basic techniques of working on camera as a professional actor, with an appreciation of the full process of creating a film or television program. All work by the student will be videotaped then subsequently replayed with a critique by the instructor. (Sp)
DRAM 4533	Master Teachers of Acting	Prerequisite: DRAM 2523 and permission of instructor; majors only. A juried audition is required for permission. This is a team-taught course intended for upper-division acting students. The course provides 2-3 weeks each of extensive study of the techniques and methods of six legendary American acting teachers of the Stanislavski method. (Irreg.)
DRAM 4543	Professional Preparation II	Prerequisite: DRAM 4513 and permission of instructor; majors only. A juried audition is required for permission. An extension of the training in Professional Preparation I. Covers advanced audition techniques for theatre, film, TV and voice-over; advanced business, brand and marketing tools to strategize for success; and prepares the student to handle the harsh realities of "selling theatrical product" in the professional industry. (Sp)
DRAM 4643	Advanced Voice Extended Usage	Prerequisite: juried auditions. This work will focus on developing the voice for extended usage as in combat, laughing, crying, shouting, screaming, topping extraneous noise, and projecting in large or outdoor venues. The foundations of breath, resonance, and the free and open vocal track will be reviewed. Anatomy and care of the voice will also be stressed. Current theories of voice training will be explored through reading and discussion. The performance of monologues and short scenes will be used to practice skills. (Sp)
DRAM 4723	American Theatre History	Prerequisite: 3733. Approaches the history of American theatre topically by exploring the interactions between the theatre and the social and cultural context in which it has developed and flourished from colonial times to the present. (Irreg.)
DRAM 4733	Dramaturgy Seminar	Prerequisite: 3733. Designed to train students to do dramaturgy and literary management as they are currently practiced in American theatre. Develops students' skills in theatre research, writing and script analysis which may be applied to the functions of a dramaturg or other artist in the field. (Irreg.)

DRAM 4743	The Modern Theatre	Prerequisite: 3713 and 3733 or permission. A survey of the modern western theatre from 1870 to the present emphasizing those departures in playwriting and scenography from the realistic mainstream. (Irreg.)
DRAM 4763	Queer Theatre Through Film	Prerequisite: Junior standing. A survey of English-language gay and lesbian dramatic literature, using 20th century adaptations from the stage to film. (Sp)
DRAM 4773	Playwriting I	Prerequisite: permission. Study and practice in playwriting. Acquaints the student with dramatic structure and technical limitations placed upon material written for dramatic production and provides experience in writing for the stage. (F, Sp)
DRAM 4783	Playwriting II	Prerequisite: permission. Study and practice in playwriting. Acquaints the student with dramatic structure and technical limitations placed upon material written for dramatic production and provides experience in writing for the stage. (F, Sp)
DRAM 4803	Capstone Experience	Prerequisite: permission of instructor. Advanced, individual project which demonstrates mastery of skills and knowledge in student's area of interest, selected under advisement and guided by appropriate faculty member(s). Take in the senior year, capstone requires written document, either explanatory or evaluative, of the entire capstone project in appropriate research paper format. (F, Sp, Su) [V]
DRAM 4810	Performance Practicum	1 to 2 hours. Prerequisite: permission. May be repeated; maximum credit 10 hours. Study and practice in rehearsal and performance as a cast member of OU Theatre. (F, Sp)
DRAM 4820	Management Studio II	Prerequisite: 3820 and senior standing in drama. May be repeated with change of content; maximum credit six hours. Base for various units of study pertaining to the fields of theatre management and stage management. (F, Sp)
DRAM 4822	Stage Management Studio II	Prerequisite: 3822 and senior standing. May be repeated; maximum credit four hours. Practical experience in stage management on university theatre productions. Laboratory (F, Sp)
DRAM 4843	Producing	Prerequisite: junior standing and permission of instructor. Introduces the process and practice of theatrical producing. Includes the history of producing, as well as contemporary approaches in both the not-for-profit and commercial venues. Research papers, reports and experience with university productions are required. (Sp)
DRAM 4853	Advanced Theatre Management	Prerequisite: 4843 and major in drama. An evaluative study of specific management applications in the field of theatre. (Sp)
DRAM 4900	Professional Semester	3 to 12 hours. Prerequisite: junior or senior standing. Internship with a non-academic theatre (or theatre-related) organization which will augment the students academic experiences. (F, Sp, Su)
DRAM 4940	Special Topics in Theatre	2 to 6 hours. Prerequisite: junior standing or permission of instructor. For majors only. May be repeated with change of content; maximum credit six hours. Varying topics in the study and practice of theatre and drama not covered in regularly scheduled courses or new developments within the area of expertise. (Irreg.)
DRAM 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
DRAM 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
DRAM 4990	Special Studies	2 to 6 hours. Prerequisite: permission. May be repeated with change of subject matter; maximum credit 12 hours. A special creative or research project course on an advanced level in any phase of the theatre or drama adapted to the individual student. (F, Sp, Su)

DRAM	5013	Introduction to Graduate Study	Prerequisite: graduate standing. Research methods and various types of critical expression and scholarly investigation. (F)
DRAM	5050	Company Workshop for Graduate Students	2 to 6 hours. Prerequisite: permission. May be repeated; maximum credit 18 hours. Study and practice in production, rehearsal and performances as members of a theatre company. Laboratory (Su)
DRAM	5073	Developing the Professional Perspective	(Slashlisted with 4073) Prerequisite: graduate standing. Meant to give the artist the life tools to participate and thrive in an artistic lifestyle. No student may earn credit in both 4073 and 5073. (F)
DRAM	5112	Readings in Design Technology	Prerequisite: graduate standing. Directed readings to provide knowledge of literature in the field. Titles selected from general area of design in the theatre with other titles pertinent to specific area of interest of the student. (F, Sp, Su)
DRAM	5142	Design Apprenticeship	Prerequisite: graduate standing and permission. Repeat one time; area may be changed on repetition. Provides professional practice for the student. Student assists designer in area of scenery, lighting or costumes in the research, drafting, rendering, model building, material selection, etc. as applicable in practical production situations. Laboratory (F, Sp, Su)
DRAM	5163	Technical Production Practice	Prerequisite: 12 hours of drama, including a course in stagecraft. Study in the theory and practice of technical production to render the student capable of assuming the full responsibility for staging a full-length play each semester. (Irreg.)
DRAM	5165	Design Studio	Prerequisite: graduate standing and permission. To be taken three times for total of 15 credit hours. Not open for credit toward M.A. degree. The design studio sequence provides the graduate student with experience of both practical and aesthetic nature within his/her design specialization. The student will work with both real and theoretical projects to build skill as designer and technician. Laboratory (F, Sp, Su)
DRAM	5213	Lighting Styles	(Slashlisted with 4213) Prerequisite: 2223. The course content is based on the experimentation of lighting themes found in symbolism, constructivism, expressionism and absurdism. The course will focus on concept development, execution and presentation. The course will delve deeply into advanced lighting practices and current technology. No student may earn credit in both 4213 and 5213. (Irreg.)
DRAM	5613	Graduate Directing	Prerequisite: 12 hours of drama, including a course in acting, a course in interpretation and a course in directing. May be repeated up to three times with change of topic. A survey covering the various problems the graduate director might encounter. (F, Sp)
DRAM	5643	Advanced Voice: Extended Usage	Prerequisite: graduate standing. This work will focus on developing the voice for extended usage as in combat, laughing, crying, shouting, screaming, topping extraneous noise, and projecting in large or outdoor venues. The foundations of breath, resonance, and the free and open vocal track will be reviewed. Anatomy and care of the voice will also be stressed. Current theories of voice training will be explored through reading and discussion. The performance of monologues and short scenes will be used to practice skills. (Sp)
DRAM	5723	American Theatre History	Prerequisite: graduate standing or permission of instructor. Approaches the history of American theatre topically by exploring the interactions between live theatre and the social and cultural context in which it has developed and flourished from colonial times to the present. (Irreg.)
DRAM	5733	Graduate Play Structure and Analysis	Prerequisite: graduate standing or permission of instructor. Instructs students in methods of structural analysis of dramatic literature encompassing a wide range of periods, styles and genres. (Sp)
DRAM	5743	Modern Theatre	Prerequisite: graduate standing or permission of instructor. Survey of modern American and European theatre from the 1880s to the 1980s, beginning with Realism and following the developments of nonrealistic styles of playwriting and production, through the post-modern period. (Irreg.)

DRAM	5753	Period Style for the Theatre	Prerequisite: graduate standing or permission of instructor. Introduces students to the major periods in art, literary, and cultural history from the Romanesque to the Romantic era through the study of painting, sculpture, architecture, interior design, costume, manners, music, and dramatic literature. (Irreg.)
DRAM	5763	Forces in 20th Century Design	Prerequisite: graduate standing or permission of instructor. Familiarizes students with artistic moments and important persons that have contributed to and influenced the nature of the theatrical experience in the 20th century. (Irreg.)
DRAM	5900	Professional Semester	Prerequisite: graduate standing. Internship with a non-academic theatre (or theatre-related) organization which will augment the student's academic experiences. (F, Sp, Su)
DRAM	5913	Graduate Production Project	Prerequisite: 5163 and 5613 or permission. May be repeated with change of subject matter; maximum credit nine hours. Study and practice in assuming full responsibility for the staging of a full-length play. Laboratory (F, Sp, Su)
DRAM	5924	Graduate Performance/Process Studio	Prerequisite: graduate standing. May be repeated; maximum graduate credit 16 hours for acting students; eight hours for directing students. Concentrated exercises and projects toward the development of the total actor and the director in the context of the actor. Work toward sensitizing the standards to self and environment; work on physical self: the vocal instrument, self in space, through work on scripts and performance of scripts in studio. Laboratory (F, Sp)
DRAM	5940	Special Topics in Theatre Drama	Prerequisite: graduate standing or permission of instructor. For majors only. May be repeated with change of content; maximum credit nine hours. Varying topics in the study and practice of theatre and drama not covered in regularly scheduled courses or new developments within the area of expertise. (Irreg.)
DRAM	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
DRAM	5970	Graduate Seminar	1 to 4 hours. Prerequisite: 12 hours of drama and graduate standing or permission. May be repeated with change of subject matter; maximum credit 12 hours. (F, Sp, Su)
DRAM	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
DRAM	5990	Special Studies for Graduate Students	2 to 6 hours. Prerequisite: permission. May be repeated with change of subject matter; maximum credit each time six hours. (F, Sp, Su)
DRAM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EACS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EACS	2400	Field Experiences in Education	(Also listed under Professional Studies in Education.) 1 to 3 hours. Introduction to education as a profession based upon assignment to public schools and other educational agencies. Students will be expected to observe the schools in action, interact with students and professionals and participate in the instructional process. (F, Sp, Su)
EACS	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)

EACS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EACS	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EACS	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EACS	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EACS	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EACS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EACS	4960	Directed Readings In Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EACS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EACS	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EACS	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EACS	5233	The Organization of Education	Prerequisite: graduate standing. The organization of American schools. The history, relationships, functions, present status and trends in local, state and national education agencies. The places which professional educational associations, citizen's committees and other influential groups have in relation to schools. The administrative hierarchy in schools and the special functions of each level. The multicultural aspects of schooling in America. (F, Sp, Su)

EACS	5253	Legal Aspects of School District Administration	Prerequisite: graduate standing or permission of instructor. Provides in-depth examination to broad educational law topics, students' rights, and teachers' rights. Study of the landmark laws and court cases within these topics to apply new information and understandings to the student's position in educational settings. (Irreg.)
EACS	5263	Education and the Law	Prerequisite: graduate standing. Legal framework of education in the United States; consideration of federal and state constitutional provisions, federal and state statutes, federal and state judicial decisions and rules and regulations of the various federal and state agencies which affect education. (F, Sp, Su)
EACS	5333	Politics in Educational Administration	Prerequisite: graduate standing. An overview of political activities at the local, state, and federal levels that will enhance the professional development of school administrators. Issues addressed include micro-politics at the school site and district offices; superintendent and school board relations; lobbying legislators and dealing with interest groups; the state political process, federal aid; and analysis of current political controversies. (F, Sp)
EACS	5343	Financial Leadership in the Schools	Prerequisite: graduate standing. Primarily for prospective building level educational leaders, and includes a comprehensive overview of the effective management of fiscal resources in public schools. (Su)
EACS	5403	Inquiry for Performance Improvement	Prerequisite: graduate standing. School administrators need to draw on knowledge and competencies related to the inquiry process, measurement and assessment, and data collection, analysis, and interpretation to lead continuous improvement. Inquiry for performance improvement is designed to develop the capacity of school leaders to manage effective performance by applying competencies of organizational research and development to the design and implementation of a balanced approach to performance management. (F, Sp)
EACS	5543	School Level Instructional Leadership	Prerequisite: graduate standing. Focuses on school-level leadership in the areas of instructional and curriculum leadership. In the areas of instruction, the role of the principal is to develop the instructional capacity of teachers by developing human capital, enhancing the quality of teaching resources, developing instructional cultures/climate to improve teaching and learning. (F, Sp)
EACS	5573	Supervision of Instruction	Prerequisite: graduate standing. Focuses upon the clinical supervision of the classroom environment, instructional procedures and the evaluation of teaching through the processes of observation and consultation. Participants develop control of the instrumentation and procedures which enable them to gather, display and interpret data relevant to the evaluation of classroom environments. (F, Sp)
EACS	5593	Principal Leadership	Prerequisite: graduate standing. School leadership; effective schools; elementary and secondary administration; administration characteristics and responsibilities including personnel, fiscal, facility organization governance, and evaluation. (F)
EACS	5613	Human Relations in Education	(Crosslisted with H R 5613) Prerequisite: graduate standing. Focuses on intrapersonal, interpersonal and intergroup relations problems in the public schools. Specifically, deals with persistent school/classroom problems associated with multiculturism. Attempts to blend theory and practice through a lecture/discussion/problem-solving approach. Emphasizes teacher self-awareness as a major aspect of the human relations approach. (F, Sp)
EACS	5623	School and Staff Development Management	Prerequisite: graduate standing. Provides preparation in the development of technical and conceptual skills applicable to principals in their establishment of professional cultures in school environment(s). Topics will include: staff development; school climate variables; school imaging problems, strategies, and improvement models; student special interest programs and recognition procedures; and involving external groups in school improvement. (F, Sp)

EACS	5693	Technology in Educational Administration	Prerequisite: graduate standing. Provides the administrator the training in theory and application of computer concepts and the utilization of specific software programs and applications to enhance administrative decision making. (F)
EACS	5793	Technology Staff Development in Education	Prerequisite: 5693 or equivalent. Technology in the form of computers and multimedia devices is becoming increasingly prevalent in classrooms. As school districts are expending more funds to purchase equipment and provide networking, it is important that educators have the training and development necessary to effectively utilize technology to improve the instruction of students. The course is designed to familiarize students with research and best practices in the area of technology staff development. (Sp)
EACS	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EACS	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EACS	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EACS	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EACS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EACS	5980	Research For Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EACS	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EACS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EACS	6023	Applied Quantitative Research Methods in Educational Administration	Prerequisite: graduate standing. Designed to provide advanced graduate students with research skills required of effective executive educational leaders. This course will provide students with the analytical tools necessary to become effective, critical consumers of educational research, and to enable potential educational leaders to oversee and supervise staff in the preparation, development, and dissemination of evaluative research. (F)

EACS	6033	Advanced Curriculum Development	Prerequisite: graduate standing. Concepts of curriculum in K-12 education; program development; learning theories as related to curriculum; materials and media; principles of program and curriculum development; and construction of curriculum materials. (F)
EACS	6103	Visionary Leadership in Education	Prerequisite: graduate standing. The course is intended to prepare educational leaders who value and are committed to educating all students to become successful adults. Included is a detailed analysis of the role of vision and visionary leadership in educational organizations. Both scholarly literature and best practices concerning visionary leadership in education underlay course activities and discussions. (F)
EACS	6123	Administrative and Organizational Theory	Prerequisite: graduate standing. An introduction to the important theoretical bases underlying the administration of organizations, particularly educational organizations; topics include bureaucracy, social systems, leadership, decision-making, properties of systems, communication and situational analysis. (F, Sp)
EACS	6133	Qualitative Inquiry for Practitioners	Prerequisite: graduate standing. Introduces graduate students to concepts, methods, and issues in qualitative research as it is used in educational settings. Draws attention to epistemological and ethical concerns in social science and to strategic and logistical issues in the conduct of field research. Both positivist and interpretive approaches to the use of qualitative methods will be explored. Concept and theory building, strategies and techniques, and discussions of different issues of reliability and validity in the use of qualitative data will be emphasized. (F)
EACS	6203	Instructional Leadership in Educational Administration	Prerequisite: graduate standing. Focuses on instructional leadership and its emphasis on competencies necessary for leadership and management of school districts. The class draws from research, public policy and educational practices related to curriculum, instruction, assessment, strategic planning, and professional growth plans. Will enable school district administrators to plan for the integration of technology in curriculum implementation, instructional strategies, and evaluation/assessment. (Sp)
EACS	6213	Policy Evaluation	Prerequisite: graduate standing or permission of instructor. A review of selected theoretical evaluation models; topics include techniques of evaluation, generation of performance objectives, forecasting, simulation, and gaming. (Sp)
EACS	6223	Policy Planning and Development in Education	Prerequisite: graduate standing or permission of instructor. An introduction to analytical techniques applicable to the development of education policy. Includes consideration of decision theory and its application to policy making. Social, political, economic and multicultural factors in the organization and its environment will be explored as contexts within which educational policy is established. (F)
EACS	6243	Education and the Law	Prerequisite: graduate standing. Legal framework of education in the United States; consideration of federal and state constitutional provisions, federal and state statutes, federal and state judicial decisions and rules and regulations of the various federal and state agencies which affect education. (F, Sp, Su)
EACS	6253	Financing Education	Prerequisite: graduate standing, 5213, 5223, or equivalent or permission of instructor. A consideration of the roles of federal, state and local governments in the financing of education. Attention is given to the important contemporary issues related to educational financing at all three governmental levels. Also includes an introduction to the economics of education. (Sp)
EACS	6263	Educational and Community Relations	Prerequisite: graduate standing or permission of instructor. Examines the field of intra/interpersonal relationships in the context of educational organizations and their constituent communities; topics include authenticity, organizational communication, leader behavior, group dynamics, and conflict management. (F)

EACS	6273	Personnel Administration in Education	Prerequisite: graduate standing or permission of instructor. Emphasizes application of selected concepts from the social sciences and organization theory which relate to understanding and managing people within the organizational setting. Focus is on all aspects of the personnel function including: manpower planning, recruitment, selection, placement, evaluation, development, compensation, security and an introduction to collective negotiations. (Sp)
EACS	6283	Communication for Educational Renewal	Prerequisite: graduate standing. Engage students in examining communication theory and practice involving intrapersonal, interpersonal, small group, and public communication settings within the context of educational renewal. (Su)
EACS	6303	Strategic and Financial Planning in Education	Prerequisite: graduate standing. Strategic planning enables a district or school to shape and guide its overall educational objectives. Through effective strategic planning an educational organization creates a framework for developing, adapting and aligning organizational vision, mission and goals to achieve and sustain its desired educational outcomes. A critical element of the planning process is financial planning, in which the organization's goals are aligned with organizational resources. Course focuses on the leadership competencies necessary to formulate, execute and monitor the strategic planning for an educational organization based on research-based analytical techniques and models. Includes an examination for school district risk management. (Sp)
EACS	6333	Politics in Educational Administration	Prerequisite: graduate standing. An overview of political activities at the local, state, and federal levels that will enhance the professional development of school administrators. Issues addressed include micro-politics at the school site and district offices; superintendent and school board relations; lobbying legislators and dealing with interest groups; the state political process, federal aid; and analysis of current political controversies. (F, Sp)
EACS	6503	Ethics in Educational Administration	Prerequisite: graduate standing. Intends to familiarize upper-level graduate students with ethical theories that can be utilized in the policy development and administration of school districts and related decision making. Prepares students to enter school district management with the skills necessary to assume a successful leadership role. Firm grounding in the current problems of today's schools will be used as an opportunity to explore decision making capacity as a district level administrator. Students will learn the foundations of ethics which will promote decision making. Challenges students to understand and apply ethical considerations with regard to 1) the rights of others with regard to confidentiality, dignity and honesty; 2) sensitivity to student diversity; and 3) impartiality in their interactions with others. Students will explain decisions based on ethical and legal principles. (Sp)
EACS	6663	Special Education Law	Prerequisite: graduate standing. Enables students to understand the legal complexities involved in identifying and providing educational services to students with special needs. (F)
EACS	6673	Advanced Inquiry	Prerequisites: graduate standing and EACS 6023, 6713, and 6970. The course is intended to help provide advanced graduate students with necessary analytical skills to become effective consumers of research, and to produce an effective doctoral dissertation. The course focuses on skills related to formulation of research problems, developing research proposals, collection, analysis and interpretation of data. (F, Su)
EACS	6693	Educational Technology Leadership	Prerequisite: graduate standing, 5693. Designed to help enhance the competencies of school district administrators in the area of educational technology leadership. Focuses on technology leadership (at the central office level), rather than technology user skills. Intended for district level leaders (such as superintendents) who are not technology specialists (e.g., the course is not intended for district level technology directors or coordinators). (F)

EACS	6713	Pro Seminar	(Crosslisted with EDAH 6713 and EDS 6713) Prerequisite: graduate standing. The purpose of the Pro Seminar is to introduce beginning doctoral students to the concept and process of research. Included are issues related to the role of philosophical frameworks, theory, research conceptualization, scholarly writing, and rudimentary research methods. (F, Sp, Su)
EACS	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EACS	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EACS	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EACS	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EACS	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EACS	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EACS	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EACS	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
ECE	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ECE	2214	Digital Design	Prerequisite: MATH 1823 or MATH 1914. Number systems, Boolean algebra, minimization procedures, combinational logic functions, introduction to sequential logic design, finite state machines and clocked (synchronous) sequential circuits. Analysis, synthesis and implementation are appropriately emphasized. (F, Sp)

ECE	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, C S, ENGR, EPHY, G E, I E, P E 2281) Prerequisite: student participation in the program. The co-op program provides student placement in jobs outside the university, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
ECE	2713	Digital Signals and Filtering	Prerequisites: ENGR 1411 or ENGR 3511 or concurrent enrollment; CS 1313 or CS 1323 or concurrent enrollment; and MATH 2423 or 2924. Digital signals and filter, discrete Fourier A and Z transforms, sampling. (F, Sp)
ECE	2723	Electrical Circuits I	Prerequisites: ECE 2713 or concurrent enrollment in ECE 2713; MATH 2423 or 2924; PHYS 2524. Introduction to circuit elements and the laws of electrical science. Loop and nodal analysis solution methods. Thevenin and Norton equivalent circuits. Superposition and source transformation methods. Laplace transform analysis of electrical circuits. Guest lectures introducing advanced topics. (F, Sp)
ECE	3113	Energy Conversion I	Prerequisite: ECE 2723 and ECE 3613. Survey of methods of energy conversion; field-energy force relationships, equations of motion, incremental motion transducers, transformer theory; introduction to rotating machines. (Sp)
ECE	3223	Microprocessor System Design	Prerequisite: ECE 3773 or concurrent enrollment. Review of clocked sequential circuits; MSI/LSI devices and applications, including registers, busing, combinational functions; use of microprocessors and logic design using microprocessors. Emphasizes assembly of full functional units into workable systems. (F, Sp)
ECE	3323	Introduction to Solid State Electronic Devices	Prerequisite: 3613. Introduction to quantum mechanics, crystal properties and growth of semiconductors, energy bands in solids, charge carriers in semi-conductors, excess carriers in semiconductors, and introduction to diodes and transistors. (F, Sp)
ECE	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ECE	3613	Electromagnetic Fields I	Prerequisite: ECE 2723 and MATH 2443 or MATH 2934 and Mathematics 3113. Electrostatic and magnetostatic fields and sources, boundary conditions; introduction to Laplace's and Poisson's equations; quasi-stationary and time-varying fields; Maxwell's equations and circuit concepts. (F, Sp)
ECE	3723	Electrical Circuits II	Prerequisites: ECE 2713, ECE 2723; and MATH 3113 or concurrent enrollment in MATH 3113. Analysis of electrical circuits in both time and frequency domains. Continuation of AC circuit theory, use of two port network theorems, impulse response, convolution, and differential equations. Laplace and Fourier transform analysis of electrical circuits. (F, Sp)
ECE	3773	Electrical and Computer Engineering Circuits Laboratory	Prerequisite: ECE 2214 and either ECE 3723 or concurrent enrollment in ECE 3723. Electrical laboratory procedures, circuit construction, debug and experimental Confirmation of the principles of circuit theory. Introduction to use of laboratory instrumentation, including skills in the use of the oscilloscope in the evaluation of DC and AC circuits. Use and application of diodes, operational amplifiers and programmable logic devices. (F, Sp)
ECE	3793	Signals and Systems	Prerequisites: ECE 2713, ECE 2723, MATH 3113; and MATH 3333 or concurrent enrollment in MATH 3333. Linear systems; time domain analysis; frequency domain analysis; Fourier, Laplace and Z-transforms; introduction to communications and control. (F, Sp)

ECE	3813	Introductory Electronics	Prerequisites: ECE 2713, and ECE 2723; CHEM 1315; and MATH 2443 or 2934 or concurrent enrollment in MATH 2443 or 2934. Small and large signal characteristics and models of electronic devices; analysis and design of elementary electronic circuits. (F, Sp)
ECE	3873	Electrical and Computer Engineering Electronics Laboratory	Prerequisite: 3773, 3813, and Engineering 2002 or 2003. Electronic analog circuit design, simulation, construction, debugging and measurement of circuit performance quantities using advanced instrumentation techniques; circuit reliability theory; independent design skills development and technical writing. (F, Sp)
ECE	3960	Honors Reading	Prerequisite: admission to Honors program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
ECE	3970	Honors Seminar	Prerequisite: Admission to Honors program. May be repeated; maximum credit six hours. Projects covered will vary. Deal with concepts not usually presented in regular coursework.
ECE	3980	Honors Research	Prerequisite: admission to Honors program. May be repeated; maximum credit six hours. provides an opportunity for the gifted Honors candidate to work on a special project in the student's field. (F, Sp, Su)
ECE	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ECE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ECE	4113	Analysis of Electrical Transmission	Prerequisite: 3113. Transmission and distribution of electrical energy, particularly addressing electrical transmission systems in the competitive energy market. (F)
ECE	4213	Digital Signal Processing	(Slashlisted with 5213) Prerequisite: 3793. Discrete-time linear systems, finite duration impulse response digital filters, finite work length effects, spectral analysis, fast Fourier-transforms, two-dimensional signal processing and applications. No student may earn credit for both 4213 and 5213. (F)
ECE	4273	Digital Design Laboratory	Prerequisites: ECE 3223 and ECE 3873. Design of digital systems with integrated circuits and MSI/LSI and microprocessor interfacing. Laboratory (F, Sp)
ECE	4363	Optical Engineering	(Slashlisted with 5363) Prerequisite: ECE 3793. Underlying theory and design of optical systems. Interference, diffraction and coherence phenomena will be examined as a basis for studying the limits of optical system performance. Other topics include a detailed study of polarization, the interaction of light with various media and geometrical optics. No student may earn credit for both 4363 and 5363. (Sp)
ECE	4383	Integrated Circuit Fabrication Technology	(Slashlisted with 5383) Prerequisite: 3323. A treatment of the theory and processes involved in the fabrication of integrated circuits. No student may earn credit in both 4383 and 5383. (F)
ECE	4413	Introduction to Control System Engineering	Prerequisite: 3793. Analysis and synthesis of control systems; control systems performance and applications. (F)
ECE	4433	Measurement and Automation	(Slashlisted with 5433) Prerequisite: ECE 3793 or instructor permission or systems course in another major. Fundamentals of data acquisition and control. A series of design projects in data acquisition, logging and real-time analysis. Includes machine vision and image processing as well as vibration, motion and real-time control. No student may earn credit for both 4433 and 5433. (F)

ECE	4523	Introduction to Communication Theory	Prerequisite: 3793. An introductory treatment of statistical communication theory; description of a random process by auto-correlation and power spectral density functions, sources and properties of electrical noise, the effects of modulation, detection And filtering on signal information content, bandwidth and signal-to-noise ratio. (Sp)
ECE	4613	Computer Architecture	(Crosslisted with C S 4613) Prerequisite: 3223 or Computer Science 2613. Covers basic concepts of computer system design and communication between components, along with current and historical examples of computer architecture. (F, Sp)
ECE	4623	Computer Hardware Design	(Slashlisted with 5623) Prerequisite: 3223. Design of modern digital computing circuits, computer arithmetic, number systems, state machines, control units, data transfer, bus interfacing, VHDL language elements and usage, circuit simulation. No student may earn credit for both 4623 and 5623. (F)
ECE	4643	Radio Frequency and Microwave Engineering	(Slashlisted with 5653) Prerequisite: ECE 3613. Analysis of radio frequency (RF) and microwave components, circuits and systems using modern engineering tools and measurement instruments. No student may earn credit for both 4643 and 5643. (Sp)
ECE	4653	Digital Radar Systems	(Slashlisted with 5653) Prerequisite: ECE 3793. Modern and next-generation radar systems, with an emphasis on the digital receiver and post processing that follows the RF front-end. Several off-the-shelf receiver case studies will be conducted. These will focus on analog-to-digital converter (ADC) selection followed by software defined radio (SDR) concepts for field programmable gate array (FPGA) implementation. These receivers may also be used for communication systems and have other broad applications. No student may earn credit for both 4653 and 5653. (F)
ECE	4663	Radar Engineering	(Crosslisted with METR 4663; Slashlisted with 5663) Prerequisite: Grade of C or better in 3613, or permission. Introduction to radar system designs and applications with emphasis on weather radar; radar system architecture and their functionalities and limitations of subsystems; theories of radar detection and estimation in a noisy and cluttered environment; existing technologies and advanced techniques to improve radar performance. No student may earn credit in both 4663 and 5663. (F)
ECE	4693	Antennas	(Slashlisted with 5693). Prerequisite: ECE 3613 and ECE 4703 or permission of instructor. Introduction to antenna theory and design. Course covers design, construction, and measurement of antennas including, but not limited to the following specific types; dipoles, loops, aperture, microstrip, and broadband antennas, as well as array theory. No student may earn credit for both 4693 and 5693. (Sp)
ECE	4703	Electromagnetic Fields and Wave Propagation	(Slashlisted with 5703). Prerequisite: ECE 3613. Maxwell's Equations, time-harmonic fields, plane waves, reflections on interfaces, waveguides and transmission lines, radiation, and antenna basics. No student may earn credit for both 4703 and 5703. (F, Sp)
ECE	4773	Laboratory (Special Projects)	Prerequisite: 4273 or concurrent enrollment in 4273. Individually supervised special engineering problems of experimental nature. Laboratory (F, Sp) [V]
ECE	4813	Electronics	Prerequisite: 3813. Analysis and design of electronic circuits such as multi-stage amplifiers, feedback amplifiers, oscillators and power amplifiers. (Sp)
ECE	4823	Engineering Principles of the Human Body	Prerequisites: ECE 2723, PHYS 2514, MATH 2423 or 2924. Introduction to the foundational engineering approach to analyzing the human body's anatomy and physiological function. Topics include muscle and forces, fluid dynamics of the lungs and cardiovascular system, electrical signals in the body, and vision and optics of the eye. (Sp)

ECE	4833	VLSI Digital System Design	(Slashlisted with 5833) Prerequisite: ECE 3223 and ECE 3873. An introduction to Very-Large-Scale Integrated (VLSI) systems design methods; complementary Metal-Oxide Semiconductor (CMOS) technology emphasized. VLSI Computer Aided Design (CAD) tools and CMOS layout rules and techniques. Project oriented. No student may earn credit for both 4833 and 5833. (F)
ECE	4853	Biomedical Signals and Systems	(Slashlisted with 5853) Prerequisite: ECE 3723 and ECE 3793, or equivalent courses in electrical circuits and signal processing, or permission of instructor. Comprehensive coverage of topics related to signals in humans. Emphasis on using engineering tools to interpret signals and underlying physiological principles. Focus on emerging engineering technologies, physiological knowledge and clinical application. No student may earn credit for both 4853 and 5853. (Sp)
ECE	4863	Bioinstrumentation	(Slashlisted with 5863) Prerequisite: ECE 3723 or ECE 4813 or permission of instructor. A comprehensive coverage of topics related to principles, applications and design of medical instruments widely used in hospitals and clinical research. Emphasis is placed on general design concepts, discussions on a great variety of medical devices and medical device safety issues. Materials cover different levels and various aspects of human systems, such as heart, brain, circulation, respiration and so on. Reading projects cover the state-of-the-art developments in advanced medical devices. No student may earn credit for both 4863 and 5863. (F, Sp)
ECE	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ECE	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ECE	4973	Special Topics	Prerequisite: Varies with course content. May be repeated with change of subject; maximum credit six hours in combination with 4990. Devoted to special topics in Electrical and Computer Engineering not covered in the current curriculum. (F, Sp, Su)
ECE	4990	Special Studies	Prerequisite: Senior standing and permission. May be repeated with change of subject matter; maximum credit six hours in combination with 4973. Devoted to supervised individual studies of special topics (S/U Graded) in Electrical and Computer Engineering. (F, Sp, Su)
ECE	5063	Pattern Recognition and Computer Vision	Prerequisite: MATH 2433 or MATH 2934, MATH 3333, ISE 3293 or MATH 4753, and graduate standing. Covers the theory, methods and applications of computer vision. Topics include binary machine vision, multiscale vision, color vision, low-level and high-level vision, 2-D and 3-D vision with both static images and dynamic scenes. (F)
ECE	5123	Wireless Communications	(Crosslisted with TCOM 5123) Prerequisite: 3793 or permission. Wireless communications principles, multiple access techniques, wireless networking, and systems and standards. (F)
ECE	5153	Emerging Topics in LTE-Advanced and 5G	(Crosslisted with TCOM 5153) Prerequisite: graduate standing. This course will train students to master the latest developments in the rapidly evolving landscape in wireless cellular networks, thereby preparing them for working on emerging as well as near future wireless technologies. Focuses on selected topics for research and development of LTE-A and 5G cellular networks. These topics include: PHY and MAC layer techniques suitable LTE-A & 5G; network densification techniques such as HetNets and C-RAN; Self Organizing Networks (SON); and Big Data Empowered SON. (Sp)

ECE	5163	Generation Resource Scheduling and Portfolio Optimization	Prerequisite: 4113 and Industrial Engineering 3293. Optimum generation scheduling, including economic dispatch and unit commitment; various financial transactions such as forward contracts, futures and options; optimum portfolios consisting of these possible transactions and generating units. Uncertainty models and methods of describing "risk" are introduced. (Sp)
ECE	5183	Quantum Information Theory	(Crosslisted with TCOM 5183) Prerequisite: linear algebra. Introductory course of quantum information theory. Topics covered include quantum state, quantum measurement, quantum channels, No-Cloning Theorem, Bell's inequalities, entanglement, quantum dense coding, quantum teleportation, distance measures, quantum entropy, quantum mutual information, information of quantum channels. (F)
ECE	5213	Digital Signal Processing	(Slashlisted with 4213) Prerequisite: 3793. Discrete-time linear systems, finite duration impulse response digital filters, infinite impulse response digital filters, finite word length effects, spectral analysis, fast Fourier-transforms, two-dimensional signal processing and applications. No student may earn credit for both 4213 and 5213. (F)
ECE	5223	Estimation and Identification	Prerequisite: 5403 and 5523. Estimation and filtering, optimal filtering, modeling, parametric and nonparametric identification methods. (Sp)
ECE	5233	Digital Logic and Systems	Prerequisite: 2214. Boolean Algebra, vector switching algebra, Boolean calculus, fault detection in digital circuits, sequential machine design, circuit testing and testable design, Multi-valued logic systems, fuzzy logic systems, basics of logic design in nanospace. (F)
ECE	5243	Logic and Computer Design in Nanospace	Prerequisite: permission of instructor. Intro to nanotechnologies, combinational logic (gates, encoders, decoders, multiplexers, demultiplexers), design in nanospace, sequential logic (flip-flops, registers, counters, memories), design in nanospace, design of basic nanocomputers, parallel computation in nanospace, fault-tolerant computation, information measures in nanodimensions. (Sp)
ECE	5253	Digital Systems Interfaces	Prerequisite: 3223. Provides formal background in asynchronous sequential circuit design (fundamental mode circuits, races, hazards and pulse mode design), followed by a treatment of standard interface conventions for data transmission and reception and a discussion of priority interrupt systems. Finally, the use of A/D and D/A converters is presented. (Sp)
ECE	5263	Computer Arithmetic	Prerequisite: 4613 or Computer Science 4613 or permission of instructor. Design of computer arithmetic units including fast adders, fast multipliers, dividers and floating point arithmetic units. (Irreg.)
ECE	5273	Digital Image Processing	Prerequisite: 3793 or permission of instructor. This course covers the theory, methods, and applications of image enhancement, image restoration, image compression, image segmentation, image representation and description, and image recognition and interpretation. (Sp)
ECE	5283	Special Topics in Digital Signal/Image Processing	Prerequisite: 4213/5213 or 5273 or permission. May be repeated with change of content; maximum credit 12 hours. Selected topics in current research interest not covered by regularly scheduled course work. (Irreg.)
ECE	5303	Solid State Electronics I	Prerequisite: 3323. Principles and applications of electronic properties of solids for devices with particular emphasis on semiconductor junction, bulk and field effect devices. (F)
ECE	5313	Semiconductor Material & Device Characterization	Prerequisite: 3323. Characterization techniques and underlying principles for measuring semiconductor materials and devices. (Sp)
ECE	5323	Opto-Electronics I	Prerequisite: 3323 or Engineering 2313. Introduction to phenomenological and quantum mechanical theory of solids; introduction to lasers and masers with particular emphasis on the physical mechanisms underlying interactions between electromagnetic radiation and atomic systems. (F, Sp)

ECE	5343	Quantum Structures and Devices	Prerequisite: ECE 3323 or permission of instructor. Theory and application of KP method, strain effects, electrical and optical properties of quantum structures, semiconductor quantum devices including quantum well infrared photodetectors, quantum cascade and interband cascade lasers, type-II superlattice detectors. (Sp)
ECE	5353	Fiber Optics	Prerequisite: 3793 and 3813. Principles of optical fiber wave-guiding and losses; sources and detectors; receivers; transmission system design; fiber-based broadband networks. (Sp)
ECE	5363	Optical Engineering	(Slashlisted with 4363) Prerequisite: ECE 3793. Underlying theory and design of optical systems. Interference, diffraction and coherence phenomena will be examined as a basis for studying the limits of optical system performance. Other topics include a detailed study of polarization, the interaction of light with various media and geometrical optics. No student can earn credit for both 4363 and 5363. (Sp)
ECE	5383	Integrated Circuit Fabrication Technology	(Slashlisted with 4383) Prerequisite: 3323. A treatment of the theory and processes involved in the fabrication of integrated circuits. No student may earn credit for both 4383 and 5383. (F)
ECE	5403	Linear Systems Analysis	Prerequisite: Math 3333. In-depth background course in methods of linear analysis in systems engineering. Topics include least squares methods, singular value decomposition, continuous and discrete time linear dynamical systems, controllability and state transfer. (F)
ECE	5413	Control Theory	Prerequisite: 4413, 5403. Controllability, optimal control and dynamic programming, LQR, observability, linear estimation and Kalman filter, realization theory. (Sp)
ECE	5433	Measurement and Automation	(Slashlisted with 4433) Prerequisite: graduate standing, ENGR 3723 or Math Numerical Methods, ECE 3793 or instructor permission or systems course in another major. Fundamentals of data acquisition and control. A series of design projects in data acquisition, logging and real-time analysis. Includes machine vision and image processing as well as vibration, motion and real-time control. No student may earn credit for both 4433 and 5433. (F)
ECE	5463	Advanced Computer Architecture	(Crosslisted with C S 5463) Prerequisite: graduate standing. The design of modern programmable computer systems with emphases on exploiting parallelism at all levels, designing within constraints including energy consumption, and the impact of architecture on software design. Covers state of the art computer architecture, case studies and trends. (Sp)
ECE	5513	Communication Theory	Prerequisite: 4523. Probability theory, stochastic processes, detection, extraction and predictions of signals in noise. (F)
ECE	5523	Random Signals	Prerequisite: ECE 3793, ISE 3293 or permission of instructor. Review of random variables; random vectors. Introduction to random processes; stationarity; ergodicity. Random signals into linear systems. Special processes; ARMA, Markov, Point, Gaussian. Review of parameter estimation. Estimation of random signal parameters. (F)
ECE	5533	Telecommunications Industry Overview	Prerequisite: 3793. Studies the development of telecommunications technology, industry, and policy in the United States , stressing inter-relationships among industry, government bodies and policies, and users. Provides a broad view of telecommunications and of the direction of the industry. (F)
ECE	5543	Telecom Network Design and Management	Prerequisite: 3793. Introduction to basic issues in the design and management of telecommunications networks; Concepts will include those pertinent to telecommunications engineering and electrical and computer engineering, such as wide area network design principles that cater to Erlangian traffic. (Sp)
ECE	5553	Telecommunications Technology	Prerequisite: 3793. The ways and means by which voice, data and video traffic are moved long distances. Topics include data networks, telephone systems, video, and optical systems. (F)

ECE	5563	Computer and Communications Security	Prerequisite: 3793. Introduction to security problems in computing and communications basic encryption and decryption techniques, secure encryption systems, cryptographic protocols and practices, security in networks and distributed systems, legal and ethical issues in computer security. (Sp)
ECE	5573	Optical Systems and Networks	Prerequisite: 3793. Comprehensive study of new developments and how optical technology is used in optical systems and networks; covers optical fiber applications as the best transmission medium for high capacity traffic in communications networking; also how advanced photonic technology has enabled networks to transport broadband exceeding terabits/second/fiber. (Sp)
ECE	5583	Information Theory	Prerequisite: 4523 or equivalent. Introductory course in information theory. Topics include: asymptotic equipartition property, entropy, Fano's inequality, Huffman coding, lossy source coding theory, and channel coding theory. (F)
ECE	5593	Free Space Optics in Telecommunication Networking	Prerequisite: 3613 and 4523 or equivalent. Introduction to free space optical communications. Review of Maxwell's equations, LED's and lasers, photodetectors, heterodyne detection of light beam tracking and steering, laser radar and range finders. (Sp)
ECE	5623	Computer Hardware Design	(Slashlisted with 4623) Prerequisite: 3223. Design of modern digital computing circuits, computer arithmetic, number systems, state machines, control units, data transfer, bus interfacing, VHDL language elements and usage, circuit simulation. No student may earn credit for both 4623 and 5623. (F)
ECE	5633	Reconfigurable Computing	Prerequisite: 4623 or 5623. Study and design of modern configurable hardware devices and systems. Internal operation and application of field programmable gate arrays (FPGAs) for computing hardware using VHDL. Static and dynamic reconfiguration. Spacial vs. temporal computing. (Sp)
ECE	5643	Radio Frequency and Microwave Engineering	(Slashlisted with 4643) Prerequisite: ECE 3613 and ECE 3713. Analysis of radio frequency (RF) and microwave components, circuits and systems using modern engineering tools and measurement instruments. No student may earn credit for both 4643 and 5643. (Sp)
ECE	5653	Digital Radar Systems	(Slashlisted with 4653). Prerequisite: ECE 3793. Modern and next-generation radar systems, with an emphasis on the digital receiver and post processing that follows the RF front-end. Several off-the-shelf receiver case studies will be conducted. These will focus on analog-to-digital converter (ADC) selection followed by software defined radio (SDR) concepts for field programmable gate array (FPGA) implementation. These receivers may also be used for communication systems and have other broad applications. No student may earn credit for both 4653 and 5653. (F)
ECE	5663	Radar Engineering	(Crosslisted with METR 5663; Slashlisted with 4663) Prerequisite: Grade of C or better in 3613, or permission of instructor. Introduction to radar system designs and applications with emphasis on weather radar; radar system architecture and their functionalities and limitations of subsystems; theories of radar detection and estimation in a noisy and cluttered environment; existing technologies and advanced techniques to improve radar performance. No student may earn credit in both 4663 and 5663. (F)
ECE	5673	Weather Radar Theory and Practice	(Crosslisted with METR 5673) Prerequisite: graduate standing, grade of C or better in Math 3113 and Physics 2524, or permission of instructor. Introduction to electromagnetic waves and propagation through the atmosphere, radar design trade-offs, antennas, transmitters, and coherent receivers; analysis of radar signals as noise-corrupted stochastic processes, with emphasis on digital signal processing for Doppler spectrum and moment estimation; implementation of processing algorithms using actual Doppler radar data. No student may earn credit for both 4673 and 5673. (F)

ECE	5683	Weather Radar Applications	(Crosslisted with METR 5683) Prerequisite: graduate standing in Meteorology or Engineering, or permission of instructor. Interpretation of meteorological structures using weather radar. Introduces scatter from hydrometeors and refractive index variations. Presentation of quantitative precipitation estimation methods based on the radar reflectivity factor, attenuation, and dual-polarization observations. Also includes the fundamental concepts of clear-air echoes and the estimation of winds under non-precipitation conditions. (Sp)
ECE	5693	Antennas	(Slashlisted with 4693) Prerequisites: ECE 3613, ECE 4703, and permission of instructor. Introduction to antenna theory and design. Course covers design, construction, and measurement of antennas including, but not limited to the following specific types; dipoles, loops, aperture, microstrip, and broadband antennas, as well as array theory. No student may earn credit for both 4693 and 5693. (Sp)
ECE	5703	Electromagnetic Fields and Wave Propagation	(Slashlisted with 4703) Prerequisite: ECE 3613. Maxwell's Equations, time-harmonic fields, plane waves, reflections on interfaces, waveguides and transmission lines, radiation, and antenna basics. No student may earn credit for both 4703 and 5703. (F, Sp)
ECE	5713	Microwave Systems and Components	Prerequisites: ECE 4643 or ECE 4693 or instructor permission. Theoretical and practical survey of modern high-frequency and microwave system engineering principles, active and passive microwave components, modern communication and radar systems. Laboratory- and project-based activities emphasize practical issues that arise in this area of engineering. (F)
ECE	5723	Radar Signal Processing	Prerequisite: ECE 3793 or equivalent. Radar fundamentals: radar range equation, waveforms, detection and matched filtering, ambiguity functions. Processing and Applications: Pulse-Doppler radar, synthetic aperture radar (SAR), moving target indication (MTI), space time adaptive processing (STAP). (Sp)
ECE	5833	VLSI Digital System Design	(Slashlisted with 4833) Prerequisite: ECE 3223 and ECE 3873. An introduction to Very-Large-Scale Integrated (VLSI) systems design methods; complementary Metal-Oxide Semiconductor (CMOS) technology emphasized. VLSI Computer Aided Design (CAD) tools and CMOS layout rules and techniques. Project oriented. No student may earn credit for both 4833 and 5833. (F)
ECE	5843	Medical Imaging Systems	Prerequisite: 3793 or Fourier transforms, or permission. Fundamental principles of medical image formation, image acquisition and image quality evaluation, Major medical imaging modalities, such as radiography, fluoroscopy, computed tomography, ultrasound, MRI, and nuclear medicine will be introduced. Clinical applications and limitations of each modality will also be analyzed. (Sp)
ECE	5853	Biomedical Signals and Systems	(Slashlisted with 4853) Prerequisites: ECE 3723 and ECE 3793, or equivalent course in electrical circuits and signal processing, or permission of instructor. Comprehensive coverage of topics related to signals in humans. Emphasis on using engineering tools to interpret signals and underlying physiological principles. Focus on emerging engineering technologies, physiological knowledge and clinical application. No student may earn credit for both 4853 and 5853. (Sp)
ECE	5863	Bioinstrumentation	(Slashlisted with 4863) Prerequisites: ECE 3773 or ECE 4813 or permission of instructor. A comprehensive coverage of topics related to principles, applications and design of medical instruments widely used in hospitals and clinical research. Emphasis is placed on general design concepts, discussions on a great variety of medical devices and medical device safety issues. Materials cover different levels and various aspects of human systems, such as heart, brain, circulation, respiration and so forth. The course will also provide reading projects to cover the state-of-the-art developments in advanced medical devices. No student may earn credit for both 4863 and 5863. (F, Sp)

ECE	5873	Advanced VLSI Design and Applications	Prerequisite: ECE 4833 or ECE 5833. Design of sophisticated digital integrated circuits; special purpose architectures used where appropriate; silicon compiler and hardware description language used; project oriented. (Sp)
ECE	5880	Professional Internship	1 to 3 hours. Prerequisite: graduate standing and 12 credit hours toward graduate degree. May be repeated; maximum credit six hours; grade equivalent to B or better required. Professional technical internship training in electrical and computer engineering, as part of M.S. or PhD degree requirements. A written report to be graded by a member of the graduate faculty is required. (F, Sp, Su)
ECE	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ECE	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ECE	5973	Special Topics in Electrical and Computer Engineering	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics of current research interest not covered by regularly scheduled coursework. (F, Sp, Su)
ECE	5980	Research for Master's Thesis	Variable enrollment, permission of instructor required, two to nine hours; credit required for degree, six hours. (F, Sp, Su)
ECE	5990	Special Studies	1 to 3 hours. Prerequisite: graduate standing or permission. May be repeated with change of subject matter; maximum credit nine hours. Devoted to special topics in electrical engineering not covered in the regular curriculum or to supervised individual study. (F, Sp, Su)
ECE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ECE	6213	Optical Information Processing	Prerequisite: 5213 and 5353. Application of Fourier transforms, linear systems, and diffraction theory to the analysis of optical systems. Emphasis is on the use of optical systems for information processing, including image enhancement, pattern recognition, data processing, optical switching, and computing. (F)
ECE	6283	Advanced Topics in Digital Signal/Image Processing	Prerequisite: 5223 or permission. May be repeated with change of content; maximum credit 12 hours. Selected topics at the Ph.D. level of current research interest not covered by regularly scheduled course work. (Irreg.)
ECE	6613	Weather Radar Polarimetry	(Crosslisted with METR 6613) Prerequisite: graduate standing. Provides fundamentals and principles of weather radar polarimetry through understanding wave scattering and propogation in geophysical media subject to turbulent mixing and filled with hydrometers and other objects. The relations between polarimetric radar observables and physical parameters will be established. The methods and algorithms for retrieving cloud and precipitation microphysics for weather quantification and forecast will be introduced. (F)
ECE	6813	Advanced Topics in Biomedical Engineering	Prerequisite: 5843. May be repeated with change of content; maximum credit 12 hours. In-depth studies in biomedical engineering. Focus will be on advanced optoelectronic biomedical technologies, such as bioinstrumentation, biomedical imaging modalities. Students will learn the knowledge behind current technology and also research and development methods of applying future technology to clinical and biomedical applications. (Sp)
ECE	6950	Research in Electrical and Computer Engineering	1 to 4 hours. Prerequisite: graduate standing and permission of instructor in Electrical and Computer Engineering. May be repeated; maximum credit 24 hours. Research in electrical and computer engineering occurring prior to the General Examination. (F, Sp, Su)
ECE	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

ECE	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ECE	6973	Advanced Topics in Electrical and Computer Engineering	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics of current faculty research interest at the Ph.D. level not covered by regularly scheduled coursework. (Irreg.)
ECE	6980	Research for Doctoral Dissertation	Prerequisite: Graduate standing. Permission of Instructor required. Research in Electrical and Computer Engineering. (F, Sp, Su)
ECE	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ECON	1113	Principles of Economics-Macro	Prerequisite: Satisfactory score on the Math placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. The functioning and current problems of the aggregate economy: determination and analysis of national income, employment, inflation and stabilization; money and banking, monetary and fiscal policy; and aspects of international interdependence. Laboratory (F, Sp, Su) [III-SS]
ECON	1123	Principles of Economics-Micro	Prerequisite: Satisfactory score on the Math placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Goals, incentives and allocation of resources resulting from economic behavior with applications and illustrations from current issues: operation of markets for goods, services and factors of production; the behavior of firms and industries in different types of competition and income distribution. Laboratory (F, Sp, Su) [III-SS]
ECON	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ECON	2523	Health Economics and Health Promotion	Analyze basic health policy issues through the use of basic economic principles. Topics included will be the role of taxation and regulation in promotion public health, health promotion program evaluation, and health care reform. (Sp)
ECON	2843	Elements of Statistics	Prerequisite: a grade of C or better in Mathematics 1503 or 1743 or 1823. Basic statistical techniques emphasizing business and economic applications. Topics covered include data summary techniques, elementary probability theory, estimation, hypothesis testing, simple regression, time-series and index numbers. Laboratory (F, Sp, Su) [I-M]
ECON	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
ECON	3113	Intermediate Microeconomic Theory	Prerequisite: 1113 and 1123 with a grade of C or better and Mathematics 1503 or 1643. Fundamental economic concepts and principles; value and distribution theories under conditions of competition, monopoly and monopolistic competition. Appraisal of modern problems in terms of these theories. (F, Sp, Su) [III-SS]
ECON	3133	Intermediate Macroeconomic Theory	Prerequisite: a grade of C or better in 1113, 1123, and Mathematics 1503 or 1643. National income concepts; aggregate demand by household, business, government, and foreign sectors; determination of national income, interest rate, price, output, and employment levels. (F, Sp, Su)

ECON	3213	Environmental Economics	Prerequisite: a grade of C or better in ECON 1123. Economic approach to environmental protection; analysis focuses on property rights and externalities. Examines strategies for addressing externalities including command-and-control regulation, emissions taxes, and tradable discharge permits. Topics include air pollution, water pollution, waste disposal and recycling, and endangered species protection. (Irreg.)
ECON	3233	Information Technology and the Economy	Prerequisite: a grade of C or better in 1123. Examines the role of information and technology in the economy. Topics will include the importance of network externalities, the growth of e-commerce, and the economic analysis of standards and protocols. (Irreg.)
ECON	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ECON	3513	Labor Problems	Prerequisite: a grade of C or better in 1113 and 1123. Problems of labor in an industrial society; wages, hours, working conditions, child labor. Conflicts between management and labor. (F)
ECON	3523	Health Economics	Prerequisite: ECON 1113 and ECON 1123 with a grade of C or higher. Overall view of health economics. Covers health insurance markets, externalities in health and medical care, health and labor markets, government intervention in health care provision, current health programs in the United States and models of health production. (Irreg.)
ECON	3613	International Trade Theory and Problems	Prerequisite: a grade of C or better in 1113 and 1123. Benefits of trade, determination of the direction and level of trade, commercial policy and trade barriers, international trade problems and issues. (F, Sp)
ECON	3633	International Finance Theory and Problems	Prerequisite: a grade of C or better in 1113 and 1123. Effects of international trade on employment, inflation, the exchange rate, effects of devaluation, types of international monetary arrangements, effects of foreign transfers, open economy macroeconomic policy. (F, Sp)
ECON	3713	Governmental Relations to Business	Prerequisite: a grade of C or better in ECON 1113 and ECON 1123. Analysis of economic aspects of government regulation and direction of business enterprise; controls affecting managerial discretion in the determination of prices and other basic business policies. (F, Sp, Su) [III-SS]
ECON	3880	Directed Readings	1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Readings will consist of topics designated by the instructor in keeping with student's specialization within major program. Topics will cover materials not usually presented in regular courses. (F, Sp, Su)
ECON	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to the Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
ECON	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ECON	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ECON	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

ECON	4153	Mathematical Economics	Prerequisite: a grade of C or better in 2843, 3113 and Mathematics 1743 or 1823. Introduction to the use of mathematics for economics analysis. Includes the following topics: market equilibrium analysis; matrix algebra; differentiation; comparative statics; optimization with and without constraints; integration; continuous and discrete time dynamics; static and dynamic games. Emphasis will be on methods and interpretation reflecting the economic substance of micro and macro models. Course will have a strong orientation toward economic applications. (Sp)
ECON	4223	Econometric Analysis	Prerequisite: a grade of C or better in 1113, 1123, and 2843. Classical statistical inference; means, proportions, variances, analysis of variance and covariance; regression and correlation analysis; normal, binomial, chi-square, t, F, Poisson, exponential distributions. (F, Sp) [I-M]
ECON	4233	Introduction to Applied Econometrics	Prerequisite: a grade of C or better in 1113, 1123, and 2843. Introduces students to the use of modern econometric techniques in economics. Topics include time series and dynamic emulation models, panel data, two stages least squares, simultaneous equation models, limited dependent variable models (logit, probit), and sample selection corrections. The course will have a strong orientation toward empirical applications. (Sp)
ECON	4313	Industrial Organization	Prerequisite: ECON 1113 and ECON 1123 with a grade of C or better. Industrial organization studies the way firms interact and compete with each other. Covers pricing strategies (price discrimination, bundling and tie-in sales); product strategies (product variety, quality, advertising); and mergers and acquisitions. (Irreg.)
ECON	4323	Public Finance: Expenditures	Prerequisite: A grade of C or better in ECON 1123. Topics covered include: tools of positive and normative analysis market failures, public goods, externalities, cost-benefit analysis and income redistribution. Focus on expenditures and public programs, such as education, health care and social security. (Irreg.)
ECON	4353	Public Finance: Issues and Taxation	Prerequisite: a grade of C or better in 1113 and 1123. Public expenditures, their nature, cause of the increase, and classification; sources of public revenue; methods of distributing the tax burdens; public debts and debt management; introduction to fiscal theory and policy. (F, Sp)
ECON	4393	Economics of Capital Markets	Prerequisite: a grade of C or better in 2843, 3113, 3133, and Mathematics 2123 or 2423. Analysis of the structure and working of financial markets and economic effects. Topics include time, value of money risk-return tradeoff, portfolio theories, factor pricing models, fixed income securities, equity securities and derivatives. (F)
ECON	4413	International Trade, Laws and Institutions	Prerequisite: a grade of C or better in 3613. Explores the interface of the economics and legal professions' analysis of international trade. The class will explore some of the issues and topics of common interest from the perspective of each profession. (F)
ECON	4453	Urban Economics	Prerequisite: a grade of C or better in 3113. Study of economic models of urban location, including firm location and residential location models. Public policy topics of urban taxation, residential housing discrimination, urban renewal, etc., will also be discussed from an economic perspective. (Irreg.)
ECON	4513	The Economics of Discrimination	Prerequisite: a grade of C or better in 1113 and 1123. This course will focus on discrimination in the labor market. Topics to be covered include wage discrimination, employment discrimination, and occupational segregation. Examples will be drawn frequently from current events and public policies. (F, Sp)
ECON	4673	Economics-Money & Banking	Prerequisite: a grade of C or better in 3133. Introduce students to the role of money, banks and financial institutions in the economy. Topics include banking and financial intermediation, financial market regulation, monetary economics and economic fluctuations, and monetary policy. (F)

ECON 4713	Latin American Economic Development	Prerequisite: a grade of C or better in 1113 and 1123. Examine the major characteristics of Latin American economic development, from the evolution of economic policy in the region since independence, to the recent problems with industrialization policy, debt, inflation and stabilization, and economic reform. (F)
ECON 4723	International Financial Institutions and Development Policies	Prerequisite: a grade of C or better in 1113 and 1123. Examines the origins of the policies of the Bretton Woods institutions. Develops methods to evaluate the macroeconomic policies and studies the missions and structures of the institutions. (Irreg.)
ECON 4733	Economic Development in the Middle East	Prerequisite: ECON 1113 and ECON 1123 with a grade of C or higher. An introduction to the existing debates on comparative economic development in the Middle East and North Africa region during the post-independence period. (Irreg.)
ECON 4753	Analysis of Contemporary Economic Issues	Prerequisite: a grade of C or better in 1113 and 1123. May be repeated with change of topic; maximum credit nine hours. An application of economic analysis to contemporary problems. Specific topics to be announced each time offered. (F, Sp)
ECON 4773	Economic Game Theory	Prerequisite: a grade of C or better in 3113, and Mathematics 2123 or 2423. Develops the fundamental concept of the Nash equilibrium, advancing to refinements such as subgame perfection and Bayesian perfection. Applications include oligopoly, adverse selection in insurance markets, and moral hazard in agency. (Sp)
ECON 4823	Introduction to Comparative Economic Systems	Prerequisite: a grade of C or better in 3113 and 3133, or permission of instructor. Concerned principally with a comparative economic and institutional analysis of past and present systems. (Sp)
ECON 4853	World Economic Development	(Slashlisted with 5853) Prerequisite: a grade of C or better in 1113 and 1123. The economics of the developing nations; a review and analysis of common problems and issues. (Irreg.)
ECON 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ECON 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ECON 4983	Economics as Social Science	Prerequisite: a grade of C or better in 2843, 3113 and 3133, or permission of instructor. Examination of selected topics in various subdisciplines within economics e.g., international trade and finance, econometrics, energy economics, public finance, labor economics, economic history and development, etc. [V]
ECON 4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ECON 5023	Statistics for Decision Making	Prerequisite: admission to Master of Business Administration program or permission of instructor. Covers basic probability density functions, the parametric estimating techniques of linear multivariate regression analysis and the elements of statistical decision making under uncertainty. (F, Sp, Su)
ECON 5033	Managerial Economics I	Prerequisite: graduate standing. Practical applications of economic theory and techniques to business problems. Topics include: demand theory and estimation; production and cost theory; empirical cost analysis; pricing practices, market structure and antitrust policy; corporate strategies for dealing with risk; long-term investment decisions with emphasis on plant size, technological change and investment requirements. (F, Sp)

ECON 5043	Managerial Economics II	Prerequisite: 5033, 5073. Emphasizes current topics in several areas including: regulation, business and government, antitrust economics, the economics of intellectual capital markets, and the economics of technological change. Strategies for management will also be discussed. (Irreg.)
ECON 5063	Quantitative Economic Methods	Prerequisite: permission of instructor. Covers the mathematical techniques used by Ph.D-level economics courses. All MA (Theory) and Ph.D. students are required to take this course or test out of it. (F)
ECON 5073	Contemporary Economic Methods and Analysis	A review of contemporary economic methodology and theory and their application to the analysis of macroeconomic questions and problems in the American economy. Techniques of economic forecasting will also be covered. (F, Sp, Su)
ECON 5123	Advanced Price and Welfare Theory	Prerequisite: 3113 or equivalent, senior standing or permission. An intensive study of the static and dynamic welfare and efficiency properties of the price and market system method of social organization. Topics include: theory of markets, game theory, capital theory and intertemporal equilibrium, general equilibrium and employment, welfare theory. (Sp)
ECON 5153	Mathematical Economics I	Prerequisite: 2843, 3113, 3133. Investigation of several important models of economic activity. Emphasis on methods of analysis and interpretation involving construction of mathematical models reflecting the economic substance of these models. Implications for economic policy considered.
ECON 5163	Advanced Macroeconomic and Growth Theory	Prerequisite: 3113, 3133. Comparison of static macroeconomic systems; introduction to dynamic macroeconomic systems; post-Keynesian and modern theories of economic growth. (F)
ECON 5173	Urban and Regional Analysis	(Crosslisted with RCPL 5173) Prerequisite: Regional and City Planning 5113 or equivalent. A lecture-seminar-problems-oriented course designed to acquaint the student with the scientific techniques used to analyze urban and regional social, economic, political and environmental problems. Oriented to reflect requirements for studies leading to the preparation of goals, policies, and plans for urban and regional scale development. (Sp)
ECON 5213	Advanced Econometrics	Prerequisite: graduate standing. Measurement of micro- and macro-economic relations, both static and dynamic. Comparative statics and dynamics; practical use of inference from non-experimental data. Identification and estimation problems. (Irreg.)
ECON 5243	Econometrics II	Prerequisite: 5213. Examines topics and techniques in applied econometric analysis. Course topics include limited dependent variables, sample selection bias, systems of equations and the use of econometric software. (Sp)
ECON 5273	Survey of International Economics	Prerequisite: graduate standing. Examines topics in international trade and finance including and evaluation of economic policies and international institutions. Public policy topics such as the impact of tariffs, quotas and exchange rates will be discussed. (Irreg.)
ECON 5313	Advanced Industrial Organization	Prerequisite: graduate standing. Examines the market structure, conduct and performance of various industries. Topics include: theory and empirical results regarding structure, conduct and performance; the structure of U.S. industry versus other countries; recent developments; and antitrust policy. (Irreg.)
ECON 5353	Public Finance II	Prerequisite: 4353 or permission of instructor. Teach advanced principles of public finance. The chief topics are market failure and public goods, public choice and principles of expenditure analysis.
ECON 5453	Advanced Urban Economics	Prerequisite: graduate standing. Study of economic models of urban location, including firm location and residential location models. Public policy topics of urban taxation, residential housing discrimination, urban renewal, etc. will also be discussed from an economic perspective. (Irreg.)
ECON 5613	International Economics-Trade	Prerequisite: 3613 and Mathematics 1743 or permission of instructor. Causes and effects of international trade; gain from trade; theory of tariff and effective protection; economic growth and trade; intermediate products; optimal trade policies; factor market imperfections; theory of integration. (Sp)

ECON	5633	International Economics--Finance	Prerequisite: 3613 and Mathematics 1743 or permission of instructor. Foreign exchange rates; balance of payments; alternative international monetary systems; international reserves. (F)
ECON	5733	Macro/Micro for MBA's	Covers basic macro-and microeconomics needed for MBA students including international economic issues. (Sp)
ECON	5853	World Economic Development	(Slashlisted with 4853; Crosslisted with RCPL 5853) Prerequisite: graduate standing. The economics of the developing nations; a review and analysis of common problems and issues. (Irreg.)
ECON	5933	Economic Analysis of Energy Markets	Prerequisite: 5033 or equivalent; graduate standing. Economic analysis of the competitive relationships in the oil, natural gas, coal and electricity markets. Special attention is given to the determinants of price and the influence of price upon the economic feasibility of energy projects. The structure and pricing of international crude oil markets. Federal and state legislative and regulatory policy; their influence upon energy production and prices. (F)
ECON	5940	Research in Economic Problems	1 to 3 hours. May be repeated; maximum credit six hours. (F, Sp, Su)
ECON	5960	Readings in Selected Fields of Economics	1 to 4 hours. May be repeated; maximum graduate credit eight hours. The only passing grade given in this course is the neutral grade of S. Directed readings under staff supervision for advanced students. A comprehensive report or examination is required. (F, Sp, Su)
ECON	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ECON	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
ECON	5990	Special Studies	1 to 3 hours. May be repeated with change of topic; maximum credit twelve hours. Advanced studies in various areas of economics. Given under stated titles determined each semester by the instructor involved. (F, Sp)
ECON	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ECON	6123	Planning and Policy Analysis: Advanced Methods	Prerequisite: 5123. Covers advanced data analysis techniques useful for performing policy analysis. Focus on: structural regional modeling, program evaluation and experimental design. Goal is to help students develop a broad understanding of the methodological and empirical issues needed to evaluate public policy programs. (Irreg.)
ECON	6213	Seminar in Price and Welfare Theory	Prerequisite: 5123 or equivalent, graduate standing. Current theoretical issues and research developments are explored. Attention is given to externalities, social welfare functions, market and nonmarket choice mechanisms, capital theory and analysis of intertemporal adjustments, general equilibrium under dynamic growth conditions. (F)
ECON	6313	Seminar in Macro and Growth Theory	Prerequisite: 5163. Detailed analysis of static and dynamic macroeconomic systems; macrostatic and macrodynamic policy issue. (Irreg.)
ECON	6333	Seminar in Industrial Organization	Prerequisite: graduate standing or permission of instructor. Survey of recent industrial organization, public utility and regulation literature.
ECON	6343	Econometrics III	Prerequisite: 5243. Topics and techniques in advanced econometric methods including time-series analysis and/or panel data analysis. May include applications in time-series econometrics such as ARMA models and VAR techniques; and applications in panel data econometrids including fixed effects, random effects and dynamic models. (F)
ECON	6373	Econometrics IV	Prerequisite: 6343. Examines advanced topics in theoretical and applied econometrics. The course covers recent innovations in econometric techniques including general method of moments estimators, panel cointegration techniques, and other advanced topics. (Sp)

ECON	6613	Seminar in International Economics	Prerequisite: 5613 or 5633. Survey of recent literature in international economics. Recent theoretical and empirical research in international trade and/or international finance will be examined. (Irreg.)
ECON	6653	Seminar in Growth	Prerequisite: graduate standing and permission of instructor. Endogenous growth theory, recent work on growth success and failures, regime switching models of growth, the effects of crises on long run performance, and the role of the IMF and World bank in development. Other topics may include financial crises, corruption, etc. (Irreg.)
ECON	6693	Seminar in Economic Development	Problems of economic development with special emphasis on the developing nations. Theoretical as well as policy issues concerning the process of economic development are examined. (Irreg.)
ECON	6773	Seminar in Public Economics	Prerequisite: 5313 or permission of instructor. Survey of recent literature in the economics of public finance. Recent theoretical and empirical research will be examined. (Irreg.)
ECON	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ECON	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ECON	6980	Research for Doctoral Dissertation	(F, Sp, Su)
ECON	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDAH	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDAH	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDAH	2963	R.A. Training	Introduces various theories and skills that aid the student in the performance of the duties of a resident advisor. Areas of study include student development theory, community development, programming, peer counseling, and policy enforcement. The class will review current issues confronting college students. (F, Sp)
EDAH	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDAH	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)

EDAH	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDAH	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDAH	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDAH	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDAH	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDAH	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDAH	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDAH	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDAH	4993	R.A. Training Special Problems in Education	Prerequisite: junior standing. Introduces various theories and skills that aid the student in the performance of the duties of a resident advisor. Areas of study include student development theory, community development, programming, peer counseling, and policy enforcement. The class will review current issues confronting college students. Students will also be involved in University community-building programs and special events which relate to the roll of resident advisor. (F, Sp)
EDAH	5013	The Adult Learner	Prerequisite: graduate standing. Course content includes: (a) recent history; (b) social, technological and economic factors associated with changes in educational philosophy with consequences for lifelong learning: (c) trend data on adult enrollments by socio-economic, racial, ethnic and other factors; (d) major providers; (e) research and issues concerning adult learning ability, adult development, stresses upon the adult learner, teaching adults, etc. (F)
EDAH	5023	Administration of Adult and Higher Education	Prerequisite: graduate standing. Organization and administration of adult and higher education from legislative, legal, structural-functional, power, political, bureaucratic and social perspectives. Topics considered include: governance, central office organization, administrative position analysis, faculty organization, faculty participation in policy formation and decision making, academic freedom, goals analysis, budgetary policies and methods, and decision strategies. (F)
EDAH	5033	Critical Literature in Adult and Higher Education (Crosslisted with EDS 5033)	(Crosslisted with EDS 5033) Prerequisite: graduate standing. Explores twentieth-century ideas and issues in adult and higher education. The majority of the literature and discussion concern the university. (F)

EDAH	5043	Introduction to Research in Adult and Higher Education	Prerequisite: graduate standing. Recommend specific prior enrollment -- see adviser. An introduction to data collection and analysis, research methods (experimental, quasi-experimental, qualitative), and statistics used in adult and higher education. (F, Sp, Su)
EDAH	5103	Instructional Strategies in Adult and Higher Education	Prerequisite: graduate standing. Encourages a rational consideration of the problems of college teaching. A problems-based course, requiring that each student be involved in an actual college teaching experience while taking it. Topics to be considered include: learning potentials of young adults; preparation of instructional objectives; evaluation of instruction; instructional techniques. (Su)
EDAH	5123	Decision-Making in Adult and Higher Education	(Crosslisted with H R 5123) Prerequisite: graduate standing. Provide students with an understanding of various forces which influence the process of decision-making in adult and higher education, as well as provide an opportunity to examine how such decisions can be reached and implemented. The student will examine realistic examples of decision-making in such areas as budgeting, trustee relations, tenure decisions, faculty development, curriculum, etc. (F, Sp)
EDAH	5133	American Community/Junior College	A study of its purposes, functions, curriculum, organization and administration; exploring this uniquely American institution as an emerging factor and significant element in the structure of higher education in America today. (Sp)
EDAH	5143	Leadership Development in Adult and Higher Education	Prerequisite: graduate standing. Apply concepts from the behavioral and social sciences to the development of techniques and strategies specific to leadership development in adult and higher education. (Sp)
EDAH	5153	Legal Aspects Of Higher Education	Prerequisite: graduate standing. Survey of principles, legislation, and court rulings in such areas as employment, affirmative action, dismissal, contracts, tenure, civil rights, due process, student rights, and other issues of concern to higher education administrators. (F)
EDAH	5163	Diversity Issues in Higher Education	Prerequisite: graduate standing. Explores the educational participation of diverse groups in higher education. The student will gain a further understanding of issues of race, ethnicity, gender, and physical disability and their influence on colleges and universities. (F, Sp)
EDAH	5173	Leadership and Administration in Student Affairs	Prerequisite: graduate standing. Designed to provide student foundational knowledge on topics related to leadership and administration of student affairs in collegiate settings. The course additionally exposes students to traditional and alternative leadership and administrative philosophies in college student affairs. Critical examination of how student affairs functions in the broader organizational structure and develop higher-ordered understanding of how institutional cultures (and a professional's role within those cultures) facilitate college student affairs administration. (F, Sp, Su)
EDAH	5213	History of American Higher Education	Prerequisite: graduate standing or permission of instructor. The history of American higher education during the twentieth century, with an examination of the major issues which have shaped, and are shaping, the development of American colleges and universities. (Sp)
EDAH	5223	Foundations of Student Affairs in Higher Education	Prerequisite: graduate standing. A comprehensive introduction to the field of student affairs and its role within the context of American higher education. Specifically, provides an introduction to the origin, history, philosophy, and current practices of the college student affairs profession. A related goal is the development of a broad foundation of knowledge to which subsequent study, practitioner skills, and research strategies may be added. (F)

EDAH	5233	Research On The College Student	Research On The College Student. Prerequisite: Graduate Standing. The Primary Aim Is To Introduce Students To The History Of College Students, Research Methodologies Employed In Research On College Students, And Theoretical Concepts And Research Findings Related To Student Characteristics, College Environments, Choice, Student Development, Attrition, Persistence, Cognitive And Affective Development, And General Outcomes. An Understanding And Knowledge Of These Topics Is Considered A Precursor For Those Interested In Student Personnel Administration And/Or In Advanced Research On College Students. (Sp)
EDAH	5243	Financial Management In Higher Education	Financial Management In Higher Education. Prerequisite: Graduate Standing. Students Will Be Introduced To The Following Topics: Administrative Organization Function And Structure; Financial Management Of Sponsored Programs (Grants And Contracts); Fund Accounting And Basic Financial Statements; State Coordination Policies And Procedures; Basic Budgeting Concepts And Techniques; Cost Analysis And Comparisons. (Sp)
EDAH	5253	Institutional Research In Higher Education	Institutional Research In Higher Education. Prerequisite: Graduate Standing. Recommend Specific Prior Enrollment--See Advisor. Covers The Roles And Functions Of Institutional Research, Student Information Systems, Faculty And Staff Analysis, Facilities Analysis, Capital And Financial Analysis, Environmental Scanning, Assessment Studies, Program Review, Student Outcomes Studies, And Quality Assessment. (F)
EDAH	5263	Planning In Higher Education	Planning In Higher Education. Prerequisite: Graduate Standing. Recommend Specific Prior Enrollment--See Advisor. Covers Concepts, Practices, Issues And Problems Related To Planning In Higher Education. (F)
EDAH	5273	Athletics In Higher Education	(Crosslisted With H R 5273) Prerequisite: Graduate Standing. Provide Students With An Understanding Of The History, Structure And Administration Of Intercollegiate Athletics, As Well As An Opportunity To Discuss A Wide Variety Of Related Contemporary Issues. (Irreg.)
EDAH	5313	Adult Learning Models	Prerequisite: Graduate Standing. Focuses Upon The Current Research Into The Practice Of Adult Education With Particular Attention To The Developing Models Of Learning. It Utilizes The Work Of Lindeman, Horton, Houle, Knox, Knowles, Freire And Brookfield. (Sp)
EDAH	5333	Program Planning For The Adult Learner	Program Planning For The Adult Learner. Prerequisite: Graduate Standing. Recommend Specific Prior Enrollment--See Advisor. Designed To Develop An Understanding Of Institutional Roles And Institutional Differences; A Knowledge Of The Principles Of Program Planning In Relation To The Delivery Of Adult Education. Reviews The Elements Of Program Planning To Include Needs Assessment, Program Design And Delivery, And Evaluation. (F)
EDAH	5343	Gerontological Education	Gerontological Education. Prerequisite: Graduate Standing. Prepares Students To Respond Effectively To The Learning Needs Of The Elderly And Those Professions Who Serve The Elderly. (Irreg.)
EDAH	5353	Adult Learning And Development	Adult Learning And Development. Prerequisite: Graduate Standing. Students Will Engage In Inquiry Into The Adult Development Process And Its Relationship To Learning And Change. Students Will Become Acquainted With A Wide Range Of Orientations To And Theories Of Adult Development. The Focus Will Be More Closely On Development That Takes An "Inside" View Of The Learner, And Correspondingly Participants Will Be Encouraged To Explore Their Own Development (As Learners) As An Instance Of Growth, Learning, And Change. (F, Sp)

EDAH	5363	Self-Directed Learning	Self Direct Learning. Prerequisite: Graduate Standing. Self-Directed Or Independent Learning Is An Important Aspect Of Adult Education Because It Represents A Significant Portion Of All Learning By Adults. Students Will Explore Self-Directed Learning From Both An Academic And A Personal Perspective. Topics Include Its History And Development, Its Research Base, Areas Of Current Interest, And Implications For Adult Education Practice. (F, Sp)
EDAH	5373	Assessment In Adult & Higher Education	Assessment In Adult And Higher Education. Prerequisite: Graduate Standing. Covers The Basic Principles Of Assessment (Evaluation) And Strategies For Ensuring That Assessment Activities Are More Effective And Meaningful To Educators, Planners, And Decision Makers In Adult And Higher Education Organizations. Specifically, The Course Will Examine Conceptual And Practical Assessment Issues Related To Finance, Faculty Or Trainers, Curricula Or Programs, Students Or Learners, And Institutions Or Organizations. (F, Sp)
EDAH	5383	Contemporary Issues In Student Personnel	Contemporary Issues In Student Personnel. Prerequisite: Graduate Standing. Designed To Provide Students An Opportunity To Synthesize Ideas From Previous Coursework And Practical Experiences In Student Affairs. An Integration Of Student Development Theories, Current Issues In The Field, And Analysis Of Case Studies Will Be The Focus Of The Course. (F, Sp)
EDAH	5413	Design And Delivery Of Distance Education Programs	Design And Delivery Of Distance Education Programs. Prerequisite: Graduate Standing. Designed To Prepare Student To Design Instruction For Distance Learning Systems. Topics Include The Distance Learner, Facilitating Learning At A Distance, Instructional Design For Distance Learning Systems, And Assessment Of Learning At A Distance. (Sp)
EDAH	5433	Organizational Design and Management of First Year Experience Programs	Prerequisite: graduate standing. Focuses on the first-year experience through exploring existing research and practice in organizational design and management. Based on readings, research, national guidelines, course discussion, and personal/professional experience, graduate students will design their own first-year experience program for un-traditional students within an institution of their choice. (F, Sp)
EDAH	5443	Organization Development and Change	Prerequisite: graduate standing. Designed to provide an overview of the practical skill sets required to plan, develop, and conduct organizational development activities within public as well as private sector organizations. Topics will include concepts of OD models and theories, organizational assessment procedures, various OD interventions methods, and technological tools for effect OD. Trends and contemporary solutions for organizational development will be introduced through webinars and demonstrations. (F, Sp, Su)
EDAH	5453	Autobiography and Lifewriting in Adult Education	Prerequisite: graduate standing. Explores autobiography and other forms of life writing as an instructional method and research tool within the broader field of the study and education of adults. Reviews the historical and contemporary uses of autobiography, its related concepts and theories and major authors who have contributed to the field. These are explored in light of educational principles and how autobiography can lead to understanding of self and others. (F, Sp, Su)
EDAH	5463	Transformative Learning in Adult and Higher Education	Prerequisite: graduate standing. Study of the phenomenon of transformative learning as it applies to adults and relates to the process of human growth and development. It draws on the relationship between change, learning, and development, and examines contemporary theories, major contributing authors, and current issues related to the concept. Also, consideration of the personal, social, and global significance of transformative learning and its implications for educational practice with a learning public. (F, Sp, Su)

EDAH	5473	Race, Class, and Gender in Education	Prerequisite: graduate standing. This course attempts to achieve congruence between common and differing oppressions, challenges, and successes according to race, class, and gender. The topics are restricted to maximize integration with studies in the various educational specialties. Analysis of the work of educational institutions in light of the relationships of these institutions to the broader society in which they are situated. Particular attention is paid to the complexities of identity and multiculturalism across educational institutions and in the educational pipeline. (F, Sp, Su)
EDAH	5483	College Student Development	Prerequisite: graduate standing. Designed to expose students to a variety of college student development theories as well as research that describes typical patterns of student growth and development during the college years. In addition, a primary objective of this course is to discuss how student affairs professionals, higher education administrators, and faculty may utilize student development theory to design programs, develop services, and create learning environments that support the academic and social development of students attending postsecondary institutions. (F, Sp, Su)
EDAH	5493	Innovation in Student Affairs	Prerequisite: graduate standing. Designed to push students' thinking about student affairs work in college and university settings through innovative, contemporary solutions to ongoing problems, issues and trends concerning college students. Topics include but are not limited to: collaboration among student affairs and academic affairs in solving problems; the skills and theoretical perspectives undergirding change in student affairs; the evolving roles of student affairs professionals; creating inclusive educational communities; innovatively supporting institutional missions toward curricular and co-curricular development and student outcomes; and engaging students in active learning. (F, Sp, Su)
EDAH	5503	Introduction to Developing and Training Human Resources in Organizations	Prerequisite: graduate standing. An overview of the human resource development functions in business, industry, government and voluntary organizations. It is designed for those who are expected to be responsible for some aspect of training and development and for those interested in learning more about these functions. Introduces the competencies required to succeed as a training and development professional as identified in ASTD's Competency Model. Topics include strategic training, learning theories and program design, assessing training needs, transfer and evaluation of training, traditional and technological training methods, and employee, management, and career development. (F, Sp)
EDAH	5513	Management & Admin Of The Training Function	Prerequisite: Graduate Standing This Course Is Designed For Those Preparing For Or Having Oversight Responsibilities In The Training And Development Function. Topics Will Include The Management Function, Staffing, Ensuring The Quality Of Training, Legal Issues, Marketing And Financial Management.
EDAH	5523	Skills and Strategies in Designing, Developing, and Delivering Training	Prerequisite: graduate standing. Addresses the core aspects of Instructional Systems Design (ISD) as applied to workforce learning, and performance. Learn and apply key principles involved in assessing, designing, developing, implementing, and evaluating face to face (traditional) training programs. Students select training topics identified as critical to success in the training and development field, and engage the ISD process in creating active training programs. (F, Sp)

EDAH	5543	Gender, Society, and Higher Education	Prerequisite: graduate standing. Addresses issues of gender as set within the historical, economic and socio-political context of American higher and post-secondary higher education. Multiple feminist perspectives are explored including, but not limited to, liberal feminism, radical feminism, Black feminism, womanism, Chicana feminism, Native American feminism, Arab American feminism, multicultural feminism, eco- and global feminism. The connections between theory, practice, and reflection are emphasized. Social justice and ally development are strong components of this course. (F, Sp)
EDAH	5553	Evaluation Strategies for Learning and Performance	Prerequisite: graduate standing. Provides instruction and practices in evaluation strategies to improve learning and performance outcomes in educational and workplace settings. Major foci of the course will be on comparing various approaches of evaluation, planning and designing program evaluation, and managing evaluation project. Students will have opportunities to analyze evaluation data and develop evaluation report for instructional and organizational decision making. (F, Sp)
EDAH	5613	Ethical Decision Making in Intercollegiate Athletics Administration	Prerequisite: graduate standing. Explores ethical decision-making and conduct in the contemporary 21st century intercollegiate athletics department. Specific issues related to the commercialization of college athletics that will be covered include: academic reform, diversity within intercollegiate athletics, pay-for-play, gender equity, fiscal management, compensation for student-athletes, and the recruiting process. Students will analyze current research and theoretical frameworks centering on ethical decision making, as well as utilize a theory to practice case-study pedagogical approach in order to evaluate their personal morals, values, and principles as they pertain to ethics in college sports to enhance future decision-making.(Sp)
EDAH	5623	Marketing & Development in Intercollegiate Athletics Administration	Prerequisite: graduate standing. The theoretical and practical foundations of sport marketing and fan development in 21st century intercollegiate athletics settings. Fundamental concepts that will be covered include: revenue generation, licensing, ticket sales, consumer marketing, and marketing matrix frameworks. Students will create an individual marketing proposal to develop an enhanced understanding of techniques and strategies used to successfully market large scale athletic events and enhance the consumer experience. (Sp)
EDAH	5633	Gender Issues in Intercollegiate Athletics	Prerequisite: graduate standing. A review of the historical role of women in intercollegiate athletics, the creation and implementation of Title IX, and the challenges institutions of higher education face with respect to Title IX compliance. Based in feminist and organizational behavior theory, this course critically examines the gender bias associated with intercollegiate athletics including a thorough analysis of case study examples. Topics for weekly discussion include: coaching disparities, equal pay, social equity, prior case law and NCAA legislature on gender issues, as well as the female student-athlete experience. (F)
EDAH	5643	Career Development in Intercollegiate Athletics and Higher Education	Prerequisite: graduate standing. This course is designed to provide students with a foundational understanding of various theories of career development, common methods of career development assessment, and an enhanced understanding of the process required to seek and obtain employment in the 21st century job market. As career development continues through various phases and in different forms into the latter stages of life, this course will utilize a lifespan perspective from birth to higher education. Students will be expected to examine and appreciate the role that environment and one's cultural contexts has in shaping the process of career development and impacting career trajectories. Class time will be devoted to lectures, demonstrations, discussion of the readings, small group activities, presentations, and workshop time to develop a personal career trajectory plan. (Sp)

EDAH 5653	Academic Reform and Athletic Academic Advising	Prerequisite: graduate standing. Explores and provides an understanding of the National Collegiate Athletics Association's academic reform movement in the 21st century and the subsequent effects on student-athletes in higher education. The course focuses in-depth on methods currently utilized in academic advisement of the student-athlete higher education population subset. In addition, focuses on the changes made to the current NCAA governing rules as they apply to academic support and advisement of student-athletes. Students will learn to critically analyze current academic reform measures taken by the NCAA and wrestle with present day challenges faced by athletics advisers in practitioner settings. The course will utilize case studies to frame critical inquiry and discussion to prepare future higher education leaders who work with this special population of students. (Sp)
EDAH 5663	Governance of Intercollegiate Athletics	Prerequisite: graduate standing. Examines the governance systems of contemporary intercollegiate athletics departments nested within institutions higher education. This course focuses on the specific bylaws colleges and universities must abide by to ensure reporting structures internal to athletics and external to the greater campus environment are compliant with current national standards. Students will analyze the current governance structures of athletic departments situated with institutions of higher education at multiple levels (i.e. NCAA Division I, II and III) to understand the differences in governance models, hone critical thinking skills, and develop policy enforcement action plans.(Sp)
EDAH 5673	Organization & Administration of Intercollegiate Athletics Administration	Prerequisite: graduate standing. Examines the organizational structure of intercollegiate athletics departments nested within NCAA Division I, II, and III institutions of higher education. Students will develop an understanding of the organizational structures of each administrative unit internal to a 21st century intercollegiate athletics departments. Students will enhance personal leadership, communication and academic writing skills through multiple reflective exercises and case studies. Culminates with the development of a formal literature review and presentation.(F)
EDAH 5683	Diversity in Sports	Prerequisite: graduate standing. A critical critique of the diversity in sports, specifically in the collegiate environment. Addresses the many issues of diversity in the sports arena and the institutional systemic challenges and barriers that impact a diverse population of individuals in higher education. Intended to give students the ability to think beyond the typical student-athlete profile and seek to provide opportunities for others, reach out and recruit from other areas, and set up a program that fits their needs and allows them to succeed in sports and academics while attending the university. (Sp)
EDAH 5693	Professional Development in Intercollegiate Athletics	Prerequisite: graduate standing. Prepares students for impending job searches in a competitive 21st century sport industry. Students complete career and professional development activities in addition to a personalized service-learning experience in intercollegiate athletics practitioner settings. Class time centers on: reflection of individual service-learning experiences, leadership growth and development, and workshop time to develop professional development portfolio. Students develop a professional portfolio over the course of the semester to include a current resume, cover letter, personal leadership philosophy, and site supervisor service-learning evaluations. This class is intended for students who have little to no previous experience in intercollegiate athletics. (F, Sp)

EDAH	5713	Leadership Issues in Athletic Administration	Prerequisite: graduate standing. Explores and provides an understanding of the many of the crucial issues central to the leadership development of future higher education leaders focused in the niche area of intercollegiate athletics. Specific emphasis is placed on the mission and culture of intercollegiate athletics departments and the subsequent role of the organizational leader within each unique institution. Students will explore characteristics of successful leaders in such settings to define personal leadership style and philosophy. (Sp)
EDAH	5743	E-Learning and Blended Learning Approaches for Workforce Development	Prerequisite: graduate standing. Provides students with an overview of instructional theories and principles for the design and delivery of e-learning and blended learning. Students learn how to incorporate learning theories and sound instructional design principles to design effective blended learning, how to use various instructional strategies, and how to utilize software tools to develop and deliver e-learning and blended learning. (Irreg.)
EDAH	5753	Technologies, Innovation, & Performance Systems for Human Resource Development	Prerequisite: graduate standing. Provides instruction and practices in evaluation strategies to improve learning and performance outcomes within workplace settings. Major foci of the course will be on comparing various approaches of evaluation, analyzing workplace issues hindering learning and performance transfer, and managing evaluation project. Students will have opportunities to plan an evaluation, analyze evaluation data, and report evaluation results for performance improvement and organizational decision making. (F, Sp, Su)
EDAH	5813	NCAA Compliance I	Prerequisites: graduate standing. Examination of the structure of the National Collegiate Athletics Association ("NCAA") from a legal framework. Drawing on legal and organizational theory, this course will present an overview of NCAA regulations, research of NCAA interpretations, waivers and secondary violations. Students will examine specific cases to analyze NCAA, conference, institutional regulations and policies. Students will develop an enhanced understanding of NCAA compliance standards in college sport, a foundational skillset for aspiring athletics administrators and specifically those who wish to work in a compliance office at an NCAA institution. (F)
EDAH	5823	NCAA Compliance II	Prerequisite: EDAH 5813 and graduate standing. Examines the structure of the National Collegiate Athletics Association ("NCAA") from a legal framework. Provides aspiring athletics administrators with foundational knowledge on the NCAA Enforcement procedures, the new Enforcement Model and internal compliance investigation standards paramount to successfully operating the daily activities of an intercollegiate compliance office. Students will develop an enhanced understanding of NCAA compliance standards, NCAA regulations, NCAA enforcement procedures of institutional investigation to rules violations, reporting of violations and major infraction cases in college sport. (F)
EDAH	5833	Evidence-Based Practices and Research Development in Intercollegiate Athletics	Prerequisite: graduate standing. Fuses scholarship and practice, as it is designed to teach students various research approaches and have students practically apply those approaches to intercollegiate athletics administration-related issues. Students will engage in evidence-based examinations of contemporary topics in intercollegiate athletics. Students complete solution-driven assignments that are both rooted in research and applicable to the daily challenges of intercollegiate athletics administrators. The major assignment for this course will be a literature review that students can present at a national conference. (F)

EDAH	5843	Event and Facility Management in Intercollegiate Athletics Administration	Prerequisite: graduate standing. Provides students with an enhanced understanding of the logistical and operations management skillsets that are imperative for contemporary intercollegiate athletics administrators to possess. Drawing on consumer motivation and marketing theories, students will participate in the planning and development of a specific intercollegiate athletics event. By pairing theoretical discussion and practical application, students will learn how to safely and efficiently plan large-scale intercollegiate athletics events. (F)
EDAH	5853	Best Practices in Contemporary Intercollegiate Athletics Student Support Services	Prerequisite: graduate standing. Designed to discuss different aspects of support services for student-athletes. Centers on developing an understanding of the role of student services units within intercollegiate athletics including athletic training, academics, nutrition, strength and condition, psychological support. Particular emphasis is placed on how these services interact with each other. Current research and perspectives from the field will be presented. Students will be expected to complete personal reflection exercises, case studies, and a culminating group project. (Sp)
EDAH	5863	Licensing, Trademark Law and Fundraising in IAA	Prerequisite: graduate standing. Provide students with an introduction to the legal aspects of collegiate licensing and fundraising. Student will develop an enhanced understanding of the principles of intellectual property, trademark law and licensing. Explores the history and role that licensing plays in intercollegiate athletics. Culminates with the development of an athletic fundraising campaign group project. (Sp)
EDAH	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included.
EDAH	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty.
EDAH	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure.
EDAH	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours.
EDAH	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDAH	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDAH	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

EDAH	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDAH	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDAH	6023	Theory & Practice In Higher Education Finance	Theory And Practice In Higher Education Finance. Prerequisite: Graduate Standing. Covers Important Aspects Of Finance In American Higher Education. Topics Covered Include History Of Finance, Politics Of The Budgetary Process, State Funding, Student Financial Aid, Internal Budgeting, Finance Management, Tuition Pricing, Costing, Financial Indicators, Funding Of Private Higher Education, The "Who-Pays- And-Who-Benefits" Question, And Key Financial Terminology Employed In Higher Education. Discussions Of These Topics Are Purposely More Theoretical Than Hands-On And More Focused At The National Level Than At The State Or Institutional Levels. (F, Sp)
EDAH	6193	Foundations of Qualitative Inquiry in Adult & Higher Education	Prerequisite: graduate standing. An introduction to qualitative inquiry specific to the field of adult and higher education. The first half of the class will focus on learning about various qualitative approaches and the differences between philosophical paradigms, theoretical frameworks, methodology, and methods in adult and higher education. In order to provide needed context, this section includes information about the specific history of qualitative research outside of and within adult and higher education. Further, it consists of reading assignments, lectures, and in-class exercises that uncover the nuances of various approaches to qualitative research. At this point, each student will have a deep understanding of their own epistemological approach to research. An emphasis will be placed on research congruence and researcher positionality as students conceptualize their own research project. The second half of class will focus on the student's individual research project as s/he works within communities of practice -- a theoretical learning mode important to adult and higher education. Students should be prepared each class period to discuss reading assignments and the status of their individual research projects. This half of class will be heavy on research projects and discussion. (F, Sp)
EDAH	6213	Theory And Practice Of Continuing Higher Education	Theory And Practice Of Continuing Higher Education. Prerequisite: Graduate Standing. Defines Continuing Higher Education And Traces Its Development In The United States From The 18th Century. Examines The Range Of Institutions, Kinds Of Programs, Emerging Issues, Organizational Structure, Budgeting, Administration And Relationship To The Larger Institution In Which Continuing Higher Education Operates.
EDAH	6713	Pro Seminar	(Crosslisted with EACS 6713 and EDS 6713) Prerequisite: graduate standing. The purpose of the Pro Seminar is to introduce beginning doctoral students to the concept and process of research. Included are issues related to the role of philosophical frameworks, theory, research conceptualization, scholarly writing, and rudimentary research methods. (F, Sp, Su)
EDAH	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDAH	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)

EDAH	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDAH	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDAH	6943	In-Depth Approaches to Qualitative Inquiry in Educational Research	Prerequisite: graduate standing. Graduate students should produce a presentable conference paper and/or publishable article. Explores the various assumptions that are found across the array of epistemological and paradigmatic approaches to educational research. Students will become familiar with terminology, methodology, methods, tools for analysis (or lack-thereof) across such approaches. The initial research or inquiry paper will most likely need more related theory, description of methodology, and substantially enhanced data collection and analysis. Students must identify a potential journal outlet, a sample article, and critique the sample article to inform their own research processes. In addition, students will teach their selected methodology while applying this methodology to their own study. (F, Sp)
EDAH	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDAH	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDAH	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDAH	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDEC	1203	Contemporary Parenting	An introductory course covering basic principles of child management. Parenting skills and guidance techniques that foster self-worth in children are stressed as are positive and effective methods of discipline and control.
EDEC	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDEC	2203	Creative Expression in Early Childhood	Characteristics and processes of creativity as expressed by children from age two to eight are reviewed. Planning and production of materials that enhance creativity in self-expressive thought and play are emphasized. (Sp)
EDEC	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)

EDEC	3001	Mentoring I	Prerequisite: EDEC 2203 and admission to Teacher Education program. Corequisite: EDEC 3213, EDEC 3211, and EDLT 3183. Fosters professional development of early childhood education students and facilitates their successful participation in the Teacher Education program. Professional opportunities in the field and professional organizations will be identified. Students will continue development of their portfolio documenting their development in the Teacher Education program. (F)
EDEC	3211	Laboratory Placement I	Prerequisite: admission to Teacher Education program; Corequisite: EDEC 3333. Designed to provide students with the opportunity to implement what they are learning in other courses as they interact with children in a classroom setting. Students will carry out assignments during this lab that have been assigned in EDEC 3333 as well as other specialization classes. (F)
EDEC	3213	Fundamentals of Instruction of the Preschool Child I: Social/Emotional Skills	Prerequisite: EDEC 2203 and admission to Teacher Education program; corequisite: EDEC 3001, EDEC 3211 and EDLT 3183. Links theory and research to preschool teaching. Includes materials on ways to foster social and emotional well-being and enhance creativity in children. Effective methods of discipline and a multiethnic approach to curriculum are emphasized. Includes weekly participation in an approved preschool program. (F)
EDEC	3221	Laboratory Placement II	Prerequisite: admission to Teacher Education program; Corequisite: EDEC 3513 and EDEC 3233. Designed to provide students with the opportunity to implement what they are learning in other courses as they interact with children in a classroom setting. Students will carry out assignments during this lab that have been assigned in EDEC 3513 as well as other specialization classes. (Sp)
EDEC	3223	Fundamentals of Instruction of the Preschool Child II: Language and Cognitive Processes	Prerequisite: EDEC 3213 and admission to Teacher Education program; corequisite: EDEC 3221 and EDLT 4303. Links theory and research to practical preschool teaching. The development of mental ability and reasoning skills is stressed as are effective strategies for encouraging language development and prereading skills. Special attention is given to the needs of children from low income families. Weekly participation in an approved preschool program is required. (Sp)
EDEC	3233	Teacher, Parent, Child Relationships in Early Childhood Programs	Prerequisite: Admission into the ECE Norman/Tulsa Program; Junior Standing; EDEC 3333; corequisite: EDEC 3221, EDEC 3513, and EDLT 4303. Includes techniques for parent conferencing and referrals, planning and presenting effective parent education meetings, parent involvement in the classroom and experience in making home visits. Focuses on family needs when children are aged two to eight. (Sp)
EDEC	3333	Social Emotional Learning and Child Guidance	Prerequisites: EDEC 3413; EDEC 2203; EDEC 3543. Teaching strategies to promote prosocial skills in young children. Principles and practices of positive child guidance and facilitating an effective classroom community. How to enhance children's social and emotional learning. (F)
EDEC	3413	Early Childhood Development	Social, physical and cognitive influences on behavior during the preschool years are described and explained. The developmental implications of changing from caregiver to peer relationships are examined. (Sp)
EDEC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

EDEC	3513	Integrated Curriculum (Birth-5)	Prerequisite: junior standing and admission to OU Norman/Tulsa early childhood education program. Explores early childhood development domains (social, emotional, cognitive, language, fine motor, large motor, and creative development) and concepts associated with the subject areas of math, science, social studies, language, arts, music, and physical education. The course will focus on integrating the curriculum through teaching strategies, methods, and concepts that are appropriate learning experiences for young children, emphasizing ages birth through five years of age. (F Tulsa; Sp Norman)
EDEC	3523	Field Experience with Seminar	Prerequisite: junior standing and admission to OU-Tulsa early childhood education program. This course will focus on connections between developmental theory and practice. Emphasis will be placed on planning developmentally appropriate environments for infant-toddler growth and learning. This course includes 45 hours of field experience and a seminar that meets 90 minutes each week. (Sp)
EDEC	3533	Infant-Toddler Development and Care	Prerequisite: junior standing and admission to OU-Tulsa early childhood education program. Designed to provide the student with knowledge and understanding of the importance of the developmental processes that occur in infants from conception to their third birthday. Environmental influences on each of the important stages of development (prenatal, neonatal, young, mobile and older infancy) will be explored. Theories of development, philosophies of care, and techniques for the promotion of optimal physical, motor, cognitive and social-emotional development will be shared. Cultural difference in caregiving strategies will be examined as well as the importance of a mutual supportive partnership between parents and substitute caregivers in caring for children with and without special needs. (F)
EDEC	3543	Teaching and Learning in Early Childhood Education	Prerequisite: admission to OU Norman/Tulsa early childhood education program. Includes theoretical and practical aspects of the four domains of development for children ages birth to age eight. A major focus will be on the theoretical dispositions of Piaget and Vygotsky and major topics of study will include: autonomy, play, children's thinking, peer interactions, and child guidance. (Sp)
EDEC	3553	Field Experience with Seminar	Prerequisite: admission to OU Norman/Tulsa early childhood education program. Focuses on implementing the theoretical aspects of the development of the whole child focusing primarily on ages 3-5. Emphasis will be placed on planning developmentally appropriate teaching and learning. (F Norman, Sp Tulsa)
EDEC	3563	Family and Community Connections	Prerequisite: junior standing and admission to OU-Tulsa early childhood education program. Focuses on the importance of family and community connections in the education and development of young children (0-8 years). Strategies for strengthening family and community connections in early childhood classrooms will be discussed including techniques for communicating effectively with families, promoting parent involvement, engaging community agencies and members, and making home visits. (Sp)
EDEC	3573	Diverse Learners	Prerequisite: junior standing and admission to OU Norman/Tulsa early childhood education program. Focuses on strategies for providing individualized, inclusive, and developmentally appropriate instruction for children 0-8. Topics addressed include cultural diversity, teaching in contexts of poverty, individualizing instruction according to learning styles, supporting dual language learners, and modifying/adapting instruction and environments for children with special needs. (F Norman, Su Tulsa)

EDEC	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDEC	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDEC	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDEC	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDEC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDEC	4001	Mentoring II	Prerequisite: EDEC 3001 and admission to Teacher Education program. Fosters continued professional development of early childhood education majors and facilitates their successful participation in the Teacher Education program. Professional development opportunities outside the classroom are discussed. Students continue work on a portfolio showing their continued development as future teachers. (F)
EDEC	4121	Curriculum Laboratory	Prerequisite: admission to Teacher Education program; Corequisite: EDEC 4123. Designed to provide students with the opportunity to implement what they are learning in other courses as they interact with children in a classroom setting. Students will carry out assignments during this lab that have been assigned in EDEC 4123 as well as other specialization classes. (F)
EDEC	4123	Curriculum of Early Childhood Education	Prerequisite: EDEC 4513; Admission to the ECE Norman program and senior standing. Co-requisite: EDUC 4920. A comprehensive study of the scope of early childhood education with specific concern for curriculum foundation and organization. (F, Sp) [V]
EDEC	4203	Program Planning and Leadership in Early Childhood Programs	Prerequisite: EDEC 3223; corequisite: EDEC 4001, EDEC 4121, and EDEC 4123. Focuses on administrative aspects of early childhood programs outside the realm of the elementary school. Leadership and professional development issues are examined. Staff supervision, financial management, program policies, health and safety, and the physical environment are addressed. Unique initiatives and features of the early childhood profession are explored. (F)
EDEC	4513	Integrated Curriculum (K-3)	Prerequisite: Admission to the OU Norman/Tulsa early childhood education program; EDEC 3513; senior standing. Explores concepts associated with the major subject areas of math, science, social studies, language arts, music, and physical education. Focus is placed on integrating the curriculum through teaching strategies, methods, and concepts that are appropriate learning experiences for young children, emphasizing grades K-3. (F)
EDEC	4523	Field Experience with Seminar	Prerequisite: senior standing and admission to OU-Norman/Tulsa early childhood education program. Focuses on implementing the theoretical aspects of the development of the whole child focusing primarily on grades K-3. Emphasis will be placed on planning developmentally appropriate teaching and learning. (F)

EDEC	4533	Assessment in Early Childhood Education	Prerequisite: Senior Standing and admission to the OU Norman/Tulsa early childhood education program. A survey of the multiple purposes and types of assessment in early childhood including classroom assessment, standardized child assessment, and program evaluation. Addresses consideration of the various forms of assessment, evaluation of assessment techniques, and examination of current trends and practices. An overview of common assessment tools and techniques used with young children birth through age 8 will be included. (F)
EDEC	4543	Senior Seminar in Early Childhood Education (Capstone)	Prerequisite: Senior standing and admission to OU-Tulsa early childhood education program. Focuses on being a professional in the field of early childhood education. This includes dissecting what it means to be a leader, advocate, collaborator, researcher, mentor, and a life-long learner. (Sp)
EDEC	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDEC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDEC	4980	Practicum in Early Childhood Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDEC	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDEC	5203	Creative Curriculum in Education	Prerequisite: graduate standing. Characteristics and processes of creativity as expressed by children from age two to eight are reviewed. Planning and production of materials that enhance creativity in self-expressive thought and play are emphasized. (Irreg)
EDEC	5233	Family Engagement in Education	Prerequisite: graduate standing. This course includes techniques of parent conferences and referrals, planning and presenting effective parent meetings, fostering parent involvement in the classroom, and experience in making home visits. The focus is on family needs of children aged two to eight years. (Irreg)
EDEC	5333	Social and Emotional Learning	Prerequisite: graduate standing. This course is designed to address the social and emotional development of young children and how development influences learning. This course links theory and research to the preschool early learning environment. It includes materials on ways to foster social and emotional well-being and enhance creativity in children. Effective methods of discipline and a multiethnic approach to curriculum are emphasized. (Irreg)
EDEC	5413	Early Childhood Development	Prerequisite: graduate standing. Social, emotional, physical and cognitive influences on development from prebirth to age eight are identified. Issues associated with child development are discussed. The role of the early childhood professional is defined and examined. (Irreg)
EDEC	5533	Advanced Studies in Infant-Toddler Development	Prerequisite: graduate standing or permission of instructor. This course will be an in-depth exploration of issues related to infant-toddler development and learning, especially as it relates to the care of infants and toddlers in non-parental care settings such as childcare centers and family childcare homes. Topics include an exploration of the multiple contexts in which infants and toddlers develop, and the influences of the caregiving environment on the children's physical, emotional, and cognitive development, with a special focus on attachment and on brain development. (Irreg.)

EDEC	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDEC	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDEC	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDEC	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDEC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDEC	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDEC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDEC	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDEC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDEC	6033	Theory and Research in Early Childhood Education	Prerequisite: graduate standing or permission of instructor. Designed to facilitate student's understanding of various theories relevant to early childhood education. In-depth analysis of various theories will be accompanied by examination of research guided by these theoretical perspectives. Discussion will include how these theoretical views and the research associated with them influences the field. (Irreg.)
EDEC	6303	Parent Involvement and Parent Education	Prerequisite: graduate standing. This seminar explores current developments in parent involvement and parent education. Research on parent education programs and parent involvement will be discussed as well as the effects of each on children and families. Interventions designed for various populations of children and families are examined. (Irreg.)
EDEC	6403	Advocacy and Leadership in Early Childhood Education	Prerequisite: graduate standing. Focuses on developing the skills and knowledge necessary to help individuals build coalitions and design effective public policy/advocacy initiatives. (Sp)

EDEC	6433	Methods in Qualitative Research with Young Children	Prerequisite: graduate standing. The purpose of this course is to expand student's knowledge of qualitative methods in educational research, more specifically addressing the unique methods required when children are involved in the research process. The course has both a theoretical and applied focus. First, we examine how qualitative research is used in educational research. We will discuss qualitative methods as an interpretive inquiry focusing on topics such as the development and use of theory, kinds and interpretation of data, and issues of reliability. We will compare the different methods and methodologies used by researchers. Students will analyze and critique research articles using ideas and concepts discussed in the required texts and in class. Second, students will engage in a pilot study of their own in which they apply and experience qualitative research for themselves. Here students will develop a question, examine their own theoretical position, conduct a review of the literature, collect data, and produce a research paper. Together, these two approaches will introduce students to the main questions, concerns and goals of qualitative research. (Irreg.)
EDEC	6533	Assessment and Program Evaluation in Early Childhood Education: Advanced Seminar	Prerequisites: graduate standing or permission of instructor. An in-depth exploration of the multiple purposes and types of assessment in early childhood education including classroom assessment, standardized child assessment, program evaluation, and accountability assessment. Also focuses on the various forms of assessment, evaluation of assessment techniques and practices, and examination of current trends and practices. A special focus will be placed on program evaluation and accountability assessments and approaches. (F)
EDEC	6833	Advanced Qualitative Analysis	Prerequisite: graduate standing. This course is designed to provide doctoral students with an in-depth understanding of the variety of ways to theory build, analyze & interpret qualitative research, write up findings, and synthesize information for interpretation. It is assumed that students enrolling in this class have already completed an introductory qualitative research methods course. (Irreg.)
EDEC	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDEC	6910	Practicum in Educ--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDEC	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDEC	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDEC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

EDEC	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDEC	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDEC	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDEL	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDEL	3002	Promoting Healthy Lifestyles for Elementary Students	Prerequisite: admission to the teacher education program. Students explore models for teaching that transform research on human movement, physical activity and health education into effective classroom teaching practice. Students gain understanding of teaching strategies that foster active, healthy lifestyles, the practice of skills for good health and enhanced quality of life for elementary students. (F, Sp)
EDEL	3143	Creative Expression in the Elementary School	Prerequisite: Admission to teacher education program. Explore how to think and teach creatively in this historical context. Study of creative expression in education and how it can be enacted in classrooms. (F, Sp)
EDEL	3243	Integrated Arts Education	Prerequisite: admission to the teacher education program. Promotes literacy and skills involving art principles and processes in education and life. Explores arts integration across the curriculum as a means of expressing beauty/aesthetics, self-identification, social criticism, and critical reflection. (F, Sp, Su)
EDEL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDEL	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDEL	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDEL	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDEL	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)

EDEL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDEL	4063	Critical Inquiry and Integrated Instruction	Prerequisite: EDMA 4353, EDLT 4813, EDSC 4193, EDSS 4323, EDEL 4980; corequisite: EDUC 4050. Course for teacher candidates to understand how to support critical inquiry across the disciplines. Teacher candidates will also understand how to integrate and apply what they have learned throughout their coursework to organize a classroom to create a community of learners. (F, Sp) [V]
EDEL	4101	Mentoring	Prerequisite: admission to Teacher Education program and permission of adviser. This course should be taken in the semester which precedes enrollment in EDLT 4813, EDMA 4353, EDSC 4193, EDSS 4323, EDEL 4980. Students will study and analyze current education practices existing in today's elementary classrooms. Selected readings, significant discussion, hands-on activities and practical experiences will enable students to think critically about the challenges and rewards of becoming an elementary educator. The course also guides students in preparing program portfolios. (F, Sp)
EDEL	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDEL	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDEL	4980	Practicum in Elementary Education	Prerequisite: 4101; corequisite: EDMA 4353, EDLT 4713, EDSC 4193, EDSS 4323. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (F, Sp)
EDEL	5503	Integrating Multicultural Literacy in Elem/Mid Sch Classroom	Prerequisite: graduate standing. Using multicultural literacy in curriculum and instruction for kindergarten through eighth grade. Focus is on reviewing a wide variety of resources and developing instructional strategies for integrating multiculturalism across the curriculum. (Sp)
EDEL	5583	The Elementary/Middle School Language Arts Curriculum	Prerequisite: graduate standing. Understanding of theories and current issues related to literacy in elementary and middle schools. (Irreg.)
EDEL	5593	Issues in Teaching in Elementary Schools	Prerequisite: graduate standing. Interdisciplinary seminar focusing on critical analysis of issues related to teaching and learning in elementary schools. (Irreg.)
EDEL	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDEL	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)

EDEL	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDEL	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDEL	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDEL	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDEL	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDEL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDEL	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDEL	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDEL	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDEL	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDEL	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDEL	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)

EDEL	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDEN	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDEN	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDEN	3223	Teaching Grammar and Composition in Middle/Secondary School	Prerequisite: admission to Teacher Education Program. Secondary language arts students will learn different conceptions of grammar and how to teach them. Students will also study how socio-cultural factors shape language learning and usage. (F)
EDEN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDEN	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDEN	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDEN	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDEN	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDEN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDEN	4273	Creativity in Teaching Composition	(Slashlisted with 5273) Prerequisite: junior standing or permission of instructor. Features visual-verbal arts integration and teaching composition at primarily middle and secondary school levels. Students will paint, write, and otherwise practice the arts as well as consider current teaching implications. No student may earn credit for both 4273 and 5273 (Su)
EDEN	4283	Mediacy and the Pop Culture	Prerequisite: admission to the Teacher Education program. Examines the significance of youth media cultures as they intersect with literacy and learning in school settings. (Sp)

EDEN	4914	The Teaching of English	Prerequisite: EDEN 3223, EIPT 3473, EIPT 3483, EDSP 3054, and senior standing. Development of skills in teaching the language arts at the secondary level. Introduction to current trends, professional literature and resource materials. Practice in presenting model lessons. Written reports. (F, Sp) [V]
EDEN	4923	Teaching Literature in Middle and Junior High School	Prerequisite: EDEN 3223 and admission to Teacher Education program. Teaching literature in middle and junior high school, with particular emphasis on literature written for young people, current examples and related pedagogies. (Sp)
EDEN	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDEN	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDEN	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDEN	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDEN	5203	Action Research in English Education	Prerequisite: graduate standing; co-requisite: 5920 (Internship). Nature and methodology of teacher research. Students will conduct a field research project with EDUC 5920, Internship in Education, to demonstrate understanding of fundamental field research design and practice, including writing the teacher research report. (F, Sp)
EDEN	5213	Secondary English Curriculum	Prerequisite: graduate standing. General principles of curriculum development and particular problems with planning literature curricula. Evaluation and revision of school curricula based on theories of curriculum planning.
EDEN	5223	The Teaching of Composition: Theory and Practice	Prerequisite: graduate standing. Analysis of competing theories of composition instruction. Study of issues related to planning writing activities, and consider problems related to writing about literature, informal writing, writing apprehension, teaching basic writers, and teaching syntax.
EDEN	5233	The Teaching of Literature: Theory and Practice	Prerequisite: graduate standing. Research and methodology important to teaching literature to young people and adults with particular focus on developing reading and responding abilities to poetry and fiction. Other emphases include reading-writing interactions, creative approaches to teaching traditional literature, uses of young adult literature, and developing middle/secondary literature curricula. (Sp)
EDEN	5243	The Teaching of Language: Theory and Practice	Prerequisite: graduate standing. Research and teaching methodology important to providing language instruction for young people with particular focus on oral and written language development in a culturally diverse society. Topics include grammar, usage, dialect, semantics, vocabulary instruction and curriculum design. (F)
EDEN	5253	Research in English Education	Prerequisite: graduate standing. Study of issues and methods involved with research in English education. May include experience in the collection and analysis of data. (Irreg.)
EDEN	5263	Special Topics in Literacy I	Special Topics In Literacy I. Prerequisite: Permission Of Department. Possible Topics Include Students In And Out Of School, Culture And Literacy, Socio-Historical Perspectives On Learning, And Other Analysis Of Literate Activity. (F)

EDEN	5273	Creativity in Teaching Composition	(Slashlisted with 4273) Prerequisite: graduate standing or permission of instructor. This course features visual-verbal arts integration and teaching composition at primarily middle and secondary school levels. Students will paint, write, and otherwise practice the arts as well as consider current teaching implications. No student may earn credit for both 4273 and 5273 (Su)
EDEN	5283	Mediacy and the Pop Culture	Prerequisite: graduate standing. Admission to the Teacher Education program. Examines the significance of youth media cultures as they intersect with literacy and learning in school settings. (Sp)
EDEN	5303	Oklahoma Writing Project	Prerequisite: graduate standing and permission of instructor. Course is offered at summer institute. Focus is on improvement of personal writing and classroom writing instruction. Participants completing course become teacher consultants with Oklahoma Writing Project. (Su)
EDEN	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDEN	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDEN	5940	Field Studies in Education	1 to 4 hours. Prerequisite: twelve hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDEN	5960	Directed Readings	1 to 4 hours. Prerequisite: twelve hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDEN	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDEN	5972	Pre-Master's Seminar	Prerequisite: twelve hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDEN	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDEN	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDEN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDEN	6263	Special Topics in Literacy II	Prerequisite: enrollment in doctoral program. Topics explore the definition and practice of literacy, with a focus on their applicability to doctoral research. The analysis of the topics will include a stress on the relationship between research problems and research methodology. (F)

EDEN	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDEN	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDEN	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit twelve hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDEN	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: twelve hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDEN	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDEN	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDEN	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDEN	6990	Individual Study in Education	1 to 4 hours. Prerequisite: twelve hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDFN	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDFN	3003	Schools In American Cultures	Schools In American Cultures. Prerequisite: Admission To Teacher Education. An Overview Of Education As A Profession Based Upon Historical And Philosophical Principles Including A Treatment Of Current Problems And Affairs With Specific Attention Given To Multi- Cultural Phenomena. (F, Sp, Su)
EDFN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDFN	5513	Comparative Education	Comparative Education. Prerequisite: Graduate Standing. Introduction To The Field Of Comparative Education. Primary Objective Is To Develop An Understanding Of The Field Of Comparative, International And Development Education, Its Primary Focus And Assumptions, And The Intellectual Frameworks. Theories And Paradigms It Draws Upon In Inquiry. (F)

EDFN	5523	Education And Poverty	Education And Poverty. Prerequisite: Graduate Standing. Examination Of Issues At The Intersection Of Education And Poverty Including Theories, Principles, Beliefs And Values Underlying The Existence And Analysis Of Poverty. Procedural And Policy Alternatives Which May Tend To Ameliorate The Educational Consequences Of Poverty Will Be Analyzed. (Sp)
EDFN	5533	Comparative Educational Policy	Comparative Educational Policy. Prerequisite: Graduate Standing. Overview Of Issues In Comparative Policy Study Within Education, Including Various Basic Understandings Regarding The Nature Of Policy And The Manners In Which Beliefs And Values Are Institutionally Or Organizationally Codified. The Student Will Explore A Selected Topic By Contrasting Similarities And Differences As They Exist Across Varying Sociopolitical/Cultural Contexts. (F)
EDFN	5543	Education And National Development	Education And National Development. Prerequisite: Graduate Standing. Through Interdisciplinary Readings Students Will Develop An Understanding Of The Possibilities And Limits Of Education As An Instrument Of Social Change Within Varying National Contexts. Also Addresses Challenges Surrounding Issues Of Gender, Class, Culture, Race, Language, Ethnicity, And Religion And How They Are Impacted By The Provision, Form And Content Of Education. (Sp)
EDFN	5753	The Educational Philosophy Of John Dewey	The Educational Philosophy Of John Dewey. Prerequisite: Graduate Standing. Close Critical Study Of Educational Thought By John Dewey, His Recent Critics, His Contemporaries, And Others Who Influenced Or Were Influenced By Him In A Multicultural, Gendered, And Techno- Logically Developing Context. Intensive Oral And Written Work Will Aim At Developing Continuity Between Theory And Practice In Various Formal And Informal Educational Settings. (Sp)
EDFN	5783	Classics In Educational Thought	Classics In Educational Thought. Prerequisite: Graduate Standing Or Permission Of Instructor. Close Critical Study Of Selected "Classics" In Educational Thought By Plato, Rousseau, Du Bois, Dewey, Woolf, Or Others Of Comparable Historical Significance For Multicultural Coeducation Throughout The Human Life-Span, In A Context Of Social Inequalities. Intensive Written And Oral Practice In Basic Conceptual Skills And Informal Logic Will Require Independent Inquiries On Topics Of Special Interest To Students. (F)
EDFN	5823	Contemporary Critical Thought And Education Studies	Contemporary Critical Thought And Educational Studies. Prerequisite: Graduate Standing Or Permission Of Instructor. Close Study Of Contemporary Critical Thought That Has Profoundly Transformed Recent Theorizing About Education And Its Various Social, Cultural, And Economic Contexts. Major Texts Selected From Philosophical Movements Such As Analysis, Existentialism, Marxism, Feminism, Post-Structuralism, Neo-Pragmatism. Intensive Oral And Written Practice In Educational Criticism And Theory, Developing Case Studies From Primary Sources. (Sp)
EDFN	5833	Gender, Values, And Education	Gender, Values, And Education (Crosslisted With Philosophy 5833). Prerequisite: Graduate Standing Or Permission Of Instructor. May Be Repeated With Change Of Topic; Maximum Credit Six Hours. Topics Vary Each Semester, But Are Developed From Philosophical Studies In And About Education, Politics, Ethics, Aesthetics, Law And Religion That Address Issues Of Gender And Sexuality. Intensive Oral And Written Theoretical Inquiry. (Irreg.)
EDFN	5913	Cultural Pluralism And Education	Cultural Pluralism And Education. Prerequisite: Graduate Standing Or Permission Of Instructor. Investigates The Role Of The Schools From An Interdisciplinary Perspective Using The Philosophy, History, Anthropology, And Sociology Of Education, And Cross-Cultural Analysis, In Fostering A Climate Of Ethnic, Racial, And Gender Inclusiveness.

EDFN	5933	Girls, Women, And Educational Studies	Girls, Women And Educational Studies. Prerequisite: Graduate Standing Or Permission Of Instructor. History, Sociology, And/Or Philosophy Of Girls' And Women's Education In A Multicultural Context That Includes Family, Work, And Community Life As Well As Coeducational Public Schooling And Higher Education In The U.S. Oral And Written Critical Inquiry Concerning Selected Primary Sources Will Introduce Students To The Activity Of Interdisciplinary Theorizing About Gender And Sexuality In Education. (F)
EDFN	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDFN	5943	American Social & Education Issues In Historical Perspective	American Social And Education Issues In Historical Perspective. Prerequisite: Graduate Standing. May Be Repeated; Maximum Credit Six Hours. Acquaints Students With Several Diverse Culture Groups Which Constitute Society In The United States And Their Placement Within The Historical Context Of American Education. Educational Experience Of These Groups Will Be Discussed. Class Members Will Integrate Their Personal Narratives Into An Understanding Of Education In American Culture. (F)
EDFN	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDFN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDFN	6010	Writing Educational Inquiry	Writing Educational Inquiry (Crosslisted With Philosophy). 1-3 Hrs Prerequisite: Graduate Standing, Enrollment In Edfn Graduate Course And Permission Based On Review Of Writing Samples. May Be Repeated; Maximum Credit Nine Hours. Individual Or Group Tutorial Study Of Informal Logic And Rhetorical Theory Concerning Academic Writing As A Social Practice. Emphasis On Contextually Appropriate Documentation Practices, Philosophical Moves, And Rhetorical Devices; Development Of Clarity And Grace In Written Formulations Of Educational Concepts And Values. Address Various Scholarly And Professional Situations. Aimed Toward Public Presentation Or Publication. (F, Sp)
EDFN	6013	Gender, Knowledge, And Inquiry	Gender, Knowledge, And Inquiry (Crosslisted With Philosophy 6013). Prerequisite: Graduate Standing And Womens' Studies 4003 Or Equivalent, Or Any Graduate-Level Course In Research Methods Or Philosophy, Or Three Graduate Hours In Edfn. Interdisciplinary Seminar Introducing Feminist Criticisms Of Epistemology And Exploring Their Possible Significance For Design And Practices Of Gender Sensitive Inquiry In Various Academic Fields And Educational Contexts. (F)
EDFN	6033	Inquiry Design	Inquiry Design. Prerequisite: Graduate Standing Or Permission Of Instructor. May Be Repeated; Maximum Credit Six Hours. An Individual Or Small Group Tutorial Focused Exclusively On Preparation Of The Dissertation Or Prospectus For Interdisciplinary Critical Or Theoretical Inquiry In Historical, Philosophical, And Social Foundations Of Education. (F)
EDFN	6703	Advanced Studies In The History Of Educational Thought	Advanced Studies In The History Of Educational Thought. Prerequisite: 5753 And 5783, Or Equivalent And Permission Of Instructor. May Be Repeated For Credit, Maximum Credit Nine Hours. Topical Focus Will Vary. An Individual Or Group Tutorial In Which Students Pursue Original Inquiries With Close Guidance And Contribute To The Delivery Of Edfn 5753 Or 5783. A Final Paper Suitable For Public Presentation Or Publication Is Required. (Sp)

EDFN	6763	Issues In Contemporary American Education	Issues In Contemporary American Education. Prerequisite: Graduate Standing. Backgrounds Of The Contemporary American Social Scene With Such Issues As Extension Of Educational Opportunity; Interrelationships Between Church, State And School; Changing Economic Concepts In The Age Of Technology; Purposes Of Education To Social Policy; Federal Aid To Education; Academic Freedom. (F, Sp, Su)
EDFN	6793	History Of American Education	History Of American Education. Prerequisite: Graduate Standing. Development Of Schools In American Society From Colonial Times To The Present As Set Against The Background Of Intellectual Movements And Changes From The Colonial Period To The Present. Attention Is Given To The Development Of The Organization, Administration, Finance And Curriculum In The American Public School System. Major Concepts Relating To The Maintenance Of A School In American Society Are Considered; Historical Treatment Of Nativism, Populism, Empiricism, Associationism, A Person's Relation To Spiritual And National Self, As These Topics Relate To The Development Of Educational Ideals And Practices In American Society.
EDFN	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDFN	6903	Colloquium In Contemporary Educational Thought	Colloquium In Contemporary Educational Thought. Prerequisite: 5823 And 5933, Or Equivalents And Permission Of Instructor. May Be Repeated For Credit, Maximum Credit Nine Hours. Topical Focus On Selected Conceptual Problems Will Vary. A Colloquium In Which Students Share And Practice Mutual Critique Of Original Inquiries They Are Pursuing With Close Guidance. Participation In The Delivery Of Edfn 5823 Or 5933 And A Final Paper Suitable For Public Presentation Or Publication Is Required. (F)
EDFN	6933	Naturalistic & Qualitative Research In Education	Naturalistic & Qualitative Research In Education. Prerequisite: Graduate Standing And Pro-Seminar. Designed To Familiarize Graduate Students In Education With Naturalistic Research And Qualitative Methodologies.
EDFN	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDFN	6973	Documentary And Narrative Research	Documentary And Narrative Research. Prerequisite: Graduate Standing Or Permission Of Instructor. Examines Problems And Methods Of Non-Empirical Research In Education. Use Of Primary And Secondary Sources, Evidence, Generalization, Interpretation, Documentation, Citation, And Oral History Are Discussed. (F)
EDFN	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDLT	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDLT	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDLT	3143	Language and Literacy Development Birth through 5	Prerequisite: junior standing and admission to OU-Tulsa early childhood education program. Acquaints early childhood preservice teachers with theories of language and emergent literacy development, including key precursors to conventional reading and writing, developmentally appropriate assessment practices, evidence-based curriculum and instructional practices, and materials to support language and literacy learning in early childhood settings for children from birth through age 5. (Sp)

EDLT	3183	Theories of Literacy Development for Young Children	Prerequisite: admission to Teacher Education program. Introduction to the essential concepts of language and literacy learning and teaching from birth through third grade. Topics include theories of language and literacy development, components of a literacy-rich environment, and evaluation of literacy activity. (F)
EDLT	3253	Understanding and Teaching Children's Literature	Prerequisite: admission to Teacher Education program. Introduction to children's literature from infancy to middle school, elements of literature, and how to encourage children's responses to literature. Topics include understanding literary genre, the history of children's literature, book selection, literary response theory, and the development of a literature curriculum. (F, Sp, Su)
EDLT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDLT	3711	Language and Literacy Practicum I	Prerequisite: admission to Teacher Education program; EDLT 3253 or concurrent enrollment; corequisite: EDLT 3713. Support preservice teachers in making connections between theories of language and literacy development/assessment and children's actual literacy learning processes and products. (F, Sp, Su)
EDLT	3713	Foundations of Language and Literacy Development and Assessment	Prerequisite: admission to Teacher Education program; EDLT 3253 or concurrent enrollment; corequisite: EDLT 3711. Introduce theoretical and practical information related to language acquisition and development. Develop foundational knowledge about literacy assessment. (F, Sp, Su)
EDLT	3911	Language and Literacy Practicum	Prerequisite: admission to Teacher Education program. Support pre-service teachers in making connections between theories of language and literacy evaluation and instruction and literacy learning processes and behaviors of children in primary grades.
EDLT	3913	Literacy in the Primary Grades	Prerequisite: admission to Teacher Education program. Explore issues and factors related to language and literacy development in primary grades; examine how to develop proficiency in supporting children's language development; learn literacy assessment activities, interpret findings and identify children's strengths and needs; and choose instructional strategies to help children become strategic readers and writers. (F, Sp, Su)
EDLT	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDLT	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDLT	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDLT	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)

EDLT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDLT	4113	Literacy in the Intermediate Grades	Prerequisite: EDLT 3913. Understand how to support students in the intermediate grades (4th through 6th) with a wide variety of instructional strategies and procedures to implement a balanced, comprehensive literacy program, including differentiating literacy instruction, using assessment to plan instruction, and emphasizing content area literacy. (F, Sp, Su)
EDLT	4123	Language and Literacy Development in Kindergarten through 3rd. grade	Prerequisite: senior standing and admission to OU-Tulsa early childhood education program. Acquaints early childhood preservice teachers with foundations of reading and writing development in kindergarten and the primary grades, including a comprehensive literacy curriculum for reading, writing, and oral language learning how to assess literacy understandings, use data to plan instruction, evidence based developmentally appropriate instructional practices and materials to support children becoming independent conventional readers, writers, and language users by the end of third grade. (F)
EDLT	4201	Language and Literacy Practicum II	Prerequisite: 3713; corequisite: 4203. Support preservice teachers in making connections between theories of language and literacy evaluation/instruction and children's actual literacy learning processes and products. (F, Sp, Su)
EDLT	4203	Language & Literacy Evaluation & Instruction	Prerequisite: EDLT 3253, EDLT 3713, and EDLT 3711; corequisite: EDLT 4201. Evaluating literae activity in various settings, interpret assessment findings and select instructional strategies to promote literacy development. Explore factors related to language and literacy evaluation and instruction. (F, Sp, Su)
EDLT	4303	Methods, Materials & Organization of Literacy Prog for Young Children	Prerequisite: 3183. Focuses on supporting literacy learning in a variety of learning environments for children from birth through third grade. Emphasis includes developmentally appropriate teaching strategies and activities, instructional planning, organizing and managing instruction, planning the overall literacy program, integration of literacy across the curriculum, and evaluating literacy materials. (Sp)
EDLT	4313	Language and Literacy in Elementary/Middle School Classrooms	Prerequisite: EDLT 4203, EDEL 4101. corequisites: EDMA 4053, EDSC 4193, EDSS 4323, ILAC 4043. Explore issues related to planning, organizing, and implementing an integrated literacy program in elementary/middle schools. Reflect on field experiences that lead to informed, dynamic teaching and learning. (F, Sp) [V]
EDLT	4713	Data Driven Instruction in Language and Literacy	Prerequisite: EDLT 3713, EDLT 3711, EDEL 4101; corequisite: EDMA 4353, EDSC 4193, EDSS 4323, EDEL 4980. Issues and factors related to language and literacy assessment, evaluation, and instruction, and best practices for developing proficiency in supporting children's language and literacy development in K-8. Administration and interpretation of assessments and use of the data to inform instructional decisions and select appropriate strategies to help children become strategic readers and writers. (F, Sp, Su)
EDLT	4813	Literature and Writing Across the Curriculum	Prerequisite: EDLT 4113. Provides pre-service teachers with the knowledge and skills needed to provide writing instruction in the elementary classroom. Students will explore children's literature as a tool for language and literacy development and writing instruction. (F, Sp)
EDLT	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDLT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

EDLT	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDLT	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDLT	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDLT	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDLT	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDLT	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDLT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDLT	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDLT	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDLT	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDLT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDLT	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)

EDLT	6910	Practicum in Educ--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDLT	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDLT	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDLT	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDLT	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDLT	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDLT	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDMA	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDMA	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDMA	3001	Mathematics Education Field Experience Mentoring II	Prerequisite: admission to Teacher Education program, EDFN 3003; corequisite: EIPT 3483. Mentoring course providing access to and support from mathematics education faculty for students during their second level field experience. Students meet with the mathematics education faculty for seminars, discussions, and demonstrations. (F, Sp)
EDMA	3053	Problem-Centered Learning Environments	Prerequisite: admission to Teacher Education program; MATH 1000-level Core Area I, and MATH 2213. Designed to engage the prospective teacher in examining various facets which contribute to decision making with regard to a learning environment best adapted to the abilities and needs of each students as a mathematics learner. (F, Sp, Su)

EDMA	3153	Early Mathematics Concepts	Prerequisite: EDMA 3053, MATH 2213, and MATH 2223. Students will engage in mathematics activities as a basis for reflecting on and analyzing the learning and teaching of mathematics appropriate to primary education in order to make decisions with regard to meeting the needs of young children as mathematics learners. (F, Sp, Su)
EDMA	3353	PK-3 Mathematics Concepts	Prerequisite: admission to the teacher education program and 1000-level Gen Ed approved Math, MATH 2213. Addresses the important "big" ideas in mathematics that are appropriate for pk-3rd grade students to learn. How research, theory and practice facilitate young children's learning will be explored. Will also be emphasis on inquiry based/problem centered curriculum, instructional strategies and assessment. (F, Sp, Su)
EDMA	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDMA	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDMA	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDMA	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDMA	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDMA	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDMA	4001	Mathematics Education Field Experience Mentoring III	Corequisite: 4242. Mentoring course providing access to and support from mathematics education faculty for students during their third level field experience. Students meet once per month with the mathematics education faculty for seminars, discussions, and demonstrations. (Sp)
EDMA	4053	Elementary Mathematics Curriculum	Prerequisite: EDMA 3153, and EDEL 4101; Corequisite: EDLT 4313, EDSC 4193, EDSS 4323, ILAC 4043. Designed to offer the student means for planning, implementing, and evaluating mathematics instruction. Examination of the elementary curriculum will provide the basis for understanding and developing specific strategies and materials for teaching elementary mathematics. (F, Sp)

EDMA 4233	Developing Problem-Solving Environ for Secondary Math Learning	Prerequisite: Mathematics 2433. Focuses on the development of problem-solving environment for middle and high school mathematics learning. Emphasizes student characteristics, issues of equity and diversity, theories of teaching and learning, and current best practices from research into mathematics teaching and learning. Areas of focus will include problem-centered learning, appropriate uses of technology, and inclusion of historical and interdisciplinary topics in teaching mathematics for all students. (F)
EDMA 4242	Fundamental Concepts & Methods of Teaching Secondary Mathematics	Prerequisite: nine hours of education, senior standing; corequisite: 4001. Math 4232 is recommended. Fundamental concepts of mathematics relevant to the secondary school mathematics curriculum; an overview of the secondary mathematics curriculum, its development and appropriate instructional methods; current issues in mathematics education pertinent to the secondary teachers. For major credit only for those in teacher certification programs. (F)
EDMA 4243	Fundamental Concepts of Secondary Math Learning	Prerequisite: EIPT 3473, EIPT 3483, EDSP 3054, and senior standing. Fundamental concepts of mathematics relevant to the secondary school mathematics curriculum. Development of secondary mathematics curriculum and appropriate instructional methods for the teaching of Algebra, relations and functions. This course will serve as the senior capstone. (Sp) [V]
EDMA 4253	Teaching and Learning of Mathematics Reasoning and Proof	Prerequisite: full admission to Mathematics Education Program; recommend completion of EDMA 4233. This course focuses on the content and methodology of teaching middle and high school mathematics including geometry and trigonometry generally defined as reasoning and proof. (Irreg.)
EDMA 4353	4-8 Grade Mathematics Concepts	Prerequisite: MATH 2213; MATH 2223; EDMA 3353; EDEL 4101; corequisite: EDLT 4813; EDSC 4193; EDSS 4323; EDEL 4980. Students will be engaged in planning, implementing, and evaluating mathematics curriculum and instruction in the elementary school grades 4 - 8. Materials and discussions relevant to learner diversity, the appropriate use of technology, and how to integrate mathematics with other subjects will be infused throughout the course. (F, Sp)
EDMA 4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDMA 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDMA 4980	Practicum in Mathematics Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDMA 4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDMA 5013	Algebra and Mathematical Tasks at the Elementary Level (PK-6)	Prerequisite: graduate standing. This course will focus on early algebra concepts of functional thinking and generalized arithmetic. Additionally, attention will be given to the analysis and construction of effective mathematical tasks in the teaching of algebra. (Irreg)
EDMA 5023	Geometry, Spatial Visualization, and Learning Trajectories at the Elementary Level (PK-8)	Prerequisite: graduate standing. Focuses on geometric concept development at the PK-8 level and an understanding of spatial visualization. Attention will be given to the understanding of learning trajectories for elementary grades. (Irreg.)

EDMA 5033	Data Analysis, Measurement and Instructional Technology at the Elementary Level (PK-6)	Prerequisite: graduate standing. Focus on statistical literacy of elementary teachers and the teaching of data analysis and measurement to PK-8 students. Additional emphasis will be placed on the use of technology to enhance student learning of mathematics. (Irreg.)
EDMA 5043	Number Concepts and Assessment at the Elementary Level (PK-6)	Prerequisite: graduate standing. Focus on the analysis and construction of effective mathematical tasks in teaching number systems and operations at the PK-6 level. In addition, attention will also be given to the expansion of content knowledge and issues related to assessment. (Irreg.)
EDMA 5053	Rational Number Concepts, Proportional Reasoning & Classroom Interactions at Elementary Level (PK-6)	Prerequisite: graduate standing and EDMA 5043. This course will focus on teaching rational number concepts and developing proportional reasoning skills for PK-6 classrooms. Additional attention will be given to learning methods which facilitate appropriate classroom interactions. (Irreg)
EDMA 5063	Mathematics Leadership and Coaching	Prerequisite: graduate standing and 9 hours of the following: EDMA 5013; EDMA 5023; EDMA 5033; EDMA 5043; EDMA 5053. This course develops skills and knowledge for school mathematics program design and leadership, and for coaching other teaching professionals in mathematics teaching. (Irreg.)
EDMA 5153	Problem Centered Learning in Mathematics	Prerequisite: graduate standing. Intended for mathematics teachers at any level, the course is designed so participants can engage in non-routine problem solving as a basis for examining and reflecting on such an approach to the teaching and learning of mathematics. (Irreg.)
EDMA 5243	Mathematics Teaching in the Secondary Schools	Prerequisite: graduate standing. Focuses on the development of problem-solving environments for and the content relevant to teaching middle school and high school mathematics including rational numbers, number theory, probability, statistics, functions, algebra concepts, geometry, trigonometry, and calculus. (Irreg.)
EDMA 5523	Elementary School Mathematics Curriculum	Prerequisite: graduate standing. Analysis of research, trends, and issues in elementary mathematics teaching. Special attention is given to the research and theoretical bases underpinning curricula. (Irreg.)
EDMA 5533	The Middle School/High School Math Curriculum	Prerequisite: graduate standing. Analysis of research, trends, and issues in middle school and high school mathematics teaching. Special attention is given to the research and theoretical bases underpinning curricula. (Irreg.)
EDMA 5753	Theory and Research in Mathematics Education	Prerequisite: graduate standing. Designed to enhance appreciation for and understanding of research methods and findings in mathematics education. Students explore the history of research in mathematics education, discuss various theories of mathematics learning and understanding, evaluate, synthesize, and critique mathematics education research, understand a variety of research methodologies, and conduct original research. (Irreg.)
EDMA 5763	History of Mathematics for Educators	Prerequisite: graduate standing. Designed to offer a sense of the rich history of mathematics as an intellectual pursuit as well as for its practical significance. Will include presentation of methods and materials historical in nature that can be utilized by practicing classroom teachers to motivate and understanding of and appreciation for mathematics. (Irreg.)
EDMA 5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDMA 5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)

EDMA 5940	Field Studies in Mathematics Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDMA 5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDMA 5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDMA 5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDMA 5973	The Use of Technology in Teaching Mathematics	Prerequisite: graduate standing. Examination of relevant technologies and their uses in and implications for the teaching and learning of mathematics. Special attention is given to developing critical reflective practice and providing perspectives on current trends and issues in mathematics education research. (Irreg.)
EDMA 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDMA 5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDMA 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDMA 6163	Systems Theory & Learning Organizations	Prerequisite: graduate standing, permission of instructor. Examines system theories, including the development and significance of complex adaptive systems, complexity analyses, and paradigms associated with new science, especially related to the educational context. (Irreg.)
EDMA 6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDMA 6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDMA 6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)

EDMA	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDMA	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDMA	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDMA	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDMA	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDPC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDPC	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDPC	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDPC	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDPC	5113	Human Development	Prerequisite: Admission to Professional Counseling M.Ed. program or permission of instructor. An introductory survey of current theory and research as it applies to human development across the lifespan. Emphases include cognitive and language development, self and social development, and contextual influences on development. Particular focus will be on human development as related to counseling. (F)
EDPC	5234	Individual Intelligence Testing	Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Classroom experience dealing with the rationale, purpose, and ethics involved in individual intelligence testing, plus laboratory experience in the administration, scoring, and interpretation of the Stanford-Binet and Wechsler scales with an emphasis on the Wechsler scales. (Sp)

EDPC	5253	Personality and Intelligence Assessment	Prerequisite: admission to Professional Counseling, M.Ed. program or permission of instructor. Theories of personality and intelligence testing will be discussed. Students will gain knowledge and experience in administering, scoring, and interpreting personality tests and in interpreting intelligence tests with an emphasis on the Wechsler scales. (F)
EDPC	5263	Professional Issues and Ethics in Counseling	Prerequisite: Must be admitted to masters program in Professional Counseling. This course introduces graduate students in counseling to professional, legal and ethical issues in professional counseling. The course reviews literature and covers topics pertaining to counseling, supervision, teaching, and research, with special focus on areas that are most important and most current in the field. (Sp)
EDPC	5413	Occupational Information--Career Development	Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Methods of preparing informational files for student use; nature of educational and occupational information, job classification, sources of information, and occupational surveys and trends. Theories of career development; techniques of job and occupational analysis; individual experiences of reporting client career development. (F)
EDPC	5423	Methods and Techniques of Counseling	Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Introduction to stages in the counseling process; interviewing skills; counseling objectives; appropriate strategies. Common theories of counseling and psychotherapy and ethical considerations are considered. (Su)
EDPC	5433	Theories and Techniques of Group Counseling	Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program. Introduction to types of groups, group development, group leadership, and group dynamics with an emphasis on counseling groups. Includes experiential training in group work. (Su)
EDPC	5473	Counseling Theories	Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Surveys prevalent counseling theories within the overarching categories of psychodynamic, humanistic, behavioral and cognitive-behavioral, and contextual and constructivist approaches. In addition, multicultural counseling competencies will be reviewed. Theories presented will be discussed in terms of counseling goals, central concepts and techniques, diversity applications, and research support. (F)
EDPC	5483	Behavior Disorders	Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Diagnostically oriented course in abnormal behavior stressing standard nosology exemplified by the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM). (Sp)
EDPC	5513	Introduction to Abuse and Addictions Theory and Treatment	Prerequisite: Admission to Professional Counseling M.Ed. program or permission of instructor. An overview of various abuse and addiction theories, treatment and stages of change, including substance use disorders, gambling addictions and sex addictions. (Su)
EDPC	5523	Addictions and Family Theory	Prerequisite: Admission to Professional Counseling M.Ed. program or permission of instructor. An overview of various addictions with emphasis on substance use disorders and their effect on individuals, families, and communities. The course will focus on prevention and treatment. (Sp)
EDPC	5533	Psychopharmacology/Neurobiology of Addiction	Prerequisite: Admission to Professional Counseling M.Ed. program or permission of instructor. In this course, alcohol and drug dependency is explored through the study of brain chemistry and related causal factors and pathophysiological processes. The role of psychopharmacology is addressed as an agent frequently used in the management and resolution of withdrawal symptoms. (Sp)

EDPC	5543	Addictions Counseling: Theoretical Approaches and Co-Occurring Disorders	Prerequisite: Admission to Professional Counseling M.Ed. program or permission of instructor. Examines major theoretical approaches to the treatment of substance abuse. Diagnosis of co-occurring disorders will also be addressed. (F)
EDPC	5553	Addictions in Family Counseling	Prerequisite: Admission to Professional Counseling M.Ed. program or permission of instructor. Examines major Family Counseling Treatment approaches to substance abuse and addiction. Various assessment instruments will be examined and family dynamics will be studied. Multicultural issues will also be examined. (Sp)
EDPC	5910	Practicum in Counseling--Master's	1 to 4 hours. Prerequisite: admission to Professional Counseling, M.Ed. program or Counseling Psychology, Ph.D. program. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (F, Sp)
EDPC	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDPC	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDPC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDPR	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDPR	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDPR	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDPR	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDPR	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)

EDPR	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDPR	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDPR	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDPR	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDPR	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDPR	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDPR	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDPR	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDPR	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDPR	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDPR	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDPR	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)

EDPR	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDPR	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDPR	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDPR	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDPR	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDPR	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDPR	6990	Individual Study in Education	NULL
EDPY	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDPY	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDPY	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDPY	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDPY	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)

EDPY	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDPY	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDPY	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDPY	4413	Introduction to Counseling	Prerequisite: senior standing or permission of instructor. Development of the counseling and guidance profession. Various approaches and techniques employed in counseling. Work of the counselor in various settings. Introduction to basic theoretical and philosophical positions in counseling and guidance.
EDPY	4493	Family Psychology	(Slashlisted with 5493) Prerequisites: PSY 1113 and junior or senior standing, or permission of instructor. Examine relationships in families from a psychological perspective including issues such as attachment, intimacy, communication, conflict, and cultural considerations. In addition, a variety of family forms and challenges will be presented. The primary focus will be on healthy family functioning within a multicultural world. No student may earn credit for both 4493 and 5493. (Sp)
EDPY	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDPY	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDPY	4980	Practicum in Educational Psychology	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDPY	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDPY	5213	Group Administered Tests	Prerequisite: admission to Community Counseling program. Survey of standardized tests of intelligence, aptitudes, interests, attitudes, and personality traits; selection, use, and interpretation of such tests. Provision for the interests of counselors and guidance workers rather than classroom teachers. (F)
EDPY	5234	Individual Intelligence Testing	Prerequisite: admission to Community Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Classroom experience dealing with the rationale, purpose, and ethics involved in individual intelligence testing, plus laboratory experience in the administration, scoring, and interpretation of the Stanford-Binet and Wechsler scales with an emphasis on the Wechsler scales. (Sp)
EDPY	5253	Personality Assessment	Prerequisite: admission to Community Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Theories of personality testing and of personality. Students will acquire the skills requisite to administer a variety of personality tests used in community agencies ad be able to interpret and write reports on findings. (F)

EDPY	5293	Psychoneuropharmacology	Prerequisite: admission to Community Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Focuses on two aspects of psychoneuropharmacology: (a) relevant neurobiological topics ranging from receptor functioning to the actions of neural mechanisms thought to produce phenomena such as fear and anxiety, mood disorders, and so on; and (b) the application of psychopharmacological tools, including pharmacodynamics and pharmacokinetics, in treating mental disorders. Diagnosis as it relates to treatment with psychotropic medications; general psychodynamics, effects, and side effects of the major medications will be explored. Pharmacodynamics and pharmacokinetics in racially and ethnically diverse populations will be discussed. (Irreg.)
EDPY	5443	Developmental Guidance in the Schools	Prerequisite: graduate standing. Cognitive knowledge, procedures, skills and activities needed for the effective functioning of a school guidance and counseling program. Emphasis on age-related activities and factors involved in the planning of a school guidance and counseling program. (Sp)
EDPY	5453	Intervention Strategies for School Counselors	Prerequisite: graduate standing. Intervention strategies appropriate for an educational setting and the practical aspects of working with children. Emphasis on individual and group techniques, working with parents, collaboration, and developing effective curriculum to meet the needs of school students. (F)
EDPY	5463	Multicultural Counseling	Prerequisite: admission to Community Counseling, M.Ed. program or Counseling Psychology, Ph.D. program. Consideration of the effects of cultural, ethnic, and/or language differences between counselor and counselee in the helping process. Sensitization to minority cultural values. Methods for enhancing multicultural communication. (F)
EDPY	5493	Family Psychology	(Slashlisted with 4493) Prerequisite: major in Community Counseling, graduate standing. Examine relationships in families from a psychological perspective including issues such as attachment, intimacy, communication, conflict, and cultural considerations. In addition, a variety of family forms and challenges will be presented. The primary focus will be on healthy family functioning within a multicultural world. No student may earn credit for both 4493 and 5493.(Sp)
EDPY	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDPY	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDPY	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDPY	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDPY	6050	Individual Research	1 to 4 hours. Prerequisite: admission to doctoral program in Educational and Counseling Psychology. May be repeated; maximum credit six hours. A seminar to initiate and conduct research projects on current topics in educational and counseling psychology. Funding sources and dissemination procedures will be presented.

EDPY	6063	Counseling Psychology Research	Prerequisite: admission to Counseling Psychology program, or permission of instructor. Designed to further acquaint students with the use of measurement and statistics in research, to provide students with a basic vocabulary of experimental design, to enable them to design and evaluate research pertinent to counseling and to enable them to review and critique current research in counseling.
EDPY	6103	Individual Intelligence Testing	Prerequisite: admission to Counseling Psychology,Ph.D. program (D255). Classroom experience dealing with the rationale, purpose, and ethics involved in individual intelligence testing, plus laboratory experience in the administration, scoring, and interpretation of the Stanford-Binet and Wechsler scales with an emphasis on the Wechsler scales. (F)
EDPY	6203	Personality Assessment	Prerequisite: admission to Counseling Psychology, Ph.D. program (D255). Theories of personality testing and of personality. Students will acquire the skills requisite to administer a variety of personality tests used in community agencies and be able to interpret and write reports on findings. (Sp)
EDPY	6253	Projective Personality Instruments	Prerequisite: 5213, 5234, 5253; permission of instructor. Theory of projective testing; acquaintance with several major instruments with special emphasis on the Rorschach test.
EDPY	6403	Issues and Ethics in Counseling Psychology	Prerequisite: admission to Counseling Psychology, Ph.D. program. Orientation to counseling psychology as a profession. Provides a thorough exploration of important professional, ethical, and legal issues in the practice of psychology. (F)
EDPY	6413	Theories of Counseling and Psychotherapy	Prerequisite: admission to Counseling Psychology, Ph.D. program. An advanced course covering the formal aspects of counseling theory as well as selective content of the major counseling/therapy and vocational theories. Major focus is on assisting the student to critically compare various theoretical positions and evolve a personally meaningful approach to counseling and therapy. (Sp)
EDPY	6423	Advanced Counseling Procedures	Prerequisite: admission to Counseling Psychology, Ph.D. program. Reviews the current literature on evidence-based practice in psychology (EBPP), including exposure to manualized treatments and common factors. (Sp)
EDPY	6433	Advanced Group Counseling and Psychotherapy	Prerequisite: admission to Counseling Psychology, Ph.D. program. Designed to examine in-depth the theoretical, empirical, and applied dimensions of group counseling and psychotherapy, with an emphasis on process-oriented groups. (Su)
EDPY	6443	Advanced Counseling and Therapy: Children	Prerequisite: admission to Counseling Psychology, Ph.D. program. Focuses on specialized counseling skills needed for working with children, with particular attention to diagnosis, interventions, and working with parents. (F)
EDPY	6453	Family Counseling	Prerequisite: admission to Community Counseling, M.Ed. program or Counseling Psychology, Ph.D. program, or permission of instructor. Examination of counseling approaches for helping distressed families with an emphasis on the family as a system. Role play practice in problem assessment and using various techniques and interventions. (Sp)
EDPY	6463	Couples and Family Therapy	Prerequisite: admission to Counseling doctoral program or permission of instructor. Focus on evidence-based counseling approaches for working with couples and families. Emphasis on relevant multicultural competencies and research specific to couples and families. (Sp-odd years)
EDPY	6473	Biopsychosocial Bases of Health Psychology	Prerequisite: admission to Counseling Psychology, Ph.D program. Designed to provide an integrative framework for examining biological, psychological, and social influences on behavior and health from the applied perspective of counseling psychology. (F)
EDPY	6483	Advanced Career Counseling	Prerequisite: admission to Counseling Psychology, Ph.D. program. Designed to prepare students in the area of career counseling and acquaint them with current theoretical and empirical literature as a basis for clinical practice. (Su)

EDPY	6503	Counseling Psychology--Supervision	Prerequisite: admission to counseling psychology program or permission of instructor. Develops skills and cognitive knowledge in the area of supervision. Various approaches to supervision will be considered. Practice in supervising master's level or paraprofessional counselors will be required. (F)
EDPY	6910	Practicum in Counseling-Doctoral	0 to 6 hours. Prerequisite: admission to Counseling Psychology, Ph.D program. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (F, Sp, Su)
EDPY	6913	Counseling Psychology Practicum	Prerequisite: admission to Counseling Psychology Ph.D program. May be repeated; maximum credit 15 hours. Designed to facilitate acquisition and development of clinical skills (diagnostic, conceptual, relationship) through combined didactic instruction, experiential training, and individual and group supervision. (F, Sp)
EDPY	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDPY	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDPY	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDPY	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDPY	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDPY	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDRG	0122	College Reading Strategies	A continuation of EDRG 0112. The course focuses on the development of reading strategies for college textbooks. Strategies include comprehension monitoring and how to construct a coherent interpretation of a passage. Not acceptable for credit at the University of Oklahoma. (F, Sp, Su)
EDRG	0999	Remedial Reading	NULL
EDRG	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDRG	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)

EDRG	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDRG	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDRG	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDRG	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDRG	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDRG	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDRG	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDRG	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDRG	4980	Practicum in Reading Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDRG	5103	New Literacies in 21st Century Learning	Prerequisite: graduate standing. This course will explore new definitions of what it means to be literate across the disciplines and the social practices around literacy that are necessary for understanding and creating a wide range of texts in multimodal and digital contexts. Research and theory in New Literacies/new literacies will be examined along with best practices to take advantage of new literacies in all classrooms (elementary/secondary; language arts, social studies, STEM/STEAM:vocational fields). (Irreg.)
EDRG	5444	Practicum in Reading Education	Prerequisite: graduate standing and 5613. Students will practice assessment and instructional skills with struggling readers in one-on-one and small group settings. Students will also practice observation, coaching , and feedback skills as literacy mentors and coaches to pre-service teachers. (Sp)

EDRG 5553	Issues and Research in Reading/Literacy	Prerequisite: graduate standing. Exploration of current issues in reading and literacy. Examination and critique of different paradigms of research. Students will plan and conduct a research project on one of the issues using one of the research paradigms. (Irreg.)
EDRG 5573	Culture, Language and Literacy	Prerequisite: graduate standing. Study of cultural diversity through the lenses of language and literacy. Information presented is woven through these strands: language and learning, second language learning, culture and identity. (Irreg.)
EDRG 5613	Developmental Reading (Pre-K to College)	Prerequisite: graduate standing. Study of reading development from birth through the life span. Includes understanding of factors leading to reading difficulties, relationship of reading to other language processes, and implications of this process for curriculum and instruction. (F)
EDRG 5713	Understanding Reading: the Processes and the Curriculum	Prerequisite: graduate standing. An overview of the many cognitive, linguistic, motivational, and environmental factors that can affect the reading process. The application of theory as it affects classroom learning, designing the educational setting, and assessing individual readers and curriculum materials will be the focus. (F)
EDRG 5723	Emergent and Beginning Literacy	Prerequisite: graduate standing. Discuss and explore topics related to how young children develop emergent and beginning literacy skills and knowledge, and how teachers effectively support that literacy learning. (Irreg.)
EDRG 5733	Adolescent Literacy	Prerequisite: graduate standing. May be repeated; maximum credit 6 hours. Explore theoretical and practical base for adolescent literacy, including school and community content for adolescent literacy instruction, integration of literacy with content instruction, transition across grades. (Irreg.)
EDRG 5753	Literacy and Technology	Prerequisite: graduate standing. Survey of role of technology in literacy curriculum, including issues of effective technology integration to support literacy teaching and learning. Use of literacy technology applications. (Irreg.)
EDRG 5803	Theories of Reading & Literacy	Prerequisite: graduate standing, 5613. Explores the theoretical basis of the reading, writing, and learning process. Topics to be discussed include the importance of language, social content, and culture; the meaning construction process; the role of perception, word recognition, metacognition, and affect on literacy and learning; and, how different models of the reading/writing process suggest different classroom learning environments. (Sp)
EDRG 5813	Applications of Literacy Assessment and Evaluation	Prerequisite: graduate standing. Focus is on group and individual classroom assessment strategies for the areas of literacy competence including emergent literacy, reading comprehension, automatic word recognition, vocabulary knowledge, fluency, spelling, and composition. Students will be supervised in the administration and interpretation of a variety of formal and informal assessments including standardized measures (both norm- and criterion-referenced), screening and diagnostic tests, and anecdotal observations. (Sp)
EDRG 5821	Clinic: Diagnostic Case Study	Clinic: Diagnostic Case Study. Prerequisite: Edrg 5613; Corequisite: 5812. Practice Administering And Interpreting A Variety Of Assessments. Assessment Of A Student With Reading Difficulties And Writing A Case Study. (F)
EDRG 5903	Literacy Leadership and Coaching	Prerequisite: graduate standing. Explore role of reading specialist and literacy coach as leader in an educational setting. Develop understanding of how to coach teachers to support effective literacy instruction. (Irreg.)
EDRG 5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)

EDRG	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDRG	5921	Clinic: Correcting Reading Problems	Prerequisite: graduate standing, 5613; corequisite: 5912. Practice implementing teaching strategies to promote strategic engaged readers with a small group of students having difficulty reading. (Sp)
EDRG	5933	Applications of Literacy Instructional Strategies	Prerequisite: graduate standing. Focus is on group and individual classroom instructional strategies for the areas of literacy competence including emergent literacy, reading comprehension, automatic word recognition, vocabulary knowledge, fluency, and spelling. Students will be supervised in the application of these strategies in a clinic setting with children and young adults learners.(F)
EDRG	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDRG	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDRG	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDRG	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDRG	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDRG	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDRG	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDRG	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDRG	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)

EDRG	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDRG	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDRG	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDRG	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDRG	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDS	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDS	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDS	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDS	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

EDS	4003	Schools in American Cultures	Prerequisite: admission to Teacher Education program; EIPT 3473 or EDEC 3413, EIPT 3483, and EDSP 3054. An overview of education as a profession based upon historical and philosophical principles including a treatment of current problems and affairs with specific attention given to multicultural phenomena. (F, Sp)
EDS	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDS	4980	Practicum in Educational Studies	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDS	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDS	5003	School and Society	Prerequisite: graduate standing. Presents overview of education as a profession based upon historical, sociological, and philosophical principles, including a treatment of current problems and affairs with specific attention given to multicultural phenomena. (Sp)
EDS	5013	Introduction to Educational Inquiry	Prerequisite: graduate standing. Introduction to philosophical and literary techniques of analysis and their purposes relative to the study of thought on/in/about education for social justice, nonviolence, and democratic life in a postmodern era. (F, Sp)
EDS	5023	Linguistic and Conceptual Analysis	Prerequisite: graduate standing. Study of the philosophical method, linguistic and conceptual analysis, as a means to achieve greater clarity and understanding of tactical and theoretical problems faced by educators. Students using philosophical analysis in their research may pursue the beginnings of that analysis in consultation with the instructor and other students in the course. (F, Sp)
EDS	5033	Critical Literature in Adult and Higher Education (Crosslisted with EDAH 5033)	(Crosslisted with EDAH 5033) Prerequisite: graduate standing. Explores twentieth century ideas and issues in adult and higher education. The majority of the literature an discussion concern the university. (Sp)
EDS	5043	Membership and Moral Formation	Prerequisite: graduate standing. Course is rooted in a social-philosophical understanding of moral formation, and specifically the philosophy of moral education, not moral philosophy. Examines the ways one can become a "good person." (F)
EDS	5513	Comparative Education	Prerequisite: graduate standing. Introduction to the field of comparative education. Primary objective is to develop an understanding of the field of comparative, international and development education, its primary focus and assumptions, and the intellectual frameworks, theories and paradigms it draws upon in inquiry. (F)
EDS	5663	Religion, Public Discourse and Education	Prerequisite: graduate standing. Examines the relationship between secular and religious world views in a liberal-democratic state. Examines the connections between religious and secular-civil morality, public and private religious belief and practice, and the relationship between church and state, especially as these conflicts intersect in public schools. (F)

EDS	5703	Sociology of Education	(Crosslisted with SOC 5703) Prerequisite: eight hours of education or permission. Social structure in the community wherein the school must operate and the nature of human relations within the school; social processes and patterns involved in the educational system relative to other aspects of our society; and the effect of the school on the behavior and personality of its participants. Lectures, class discussions, audiovisual materials and outside readings, both scientific and literary, portraying the American social scene.
EDS	5753	The Educational Philosophy of John Dewey	Prerequisite: graduate standing. Close critical study of educational thought by John Dewey, his recent critics, his contemporaries, and others who influenced or were influenced by him in a multicultural, gendered, and technologically developing context. Intensive oral and written work will aim at developing continuity between theory and practice in various formal and informal educational settings. (Sp)
EDS	5783	Classics in Educational Thought	Prerequisite: graduate standing or permission of instructor. Close critical study of selected "classics" in educational thought by Plato, Rousseau, DuBois, Dewey, Woolf, or others of comparable historical significance for multicultural co-education throughout the human lifespan, in a context of social inequalities. Intensive written and oral practice in basic conceptual skills and informal logic will require independent inquiries on topics of special interest to students. (F)
EDS	5823	Contemporary Critical Thought and Education Studies	Prerequisite: graduate standing or permission of instructor. Close study of contemporary critical thought that has profoundly transformed recent theorizing about education and its various social, cultural, and economic contexts. Major texts selected from philosophical movements such as analysis, existentialism, Marxism, feminism, post-structuralism, neo-pragmatism. Intensive oral and written practice in educational criticism and theory, developing case studies from primary sources. (Sp)
EDS	5833	Gender, Values, and Education	(Crosslisted with PHIL 5833) Prerequisite: graduate standing or permission of instructor. May be repeated with change of topic; maximum credit six hours. Topics vary each semester, but are developed from philosophical studies in and about education, politics, ethics, aesthetics, law and religion that address the issues of gender and sexuality. Intensive oral and written theoretical inquiry. (Irreg.)
EDS	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDS	5913	Cultural Pluralism and Education	Prerequisite: graduate standing or permission of instructor. Investigates the role of the schools from an interdisciplinary perspective using the philosophy, history, anthropology and sociology of education and cross-cultural analysis, in fostering a climate of ethnic, racial, and gender inclusiveness.
EDS	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDS	5933	Girls, Women, and Educational Studies	Prerequisite: graduate standing or permission of instructor. History, sociology, and/or philosophy of girls' and women's education in a multicultural context that includes family, work, and community life as well as coeducational public schooling and higher education in the U.S. Oral and written critical inquiry concerning selected primary sources will introduce students to the activity of interdisciplinary theorizing about gender and sexuality in education. (F)

EDS	5940	Field Studies in Education	1 to 4 hours. Prerequisite: twelve hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDS	5943	Topics in History of Education	Prerequisite: graduate standing. May be repeated; maximum credit six hours. Acquaints students with several diverse culture groups which constitute society in the United States and their placement within the historical context of American education. Educational experience of these groups will be discussed. Class members will integrate their personal narratives into an understanding of education in American culture. (F)
EDS	5960	Directed Readings	1 to 4 hours. Prerequisite: twelve hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDS	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDS	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDS	6010	Writing Educational Inquiry	(Crosslisted with PHIL 6010) 1 to 3 hours. Prerequisite: graduate standing, enrollment in Educational Studies graduate course, and permission based on review of writing samples. May be repeated; maximum credit nine hours. Individual or group tutorial study of informal logic and rhetorical theory concerning academic writing as a social practice. Emphasis on contextually appropriate documentation practices, philosophical moves, and rhetorical devices; development of clarity and grace in written formulations of educational concepts and values. Address various scholarly and professional situations. Aimed toward public presentation or publication. (F, Sp)
EDS	6013	Gender, Knowledge, and Inquiry	(Crosslisted with PHIL 6013) Prerequisite: graduate standing and Women's Studies 4003 or equivalent, or any graduate-level course in research methods or philosophy, or three graduate hours in EDFN. Interdisciplinary seminar introducing feminist criticisms of epistemology and exploring their possible significance for design and practices of gender sensitive inquiry in various academic fields and educational contexts. (F)
EDS	6033	Inquiry Design	Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. An individual or small group tutorial focused exclusively on preparation of the dissertation or prospectus for interdisciplinary critical or theoretical inquiry in Historical, Philosophical, and Social Foundations in Education. (F)
EDS	6703	Advanced Studies in the History of Educational Thought	Prerequisite: 5753 and 5783, or equivalent and permission of instructor. May be repeated for credit, maximum credit 9 hours. Topical focus will vary. An individual or group tutorial in which students pursue original inquiries with close guidance and contribute to the delivery of EDS 5753 or 5783. A final paper suitable for public presentation or publication is required. (Sp)

EDS	6713	Pro Seminar	(Crosslisted with EACS 6713 and EDAH 6713) Prerequisite: graduate standing. The purpose of the Pro Seminar is to introduce beginning doctoral students to the concept and process of research. Included are issues related to the role of philosophical frameworks, theory, research conceptualization, scholarly writing, and rudimentary research methods. (F, Sp, Su)
EDS	6763	Issues in Contemporary American Education	Prerequisite: graduate standing. Backgrounds of the contemporary American social scene with such issues as extension of educational opportunity; interrelationships between church, state, and school; changing economic concepts in the age of technology; purposes of education to social policy; federal aid to education; academic freedom.
EDS	6793	History of U.S. Education	Prerequisite: graduate standing. Development of schools in American society from colonial times to the present as set against the background of intellectual movements and changes from the colonial period to the present. Attention is given to the development of the organization, administration, finance and curriculum in the American public school system. Major concepts relating to the maintenance of a school in American society are considered; historical treatment of nativism, populism, empiricism, associationism, a person's relation to spiritual and national self, as these topics relate to the development of educational ideals and practices in American society. (Irreg.)
EDS	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDS	6903	Colloquium in Contemporary Educational Thought	Prerequisite: 5823 and 5933, or equivalents and permission of instructor. May be repeated for credit, maximum credit nine hours. Topical focus on selected conceptual problems will vary. A colloquium in which students share and practice mutual critique of original inquiries they are pursuing with close guidance. Participation in the delivery of EDS 5823 or 5933 and a final paper suitable for public presentation or publication are required. (F)
EDS	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDS	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit twelve hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDS	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: twelve hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDS	6933	Naturalistic and Qualitative Research in Education	Prerequisite: graduate standing. Designed to familiarize graduate students in education with naturalistic research and qualitative methodologies. (Irreg.)

EDS	6943	In-Depth Approaches to Qualitative Inquiry in Educational Research	Prerequisite: graduate standing. Students should have had some introduction to qualitative inquiry and research. Graduate students should produce a presentable conference paper and/or publishable article. In addition, students will teach their selected methodology while applying this methodology to their own study. Students will develop a deeper understanding of the philosophical congruence of students and other classmates' research projects. (F, Sp)
EDS	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDS	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDS	6973	Documentary and Narrative Research	Prerequisite: graduate standing or permission of instructor. Examines problems and methods of non-empirical research in education. Use of primary and secondary sources, evidence, generalization, interpretation, documentation, citation, and oral history are discussed. (F)
EDS	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDS	6990	Individual Study in Education	1 to 4 hours. Prerequisite: twelve hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDSC	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDSC	3233	Environmental Issues in the Community	Prerequisite: 8 to 9 hours in the natural sciences and sophomore standing. Designed for students to explore environmental issues in the surrounding community while utilizing scientific and engineering practices, which will lead to the development of interdisciplinary core ideas in the sciences. (F)
EDSC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDSC	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDSC	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDSC	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)

EDSC	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDSC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDSC	4093	Inquiry-Based Science Teaching	Prerequisite: admission to Teacher Education program. Elementary education students will be introduced to the nature of science and to concepts fundamental to science education at all grade levels including the central purpose of American education, developmental model of learning, and the teaching procedure known as the learning cycle. (F, Sp)
EDSC	4153	Teaching Science in Secondary Schools (Slashlisted with 5513).	Prerequisite: EIPT 3473, EIPT 3483, EDSP 3054, and senior standing. Review of the purpose of education, the nature and structure of science, review of the characteristics of the secondary school-age learner, elements of inquiry, learning in an inquiry-centered laboratory, analysis of curricula, evaluation of inquiry teaching and learning, and organization of a science laboratory for inquiry teaching. No student may earn credit for both 4513 and 5513. (F, Sp)
EDSC	4193	Teaching Science in Elementary Schools	Prerequisite: admission to Teacher Education program, EDSC 4093, EDEL 4101; corequisites: EDMA 4353, EDLT 4813, EDSS 4323, EDEL 4980. Experiences are provided, following the position that science is the quest for knowledge, and that this position is compatible with modern educational theory. (F, Sp)
EDSC	4513	Teaching Science in Secondary Schools	Prerequisite: EIPT 3473, EIPT 3483, EDSP 3054, and senior standing. Review of the purpose of education, the nature and structure of science, review of the characteristics of the secondary school-age learner, elements of inquiry, learning in an inquiry-centered laboratory, analysis of curricula, evaluation of inquiry teaching and learning, and organization of a science laboratory for inquiry teaching. No student may earn credit for both 4513 and 5513. (F, Sp)
EDSC	4533	Advanced Methods in Science Teaching	(Slashlisted with 5533) Prerequisite: EDSC 4513 and senior standing; corequisite: EDUC 4060. This course follows the position that science is the quest for knowledge. Experiences with advanced science content, technology, laboratory investigations, and modern educational theory are provided. This course will serve as the senior capstone. No student may earn credit for both EDSC 4533 and EDSC 5533. (Sp) V
EDSC	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDSC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSC	4980	Practicum in Science Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDSC	5513	Teaching Science in Secondary Schools	(Slashlisted with 4513) Prerequisite: nine hours of education, a teaching field in science. Review of the purpose of education; the nature and structure of science; review of the characteristics of the secondary school learner; elements of inquiry, learning in an inquiry-centered laboratory; analysis of curricula; evaluation of inquiry teaching and learning, organization of secondary science laboratory for inquiry teaching. No student may earn credit for both 4513 and 5513. (F, Sp)

EDSC	5514	Research and Development of Science Curricula	Prerequisite: EDSC 4513 or EDSC 5513. Provides the following experiences: teaching existing learning cycles to peer groups; developing new learning cycles; and teach these newly developed learning cycles to peers and/or secondary school students. (Su)
EDSC	5523	The Science of Learning Theories	Prerequisite: twelve hours of education or permission of instructor. The mental functioning model of Piaget is developed through experience. The characteristics of persons at each stage of development are identified and compared. A teaching theory is drawn from the functioning model and a curriculum organization and planning theory are derived from the stage model. These theories are put into practice. (Irreg.)
EDSC	5533	Advanced Methods in Science Teaching	(Slashlisted with 4533) Prerequisite: EDSC 5513 and graduate standing; corequisite: EDUC 5920 or permission of instructor. This course follows the position that science is the quest for knowledge. Experiences with advanced science content, technology, laboratory investigations, and modern educational theory are provided. No student may earn credit for both EDSC 4533 and EDSC 5533. (Sp)
EDSC	5543	The Elementary School Science Curriculum	Prerequisite: twelve hours of education, graduate standing. Elementary school science curricula are examined from a theory-based perspective which includes: the nature of science, purpose of schools, developmental learning theory, and the teaching procedure known as the learning cycle. Students trace the development of American science education from 1700 to present. (Alt. F)
EDSC	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDSC	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSC	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDSC	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDSC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSC	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDSC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

EDSC	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDSC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDSC	6532	Paradigms For Scientific Investigations	Paradigms For Scientific Investigations. Prerequisite: Admission To Graduate Standing. Current Research Paradigms In Science Education Will Be Constructed Through Readings, Discussions And Presentations. A Thorough Review Of The Literature Will Include The Use Of Professional Journals, Theses And Dissertations From That Area To Develop A Sound Understanding Of Research Paradigms And The Formal Reporting Of Research. (Irreg)
EDSC	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDSC	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDSC	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDSC	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDSC	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDSE	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDSE	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

EDSE	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDSE	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDSE	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDSE	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDSE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDSE	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDSE	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSE	4980	Practicum in Secondary Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDSE	5653	Problems of Teaching in Secondary Schools	Prerequisite: 12 hours of education, graduate standing. Place of the teacher with reference to teacher-pupil, teacher-teacher, teacher-administrator, and teacher-community relations. Problems of teaching related to criticisms of present-day secondary education; the task of secondary schools; the adolescent learner; planning for learning; appraising learning and growth; human relations; guidance; the teacher and school organization; trends in teaching. (Sp)
EDSE	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSE	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDSE	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

EDSE	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDSE	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDSE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDSE	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDSE	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDSE	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSE	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDSE	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDSE	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDSP	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDSP	3054	Understanding and Accommodating Students with Exceptionalities	Prerequisite: admission to Teacher Education program, EIPT 3473 or EDEC 3413, EIPT 3483. Introduces pre-service educators to the federally-mandated policies and procedures for educating children and youth with exceptionalities. (F, Sp, Su)
EDSP	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

EDSP	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDSP	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDSP	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDSP	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDSP	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDSP	4013	Fundamental Academic Instructional Strategies	Prerequisite: 3054. Instructional strategies and effective techniques for teaching students with mild to moderate disabilities in a variety of general and special education settings. Class objectives target remediation and progression of skills focused around an academic curriculum for students with mild/moderate disabilities. (Sp)
EDSP	4023	Assessment for Eligibility and Program Planning	Prerequisite: 3054 and 4013; corequisite: 4033. Study of assessment instruments, interpretation and use in eligibility, placement and program planning for individuals with mild to moderate disabilities. Competencies addressed include: response to intervention, pre-referral, student assistance teams, administration of curriculum-based assessment and adaptive behavior scales, interpreting functional assessment results into IEPS and individual case studies. (F)
EDSP	4033	Families and Young Children with Developmental Delays	Prerequisite: 3054, 4013; corequisite: 4023. Providing family directed services; cultural competence; interagency and multidisciplinary collaboration; and research based services in natural settings for children 0-9 years with developmental delays. Students analyze model EIEC programs; developmental domains; federal/state/local policies and procedures family and center-based case studies; systemic transitions; community-based resources; and current research and issues. (F)
EDSP	4043	Classroom Management in Special Education	Prerequisite: 3054 and 4013 and 4023 and 4033; corequisite: 4053 and 4063 and 4072. Philosophical perspectives supported by management strategies based on sound theoretical foundations and best practice. Preservice educators develop a personal plan for creating a well-managed classroom, identifying and documenting behavior concerns and developing intervention plans that remediate difficulties and increase appropriate behavior in general and special education environments. (Sp)
EDSP	4053	Language, Literacy, and Communication Strategies	Prerequisite: EDSP 3054 and EDSP 4013 and EDSP 4023 and EDSP 4033; corequisite: EDSP 4043 and EDSP 4063 and EDSP 4072. Competencies developed include: understanding language and literacy development; 32 hours tutoring; formal/informal literacy assessments; implementation of guided reading lesson plans; data collection monitoring; phonics/decoding; literal/inferential/prediction comprehension; fluency and written expression; research to practice; development of learning strategies enhancing content and literacy. (Sp)

EDSP	4063	Issues and Strategies in a Functional Curriculum	Prerequisite: 3054 and 4013 and 4023 and 4033; corequisite: 4043 and 4053 and 4072. Examines how low-incidence disabilities and other moderate to severe disabilities, including intellectual disabilities, autism, physical disabilities, traumatic brain injury, deafness, blindness, multiple disabilities, and other health impairments, affect academic and job performance. Students will learn and demonstrate current methods for teaching individuals with such disabilities. (Sp)
EDSP	4072	Introductory Practicum in Special Education	Prerequisite: EDSP 3054 and EDSP 4013 and EDSP 4023 and EDSP 4033; corequisite: EDSP 4043 and EDSP 4053 and EDSP 4063. Two hundred hours of special education field placement with supervision by master public school teachers and OU professionals. Weekly seminars based on reflections, discussion of course assignments implemented at school sites, competencies such as IEPS ecological assessments, parent interviews, and development of original lesson plans with articulated accommodations and modification. (F, Sp)
EDSP	4083	Individual Behavior Supports	Individual Behavior Supports. Prerequisite: 3054 and 4013 and 4023 and 4033 and 4043 and 4053 and 4063 and 4072. Corequisite: 4093 and 4103 and 4112. Special techniques and materials used in the instruction and behavioral modification of students who have significant behavioral disorders. Content includes proactive classroom strategies, effective instruction, and planned behavior interventions. (F)
EDSP	4093	Transition and Self-Determination	Prerequisite: 3054, 4013, 4023, 4033, 4043, 4053, 4063, 4072; corequisite: 4083, 4103, 4112. Transition education practices including assessment, transition planning, and instructional methods to facilitate post-school outcomes for students with disabilities. IDEA laws along with best practice methodology, assessment, transition planning, self-determination instruction, multicultural issues, interagency collaboration, resources, and instruction will be discussed to facilitate a successful transition. (F)
EDSP	4103	Technology Applications and Universal Design for Learning	Prerequisite: 3054, 4013, 4023, 4033, 4043, 4053, 4063, 4072, EPIT 3043; corequisite: 4083, 4093, 4112. Knowledge, skills, and issues pertaining to the use of computers, technology, and universal design with exceptional individuals. Student's prior knowledge of instructional strategies and principles of learning from general and special education courses are applied in the context of technology applications for persons with disabilities. (F)
EDSP	4112	Advanced Practicum in Special Education	Prerequisite: 3054, 4013, 4023, 4033, 4043, 4053, 4063, 4072; corequisite: 4093, 4093, 4103. Two hundred hours of supervised field experience with instruction and behavior management provided to students with disabilities. Weekly seminars focus on self-evaluations and reflections on evidence-based practice, development, and implementation of curriculum unit with modifications and accommodations, and discrepancy analysis of past and current IEPS. (F, Sp)
EDSP	4121	Applied Research in Special Education	Prerequisite: EDSP 3054, EDSP 4013, EDSP 4023, EDSP 4033, EDSP 4043, EDSP 4053, EDSP 4063, EDSP 4072, EDSP 4083, EDSP 4093, EDSP 4103, EDSP 4112. Corequisite: EDSP 4144 and EDSP 4134. Designed to enhance understanding of research related to the education of children and youth with disabilities. Students will demonstrate a comprehension of legal and ethical aspects of research in special education. Students will improve their ability to critically review research literature and conduct applied research projects. (F, Sp) [V]

EDSP	4134	Internship in Special Education I - Elementary	Prerequisite: 3054, 4013, 4023, 4033, 4043, 4053, 4063, 4072, 4083, 4093, 4103, 4112; corequisite: 4121, 4144. The Special Education Internship is designed to allow students to practice teaching under the supervision and guidance of master special educators and University clinical supervisors. Special education interns learn to apply the knowledge and skills they acquired throughout the program coursework and field experiences in an authentic, extended situation. (F, Sp) [V]
EDSP	4144	Internship in Special Education II - Secondary	Prerequisites: 3054, 4013, 4023, 4033, 4043, 4053, 4063, 4072, 4083, 4093, 4103, 4112; corequisites: 4121, 4134. The Special Education Internship is designed to allow students to practice teaching under the supervision and guidance of master special educators and University clinical supervisors. Special education interns learn to apply the knowledge and skills they acquired throughout the program coursework and field experiences in an authentic, extended situation. (F, Sp) [V]
EDSP	4203	Technological Adaptations for Exceptional Learners	Prerequisite: EIPT 4203 and EDS 4003. Trains teachers to be aware of the needs of exceptional learners and how technological advances can help them better reach their potential. (Sp)
EDSP	4823	Transition And Self-Determination	Transition And Self-Determination. Prerequisite: 4743. Assessment, Planning And Instruction To Facilitate Educational And Employment Post-School Outcomes With Information On Laws And Resources. (F)
EDSP	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDSP	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSP	4980	Practicum in Special Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDSP	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDSP	5063	Issues and Strategies in a Functional Curriculum	Prerequisite: graduate standing. Examines how low-incidence disabilities and other moderate to severe disabilities, including intellectual disabilities, autism, physical disabilities, traumatic brain injury, deafness, blindness, multiple disabilities, and other health impairments, affect academic and job performance. Students will learn and demonstrate current methods for teaching individuals with such disabilities. No student may earn credit for both 4063 and 5063. (Sp)
EDSP	5093	Transition and Self-Determination	Prerequisite: graduate standing. Transition education practices including assessment, transition planning, and instructional methods to facilitate post-school outcomes for students with disabilities. IDEA laws along with best practice methodology, assessment, transition planning, self-determination instruction, multicultural issues, interagency collaboration, resources, and instruction will be discussed to facilitate a successful transition. No student may earn credit for both 4093 and 5093. (F)

EDSP	5143	Applied Behavior Analysis in School Settings	Prerequisite: graduate standing. Applied behavior analysis principles and techniques, including observational analysis, data-based instruction, and social validity to increase students' social and task related behavior. Students learn procedures to increase or decrease target behavior, to facilitate behavior maintenance and generalization, and to evaluate effectiveness of instruction. (F)
EDSP	5163	Collaboration, Accommodations, and Modifications	Prerequisite: graduate standing in the College of Education. Explores development and delivery of effective instructional and supportive strategies through modification and adaptation along with models for improving student performance through collaboration with colleagues, families, related service providers and agencies. Addresses integration into educational settings and communities of individuals with exceptionalities from birth through adulthood. (Sp)
EDSP	5183	Advanced Assessment	Prerequisite: EDSP 5173 or equivalent. Focus will be on innovative approaches to assessment and education of students with mild to moderate learning and/or behavior problems. Techniques, methods and materials will be presented within a career/ecological framework and will be research-based. (F)
EDSP	5193	Post-Secondary Education and Employment	Prerequisite: graduate standing and EDSP 5093. Examines options for students with disabilities in terms of post-secondary education and post-secondary employment. Learning is focused on research-based best practices. (Sp)
EDSP	5293	Transition-Based Assessment	Prerequisite: graduate standing and EDSP 5093. Presents the three-part transition assessment model and the means to enable students to answer long and short term questions to assist in developing good annual transition goals. (F)
EDSP	5393	Practicum in Transition Education	Prerequisite: graduate standing, and EDSP 5093, and EDSP 5193, and EDSP 5293. Transition practicum is designed to work in conjunction with the transition education course sequence to solidify knowledge and skills in transition education. Students will complete 200 contact hours of practicum. (Sp)
EDSP	5403	Families and Young Children with Developmental Delays	Prerequisite: graduate standing in the College of Education. Providing family-directed services, cultural competence, interagency and multidisciplinary collaboration, and research-based services in natural settings for children 0-9 years with developmental delays. Students analyze model EIEC programs, developmental domains, federal/state/local policies and procedures, family and center-based resources, and current research and issues. (F)
EDSP	5413	Theories in the Education of Exceptional Children	Prerequisite: admission to a graduate program in College of Education or permission of instructor. Corequisite: student must be concurrently enrolled in zero credit discussion/lab. Introduces pre-service educators to the federally-mandated policies and procedures for educating children and youth with exceptionalities. (F, Sp, Su)
EDSP	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDSP	5913	Graduate Practicum in Special Education	Prerequisite: permission of instructor. Designed to allow students to practice teaching under the supervision and guidance of master special educators and university clinical supervisors. Special education students learn to apply the knowledge and skills they acquires throughout their special education coursework in a natural extended situation. (F, Sp)

EDSP	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSP	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDSP	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDSP	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSP	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDSP	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDSP	5983	Directed Project in Special Education	Prerequisite: graduate standing and permission of instructor. Under the direct supervision of the student's adviser, the student conducts an applied project on a topic or challenge in special education related to the student's interest. (F, Sp, Su)
EDSP	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDSP	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDSP	6003	Attitudes Toward Individuals with Disabilities	Prerequisite: graduate standing. Examines self-determination assessment, instruction, and infusion into secondary IEPS as a method to improve post-school outcomes for students with disabilities and those at high risk of school failure. Implementation issues and effective practice will be examined in light of efficacy research. (Irreg.)
EDSP	6023	Small-N Research Design	Prerequisite: graduate standing in College of Education. Examines development and implementation of small-n research design, APA writing style for publication, and small-n meta-analysis. Students will read both primary and secondary literature to support ideas in class, conduct their own original small-n research study, and conduct original small-n meta-analysis study. (Irreg.)
EDSP	6033	Self-Determination Seminar	Prerequisite: graduate standing. Examines self-determination assessment, instruction, and infusion into secondary IEPS as a method to improve post-school outcomes for students with disabilities and those at high risk of school failure. Implementation issues and effective practice will be examined in light of efficacy research. (Irreg.)

EDSP	6043	Secondary Education and Transition Seminar	Prerequisite: graduate standing. Examines the status of secondary education for students with disabilities and those at high risk for school failure. Focus will be upon transition assessment, planning, and instructional issues and strategies to improve post-secondary outcomes, especially transition into post-secondary education. (Irreg.)
EDSP	6053	Post-Secondary Education Seminar	Prerequisite: graduate standing. Examines the status of post-secondary education for students with disabilities and those at high risk for school failure. Focus will be upon transition into and success strategies to maximize post-school success. Transition from school to work or advanced study will be discussed. (Irreg.)
EDSP	6103	Consultation in Special Education	Prerequisite: Graduate standing. Students will develop a variety of consultation skills. Topics include models of consultation; interpersonal communication skills; problem-solving approaches; strategies for effective interactions with professionals, paraprofessionals and parents; and planning and conducting inservice training.
EDSP	6113	Program Development and Research Methods	Prerequisite: graduate standings, major in Special Education. Examine educational media; models of information; producing and consuming applied research; grant writing; dissemination; program, design, development and evaluation. Research in professional education: readings, class discussion, and some experience in the various kinds of educational research; different techniques studied and evaluated in light of their usefulness in different kinds of research. For advanced masters or doctoral students.(Sp)
EDSP	6123	Contemporary Issues/Research	Prerequisite: 5173, graduate standing, and permission of instructor. Examines critical issues influencing the field of special education and services for persons with disabilities. (Sp)
EDSP	6202	Practicum in Special Education Consultation	Prerequisite: 4422, 6103. Students will rehearse consultation skills in a field setting. Emphasis is placed on establishing consultation programs; entering, maintaining, and terminating consultative relationships; evaluating intervention effectiveness; conducting inservice training; and utilizing observational data as a basis for implementing change.
EDSP	6203	Professional Seminar 1	Prerequisite: graduate standing or permission of instructor. Designed for post-master's student who has been accepted into the Ph.D. program. Covers review and synthesis of a current research area, professional writing and dissemination. (F)
EDSP	6223	Pro Seminar II	Prerequisite: 6203, 6113, and permission of instructor. Students are required to write four position papers; base writing and discussion on current empirical research; demonstrate understanding of conceptual and theoretical basis of empiricism, undergo peer and instructor critical review of written products. (Irreg.)
EDSP	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDSP	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)

EDSP	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSP	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDSP	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDSP	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDSP	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDSP	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDSS	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDSS	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EDSS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDSS	3553	Foundations to Social Studies Education	Prerequisite: admission to Teacher Education program. Designed as a way to view social studies as an integrated body of knowledge while focusing on the various subject matter areas. (F, Sp)
EDSS	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDSS	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)

EDSS	3980	Honors Research (HONORS)	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDSS	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDSS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDSS	4323	Teaching Social Studies in Elementary/Middle Schools	Prerequisite: admission to Teacher Education program, EDEL 4101; corequisite: EDLT 4813, EDMA 4353, EDSC 4193, EDEL 4980. Promotes knowledge, skills, attitudes, and actions required for effective planning, implementation, and evaluation of social studies curriculum and instruction in elementary and middle schools. (F, Sp)
EDSS	4553	Foundations and Mentoring in Social Studies	Prerequisite: Full admission to the secondary social studies education program. Provides an opportunity to explore the main themes of the social sciences with limited teaching opportunities. (F, Sp)
EDSS	4563	Teaching Secondary School Social Studies	Prerequisite: full admission to the secondary social studies education program; EIPT 3473, EIPT 3483, EDSP 3054. Curriculum and instructional strategies for teaching secondary school social studies with a focus on (a) appropriate methodologies, and (b) matching these methods to content and learners. The students will study a variety of classroom techniques and the assessment of such techniques for social studies teaching. (F, Sp) [V]
EDSS	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDSS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSS	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDSS	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDSS	5043	Analysis of Teaching and Learning	Prerequisite: graduate standing; Corequisite: Must be enrolled in EDUC 5920, Internship. An understanding of how to analyze teaching and learning using a variety of reflective techniques including journals, oral inquiries, classroom/school studies, and theoretical analysis. (F, Sp)
EDSS	5313	Research in Social Studies	Prerequisite: admission to Teacher Education program. Pre-service teachers and teacher practitioners will be given the opportunity to participate and/or conduct a major investigation into the problems, techniques, history, philosophy and other special issues of social studies. (Irreg.)
EDSS	5323	Microteaching Practicum in Social Studies	Prerequisite: 5313. Pre-service teachers and teacher practitioners will be given the opportunity to strengthen their classroom techniques through the use of micro-teaching media (videotaped, reviewed, assessed presentations).

EDSS	5333	Seminar in Social Studies	Prerequisite: graduate standing. May be repeated; maximum credit 9 hours. Attend to special issues in social studies theory and practice. Focus on social studies/citizenship educational problems and possibilities in schools and society. (Irreg.)
EDSS	5342	Mentoring in Social Studies	Prerequisite: graduate standing or permission of instructor. Involves the fifth-year social studies student as mentor to the first-year social studies student. The fifth-year student will provide an orientation to the social studies program, assist first-year students with the synthesis of social studies materials, as well as engage first-year students in actual teaching.
EDSS	5343	Global Education	Prerequisite: Graduate standing. Explores critical issues in global education across subject areas and teaching concepts. Implications for citizenship education are examined in depth. (Irreg.)
EDSS	5503	Social Studies Curriculum, Instruction, Technology and Assessment	Prerequisite: Graduate standing. Analysis of K-12 social studies curriculum, instruction, technology and assessment to achieve knowledge, skills, valuing, and action capabilities in the social studies curriculum. (Irreg.)
EDSS	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDSS	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSS	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDSS	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDSS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDSS	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDSS	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDSS	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDSS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

EDSS	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EDSS	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDSS	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDSS	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDSS	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDSS	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDSS	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EDSS	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EDUC	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EDUC	2400	Field Experiences in Education	(Also listed under Professional Studies in Education.) 1 to 3 hours. Introduction to education as a profession based upon assignment to public schools and other educational agencies. Students will be expected to observe the schools in action, interact with students and professionals and participate in the instructional process. (F, Sp, Su)
EDUC	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty.
EDUC	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

EDUC 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EDUC 3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EDUC 3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EDUC 3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
EDUC 3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EDUC 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EDUC 4013	History, Culture and Education in Costa Rica	Prerequisite: approval for study abroad; permission of instructor or department. May be repeated; maximum credit 6 hours. This field-based course will concentrate on the history, culture and customs of the host country: Costa Rica. Course content will be directed toward cultural analysis of the host country with special focus on the exploration of the students' multicultural consciousness. (Su)
EDUC 4050	Teaching Experiences in the Elementary School	4 to 10 hours. Prerequisite: EDMA 4353, EDLT 4713, EDSC 4193, EDSS 4323, EDUC 4980. Corequisite: EDEL 4063. Enrollment requires a signed recommendation form by the student's counselor. Laboratory activities under competent direction and supervision: orientation, observation, and classroom teaching experiences supported by seminars and conferences which focus upon the problems of teaching. Prospective teachers receive instruction, aid, and constructive supervision in classroom management, evaluation of pupil behavior, methods of teaching, selection of teaching materials and school-home-community relations. (F, Sp)
EDUC 4060	Teaching Experiences in the Secondary School	4 to 10 hours. Prerequisite: permission of College of Education Undergraduate Academic Advising Office. Enrollment for fewer than eight hours requires special recommendation by the student's counselor. Correlation of theory and instructional practices in secondary education; supervised observation, teaching, classroom management, and evaluation; acquaintance with the administration of a school and the school program; selection and use of appropriate instructional materials; conferences with supervisors; seminar on problems of teaching; methodology, professional problems, and placement. (F, Sp)

EDUC 4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EDUC 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDUC 4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EDUC 4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EDUC 5106	Culture and Communication Techniques for ESL/ELL	Prerequisite: 12 hours of Education and admission to Graduate Certificate program. Provides educators tools to work with ESL/ELL learners, addresses issues particular to culturally diverse students, schools, and community. Provides opportunities to compare cultural differences between U.S. and non-U.S. schools. Introduces communication techniques focusing on: school content, conversation in the target language, practical vocabulary, on-the-job situations and cultural information. (Sp)
EDUC 5114	Immersion in Language, Culture and Pedagogy	Prerequisite: 5106 and graduate standing. Collaboratively-developed summer immersion program in education takes place in Mexico. Combines classroom instruction and cultural experiences to provide educators opportunities for authentic language use and insights into Hispanic students' cultural backgrounds. Understanding different cultures equips educators to organize classrooms and programs to help students learn, communicate, and engage. (Su)
EDUC 5126	Application and Pedagogy	Prerequisite: 5106, 5114, and graduate standing. Course focuses on developing, enhancing and improving instructional expertise and culturally-relevant knowledge of practicing educators and administrators who work with ELS/ELL students. With faculty support, teachers will engage in action research that utilizes language and cultural understanding to directly address needs of ESL/ELL students in their classrooms and schools. (F)
EDUC 5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EDUC 5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)

EDUC	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EDUC	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EDUC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EDUC	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EDUC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EDUC	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EDUC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EDUC	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EDUC	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EDUC	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EDUC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EDUC	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
EDUC	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)

EDUC	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
EIPT	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EIPT	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)
EIPT	3011	Productivity Tools for Education	Operation in both Mac and Windows environments. Use of word processing, database, spreadsheet, and telecommunications software to solve educational information communication and management problems. Laboratory (F, Sp, Su)
EIPT	3043	Learning with Educational Technologies	Prerequisite: EIPT 3011 or permission of instructor; admission to Teacher Education program; EIPT 3473 or EDEC 3413, EIPT 3483, and EDSP 3054. Designed to familiarize students with alternative instructional approaches using both cognitive and hardware technologies. Development of practical skills for using technology to solve instructional problems and accomplish educational goals. (F, Sp, Su)
EIPT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EIPT	3473	Educational Psychology of Childhood and Adolescence	Prerequisite: Admission to Teacher Education program. A survey of child and adolescent cognitive, social, and personality development with an emphasis on implications for teaching. Families, peer groups, and societies as contexts for development are also examined. (F, Sp, Su)
EIPT	3483	Cognition, Motivation, and Classroom Management for Teachers	Prerequisite: Admission to Teacher Education program. Classroom implications from the study of cognition, motivation, and classroom management are presented. Topics include various perspectives on how students learn, motivation processes in achievement settings, factors influencing individual variations in cognition and motivation, multiple perspectives on classroom management, and an introduction to the assessment of educational outcomes. (F, Sp, Su)
EIPT	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
EIPT	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
EIPT	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)

EIPT	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
EIPT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EIPT	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EIPT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EIPT	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)
EIPT	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
EIPT	5023	Analysis of Quantitative Data I	Prerequisite: graduate standing in the College of Education, or permission of instructor. A brief review of descriptive statistics, introduction to basic inferential statistics, and analysis of variance. Topics covered include data screening and cleaning, correlation, simple regression, oneway ANOVA, factorial ANOVA, analysis of covariance, repeated-measures designs, and nonparametric techniques. Focus is on computer-based data analysis, and substantive conceptualization and interpretation of results. (F, Su)
EIPT	5033	Introduction to Research and Evaluation in Education	Prerequisite: graduate standing. An introduction to major methods of scholarship and research in education. The main goal of the class is to help students develop the knowledge and skills required for critical reading of research. (F,Su-Irreg.)
EIPT	5113	Educational Psychology of Human Development	Prerequisite: graduate standing. An introductory survey of current theory and research as it applies to human development across the lifespan. Emphases include cognitive and language development, self and social development, and contextual influences on development. (Sp)
EIPT	5163	Educational Psychology of Childhood	Prerequisite: graduate standing. A survey of child physical, cognitive, social, and personality development emphasizing current theory and research. Families, peer groups, and societies as contexts for development are also examined. (F)
EIPT	5173	Educational Psychology of Adolescence	Prerequisite: graduate standing. A survey of adolescent physical, cognitive, social, and personality development emphasizing current theory and research. Families, peer groups, and societies as contexts for development are also examined. (F)
EIPT	5183	Motivation and Learning in the Classroom	Prerequisite: graduate standing. Introductory course covering contemporary theories of cognition, learning, and motivation as they apply to the classroom. (Irreg.)

EIPT	5203	Measurement and Evaluation in Education	Prerequisite: graduate standing. An introduction to basic concepts of educational measurement, evaluation, and testing. Includes interpretation and uses of standardized tests. Emphasizes development of effective assessment for tests. Students will also develop proficiency in the basic statistical procedures (graphic display, central tendency, variability and association) required for handling assessment data. (F, Sp)
EIPT	5513	Teaching with Technology	Prerequisite: graduate standing. Students will explore current technologies used in schools to assist learners of varying abilities succeed in educational settings. Relevant learning theory will be used to evaluate the ways in which technologies are being used with students. This course will assist students in meeting the ISTE National Educational Technology Standards for Teachers (NETS-T). (F)
EIPT	5523	Technology Advocacy in Schools	Prerequisite: graduate standing. Students explore state and federal laws and local policies influencing how schools obtain and use technology, and receive practical experience in grant development and needs analysis. (Sp)
EIPT	5533	Introduction to Instructional Technology	(Crosslisted with LIS 5533) Prerequisite: graduate standing or permission of instructor. Examination of theoretical and critical issues regarding educational technologies. Practical application and development of skills utilizing technology tools. (F)
EIPT	5601	Orientation and Introduction to 21st Century Learning	Prerequisite: graduate standing and departmental permission. In this course students will be oriented to the online masters program and begin to explore the concept of 21st century learning. They will delve into the literature related to the framework and apply it to their teaching and learning contexts. (Sp)
EIPT	5613	Classroom Management in the 21st Century	Prerequisite: graduate standing and departmental permission. Classroom management is one of the most important skills for the success of a teacher. It is based on a keen understanding of fundamental educational psychology concepts including motivation theory, child/teen development, and human learning. This course will guide students in the exploration of these topics. (Sp)
EIPT	5623	Research into Practice	Prerequisite: graduate standing and departmental permission. This course focuses on how teachers, administrators, and future scholars can integrate research into their practice. This course will be project based and students will design venues (blogs, websites, Facebook pages, coffee house discussions) for other educators to discover beneficial research. (Sp)
EIPT	5631	Open Educational Resources for Teaching	Prerequisite: graduate standing and departmental permission. Introduction to the theory and application of Open Educational Resources (OER) for teaching practices. This course will address the concept of OERs and open licensing, including the history of the OER movement, Creative Commons licensing, public domain, and copyright, as well as provide practical experience in finding, creating, sharing, and attributing open content. (Su)
EIPT	5643	Motivated Change	Prerequisite: graduate standing and departmental permission. Change is an essential aspect of education. In this course we will discuss many types of motivated change that can occur in the classroom as well as interventions for generating change. Types of change that we will discuss include: conceptual change, attitude change, emotion change, motivational change (attributions, goals, and mindsets), and transformational learning. (Su)
EIPT	5653	Technology and Social Media in Education	Prerequisite: graduate standing and departmental permission. Technology and Social Media in Education is a class that serves two purposes. In this course you will learn how to critique, use and create materials using different technologies. It also helps to make you aware of the effect of social media on schooling and how you can harness it to promote learning and community connections. (Su)

EIPT	5663	Assessment in the 21st Century	Prerequisite: graduate standing and departmental permission. When teachers use instructional methods including problem-based learning, project-based learning, and group projects, assessment often becomes a challenge. This challenge is heightened by governmental regulations mandating high-stakes testing. In this course, students will examine a history of the standards movement and associated testing requirements, purposes for assessment, and ways to assess students when using modern instructional techniques that will also effectively prepare students for high-stakes testing situations. Students will gain experience designing these types of assessments. (F)
EIPT	5671	Reflection for the 21st Century	Prerequisite: graduate standing and departmental permission. An important part of being an effective teacher is being a reflective practitioner. In this course students will reflect on their learning in the program and the application of 21st Century learning principles to teaching and learning. Students will begin to organize a reflective portfolio of their work. (F)
EIPT	5683	Technology-Enhanced Problem-Based Learning	Prerequisite: graduate standing and departmental permission. The goal of this course is two-fold: (1) to develop collaborative problem-solving skills through problem-based or project-based learning using advanced learning technologies as tools; and (2) to design a collaborative problem-based /project-based learning environment supported with advanced learning technologies. Students in the course will learn important 21st century skills, including critical thinking, problem solving, communication, collaboration, self-regulation, and use of information and communication technology to support collaborative problem solving. (Sp)
EIPT	5693	Critical Literacy	Prerequisite: graduate standing and departmental permission. The impact and pervasiveness of media in its many forms - both in and out of formal education settings -requires development of critical awareness, discernment, and engagement by educators. This course explores the intersections of (a) media and its influences; (b) social and cross-cultural skills and perspectives; and (c) personal and pedagogical (and andragogical) responsibility. (Sp)
EIPT	5703	Building Capacity for STEM	Prerequisite: graduate standing and departmental permission. Science Technology Engineering and Math is an area of great need of development in the United States and the world. In this course students will explore the current status of STEM education and the STEM pipeline, the need for STEM development and current barriers that exist in education for all students from a variety of backgrounds that wish to pursue STEM careers. (Su)
EIPT	5712	School and Community Relations	Prerequisite: graduate standing and departmental permission. The course is organized around concerns that are central to the development of a thoughtful and pragmatic community relations policy for the 21st century. Particular foci include: a) public confidence in American schools; b) leadership, development, and key mediation of school mission and capacity; c) communication with external and internal publics; d) collaboration with multiple stakeholders e) understanding the challenge and impact of high quality community relations. (Su)
EIPT	5910	Practicum in Education--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
EIPT	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)

EIPT	5940	Field Studies in Education	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education selected by the students and approved by the instructor. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
EIPT	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
EIPT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EIPT	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)
EIPT	5973	Classroom Research and Implementation	Prerequisite: 5033, 5513, 5203. Students develop and implement an action research project to explore the impact of a technological tool on learning in a classroom. (Sp)
EIPT	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
EIPT	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EIPT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EIPT	6023	Analysis of Quantitative Data II	Prerequisite: 5023. A continuation of 5023. Topics include power analysis, multiple linear regression, analysis of variance models, and an introduction to non parametric statistics. (Sp)
EIPT	6043	Qualitative Research Methods	Prerequisite: EIPT 5033 or permission of instructor. Topics include qualitative research traditions, qualitative designs, data collection techniques, qualitative data analysis. Students design, conduct, and analyze their own qualitative study during the course. (F, Sp - even years)
EIPT	6063	Applied Multivariate Statistics in Educational Research	Prerequisite:5023 and 6023, or equivalent. Covers selected multivariate techniques with an emphasis on detecting and correcting violations of assumptions, applications, and interpreting results from popular computer statistics packages. (Sp)
EIPT	6073	Program Evaluation	Prerequisite: graduate standing. This course is designed to develop understanding and experience in systematically evaluating outcomes related to program goals and standards. Topics will include: purposes and uses of evaluation, role of concepts and constructs, planning, standard setting, selecting methods, developing measures, analyzing and interpreting outcomes, reporting findings, ethics and organization, and utilization. Prior coursework recommended: at least one prior course in research design or methods and one prior course in measurement or assessment. (F)
EIPT	6083	Qualitative Research Methods II	Prerequisite: EIPT 6043 or permission of instructor. Topics include qualitative research design, data analysis, data interpretation, theory building, and write-up. Students should have qualitative data ready to analyze before enrolling in the course. (Sp)

EIPT	6101	Propaedeutic Seminar	Prerequisite: admission to Instructional Psychology and Technology doctoral program. Summarizes the history of the field of instructional psychology and technology and introduce research typical of field and specific to interests of program faculty. Also discusses expectations for scholarship in the program and field and how students meet those expectations.(F)
EIPT	6113	Educational Psychology of Human Learning	Prerequisite: graduate standing or permission of instructor. Survey and analysis of representative theories of learning and current research related to the learning process.
EIPT	6143	Instructional Development	Prerequisite: graduate standing. This course is designed to develop understanding and experience in systematically designing and developing instruction and instructional systems. Topics will include: task, context, and learner analysis, assessment design, principles of educational psychology, instructional design principles and strategies, development and production techniques, formative and summative evaluation methods, and flexibly adaptive approaches to implementation. (F)
EIPT	6153	Motivation and Emotion in Education	Prerequisite: graduate standing or permission of instructor. Survey and analysis of historically significant and current theories of motivation and emotion. This course examines basic and applied issues related to motivation and emotion from a general perspective as well as motivation to learn. (F)
EIPT	6163	Instructional Design	Prerequisite: 6143. This course is designed to develop understanding and experience in systematically designing instruction, building on the principles, processes and skills of EIPT 6143. Topics will include: strategies of instruction for specific learning outcomes, formative and summative evaluation, learning assessment design, designing jobs aids and performance support systems, rapid application development and knowledge management. (Sp)
EIPT	6173	Management of Instructional Technology Programs	Prerequisite: graduate standing. This course is designed to introduce the core principles of project management, and then develop understanding of how those principles and practices are subject to adaptation. topics include: defining the field, contexts and influences, strategic analysis, managing risk, managing people, managing time, managing budget and other resources, managing evaluation, problem-solving, and project reporting. (F)
EIPT	6183	Cognition and Instruction	Prerequisite: graduate standing. Examines the contributions of cognitive psychology to issues of instruction. Surveys basic issues in cognition and examines applied issues in greater depth.(Sp)
EIPT	6193	Instructional Design III	Prerequisite: 6143, 6163. Designed to extend students' understanding and experience in systematically designing instruction, building more specific design strategies on the principles and processes of EIPT 6143 and 6163. Builds on previous content, supporting skill in discrete instructional and systems approaches, and integrates more deeply the design of motivational instruction and systems. Students partner with outside agencies and organizations to contract actual projects, and the class supports and builds expertise through those authentic opportunities. Teacher and classmates provide insight and expertise for the critical thinking and design expertise development of each class member. (F)
EIPT	6203	Instrument Development	Prerequisite: 5203 or permission of instructor. Students in this course will have the opportunity to design items for assessments, collect data, and develop them into items that will produce reliable and valid scores. Measures and procedures in affective (e.g., Likert-type, semantic differential) and cognitive (e.g., true/false, multiple choice) instrument development will be covered. Topics including scaling techniques, methods of obtaining score reliability, use of human participants, manuscript preparation, and current methodological advances will be discussed. (F)

EIPT	6213	Advanced Measurement Theories	Prerequisite: 5203 or permission of instructor. This is a course on advanced measurement techniques for instructional designers, evaluators, and educational researchers. This course is designed to develop students' understanding of the reliability and validity of scores. Topics in this course will include classical test theory, generalizability theory, and item response theory, as well as classical and more modern interpretations of the validity of test scores. Application for educational use will be emphasized. (Sp)
EIPT	6223	Mixed-Methods Research	Prerequisite: EIPT 5023 and EIPT 6043, or equivalent courses approved by instructor. Topics include history, assumptions, and benefits of mixed-methods research along with practical implications such as design, implementation, and write-up of mixed-methods research. Students will design and write their own mixed-methods study during the course. (Sp)
EIPT	6303	Needs and Task Analysis	Prerequisite: 6143. Designed to extend students' understanding and experience in systematically analyzing needs and task components, for application to the fields of instructional design and performance improvement. Topics will include: methods of analyzing task and needs across contexts, strategies for extracting data on task and needs analysis needs relevant to job type and instructional goals, aligning assessment with analysis results, designing job aids and performance support systems based on needs and task characteristics, and flexibly adaptive approaches to analysis. Builds on previous course content, supporting skill in discrete instructional and systems approaches to design, and integrates more deeply the specific skills of needs and task analysis. (Sp)
EIPT	6313	Multimedia Design and Development for Learning	Prerequisite: graduate standing. Students will go through multiple phases of instructional design to develop computer-based, interactive programs while developing their multimedia authoring skills. They will gain hands-on multimedia design experience by working on a real-world instructional project using advanced technologies. (F)
EIPT	6333	Computers as Cognitive Tools: Theory and Practice	Prerequisite: 6313 or 6343 or 6533 or an equivalent approved by instructor. From cognitive socio-cultural and historical perspectives, students will explore and critique in a sequential timeline a wide range of topics on computers as cognitive tools, trace the evolution of the role of technology in education, and design an interactive learning/knowledge management system for various settings. Students interested in designing learning technologies are encouraged to take this course. (Sp)
EIPT	6343	Instructional Design Theories, Models, and Strategies	Prerequisite: 6313 or 6143 or an equivalent approved by instructor. Examines cognitive and theoretical foundations underlying various instructional design theories and models for designing and developing effective learning environments to support various types of learning outcomes. Multimedia methods of interactive design will also be examined and applied through working on real-world projects. (Sp)
EIPT	6423	Web-Based Instruction	Prerequisite: 5533, 6143. Designed to prepare students with knowledge, skills, and tools in the areas of web-based and web-supported instruction. Provides learners with both theoretical understanding of and practical skills for using the Internet in instructional settings. (Sp)
EIPT	6433	Theories, Pedagogy, and Tools for Online Learning	Prerequisite; graduate standing. Focuses on theoretical understandings of building virtual learning communities; pedagogies for engaging learners in social, cognitive and reflective processes; and advanced technologies for mediating learning and enhancing online collaboration. (Sp)
EIPT	6503	Design of Text-Based Instruction	Prerequisite: graduate standing. Development of prose, text-based instruction, including considerations of readability, organization, layout, and typography for instructional purposes. Effective use of graphics in instruction. Production of print-based instruction, including desktop publishing. (F)

EIPT	6523	Visual Literacy for Educational Media Production	Prerequisite: EIPT 5533 or permission of instructor. For teachers and instructional technology professionals to increase knowledge and skills in producing instructional materials for a variety of media. Topics include visual communication, and the development and manipulation of graphics, sound, animation, and video. (Sp)
EIPT	6533	Designing and Developing Open-Ended Learning Environments	Prerequisite: 6143 or 6313 or 6343 or an equivalent approved by instructor. Surveys theoretical foundations and key principles of open-ended learning environments. Various constructivist learning methods, models, or strategies will be discussed and integrated into various projects (classroom based or computer based) aiming at developing constructivist learning environments and creating cognitive tools to facilitate meaning making and knowledge construction. (Sp)
EIPT	6613	Research Issues in Instructional Technology	Prerequisite: doctoral standing. May be repeated with change of content; maximum credit 12 hours. Examine specified research issues in the field of Instructional Technology. Students will read and critique existing research, as well as identify directions for new and continuing research. (Irreg.)
EIPT	6713	Research Issues in Instructional Psychology	Prerequisite: doctoral standing. May be repeated with change of content; maximum credit of 12 hours. Examine specified research issues in the field of instructional psychology. Students will read and critique existing research, as well as identify directions for new and continuing research. (Irreg.)
EIPT	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
EIPT	6910	Practicum in Education--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
EIPT	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
EIPT	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
EIPT	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EIPT	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
EIPT	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)

EMBA	5001	Global Perspectives in Energy	Prerequisite: graduate standing, EMBA students only. An introduction to the global energy industry's past, present, and future. History and current issues faced in various regions. Provides a broad look at the fundamentals (political, cultural, regulatory, weather, legal and environmental) of world energy supply and demand, including a look at existing and emerging strategies for refining and marketing power options. (Irreg.)
EMBA	5012	Energy Policy and Regulations	Prerequisites: graduate standing, EMBA students only. The global energy industry operates within an increasingly complex political and regulatory framework. This course will explore the purpose and processes of effective regulation and how governments and global institutions develop policy to define and revise regulatory frameworks. Topics will include climate change, pollution, solid wastes, and the conservation of natural resources. Additionally, students will be introduced to operating agreements and financial arrangements on domestic and foreign lands, confidentiality, and bidding agreements. (Irreg.)
EMBA	5022	Accounting I	Prerequisites: graduate standing, EMBA students only. This course use concepts from financial accounting and managerial accounting and apply them to specific reporting issues in the energy industry as well as presentation of the information on the financial statements of an oil and gas company. Reviews the accounting cycle with an emphasis on the proper accounting treatment of energy related activities actions (e.g., acquisition of mineral interests, geological and geophysical costs). (Irreg.)
EMBA	5031	Organizational Behavior	Prerequisites: graduate standing, EMBA students only. Designed for students responsible for leading and managing human assets inside the energy industry by providing an understanding of individual behavior in organizational settings. Focus on applying theories of human behavior to solve day-to-day problems of organizational administration and consists of four interrelated parts. (Irreg.)
EMBA	5042	Managerial Economics	Prerequisite: graduate standing, EMBA students only. Microeconomic concepts and analysis as used in managerial decision-making with emphasis on marginal analysis, comparative advantage, resource allocation, opportunity cost, demand and supply, elasticity, economic efficiency, price discrimination, welfare analysis, production and cost functions, productivity, market structures, externalities and public goods, game theory, information asymmetry, market signaling, and government regulation of anti-competitive behavior. (Irreg.)
EMBA	5052	Financial Markets and Securities	Prerequisites: graduate standing, EMBA students only. Provides a strong foundation for an understanding of financial markets and the main types of securities traded in these markets. The topics covered in the course include trading structure, risk and return, portfolio theory, asset pricing models, market efficiency and an introduction to the nature and valuation of equities, bonds, futures, and options. The overarching perspective will be relevance to energy markets and securities. (Irreg.)
EMBA	5062	Quantitative Methods and Models	Prerequisites: graduate standing, EMBA students only. Introduces students to the basic tools in building models and using data to make informed management decisions. This course will help students understand a variety of means in which data may be processed in order to obtain usable decision-making information by covering introductory probability, decision analysis, basic statistics, hypothesis testing, correlation, regression, simulation, linear and nonlinear optimization, and discrete optimization. (Irreg.)

EMBA	5072	Corporate Finance	Prerequisites: graduate standing, EMBA students only. Provides students with the analytical and conceptual skills required in the modern practice of corporate financial management in energy organizations. The course will focus on three key areas of financial management: (1) the optimal allocation of capital; (2) the optimal choices for raising capital; (3) the optimal management of risk in conjunction with (1) and (2). Includes application of finance theory to solving real business problems in energy companies, and emphasizes the importance of technology and globalization to the modern practice of finance. (Irreg.)
EMBA	5082	Strategic Management	Prerequisites: graduate standing, EMBA students only. Examines management decisions and actions to improve an organization's competitiveness in global business environments. Uses a variety of pedagogies to integrate strategies, and students will develop skills to formulate, implement, and evaluate organizational strategies that play across the energy industry in rapidly changing environments. (Irreg.)
EMBA	5092	Accounting II	Prerequisites: graduate standing, EMBA students only. Provides an overview of topics such as Securities and Exchange Commission (SEC) developments, recently issued or proposed Statements of Financial Accounting Standards (SFAS), Emerging Issues Task Force (EITF) consensus, Federal Energy Regulatory Commission (FERC) activities and rule makings, energy contracts and derivative instruments, and recent tax developments. This course will cover accounting for derivatives, asset retirement obligations, gas balancing agreements, supplemental footnote disclosures, analysis of financial statements of oil and gas companies, alternative sources of energy and major accounting and tax issues affecting the energy industry. (Irreg.)
EMBA	5101	Legal Institutions and Ethics	Prerequisites: graduate standing, EMBA students only. Examines the ethical, legal and regulatory issues associated with the energy industry. Emphasis will be on the meaning of legal obedience in this importance context and the role of ethics in determining that meaning. (Irreg.)
EMBA	5111	Management Information Systems	Prerequisites: graduate standing, EMBA students only. Provides students with an awareness and understanding of the technologies and issues they are likely to confront in their roles of managers and business professionals in energy organization which will allow them to be active participants in decisions regarding investing in and implementing IT-enabled business solutions and supporting infrastructures. (Irreg.)
EMBA	5122	Oil and Gas Property and Contracts	Prerequisites: graduate standing, EMBA students only. Focuses on the process of managing the use and development of land resources. The course examines ways that private persons and companies make their own law through negotiating and entering into contracts, the creation and transfer of interests in real property and intellectual property, and the framework for land ownership and land use both in the United States and internationally. (Irreg.)
EMBA	5131	Renewable Energy and Alternative Fuel	Prerequisites: graduate standing, EMBA students only. Considers the interest in renewable energy (e.g., wind power) from the perspective of the "triple challenge." The course will deal with the economics and socio-economics of the renewable energy source, and aim to provide the student with a broad overview of how renewable energy affects markets today, the technology of renewable energy, its cost effectiveness compared to other energy sources, major barriers and challenges to market penetration, and future projections for its penetration rate. (Irreg.)

EMBA 5141	Supply Chain	Prerequisites: graduate standing, EMBA students only. Analysis of supply chain management for products/services and the dynamic interaction of companies within an integrated supply chain to make the operations of energy companies more efficient and provide the guidance to improve the utilization of equipment, facilities, and resources. The following topics as they apply to supply chain will be covered: technology, positioning of a company, performance measures used across the supply chain, and assessment solution to improve plant congestion, productivity, inventory accuracy, and material tracking. (Irreg.)
EMBA 5152	Derivative Securities and Markets	Prerequisites: graduate standing, EMBA students only. Develop an understanding, both intellectual and practical, of the organization and micro-structure of the markets for forward, futures, and options contracts, the principles governing the valuation of these "derivative" securities, and the ways in which these securities can be used effectively in investment banking, portfolio management, hedging, and risk management. Particular attention is paid to energy derivatives and the perspective of the energy sector. (Irreg.)
EMBA 5162	Energy Assets and Commodities Trading	Prerequisites: graduate standing, EMBA students only. Provides a comprehensive and in-depth review of the market for energy assets and commodities: including trading platforms, pricing issues, forecasting, role and linkage with associated futures, forwards and options contracts, study of "basis" and spreads, and hedging strategies. The course will be anchored solidly within a theoretical conceptual framework and be supported with relevant case studies. (Irreg.)
EMBA 5172	Risk Management and Financial Engineering	Prerequisites: graduate standing, EMBA students only. Emphasizes the applications, risk measurement and management (including risk management using derivatives) and using option modeling in firm decision making. The four main topic areas (in order covered) are: (1) derivatives and financial engineering, (2) real options, (3) measuring and managing risk, and (4) examination of corporate failures attributable to derivatives. Particular attention is paid to the energy industry and especially the natural gas industry. (Irreg.)
EMBA 5182	Enterprise Valuation, Mergers and Acquisitions, and Corporate Restructuring	Prerequisite: graduate standing, EMBA students only. This course will cover valuation methods (that is, where is enterprise value coming from?), traditional Mergers and Acquisitions topics and transactions, hostile takeovers and friendly acquisitions - strategic and financial Aspects, role of corporate raiders in disciplinary takeovers, creating value through corporate restructuring, private equity and leveraged buyouts (LBOs), role of "arbs", managing mergers and acquisitions risk: collars, earn-outs and contingent value rights, and develop and provide analysis for divestitures, capital restructurings and bankruptcies. (Irreg.)
EMBA 5191	Marketing Strategy	Prerequisites: graduate students, EMBA students only. Covers the challenges faced by the energy industry in developing brand image, developing new markets for its products, as well as how to manage customer and client relations. Students will learn practical marketing tools and how they can be used to affect corporate strategy. Topics include the use of management information systems, pricing, product offerings, promotion, distribution and consumer behavior, as well as marketing segmentation and strategic marketing. (Irreg.)
EMBA 5201	Negotiation and Leadership	Prerequisites: graduate standing, EMBA students only. Provides a theoretical understanding and skill development necessary for effective negotiations and leadership in organizational settings. It will focus on identifying ways for you to become a more effective leader and negotiator by applying theories of human behavior to solve day-to-day problems of organizational administration. The course examines core decision-making challenges, analyzes complex negotiation scenarios, and provides a range of competitive and cooperative negotiation strategies in the context of the energy industry. (Irreg.)

EMBA 5212	Economic Project Evaluation-Capstone	Prerequisites: graduate standing, EMBA students only. This course aims to bring together the concepts covered in previous courses to make real-life decisions in the energy industry. Examines the ways to evaluate an energy project's economic viability from an investment opportunity, and develop the skills needed to use cost estimates and economic evaluations to assess such projects. (Irreg.)
EMGT 1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EMGT 3001	Introduction to Energy Management	Prerequisite: student must be a declared Energy Management major and have been approved for degree candidacy by Price College. Designed to give students interested in the energy industry an understanding of and appreciation for the history and dynamics of the OU Energy Management program and the energy industry. Includes industry lecturers and on-site operation visits. (F, Sp)
EMGT 3113	Energy Production and Markets	Prerequisite: junior or senior standing; student must be approved for degree candidacy by Price College; be a declared Energy Management major; EMGT 3001 or concurrent enrollment. Survey of the energy landscape and introduction to local, regional, national and international energy issues from a management perspective. Provides comprehensive coverage of all facets of energy production and use. Introduces students to contemporary issues shaping the industry such as deregulation and emergence of new energy markets. (F, Sp)
EMGT 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EMGT 3523	Natural Gas Marketing and Power Trading	Prerequisite: student must be approved for degree candidacy by Price College; EMGT 3001. An overview of the supply & demand of natural gas and electricity markets with an introduction to risk management techniques associated with the physical and financial aspects of the commodities. (F, Sp)
EMGT 3603	Energy Law I	Prerequisite: Student must be approved for Degree Candidacy by Price College, EMGT 3001 and L S 3323. The format of this course has been designed to give students a fundamental understanding of the importance of law and regulation in the energy industry. The emphasis of the course will be oil and gas law and regulation. We will focus on ownership of minerals, the oil and gas lease, oil and gas contracts and certain environmental issues affecting the oil and gas industry. (F, Sp)
EMGT 3700	Internship in Energy Management	Prerequisite: permission and student must be approved for degree candidacy by Price College; EMGT 3001. May be repeated; maximum credit 12 hours. Application of the theory and principles of business in practical, on-the-job situations in energy related fields. (F, Sp, Su)
EMGT 3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
EMGT 3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
EMGT 3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)

EMGT	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
EMGT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EMGT	4800	Current Issues in Energy Management	1 to 3 hours. Prerequisite: 3713, junior standing and permission of department. May be repeated with change of content; maximum credit six hours. An advanced seminar dealing with current issues affecting the energy industry. (F)
EMGT	4900	Readings in Energy Management	to 3 hours. Prerequisite: 3001 and permission from the Energy Management Chair; student must be approved for degree candidacy by Price College; all 3000-level Business Core courses. May be repeated once with change of content. Provides an opportunity for the student to study materials not usually presented in regular courses. (F, Sp, Su)
EMGT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EMGT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EMGT	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EMGT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EN D	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EN D	3893	Intro to Urban Development: Theory and Practice	Prerequisite: Junior standing. Introduction to theories that explain the spatial form of places with an application of the concepts in a historical-spatial investigation of an urban place. Particular emphasis given to institutional theory, including guest speakers from various institutions/professions that shape the built environment.(F)
EN D	3993	Environmental Design Practicum	Prerequisite: Junior standing. In-depth and on-site problem solving workshop focused on helping community stakeholders address real world challenges found in their local built environments. Emphasis is given to phasing proposed investments in the public and private realms. Subject matter varies and is reflective of a host of issues common to urban development. (Sp)
EN D	4893	Historic Preservation Planning	Prerequisite: Junior standing. Through this course, students will: understand and be able to articulate the social and economic values associated with preservation; Gain exposure to and understanding of local, state and federal guidelines for delineation and regulation of historic districts and buildings; Develop case studies in economic feasibility and adaptive reuse, reconstruction and rehabilitation; Understand the role of the State Historic Preservation Office; Understand design-based and economic development based community and district revitalization strategies. (F)

EN D	4993	Environmental Design Capstone	Prerequisite: senior standing. Provides students a hands-on service/learning opportunity, presenting real world challenges that require collaboration and the application of acquired expertise within the dynamic context of a community's social and built environment. (Sp)
ENGB	5131	Energy Upstream/Downstream	Prerequisite: open to MBA students only. Students will gain an understanding of the operations and economics of the upstream sector in most of its aspects: reserves, players, investments, costs, benchmarking, etc. Understand the operations and the main economic characteristics of the refining and distribution. (F)
ENGB	5142	Introduction to Energy	Prerequisite: ENGB 5131 and graduate standing in Price College of Business. Provides a broad look at the fundamentals (political, cultural, regulatory, weather, legal and environmental) of world energy supply and demand, detailed study of the complete value chain for all commodities including a look at existing and emerging strategies for refining and marketing power options, and an understanding of the technology drivers for the energy industry and the roles of various energy professionals. (Sp)
ENGB	5152	Energy Accounting and Regulations	Prerequisite: ENGB 5131 and graduate standing in Price College of Business. Provides an overview of (A) federal and state regulatory law in the US affecting natural gas and oil producers and developers, interstate and intrastate pipelines, gas and power marketing companies, and power generating and transmission companies, and (B) the major accounting and tax issues affecting the energy industry. (F)
ENGB	5162	Energy Corporate Finance	Prerequisite: graduate standing in Price College of Business, FIN 5312; FIN 5322; and ENGB 5142. Provides students specialized knowledge of the corporate finance of firms in the energy sector. Provides an integrated perspective on assessing and financing energy projects, corporate risk management in the energy industry, and issues pertaining to mergers, acquisitions and restructuring in energy firms. While the course will be rigorous and solidly grounded in theoretical concepts, it will provide a thoroughly applied perspective on topics covered by the use of case studies and other hands-on learning opportunities. (Sp)
ENGB	5172	Energy Assets and Commodities: Financial Instruments, Pricing and Trading	Prerequisite: Graduate standing in Price College of Business; FIN 5322; and ENGB 5142. Provides a comprehensive and in-depth review of the market for energy assets and commodities: including trading platforms, pricing issues, forecasting, role and linkage with associated futures, forwards and options contracts, study of "basis" and spreads, and hedging strategies. The course will be anchored solidly within a theoretical conceptual framework and be supported with relevant case studies. (F)
ENGB	5182	Enterprise Valuation, Mergers and Acquisitions, and Corporate Restructuring	Prerequisite: MBA majors only; FIN 5322. Covers divestitures and the entire Mergers and Acquisitions continuum from valuation, through post-merger integration for energy companies. Provides tools, templates, and proven techniques managers need to efficiently combine different processes and organizations, and cultures. The course presents and examines the latest case studies and research findings in the energy industry. (F)
ENGB	5490	Readings in Energy for Business	1 to 3 hours. Prerequisite: graduate standing and permission. May be repeated; maximum credit six hours. Preparation and submission of a research report on an assigned comprehensive topic relating to a topic in energy not offered in the current curriculum. (F, Sp, Su)
ENGB	5970	Special Topics/ Seminar in Energy for Business	Prerequisite: graduate standing, permission of instructor. May be repeated with change of topic; maximum credit six hours. Seminar in latest developments in research and theory from the energy field. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (F, Sp, Su)

ENGL	0113	Introduction to College Writing	Course prepares students, who are judged at risk by secondary assessment, for "Principles of English Composition" (ENGL 1113). Course addresses issues of focus, development, expression, sentence structure, and editing skills. This course does not count for college credit at the University of Oklahoma. (F, Sp)
ENGL	0999	Remedial English	NULL
ENGL	1003	Introduction to Shakespeare	A survey of major works by William Shakespeare designed to introduce students to his writing and the study of literature. Works written across Shakespeare's career: comedy, tragedy, history, problem plays and romance as well as his poetry will be read. Questions of performance will be discussed alongside literary analysis. (F, Sp)
ENGL	1013	English for Exchange Students	Designed to meet the needs of international students who are studying at OU for a semester or a year. Review all English skills including pronunciation, vocabulary, listening, writing, and grammar as well as expand students' knowledge of American cultures. (F, Sp)
ENGL	1023	English for Exchange Students II	Prerequisite: ENGL 1013. Designed to build on students' experience in English 1013. Includes units that will 1) introduce new vocabulary, 2) provide opportunities for collaborating with fellow students, 3) explore relationships among American and other cultures, and 4) invite students to practice reading, writing, speaking, and listening in English. As in English 1013, focus will be on exploring writing processes as students compose and revise essays for each unit. Devotes increased attention to comprehension and analysis as well as more rigorous attention to each draft of student papers. Students will complete two essay exams and present them to the class for discussion. (F, Sp)
ENGL	1113	Principles of English Composition	Systematic analysis of the components of effective writing, with regular practice and close individual assistance. Study of expository prose models. (F, Sp, Su) [I-ENGL]
ENGL	1213	Principles of English Composition	Prerequisite: 1113. Systematic analysis of effective argumentative discourse with regular practice and close individual assistance. Study of argumentative prose models. Library research paper required. (F, Sp, Su) [I-ENGL]
ENGL	1613	Native Peoples of Oklahoma	(Crosslisted with ANTH 1613) A general introduction to the history, cultural traditions and current condition of the 38 diverse Native American tribes who now reside in Oklahoma. (F, Su) [IV-NW]
ENGL	1913	Writing for the Health Professions	Prerequisite: 1213. Prepares pre-professionals in the health professions for writing they will do in later coursework and in practice. (F, Sp)
ENGL	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ENGL	2113	Intermediate Writing	Prerequisite: 1213, application and departmental permission. Writing of non-fiction prose in a workshop setting. Reading and analysis of prose models for analysis. (Irreg.)
ENGL	2123	Creative Writing	Prerequisite: 1213, application and departmental permission. Introduction to imaginative writing, especially short stories and poems; some analysis of literary models, but major emphasis on student writing. (F, Sp)
ENGL	2133	Autobiographical Writing	Prerequisite: 1213, application and departmental permission. Writing essays from personal experience. Reading and analysis of journals, diaries, letters and autobiographies as models for writing. (Irreg.)
ENGL	2213	Fiction	Introduces fiction as a historical genre in literature. Covered will be sub-genres such as the novel, short story, memoir, travel sketch, etc. Discussion will cover such topics as character, plot and myth in narrative. The emphasis will be on close reading in light of the possibilities of fiction as a genre. (Irreg.) [IV-AF]
ENGL	2223	Poetry	Gives an introduction to the elements and rhetoric of verse. The focus will be on the canon of American and British verse. (Irreg.) [IV-AF]

ENGL	2233	Drama	A study of major Western plays (from Aeschylus to contemporary playwrights) with emphasis on literary dimensions: design, language, characterization, individual forms (such as tragedy, comedy and pastoral). May include consideration of social and literary contexts as well as acting and theatrical conventions. (Irreg.) [IV-AF]
ENGL	2243	Film Narrative	Introduction to basic visual terminology, filmmaking concerns, film theory and aesthetics. Survey of different approaches to narrative filmmaking (for example, genre or auteur). Also discussion of film and society in regards to how one influences the other. (Irreg.) [IV-AF]
ENGL	2273	Literary and Cultural Analysis	Prerequisite: ENGL 1213. This course offers an introduction to literary and cultural analysis focusing on textual explication, interpretation, and critique. Subjects may include poetic forms (including prosody and scansion, narrative techniques, introduction to genre, and a grounding in basic literary terms. The course emphasizes writing analytically about literature and culture. (F, Sp)
ENGL	2283	Critical Methods: Texts/Contexts/Theories /Critics	Prerequisite: ENGL 1213 and ENGL 2273.This course examines literary and cultural texts in conjunction with texts of theory, criticism or history. The course explores how to read literary texts within relevant frameworks, whether they be historical or other contexts such as gender, race, or colonialism. (F, Sp)
ENGL	2313	Introduction to Critical Reading and Writing	Prerequisite: 1213 or EXPO 1213. English and Language Arts majors only. Focuses on close reading of literary texts using key literary terms and involving some introduction to larger issues such as authorship, textuality, and reception. (F, Sp)
ENGL	2413	Introduction to Literature	Concentrates on close readings of masterpieces in fiction, drama and poetry. The readings are drawn from periods ancient to modern and may be American, British or Continental. (Irreg.) [IV-AF]
ENGL	2433	World Literature to 1700	A reading of literary works, by types, from classical antiquity to 1700. (F) [IV-WC]
ENGL	2443	World Literature, 1700 to Present	Masterpieces of world literature from 1700 to the modern period. (Sp) [IV-WC]
ENGL	2543	English Literature from 1375 to 1700	A survey of major writers and literary movements from Chaucer through Dryden. (F) [IV-WC]
ENGL	2653	English Literature from 1700 to the Present	A survey of major writers and literary movements from Pope to the present. (Sp) [IV-WC]
ENGL	2713	Introduction to Black Literature in the United States	Prerequisite: 1213 or equivalent. An introduction to Black writing produced in the United States. Introduces students to important texts and their major concerns. Attention is given to the struggle between literature that criticizes racial injustice and literature that celebrates Black cultural identity. (Irreg.)
ENGL	2733	American Indian Literature: Early and Traditional	Prerequisite: 1113,1213 and one course in American literature, history or anthropology. A study of earliest forms of American Indian expression in the oral tradition and beginnings of its literature as written in English up to 1945. Special emphasis on understanding particular tribal world-views in order to appreciate the literature and problems inherent in translating from native languages. (Irreg.)
ENGL	2743	American Indian Literature: Modern and Contemporary	Prerequisite: 1113,1213 and one course in American literature or history. Features the literature of American Indians written since 1945. Attention is directed to early writers such as Will Rogers and D'Arcy McNickle and to the recent renaissance of contemporary Indian writings by N. Scott Momaday, Leslie Marmon Silko, James Welch and others. (Irreg.)
ENGL	2773	American Literature	A survey of major American writers and literary movements from the colonial period to the Civil War. (F) [IV-WC]
ENGL	2883	American Literature	A survey of major American writers and literary movements from the Civil War to present. (Sp) [IV-WC]

ENGL	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
ENGL	3013	Interdisciplinary Approaches to Literature	May be repeated with change of subject matter; maximum credit six hours. The study of two or more disciplines, focusing on a narrow historical period, a single major author and other discipline, or a circumscribed topic. (Irreg.)
ENGL	3023	Thematic Approaches to Literature II	May be repeated with change of subject matter; maximum credit six hours. Close study of a major theme or preoccupation of a literary period in important works of the period. Attention to the relationship of the theme to relevant philosophical, sociological, political, religious and/or scientific thought. (Irreg.)
ENGL	3033	British Women Writers	A study of themes, literary traditions, and reception of works by British women writers from one or several periods. Considers relevant issues of female authorship, socio-historical contexts, generic conventions and feminist theory. (Irreg.)
ENGL	3043	Twentieth Century British Women Novelists	Prerequisite: 1213. Introduces students to some of the major Twentieth century English and Scottish women novelists, and to the regional, social and cultural contexts of their work. (Irreg .)
ENGL	3103	Topics in Advanced Composition	Prerequisite: twelve hours of English, application and departmental permission. May be repeated with change of subject matter; maximum credit six hours. Practice in writing with emphasis on style and strategies of composition. Focus varies: practice in various literary genres; study of rhetoric, practice in various modes; argumentative writing; advanced expository writing. (Irreg.) [I-ENGL]
ENGL	3113	Nature/Environment/Science Writing	Prerequisite: 1213 or EXPO 1213, application and departmental permission. Interdisciplinary advanced composition course offers students a chance to read and write about the natural world, the environment, and science and technology. Centered on the mode of writing called creative non-fiction, students will write a spectrum of autobiographical essays to more objective reportorial pieces. This is a designated writing course. (Irreg.) [IV-WC]
ENGL	3123	Fiction Writing	Prerequisite: 2123, application and departmental permission. Intensive writing of short stories, with class attention to writing process, style, technique, revision and contemporary developments in the genre. (Irreg.)
ENGL	3133	Poetry Writing	Prerequisite: 2123, application and departmental permission. Conducted in workshop format; emphasizes the preparation of a coherent, chapbook-length manuscript of poems. Students are also required to formulate a personal poetics and to complete selected exercises in translation or adaptation. (Irreg.)
ENGL	3143	Studies in Literacy and Rhetoric	Prerequisite: 1213 or EXPO 1213, application and departmental permission. Introduces students to current and historical knowledge about literacy and rhetoric and their places in modern society. Students also explore the forces (political, economic, racial, cultural) that shape the way literacy and rhetoric function in society. (Irreg.) [IV-WC]
ENGL	3153	Technical Writing	Prerequisite: 1213 and Engineering or hard science majors only. For students of the pure and applied sciences. Focuses on the forms of report writing most frequently encountered in research and industry. (F, Sp, Su)
ENGL	3163	Writing, Rhetoric, and Histories of Technology	Prerequisite: twelve hours of English, application and departmental permission. An advanced writing course for any major that focuses on the relationship between current and historical technological change and students' writing practices. Workshop format privileges student writing and redrafting while concurrently studying selected histories of Western rhetoric. (Irreg.)
ENGL	3173	Histories of Writing, Rhetoric and Technology	Prerequisite: twelve hours of English, application and departmental permission. Investigates how computers and other digital technologies have changed the ways we write and think. How video and television have changes the ways we write and think; and how aspects of the history of written communication, visual rhetoric, and other forces change the ways we write and think. (Irreg.)

ENGL	3183	Authoring in the Information Age	Prerequisite: 1213, application and departmental permission. Covers authoring information in traditional paper documents, Power Point presentations, and web sites with emphasis on delivery, arrangement/architecture, and design for communicating through language and graphics. Topics include the impact of rhetoric contexts, accessibility and retrieval of information, and usability testing. (Irreg.)
ENGL	3193	Working with Writers	Prerequisite: 1213 or EXPO 1213. Students will investigate how texts are produced, revised, and edited, with a focus on response and feedback strategies that help writers improve. Course will allow students to practice strategies to improve writing and learn how to work with other writers. (Irreg.)
ENGL	3213	Special Topics in Fiction	May be repeated with change of subject matter; maximum credit six hours. Presents a fictional type or problem in fiction for extensive study within a specified historical period: works by a single author in a special genre (e.g., Henry James' fantastic stories), works by several authors in a genre (e.g., violence in post-World War II novels), topics such as myth in a period of fiction and the consideration of recent developments in novel writing. (Irreg.)
ENGL	3223	Oklahoma Writers/Writing Oklahoma	Prerequisite: 1213 or EXPO 1213, application and departmental permission. An introduction to regional writing about Oklahoma. Focus on Oklahoma culture as a source of literature, and the creative work of course participants. (Irreg.) [IV-WC]
ENGL	3233	Special Topics in Drama	May be repeated with change of subject matter; maximum credit six hours. A study of a particular literary aspect of drama. This may include the pursuit of a particular theme through several periods, or concentrate on a particular age or focus on the dramatic works of a single or related playwrights. (Irreg.)
ENGL	3243	Special Topics in Film	May be repeated with change of subject matter; maximum credit six hours. Sophisticated concerns involving film: the works of specific directors (Bergmann, Fel- Lini, Kubrick, etc.); the relationship of film to literature; the writings of notable film theorists (Bazin, Eisenstein, etc.) or critics (Mast, Kael, Sarris). (Irreg.)
ENGL	3253	Special Topics in American Indian Literature	May be repeated twice with change in subject matter. Explores a major literary or cultural aspect of American Indian literature such as the Five Civilized Tribes, Eastern Tribes, the Literature of Massacre, autobiographical writing, fiction and poetry. (Irreg.)
ENGL	3263	Women and Film	Prerequisite: 1213. Focus on the representation of women on screen and the role of women behind the camera from the late 19th century through the present day. Readings will include major essays in feminist theory including sociological, psychoanalytic, semiological, and cultural approaches. (Irreg.)
ENGL	3273	Comic Theory and Comic Practice Through Film	Prerequisite: 1213. Through readings in comic theory and film, an examination of the comic response to life, celebrating our capacity to endure rather than to aspire and suffer. Forms of comedy to be examined include satire, black humor, farce, romantic comedy, festive comedy, comedy of manners, burlesque, the carnivalesque, and women's laughter. (Irreg.)
ENGL	3283	Tribally Specific Approaches To Native American Literatures	Prerequisite: 1213. May be repeated once with change of content; maximum credit six hours. Literary oeuvre of a single American Indian tribe or examines the aesthetics of tribal nationalism as they apply to native-authored literary works. (Irreg.)
ENGL	3293	Techno Thrillers / Cyber-Punk	Prerequisite: ENGL 1213 or EXPO 1213. Topics include the machine as Messiah, fighting back against nature, weapons invoking terror, speculations about the future, emergent nanotechnologies, war fantasies and myths becoming reality, salvation through ecology. The readings blend contrasting subjects-inventive new vocabularies and antique languages, wilderness and technology, religious and secular regimes before and after an apocalypse, masculine and feminine skill sets, patterns in engineering/ science/ grammar, experimental and traditional solutions for living well and finding paradise on earth or elsewhere. (F, Sp) [IV-WC]

ENGL	3313	Introduction to Literary and Cultural Studies	Prerequisite: 2313. English majors only. Focuses on relationships among different genres and media and between different forms and "levels" of culture, and on issues of cultural and multicultural interpretation. (F, Sp)
ENGL	3333	Literature and Psychological Criticism	Using the methods of discursive analysis, examines the cultural situation in which particular psychological perspectives emerge in relation to experience and understanding, with an emphasis on the psychological schools appearing in the late nineteenth and early twentieth centuries. Explore the assumptions central to a psychological theory and the characteristic language in which it is set forth. Content may include the application of one or more psychological perspectives (theories) to the understanding of both literary works and or cultural phenomena in general. (Irreg.)
ENGL	3343	The Literature of Empire	Survey of literary and nonliterary discourse about and relating to European colonies since the Renaissance. Study of colonial and postcolonial fiction, poetry, drama and criticism from Asia, Africa, the Americas, Australasia and Europe, concentrating on English-language sources. (Irreg.)
ENGL	3353	American Indian Nonfiction Writing	Examines the various forms of recorded oratory, nonfiction writing by American Indians. Includes autobiography, political and social writing, newspaper reportage, philosophy, anthropological and historical writings, humor and other kinds of writings by early and present-day American Indians. (Irreg.)
ENGL	3363	Films and Context	Explores film within a particular period or milieu. Attention is given to production styles, prominent actors and studio influence within a definable setting such as American films in the 1930s. (Irreg.)
ENGL	3383	Politics and Literature	Explore political theories of literature as well as political contexts and functions of literary works. May focus on a politically well-defined period, one or more specifically political genres, politics of particular literary movements, or on individual authors. (Irreg.)
ENGL	3403	The Graphic Novel	The graphic novel. study of the works of Spiegelman, Pekar, Moore/Gibbons, Gaiman/Mckean, Crumb and other graphic novel authors. Comparison with prose fictions having a strong visual element and possibly with films. (Irreg.) [IV-AF]
ENGL	3423	Film and Other Expressive Forms	Examines from practical and theoretical perspectives the relationship between film and another area of creative expression such as the novel, theatre, painting and photography. (Irreg.)
ENGL	3433	Foundations of Indic Culture and Civilization	Introduction to central religious, philosophical and literary writings of India from the "Rg Veda" through "Bhagavad Gita." (Irreg.) [IV-NW]
ENGL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ENGL	3453	Afro-Caribbean Lit/Cult Consciousness: from Alienation to Voice	Prerequisite: 1213. Explores select Afro-Caribbean writings by male and female writers through the historical and cultural influences that have shaped the production of this literature. Attention will be given to the literary style of the writers who represent various aspects of Caribbean experience. (Irreg.)
ENGL	3463	American Fiction	Prerequisite: 1213. Historical survey of major American fiction, both novels and shorter fictional forms, from the Federal period to the present. Special attention is given to the uniqueness and diversity of themes and forms during the nineteenth and twentieth centuries when fiction came to dominate American literary production and consumption. (Irreg.) [IV-WC]

ENGL	3483	Native American Writers	Prerequisite: 1213. May be repeated once with change of content; maximum credit six hours. Investigates the ways native American writers reflect their cultural histories and thought systems through their writing. By focusing on the emergence of native literature over the past three decades or on native writers of Oklahoma, students will learn how native traditions have been translated into literature. (Irreg.) [IV-NW]
ENGL	3503	Epic	Prerequisite: ENGL 1213 or EXPO 1213. Analyze and compare selected classical and Renaissance epic poems. Authors may include Homer, Vergil, Lucan, Ovid, Dante, Tasso, Ariosto, Spenser, Milton, and others. Attention to generic form, literary themes, and cultural/historical contexts. Works read in English or English translation. (Irreg.) [IV-WC]
ENGL	3513	Medieval English Literature	Intensive study of some of the major literary works of medieval England with attention to the relation between the literature and its social, intellectual and cultural contexts. Readings in various genres will include such works as Gawain and the Green Knight, Everyman, Piers Plowman, Morte d'Arthur, and The Canterbury Tales. (Irreg.) [IV-WC]
ENGL	3523	Sixteenth-Century English Literature	Intensive study of some of the major literary works of sixteenth-century England with attention to the relation between the literature and its social, intellectual and cultural contexts. Readings will include works in various genres by such writers as Spenser, Sidney, Shakespeare, Marlowe, More. (Irreg.)
ENGL	3533	Seventeenth-Century English Literature	Intensive study of some of the major literary works of seventeenth-century England with attention to the relation between the literature and its social, intellectual and cultural contexts. Readings will include works in various genres by such writers as Donne, Herbert, Milton, Marvell, Bacon, Jonson and Webster. (Irreg.) [IV-WC]
ENGL	3543	British-American Enlightenment Literature	Prerequisite: 1213 or EXPO 1213. Study of peculiarly British and American Enlightenment concerns, and of how they were expressed and reexamined in British and American Literary texts. (Irreg.) [IV-WC]
ENGL	3553	Transatlantic Literature	Prerequisite: 1213 and 2313. Explores links between British and American Literature and culture from the seventeenth to the nineteenth centuries. Themes include migration and the sea, issues of servitude, letter writing, interlocking uses of print, pen and voice to fashion local and transatlantic family, social, economics and political identities. (Irreg.)
ENGL	3573	Arthurian Legend and Literature	(Crosslisted with MLLL 3573) Examination of the legend of King Arthur in European literature. Concentrate on the historical Arthur, followed by major portion of semester on medieval and modern literary texts concerning Arthur and the Round Table. All texts read in English. (Irreg.) [IV-WC]
ENGL	3613	Nineteenth-Century English Literature	Intensive study of the major literary works of nineteenth-century English-the Romantic and Victorian periods-with attention to the relation between literature and its social, intellectual and cultural contexts. Readings will include work in various genres by such writers as Wordsworth, Austen, Dickens, Browning, Eliot, Carlyle and others. (Irreg.) [IV-WC]
ENGL	3623	Twentieth-Century English Literature	Intensive study of some of the major literary works of twentieth-century England with attention to the relation between the literature and its social, intellectual and cultural contexts. Readings will include works in various genres by such writers as Conrad, Yeats, Eliot, Joyce, Woolf, Synge, Shaw, Auden, Waugh, Ford, etc. (Irreg.) [IV-WC]
ENGL	3643	Special Topics in Non-Western Literature and Culture	Prerequisite: 1213. Examines a broad range of potential topics, including particular practices in the context of global cultures and/or minority groups in the West. Course readings draw on a variety of critical or theoretical work regarding culture, discourse, history, or institutions. (Irreg.)
ENGL	3653	The Bible as Literature	Interpreting the Bible as literature. Although much class time will be spent developing readings of individual books, a number of critical issues that affect the ways to approach the project of understanding the Bible will also be considered. (Irreg.)

ENGL	3713	Introduction to American Studies	An introduction to the main currents in American thought as exemplified by literary and nonliterary works (emphasis on the latter). Readings may include works from history, philosophy, art, science and other areas. (Irreg.) [IV-WC]
ENGL	3813	Science Fiction	Prerequisite: 1213. An introduction to a major genre of popular culture. Focuses on the philosophical, social, and creative values of science as a central constituent of modern life. Students explore the social, moral, and political issues at stake in science fiction's critique and occasional celebration of scientific culture. (Irreg.) [IV-WC]
ENGL	3833	Introduction to American Drama	Prerequisite: 1213. A survey of major American plays and playwrights, dramatic theory and the theatrical institutions that supported and disseminated them from the Federal period to the present. Special emphasis on the changing social context of the theater. (Irreg.) [IV-WC]
ENGL	3843	Theory Now	Prerequisite: ENGL 1213 or EXPO 1213 and ENGL 2273. Designed for undergraduate English majors and minors, the study of new directions in literary and cultural criticism and theory since 1968, reading influential selections from roughly two dozen leading postmodern figures. The main schools and movements discussed are structuralism, poststructuralism, feminist theory, postcolonial criticism, race and ethnicity studies, and cultural studies. Representative figures include Roland Barthes, Harold Bloom, Helene Cixous, Michel Foucault, Bell Hooks, and Elaine Showalter. Among the key concepts and terms explored are authorship, convention, literary canon, ideology, interpretation, intertextuality, hegemony, literariness, and tradition. (F, Sp)
ENGL	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular classes. (Irreg.)
ENGL	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (Irreg.)
ENGL	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ENGL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ENGL	4003	Movements in World Literature	(Crosslisted with MLLL 4003) Prerequisite: junior standing. May be repeated with change of subject matter; maximum credit nine hours. Focuses on texts within a literary movement (literature other than canonical American or British). Also attention to critical and theoretical questions about concepts such as genre, nation, national building, national identity, etc. (Irreg.) [IV-WC]
ENGL	4013	Major Figure (With Subtitle)	May be repeated with change of subject matter; maximum credit six hours. The major figure designated in the subtitle is studied in depth: a major portion of his/her works are covered; significant critical approaches will be presented. (Irreg.)
ENGL	4023	Literary Movements	May be repeated with change of subject matter; maximum credit six hours. A course on literary movements or groups of authors who are related through their particular interests in certain distinct or philosophical ideas: the Metaphysical Poets, the Fugitive Writers, etc. (Irreg.)
ENGL	4033	Indigenous Political Writing	Prerequisite: 2733 or 2743 or permission of the instructor. Examines key issues of American Indian politics and literature, exploring how they continue to shape the American Indian world in the present. Also considers how North American Indian politics relate to broader discussions of indigenous peoples and literatures around the world. (Irreg.)

ENGL	4113	Magazine Editing and Publishing in the Humanities	Prerequisite: 1213 or EXPO 1213. Introduction to magazine writing, editing, and publishing - scholarly and otherwise - in the humanities. (F)
ENGL	4133	History Of the English Language	Traces the development of the English language from its Indo-European origins through its present state. Special attention will be paid to changes in grammar and vocabulary. (Irreg.)
ENGL	4203	Special Topics in Literary Forms	May be repeated with change of subject matter; maximum credit six hours. Generic approach to literary forms; exact subject material (eighteenth-century satire, Western novel, gothic fiction) will vary from course to course. (Irreg.)
ENGL	4233	Major Figures in Theory	Intensive exploration of the work and influence of one or a small number of literary or cultural theorists. Texts typically will encompass primary reading in a theorist or group of theorists and ancillary readings in the work of writers or other theorists who show the theorist(s). (Irreg.)
ENGL	4243	Issues in Cultural Studies	Prerequisite: 1113, 1213. Isolate significant issues in the theoretical working out and practice of cultural studies, using the methods of discursive analysis. focus on recent attempts in the humanities to define culture, formulate post-colonial critiques of culture, and other such issues in feminism and cultural theory that are part of the working out of discourses about culture and society. (Irreg.)
ENGL	4253	Introduction to Film Theory	Introduction to basic issues of film theory as seen by classical and contemporary film theorists. (Irreg.)
ENGL	4263	Contemporary Feminist Theory	Prerequisite: 1113, 1213. Identify diverse ways that feminist scholars define culture and identify the variety of political and theoretical preoccupations of feminist cultural studies. Work toward an understanding of contemporary feminism as an inherently cultural formation. (Irreg.)
ENGL	4273	Women Writers	Prerequisite: 1213. May be repeated twice with change of content; maximum credit nine hours. A study of women's writings from one or several periods. Approach may be thematic, generic, regional, historical, etc., and will incorporate critical approaches including feminist theory and criticism. (Irreg.)
ENGL	4283	Hip Hop as Poetry, Literature and Cultural Expression	Prerequisite: 1213. Hip Hop will be examined from three different angles: the message, the history, and the performance. There are required film viewings. Students will analyze the lyrics of literary texts and music albums, and will be required to write, memorize and perform their own poetry. (Irreg.) [IV-AF]
ENGL	4293	Carnival Literature	Prerequisite: 1213 or EXPO 1213. Examines historical, cultural and political aspects of carnival celebrations in Europe, the Caribbean, and South America. Through theoretical texts, histories, novels, films, music and performance we trace the subversive and liberatory power of carnival. (Irreg.)
ENGL	4303	Special Topics in Criticism	May be repeated with change of subject matter; maximum credit six hours. selected studies in literary criticism, including the criticism of film. The exact subject matter will vary from instructor to instructor. (Irreg.)
ENGL	4323	The Harlem Renaissance	Prerequisite: 1213. Examines the literature, culture, and politics of the Harlem renaissance. In addition to texts of the 1920s, the course considers the contexts out of which the movement emerged, as well as its effects in the U.S. and abroad. (Irreg.)
ENGL	4333	Black Arts/Black Power	Prerequisite: 1213 or EXPO 1213. Examines the formation of the black arts and black power movements of the 1960s and 1970s in the united states. Focus on cultural exchanges and ideological engagements between local struggles for civil rights and larger global movements. Studies include a variety of literary and critical texts and genres, film and music. (Irreg.)
ENGL	4343	The Indian in American Popular Culture	Prerequisite: 1213 or equivalent. Explores the various appearances and roles, stereotyped or otherwise, American Indians have traditionally been pigeon-holed into throughout America's five centuries of recorded history. Covers Captain John Smith, Colonial era, Romantic period of Cooper and Longfellow, and modern writers Waters and Berger. (Irreg.) [IV-NW]

ENGL	4373	Black Literary Form and Cultural Expression	Prerequisite: 1213. Compare and contrast the relationship between literary form and cultural expression by analyzing Black literature produced in two different contexts: the United States and the Caribbean. Examine writing from the literary movements knows as the "Harlem Renaissance," "Negritude," and the "Black Arts." (Irreg.)
ENGL	4383	Civilization and Diaspora	Prerequisite: 1213. Examines literary and cultural forms from the African Diaspora (the Black population outside of continental Africa) offering alternative definitions of civilization, literary and progress. Define and explore what is called Diaspora literacy: linguistic, philosophical and cultural ways of knowing that come out of African Diaspora experience. (Irreg.) [IV-NW]
ENGL	4403	Special Topics in Comparative Literature	May be repeated with change of subject matter; maximum credit six hours. Topics will vary. Literature studied may include combinations of foreign (In Translation) and English and/or American literature. Instructor's approach may be thematic, regional, historical, generic, etc., but the course will include intensive cross-cultural explorations of literature. (Irreg.)
ENGL	4433	Modern British and European Drama	A survey of British and European drama from Ibsen and Shaw to the present day. (Irreg.)
ENGL	4443	Contemporary Literature	Intensive study of major literary works since World War II in English, American and outside the Anglo-American tradition. Readings will include works in various genres by such writers as Barthelme, Fowles, Marquez, Larkin, Merrill, Solzhenitsyn, Grass, Sartre, etc. (Irreg.)
ENGL	4453	Literature and Landscape	Exploration of writers, gardeners, farmers and painters who translated nature into art. Texts range from ancient to modern world and may include classical, renaissance, romantic and American works in which engagement in landscape is an important topic. (Irreg.)
ENGL	4463	Linguistics and Semiotics	Trace the study of synchronic linguistics in phonology, syntactics and semiotics in the twentieth century and examine the field of semiotics based on this development. (Irreg.)
ENGL	4503	Backgrounds of the Renaissance	Prerequisite: 1213. A study of classical and continental authors esteemed in the English Renaissance. Focus on Homer, Virgil, Ovid, Petrarch, Erasmus, and Machiavelli in the contexts of their cultures as well as their contributions to culture. (Irreg.) [IV-WC]
ENGL	4513	Chaucer	Examines the poetry of The Canterbury Tales and one or two of Chaucer's earlier narrative poems. Special emphasis will be given to the social, literary and cultural backgrounds to Chaucer's work. (Irreg.)
ENGL	4523	Shakespeare Comedies	Prerequisite: junior or senior standing. Close reading and analysis of Shakespeare's comedies and histories. Selected criticism, 1600 to the present. Historical background and Shakespeare's theatre. Dramatic traditions, movie interpretations, performance theory and acting. Emphases and reading lists vary from year to year. (Irreg.) [IV-WC]
ENGL	4533	Shakespeare Tragedies	Prerequisite: junior or senior standing. Close reading and analysis of Shakespeare's tragedies and lyric poetry. Selected criticism, 1600 to the present. Historical background and Shakespeare's theatre. Dramatic traditions, movie interpretations, performance theory and acting. Emphases and reading lists vary from year to year. (Irreg.) [IV-WC]
ENGL	4543	Tudor and Stuart Drama	Intensive study of the drama of Shakespeare's contemporaries, with emphasis on the plays of Christopher Marlowe and Ben Jonson. Attention to dramatic forms, social issues, cultural context, language and performance. Readings will include plays by Marlowe, Jonson, Webster, Heywood, Fletcher, Ford. (Irreg.)
ENGL	4553	Milton	Close reading and analysis of selected poetry and prose, with emphasis on Paradise Lost. Study of literary forms, cultural myths, theology, ethics. Themes of loss, guilt, free will, male-female relationships. (Irreg.)

ENGL	4573	Eighteenth-Century English Novel	Sources, early reputation and emerging critical theories; economic, moral, feminine influences; realistic, psychological, sentimental, gothic and satiric directions; technical developments in structure and point of view; works by such novelists as Richardson, Fielding, Smollett, Sterne and Jane Austen. (Irreg.)
ENGL	4593	Topics in Medieval Literature and Culture	Prerequisite: 1213. May be repeated with change of content; maximum credit six hours. Specialized study in selected topics in medieval literary culture. Students will be expected to be able to read middle English. (Irreg.)
ENGL	4603	Topics in Early Modern Literature and Culture	Prerequisite: 1213. May be repeated with change of content; maximum credit six hours. Specialized study in selected topics in early modern literary culture. (Irreg.)
ENGL	4613	Nineteenth-Century English Novel	Historical and aesthetic study of the novel in relation to main developments in English literary history during the period. Emphasis, however, is on the intrinsic literary values in the novels read. (Irreg.) [IV-WC]
ENGL	4623	English Romantic Poetry	Prerequisite: 1213 or equivalent. May be repeated once with change of content; maximum credit six hours. Intensive study of the most important poems and criticism of early Romantic poets and later Romantic poets. (Irreg.)
ENGL	4653	Twentieth-Century English Poetry	A survey with emphasis on Yeats, Pound, Eliot, Lawrence, Graves, Auden and Dylan Thomas. (Irreg.)
ENGL	4713	Major Authors in Nineteenth-Century American Literature	Prerequisite: 1213. May be repeated with change of subject; maximum credit six hours. Intensive study of one or more major 19th century American authors such as James Fenimore Cooper, Catharine Maria Sedgwick, Frederick Douglass, Walt Whitman, Nathaniel Hawthorne, Ralph Waldo Emerson, Harriet Beecher Stowe, Emily Dickinson, or Mark Twain. (Irreg.)
ENGL	4723	Issues in Nineteenth-Century American Literature	Prerequisite: 1213. May be repeated with change of subject; maximum credit six hours. Intensive study of nineteenth-century American texts in a specific literary or historical context, such as the Civil War and reconstruction, the Women's Rights Movement, transcendentalism, regionalism, or sentimentalism. (Irreg.)
ENGL	4733	American Naturalism and Realism	Major American novelists from the Civil War to the end of World War I, including Howells, James, Twain, Crane, Dreiser, Norris and Wharton. (Irreg.)
ENGL	4813	American Drama	An examination of representative American plays ranging from naturalistic tragedy to farce. Emphasis is on the period since 1918. (Irreg.)
ENGL	4823	American Novel Since 1920	Major authors and schools in American fiction including Fitzgerald, Hemingway, Faulkner, Steinbeck and others selected by the instructor. (Irreg.)
ENGL	4833	Twentieth-Century American Poetry	A survey from Frost to the present with emphasis on major figures in each of three generations. (Irreg.)
ENGL	4853	The English Capstone Course	Prerequisite: 1113, 1213, and 2433 and 2443 or 2543 and 2653 or 2773 and 2883, plus twelve hours. Combine English majors from diverse tracks to work on a topic involving major cultural issues, artifacts and texts. Projects include a significant amount of writing demonstrating the students' accomplishments in analyzing literature. (F, Sp) [V]
ENGL	4883	Literature of the Diaspora	Prerequisite: ENGL 1213 and permission of instructor. May be repeated with a change of content, maximum credit nine hours. In-depth study of selected contemporary international writers/jurors, frequently non-Western, who visit campus as part of the Neustadt and/or Puterbaugh symposia for World Literature Today. (irreg.)
ENGL	4923	Advanced Fiction Writing	(Slashlisted with 5923) Prerequisite: six hours of creative writing, application and departmental permission. May be repeated; maximum credit six hours. Work at an advanced level for qualified students. Intensive writing, peer criticism, revision, and reading in current markets with the goal of producing publishable work. No student may earn credit for both 4923 and 5923. (Irreg.)

ENGL	4933	Advanced Poetry Writing	(Slashlisted with 5933) Prerequisite: six hours of creative, application and departmental permission. May be repeated; maximum credit six hours. Intensive writing, peer criticism, revision, and reading in current markets with the goal of producing publishable work. No student may earn credit for both 4933 and 5933. (Irreg.)
ENGL	4943	Advanced Creative Nonfiction Writing	(Slashlisted with 5943) Prerequisite: six hours of 2000-3000-level writing courses, application and departmental permission. May be repeated; maximum credit six hours. Intensive writing, peer criticism, revision, and reading in current markets with the goal of producing publishable creative nonfiction. No student may earn credit for both 4943 and 5943. (Irreg.)
ENGL	4950	Special Topics in World Literature Today	1 to 3 hours. Prerequisite: 1213 and permission of instructor. May be repeated with a change of topic, maximum credit six hours. In-depth study of selected contemporary international writers/jurors who visit campus as part of the Neustadt and/or Puterbaugh symposiums for World Literature Today. (Irreg.)
ENGL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ENGL	4970	Special Topics in World Literature Today	1 to 3 hours. Prerequisite: 1213 and permission of instructor. May be repeated with a change of topic; maximum credit six hours. In-depth study of selected contemporary international writers/jurors who visit campus as part of the Neustadt and/or Puterbaugh symposiums of World Literature Today. (Irreg.)
ENGL	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topics not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
ENGL	5003	Seminar--Special Topics in English, American or Comparative Lit	Prerequisite: graduate standing and permission of department. May be repeated three times with change of subject matter; maximum credit 12 hours. Topics in theoretical and historical problems of English, American or comparative literature in different periods. (Irreg.)
ENGL	5113	Teaching College Composition and Literature	Prerequisite: graduate standing and permission of department. In a workshop format, students will apply readings in composition and literary theory to such practical concerns of freshman English teaching as course planning, assignment preparation, grading and discussion techniques. (F)
ENGL	5133	Teaching Technical Writing	Prerequisite: graduate standing and permission of department. Introduction to the types of writing professional engineers and scientists are expected to do and methods of teaching these forms of writing. In addition, students will attend classes being taught by the professor and have the opportunity to design and teach some workshops as well as evaluate the undergraduates' work. (Irreg.)
ENGL	5223	Seminar--Film	Prerequisite: graduate standing and permission of department. Will involve reading and analyzing the works of the more sophisticated film theorists and critics as well as studying approaches to the teaching of film (the auteur theory; film history; film genres; visual literacy; film and society; film as narrative; non-narrative forms). (Irreg.)
ENGL	5253	Transatlantic Women Writers	Prerequisite: graduate standing and permission of department. Explores work of eighteenth and early nineteenth century women writers who were "transatlantic" in different ways: some were born and/or lived in America and published in England; some wrote novels which crossed the Atlantic or were set on both sides; some corresponded and wrote in tandem. (Irreg.)

ENGL	5263	British Women Writers	Prerequisite: graduate standing and permission of department. May be repeated twice with change of content; maximum credit nine hours. Study of British women writers with focus on any period from the Middle Ages to the present. May focus on a particular genre, a literary movement, or on a particular author. (Irreg.)
ENGL	5273	Anglophone Women Writers	Prerequisite: graduate standing and permission of department. May be repeated once with a change of content; maximum credit six hours. Close examination of Anglophone women's writing regarding the sociopolitical forces that shape their historical experience, identity, and cultural roles. Novels will be from different regions and with distinct preoccupations. (Irreg.)
ENGL	5283	American Women Writers	Prerequisite: graduate standing and permission of department. May be repeated twice with change of content; maximum credit nine hours. Specific topics will vary. Focus on the history of writing by and about women in the United States. (Irreg.)
ENGL	5313	Literary Criticism	Prerequisite: graduate standing and department permission. May be repeated with change of content; maximum credit nine hours. A comprehensive history of literary criticism, the study of a particular movement or related movements in literary criticism; or a study of a particular issue or related issues in literary criticism. (Sp)
ENGL	5323	Contemporary Cultural Studies	Prerequisite: graduate standing and permission of department. May be repeated once with change of topic; maximum credit six hours. Addresses variable topics and issues in cultural studies such as popular culture, mass media, subcultures, gender codes, visual media, minority literatures, global cultural, and post-modernization. (Irreg.)
ENGL	5333	Native American Women Writers	Prerequisite: graduate standing and permission of department. Reading or viewing poetry, fiction, autobiography, and film by Native American women. Examining traditional Indian societies' conceptions of gender and the relationship between western Feminism and native women's political experiences. (Irreg.)
ENGL	5343	Native American Fiction	Prerequisite: graduate standing and permission of department. May be repeated twice with change of subject matter; maximum credit nine hours. Study of fiction written by Native American authors in the nineteenth and twentieth century. The course may include native authors from throughout the Americas and study the cultural contexts of Native American fiction. This course may also focus on particular themes and authors. (Irreg.)
ENGL	5353	Native American Poetry	Prerequisite: graduate standing and permission of department. May be repeated twice with change of content; maximum credit nine hours. Study of poetry written by Native American authors in twentieth century. Course may include native authors from throughout the Americas (including poetry in indigenous languages) and study the cultural contexts of Native American poetry. This course may also focus on particular themes and authors. (Irreg.)
ENGL	5363	Native American Non-Fiction and Criticism	Prerequisite: graduate standing and permission of department. May be repeated twice with change of subject matter; maximum credit nine hours. Study of Native American cultures by means of non-fiction and scholarly-critical writings. Course may focus on issues of methodology, theory, and cultural studies. Course may also focus on particular themes and authors. (Irreg.)
ENGL	5373	Graduate Topics in Native American Literature	Prerequisite: graduate standing and permission of department. May be repeated up to three times with change of subject matter; maximum credit twelve hours. Special topics focusing on Native American cultures, including literature, drama, philosophy, and thematic approaches to the subject. Course may also focus on particular themes, movements, and authors. (Irreg.)

ENGL	5403	Issues in Composition, Rhetoric and Literacy	Prerequisite: graduate standing and permission of department. An overview of contemporary research and theory in the study of written composition, with emphasis on rhetorical theory, the interrelationship of writing and reading, and the politics of defining literacy. (Irreg.)
ENGL	5413	History of Modern Composition Studies	Prerequisite: graduate standing and permission of department. A survey of twentieth century scholarship on composition theory, including composing process theory and discourse theory. (Irreg.)
ENGL	5423	Classical Rhetorical Theory	Prerequisite: graduate standing and permission of department. Historicizing of rhetoric from ancient Egyptians to Greek sophists, Plato, Aristotle to Rome and Augustine. Includes examination of the ways "history" and cultural studies comprise the area. (Irreg.)
ENGL	5433	18th and 19th Century Rhetorical Theory	Prerequisite: graduate standing and permission of department. An introduction to the rhetorical thought of eighteenth and nineteenth-century Britain and America, focusing on the development of rhetorical theories within the contexts of (1) eighteenth-century Scottish moral philosophy, (2)English romanticism, and (3) the emergence and development of higher education in nineteenth-century America. (Irreg.)
ENGL	5443	Twentieth-Century Rhetoric and Composition Theory	Prerequisite: graduate standing and permission of department. A survey of twentieth-century scholarship on rhetoric and composition theory, beginning with the rhetorical theories of Kenneth Burke, with emphasis on the mid-century revival of rhetoric and composition through current changes brought about by technology and feminism. (Irreg.)
ENGL	5453	Special Topics in Rhetoric, Composition, and Literacy	Prerequisite: graduate standing and permission of department. May be repeated two times with change of content; maximum credit nine hours. Addresses topical issues being debated within the profession. (Irreg.)
ENGL	5463	Rhetoric & Technology	Prerequisite: graduate standing and permission of department. May be repeated once with change of content; maximum credit six hours. A graduate seminar designed to explore the impact of computer technology on rhetorical theory. Examines electronic literacy in terms of the following themes: history and writing technologies; the politics of writing instruction in computer-mediated classrooms; rhetoric and issues of difference; and intellectual property in a computer age. (Irreg.)
ENGL	5473	Women's Rhetorics and Writing Practices	Prerequisite: graduate standing and permission of department. Analysis of selected historical and current work by women according to histories and theories of written composition theory, rhetorical theory, and literacy practices. These issues are studied by analyzing how women interact with different forms of communication (e.g., speaking, print, film, video, computer graphics). (Irreg.)
ENGL	5483	Rhetorical Perspectives on Literacy	Prerequisite: graduate standing and permission of department. Inquiry into the meaning of "literacy" in the electronic age where text, graphics, and video "interanimate" each other. It asks: what are the boundaries of literacy: What academic fields does its study encompass: What is the current benchmark for illiteracy: How have different societies defined functional literacy? (Irreg.)
ENGL	5513	Major Medieval Authors	Prerequisite: graduate standing and permission of department. May be repeated twice with a change of content; maximum credit nine hours. Topics vary. Focus on an outstanding medieval author such as Geoffrey Chaucer, Margery Kempe, or Thomas Malory, read in his or her literary, historical, and social context. (Irreg.)
ENGL	5523	Topics in Medieval Literature and Culture	Prerequisite: graduate standing and permission of department. May be repeated twice with change of content; maximum credit nine hours. Topics vary. Special studies in major figures, genres, themes, and movements of the Middle Ages. (Irreg.)

ENGL	5533	Major Early Modern Author	Prerequisite: graduate standing and permission of department. May be repeated twice with change of content; maximum credit nine hours. Topics vary. Focus on a significant early modern author such as William Shakespeare, John Milton, or Margaret Cavendish, read in his or her literary, historical, and social context. (Irreg.)
ENGL	5543	Topics in Early Modern Literature and Culture	Prerequisite: graduate standing and permission of department. May be repeated twice with change of content; maximum credit nine hours. Topics vary. Special studies in major figures, genres, themes and movements of the early modern period. (Irreg.)
ENGL	5553	Post-Colonial Theory and Writing	Prerequisite: graduate standing and permission of department. Theories of postcolonialism as they have emerged from poststructuralist theory in the west, and from various political-literary movements in the non-Western world. Also focuses on the literatures of postcolonial cultures in Asia, Africa, Latin American, the Caribbean, Australia, and North America. (Irreg.)
ENGL	5613	Seminar--Nineteenth Century English Literature	Prerequisite: graduate standing and permission of department. May be repeated twice with change of subject matter; maximum credit nine hours. Special studies in the Romantic and Victorian periods designed to promote original research and criticism. (Irreg.)
ENGL	5703	Special Topics in American Literature	Prerequisite: graduate standing and permission of department. May be repeated two times with change of subject matter; maximum credit 9 hours. Intensive study of a major theme, issue, genre or figure in American literature and culture that is not limited to any single historical period. (Irreg.)
ENGL	5713	Seminar--Nineteenth-Century American Literature	Prerequisite: graduate standing and permission of department. Specific topics will vary. Typical topics will be contemporary criticism and the literature of the American renaissance or contemporary criticism of the American realists. (Irreg.)
ENGL	5723	Late Nineteenth Century & Early Twentieth Century American Lit	Prerequisite: Graduate standing and permission of department. Examination of late nineteenth and early twentieth century fictional accounts of the relation between class and literary culture. Discussion includes writers' relation to literary market, writers' sense of the capacity of literature to transform society, and the writers' relation to nationalism, imperialism, and/or cosmopolitanism. Provides a broad survey of high and middlebrow literary culture in the U.S. at the turn of the century. (Irreg.)
ENGL	5803	Seminar--Twentieth-Century American Literature	Prerequisite: graduate standing and permission of department. May be repeated twice with change of subject matter; maximum credit 9 hours. Topics vary. Special studies in American authors, ideas and literary types. (Irreg.)
ENGL	5813	Blackness, Coloniality, Gender	Prerequisite: graduate standing and permission of department. Taking an historical and cultural approach to Black U.S. and Caribbean female writing, explore the struggle between the "official" cultural contexts and the spaces of counter-cultural resistance. Analyze the terminology "colonial" and "postcolonial" and the current theoretical landscape in which these terms are used. (Irreg.)
ENGL	5923	Advanced Fiction Writing	(Slashlisted with 4923) Prerequisite: graduate standing, six hours of creative writing, application and departmental permission. May be repeated; maximum credit six hours. Work at an advanced level for qualified students. Intensive writing, peer criticism, revision, and reading in current markets with the goal of producing publishable work. No student may earn credit for both 4923 and 5923. (Irreg.)
ENGL	5933	Advanced Poetry Writing	(Slashlisted with 4933) Prerequisite: graduate standing, six hours of creative writing, application and departmental permission. May be repeated; maximum credit six hours. Intensive writing, peer criticism, revision, and reading in current markets with the goal of producing publishable work. No student may earn credit for both 4933 and 5933. (Irreg.)

ENGL	5943	Advanced Creative Nonfiction Writing	(Slashlisted with 4943) Prerequisite: graduate standing, six hours of 2000-3000-level writing courses, application and departmental permissions. May be repeated; maximum credit six hours. Intensive writing, peer criticism, revision, and reading in current markets with the goal of producing publishable creative nonfiction. No student may earn credit for both 4943 and 5943. (Irreg.)
ENGL	5960	Directed Readings in Research	1 to 4 hours. Prerequisite: graduate standing and permission of department. May be repeated with change of content; M.A. thesis option maximum credit three hours; M.A. non-thesis option maximum credit six hours; Ph.D. maximum credit nine hours. An individual course, which may not duplicate regular course offerings, of intensive research. Area and problem to be determined by student and directing professor. (Irreg.)
ENGL	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing and permission of department. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ENGL	5980	Research for Master's Thesis	Prerequisite: Graduate standing and permission of department. 2 to 9 hours. Variable enrollment; maximum credit applicable toward degree, six hours. (F, Sp, Su)
ENGL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ENGL	6013	Research Seminars in Composition, Rhetoric or Literacy	Prerequisite: graduate standing and permission of department. Topics vary. Issues of the historical/philosophical in composition and rhetorical studies; issues of empirical research in composition/rhetorical studies; issues of literacy in composition/rhetorical studies. (Irreg.)
ENGL	6103	Research Methods in Composition	Prerequisite: by permission. Topics vary. A survey of the literature in composition research from 1900 to the present; directed research of an empirical, historical or theoretical nature. (Irreg.)
ENGL	6113	Issues in Contemporary Theory and Cultural Studies	Prerequisite: graduate standing and permission of department. Explores issues in theory and cultural studies during recent decades, focusing on influential figures, major texts, innovative schools and movements, and new problems in the field. (Irreg.)
ENGL	6213	Research Seminar on Women Writers	Prerequisite: permission of instructor. May be repeated twice with change of content; maximum credit nine hours. Detailed research on women writers and the contexts in which they write, as well as criticism and theory. (Irreg.)
ENGL	6523	Seminar in the Renaissance	Prerequisite: graduate standing and permission of department. May be repeated once with change of subject matter; maximum credit six hours. Closely studies texts (e.g. More, Campion, Shakespeare, Milton) and topics (e.g. the Baroque, Colonialism, rhetoric) in English literature, 1485-1700. (Irreg.)
ENGL	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ENGL	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ENGL	6980	Research for Doctoral Dissertation	(F, Sp, Su)
ENGL	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

ENGR 1410	Freshman Engineering Orientation	Prerequisite: declared major in engineering. All entering freshmen with a declared engineering major are required to enroll. One hour of this seminar a week is in a large group setting where all students meet and cover details on all engineering disciplines. Additional topics would be continuums of majors, success in the College of Engineering, success at the University of Oklahoma, study abroad programs, advising issues, graduate school opportunities, career planning, and information related to technical/honor societies and participation. A second hour a week is a required small group session with an upper-class mentor from the College of Engineering Dean's Leadership Council. This second hour will focus on basic enrollment and retention strategies such as adding and dropping classes and choosing electives in addition to a weekly topic area. (F)
ENGR 1411	Freshman Engineering Experience	Prerequisite: declared major in Engineering or permission of instructor. Required of all entering freshmen with a declared Engineering major. Lecture hours cover a variety of topics including: majors and minors; career planning; advising; and extra-curricular activities. Students also work on multi-disciplinary engineering projects in smaller groups during the lab hour. (F)
ENGR 1420	Freshman Engineering Orientation II	Prerequisite: declared major in engineering. All entering freshmen with a declared engineering major are required to enroll in this spring continuation course. One hour of this seminar a week is in a large group setting where all students meet and cover details on all engineering disciplines. Additional topics would be continuums of majors, success in the College of Engineering, success at the University of Oklahoma, study abroad programs, advising issues, graduate school opportunities, career planning, and information related to technical/honor societies and participation. A second hour a week is a required small group session with an upper-class mentor from the College of Engineering Dean's Leadership Council. This second hour will focus on basic enrollment and retention strategies such as adding and dropping classes and choosing electives in addition to a weekly topic area. (Sp)
ENGR 1510	Selected Topics	0 to 3 hours. Selected topics on current or special topics relating to engineering to be structured for students in engineering and other areas. (F, Sp, Su)
ENGR 1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ENGR 2002	Professional Development	Prerequisite: sophomore standing. Develop an understanding of engineering ethics, teamwork, leadership, and professional responsibility through the concepts of contemporary, social, and global issues. (F, Sp)
ENGR 2003	Engineering Practice I	Prerequisite: English 1213 and ENGR 1410, 1420 or ENGR 3410. Introduction to basic principles of successful engineering enterprise. (F, Sp)
ENGR 2113	Rigid Body Mechanics	Prerequisite: 1112, Physics 2514 and Mathematics 2433 or concurrent enrollment in 2433. Vector representation of forces and moments; general three-dimensional theorems of statics; free bodies; two- and three-dimensional statically determinate frames; centroids and moments of inertia of areas. Absolute motion of a particle; motion of rigid bodies; rotating axes and the Coriolis component of acceleration; Newton's laws applied to translating and rotating rigid bodies; principles of work and energy and impulse and momentum in translation and rotation; moments of inertia of masses. (F, Sp)
ENGR 2153	Strength of Materials	Prerequisite: 2113. Elementary elasticity and Hooke's law; Poisson's ratio; solution of elementary one- and two-dimensional statically indeterminate problems; stresses and strains due to temperature changes; stresses induced by direct loading, bending and shear; deflection of beams; area-moment and moment distribution; combined stresses; structural members of two materials; columns. (F, Sp)

ENGR 2213	Thermodynamics	Prerequisite: 1112, Mathematics 2433 and Physics 2524 or concurrent enrollment. First and second laws of thermodynamics are developed and applied to the solution of problems from a variety of engineering fields. Extensive use is made of partial differential calculus to interrelate the thermodynamic functions. (F, Sp, Su)
ENGR 2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, C S, ECE, EPHY, G E, I E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
ENGR 2313	Structure and Properties of Materials	Prerequisite: 1112, Chemistry 1315 and concurrent enrollment in Physics 2524. The behavior of materials under various conditions and environments is correlated to atomic and molecular structure and bonding. (F, Sp)
ENGR 2411	Applied Engineering Statics	Prerequisites: Physics 2514 and Mathematics 2433 or concurrent enrollment in Mathematics 2433. Review of fundamentals of statics calculations and their applications to common engineering situations. (Sp)
ENGR 2421	Dynamics	Prerequisite: PHYS 2514 and MATH 2433 or 2934 or concurrent enrollment in MATH 2433 or 2934. Introduction to basic principles of engineering computing. Topics include kinematics (rectilinear motion, angular motion, curvilinear motion and rigid body motion), kinetics, work and energy, and impulse and momentum. (Sp)
ENGR 2431	Electrical Circuits	Prerequisite: MATH 2423 or 2924; and PHYS 2524 or concurrent enrollment. Introduction to basic principles of electrical circuits. Topics include DC circuits analysis, DC transients, static electrical fields, static magnetic fields, capacitors, inductors, and filters. (F, Sp)
ENGR 2441	Structures	Prerequisites: Chemistry 1315 and concurrent enrollment in Physics 2524. Introduction to basic principles of engineering structures. Topics include equilibrium phase diagrams, atomic bonding and solid types, electronic structure of atoms, ionic bonding, covalent bonding, metallic bonding, electrical properties (insulators, conductors, energy band, semiconductors), crystalline state and crystallography (unit cell and lattice parameters, seven crystal systems, bravais lattice and atom positions, simple cubic lattice, body centered cubic lattice (BCC), face centered cubic lattice (FCC), hexagonal close packed lattice (HCP), Miller indices of planes and directions, primitive cell, number of atoms per unit cell, interplaner spacing DHKL, close pacing of atoms and packing factor, x-ray crystallography), atomic mobility, solid state diffusion and atomic scale defects. (Sp)
ENGR 2451	Strengths	Prerequisite: 2411. Introduction to basic principles of engineering strengths. Topics include mechanical properties of metals and alloys (nature of plastic flow, compressive strength, hardness of materials, fatigue test, toughness and impact testing, creep at high temperature, sound velocity in solids and damping capacity, metallurgical variables in material response to stresses), stress and strain, elastic behavior, torsion, beam theory, combined stress, and composite bars and beams, columns. (Sp)
ENGR 2461	Thermodynamics	Prerequisite: MATH 2433 or 2934; and PHYS 2524 or concurrent enrollment. Introduction to basic principles of thermodynamics. Topics include density, pressure, and temperature, the first law of thermodynamics for a system, the first law of thermodynamics for a control volume, the second law of thermodynamics, and psychometrics. (F)

ENGR 2471	Engineering Ethics	Introduction to basic principles of engineering ethics. Topics include the nature of ethics (the subject matter, normative ethics, conflicts in ethics, descriptive ethics), the nature of engineering ethics, and the issues and topics of engineering ethics (the preamble, the engineer's obligation to society, the engineer's obligation to employers and clients, the engineer's obligations to other engineers). (Sp)
ENGR 2531	Electrical Circuits II	Prerequisite: ENGR 2431. Introduction to intermediate principles of electrical circuits. Topics include amplifiers, filters, signal conditioning, A/D and D/A conversion, and common digital and analog circuits. (Sp)
ENGR 2613	Electrical Science	Prerequisite: ENGR 1410, ENGR 1411, ENGR 3410, or ENGR 3511; and MATH 2423 or MATH 2924; PHYS 2524 or concurrent enrollment. Formulation and solution of circuit equations, network theorems, sinusoidal steady-state analysis, simple transients. (F, Sp, Su)
ENGR 3223	Fluid Mechanics	Prerequisite: ENGR 2213, MATH 2433 or 2934; concurrent enrollment in ENGR 2113 and MATH 3113. Coverage of the fundamentals of fluid statics and dynamics. Formulation of the equation of fluid flow, i.e., Navier-Stokes Equations, Eulers Equations, Bernoulli Equations, etc. and their application. Examples of ideal fluid flow and viscous fluid flow, such as flow in open and closed conduits. (F, Sp, Su)
ENGR 3401	Engineering Economics	Prerequisite: MATH 1823 or 1914. Introduction to basic principles of engineering economics. Topics include value and interest, cash flow diagrams, cash flow patterns, equivalence of cash flow patterns, unusual cash flows and interest periods, evaluating alternatives (annual equivalent cost comparisons, present equivalent cost comparisons, incremental approach, rate of return comparisons, benefit/cost comparisons, MARR, replacement problems, always ignore the past, break-even analysis), income tax and depreciation, and inflation. (F)
ENGR 3410	Engineering Orientation for Transfer Students	Prerequisite: transfer students majoring in Civil Engineering, Environmental Science, Environmental Engineering, or Architectural Engineering majors. Sophomore standing or above. Required orientation course for majors in the School of Civil Engineering and Environmental Science. The lecture hours cover a variety of topics including: major and minors; career planning; advising; and extra-curricular activities. Students also work on multidisciplinary engineering projects. To be taken during the first semester of enrollment in the College of Engineering at OU. (F, Sp)
ENGR 3411	Numerical Methods	Prerequisites: approved Computer Science course (CS, 1313, 1323) and Mathematics 3113. Introduction to basic principles of engineering economics. Topics include roots of non-linear equations, simultaneous linear equations, least squares curve fits, numerical integration, numerical solution to ordinary differential equations. Methods covered: bisection and Newton's method; Gauss-Jordan elimination; polynomial lest squares fits; trapezoid rule and Simpson's rule; Euler's method and 4th order Runge Kutta method. (Sp)
ENGR 3421	Engineering Statistics	Prerequisite: Mathematics 2433. Introduction to basic principles of engineering statistics. Topics include combinations and permutations, sample statistics, population models - probability distributions, estimation and hypothesis testing. (F)
ENGR 3431	Electromechanical Systems	Prerequisite: ENGR 2431. Introduction to basic principles of electromechanical systems. Topics include physical principles of sensing and actuation, types of sensors and actuators, and interfacing and communication protocols. (F, Sp)

ENGR 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ENGR 3441	Fluid Mechanics	Prerequisite: Mathematics 2433. Introduction to basic principles of fluid mechanics. Topics include fluid properties, fluid statics, dimensionless parameters and similitude, control volume equations, open channel flow, and external flow. (F)
ENGR 3510	Selected Topics	0 to 3 hours. Prerequisite: upper-division standing. Selected topics on current or special topics relating to the field of engineering. (F, Sp, Su)
ENGR 3511	Engineering Orientation Experience for Transfer Students	Prerequisite: sophomore standing. Required of all incoming transfer students with a declared major in Engineering. The lecture hours cover a variety of topics including: majors and minors; career planning; advising; and extra-curricular activities. Students also meet with mentors and work on multidisciplinary engineering projects. Also open to students with an interest in engineering. (F, Sp)
ENGR 3723	Numerical Methods for Engineering Computation	Prerequisite: 1112, 1001 or Computer Science 1313 or 1323, and Mathematics 3113. Basic methods for obtaining numerical solutions with a digital computer. Included are methods for the solution of algebraic and transcendental equations, simultaneous linear equations, ordinary and partial differential equations, and curve fitting techniques. The methods are compared with respect to computational efficiency and accuracy. (F, Sp, Su)
ENGR 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
ENGR 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ENGR 4003	Engineering Practice	Prerequisites: ENGR 2002 or 2003, junior or senior standing, and permission of the instructor. Focuses on real world application of the skills taught in major courses and the core course, professional development. Allows a student to earn credit toward degree requirements through the completion of an intense internship experience. A written report detailing the responsibilities and results of the experience is required upon completion along with an oral presentation. Other service experience learning may qualify. (F, Su)
ENGR 4013	Leadership and Management for Engineers	Prerequisites: junior, senior, graduate standing or instructor permission. This course will help prepare students for leadership and management positions in a global culture. The course emphasizes team building attributes in a multi-cultural organization, how to build commitment among team members, and how to organize to compete in the global marketplace. Students will gain a better understanding of themselves and their personal and professional goals. (F, Sp)
ENGR 4023	Disruptive and Innovative Technology Ideation	Prerequisites: sophomore standing, at least one semester of calculus, a working knowledge of basic statistics, and departmental permission. Ideation is the process of conceiving or forming ideas. In the context of this class, the process of ideation will be investigated with regard to both disruptive and innovative commercial technologies. (F, Su)

ENGR 4113	Science, Engineering, and Mathematics Educational Outreach for STEM Majors	Prerequisite: junior or senior standing and permission of instructor. Designed for STEM majors interested in educational outreach at any age level, this course introduces the fundamentals of cognition, educational psychology and pedagogy, and shows how these topics relate to learning. Critical review and analysis of STEM education in light of best teaching practices, school cultural issues, gender issues, and ethnic cultural issues will be explored. Authentic, inquiry-based STEM lessons will be developed and taught in K-12 classrooms or similar education venues. Field site observations and interactions with educational professionals will be used to emphasize practical application of learning theory. No student may earn credit for both 4113 and 5113. (F)
ENGR 4223	Fundamentals of Engineering Economy	Prerequisite: permission. Introduction to concepts of economic analysis to optimize benefits utilizing multivariant, multistaged mathematical models. Topics include cost and worth comparison, capital costs and sources, time value of money, replacement economics, taxes, economic efficiency of alternate designs, minimum costs and maximum benefits, risk and uncertainty, and economics of work schedules. (Sp, Su)
ENGR 4510	Selected Topics	1 to 6 hours. Prerequisite: upper-division or graduate standing. Selected topics on current or special topics relating to engineering. May be structured for students in other areas. (Sp)
ENGR 4513	Introduction to Sustainable Engineering	Prerequisite: upper-division or graduate standing in the College of Engineering or permission of the instructor. An introduction to the concepts of sustainable development, sustainable engineering, global resource reserves, and global environmental concerns. The main focus of the class will be application of life cycle assessment to minimize the adverse environmental impacts of products (e.g., a pencil) or processes (e.g., wastewater treatment). Tools for life cycle assessment will include public domain software and SimaPro. (Sp)
ENGR 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ENGR 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ENGR 4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ENGR 5113	Science, Engineering and Mathematics Educational Outreach for STEM Majors	Prerequisite: graduate standing and permission of instructor. Designed for STEM majors interested in educational outreach at any age level, this course introduces the fundamentals of cognition, educational psychology and pedagogy, and shows how these topics relate to learning. Critical review and analysis of STEM education in light of best teaching practices, school cultural issues, gender issues, and ethnic cultural issues will be explored. Authentic, inquiry-based STEM lessons will be developed and taught in K-12 classrooms or similar education venues. Field site observations and interactions with educational professionals will be used to emphasize practical application of learning theory. No student may earn credit for both 4113 and 5113. (F)
ENGR 5120	Engineering Education Enquiry	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Seminar course covering topics in engineering education research. (Irreg.)

ENGR	5900	Engineering Professional Practice	1-6 hours. Prerequisite: Graduate standing and departmental permission. May be repeated; maximum credit six hours. Participation in a professional experience with an approved project sponsor and topic. A written report detailing the responsibilities and results of the experience is required upon completion along with an oral presentation. (F, Sp, Su)
ENGR	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ENGR	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ENGR	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
ENGR	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ENGR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ENGR	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
ENGR	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ENGR	6980	Research for Doctoral Dissertation	(F, Sp, Su)
ENGR	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ENT	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
ENT	3003	Introduction to Entrepreneurship	Prerequisite: Student must be approved for degree candidacy by Price College. The course focuses on the early development of independent ventures as well as those within established organizations. Individual and organizational level issues will be addressed. Entrepreneurial thinking will explore the thought processes that challenge existing norms and pave the way for novel solutions to problems in any field. The venture life-cycle of - opportunity - launch - growth - harvest is highlighted. The course will also address start-up team issues, legal issues with new firms and innovations and organizational form. Not for entrepreneurship major credit. (Irreg.)
ENT	3103	Entrepreneurial Field Studies	Prerequisite: student must be approved for degree candidacy by Price College, 3113 or concurrent enrollment. A practicum course that provides students with opportunities to apply concepts mastered in previous business courses. Students work with entrepreneurs to develop comprehensive business plans for new ventures or to assist business persons with problems related to market research, financial management, managerial issues, and other business requirements such as planning expansion or new product development. (F, Sp)

ENT	3113	New Venture Development I	Prerequisite: Student must be approved for degree candidacy by Price College, Entrepreneurship majors and minors or permission. Focuses on developing a better understanding of the nature of entrepreneurial opportunities and how these opportunities relate to the external environment and to students' entrepreneurial careers. Topics in this course include understanding the opportunity environment, determining the feasibility of an opportunity, preparing for the launch, growth and harvesting of an entrepreneurial venture and planning for a career in entrepreneurship. The mastery of concepts covered in this course provides a foundation for the business-plan capstone course and represents an early step in the starting and managing of an entrepreneurial venture following graduation from OU. (F, Sp)
ENT	3193	Social Entrepreneurship	Prerequisite: ENT 3113 or permission. Introduces students to social entrepreneurship and practices associated with starting and growing mission-driven ventures. Social ventures aim to achieve a double or even triple bottom line with meaningful social and/or environmental returns, as well as sustainable financial returns through their products, services or other business practices. Focus will be on for-profit ventures. (F)
ENT	3203	Entrepreneurial Process	Prerequisite: student must be approved for degree candidacy by Price College. Course focuses on the early development of independent ventures as well as those within established organizations. Individual and organizational level issues will be addressed. Entrepreneurial thinking will explore the thought processes that challenge existing norms and pave the way for novel solutions to problems in any field. The venture life-cycle of opportunity, launch, growth, and harvest is highlighted. The course will also address start-up team issues, legal issues with new firms and innovations, and organizational form. Concepts are illustrated through field and case studies and guest speakers. (Sp)
ENT	3303	Entrepreneurship Practicum	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level Business core courses. Provides an opportunity tor entrepreneurship students to learn the strategies of start-ups and venture capital. An approved practicum experience with new and expansion phase business and venture capital firms provided. The intent is to provide students with "hands-on" experiences with practicing entrepreneurs. (F, Sp, Su)
ENT	3413	New Product Development	Prerequisite: Student must be approved for degree candidacy by Price College; ENT 3113 or MKT 3053, MGT 3013, MKT 3013. Focuses on the development of ideas for new or established organizations, creating an environment conducive to innovation, recognizing business opportunities, assessing the market, customer and competitor situation. The development of these ideas leads to a feasibility analysis. Examines the development of a sales and distribution structure (including franchising, distributorship, and licensing and alliances), understanding segmentation, targeting, and niching. (Irreg.)
ENT	3423	International Entrepreneurship	Prerequisite: junior standing, and student must be approved for degree candidacy by Price College. Designed to emerge the student in the European Union consumer experience. A practicum course that provides students with opportunities to apply concepts mastered in previous business courses. The class materials are two major assignments, three cases, and a book. Materials will also be supplemented with corporate visits that reinforce the concepts from the in-class materials. The goal is to help students understand the customer experience. Solving a consumer pain and converting interest into a purchase are the foundation of a new venture. (Su)

ENT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ENT	3603	New Venture Development II	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level Business core courses, ENT 3113, and FIN 3513 or concurrent enrollment. Teaches student to conduct elaborate research relevant to the starting of a new venture. This includes thinking through and developing business concepts that can lead to a viable venture opportunity. Focus is on researching and assessing the market, industry and customer context of a potential venture. Course forms the foundation for writing a solid business plan. (F, Sp)
ENT	3613	Launching the New Venture	Prerequisite: student must be approved for degree candidacy by Price College. This class deals with the issues an entrepreneur might face during the launch phase of their new venture and/or new product. The case-based curriculum teaches students the critical questions that must be answered in order to turn products and ideas into sales and revenue. Issues to be covered are opportunity identification, manufacturing, pricing, market segmentation, advertising, promotions, public relations, branding, sales, negotiations, channels, service franchising, competition and strategy. (F, Sp)
ENT	3710	Topics in Entrepreneurship	1 to 3 hours. Prerequisite: student must be approved for degree candidacy in Price College of Business. May be repeated; maximum credit nine hours. Permits students to study topics in entrepreneurship not included in standard course offerings. Subject of course will vary. (F, Sp, Su)
ENT	3813	Entrepreneurial Law	Prerequisite: Students must be approved for degree candidacy by Price College, MGT 3013 & LS 3323 or concurrent enrollment. Designed to provide the would-be entrepreneur with a working knowledge of certain essential substantive areas of the law and the ability to work with and use lawyers effectively. The focus will be on the practical legal considerations in forming and sustaining an entrepreneurial enterprise, including entity organization, securities laws, employment benefits, operational liabilities, financing, mergers and acquisitions and intellectual property law. (Sp)
ENT	3880	Directed Reading	Prerequisite: Student must be approved for degree candidacy by Price College, permission. Directed readings and problems under staff supervision for advanced students. A comprehensive report and/or examination is required. (Irreg.)
ENT	3913	Entrepreneurial Growth Strategies	Prerequisite: student must be approved for degree candidacy by Price College, and MGT 3013 or concurrent enrollment. Focuses on growth processes and systems; attracting the right people; managing cash-flow; shareholder decision-making; financial and market-driven options for long-run competitiveness, organizational structures, and management team issues; strategic planning from a resource-based perspective; transition planning for the corporate entity, family dynamics and communication issues; and leadership empowerment. (F)
ENT	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
ENT	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)

ENT	3980	Honors Research	Prerequisite: Admission to Honors College, and 3113 or concurrent enrollment. May be repeated, maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (Irreg.)
ENT	3990	Independent Study	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level business core courses, ENT 3113 or concurrent enrollment. Provides an opportunity for the student to work at a special project in the student's field. (F, Sp, Su)
ENT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ENT	4103	Entrepreneurial Field Studies	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level Business core courses, 3113 or concurrent enrollment. A practicum course that provides student with opportunities to apply concepts mastered in previous business courses. Students work with entrepreneurs to develop comprehensive business plans for new ventures or to assist business persons with problems related to market research, financial management, managerial issues, and other business requirements such as planning expansion or new product development. (F, Sp)
ENT	4503	Center for the Creation of Economic Wealth Internship	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level business core courses, ENT 3113 or concurrent enrollment. CCEW provides OU with an enhanced mechanism to offer practical experience to promote the entrepreneurial spirit and assist in developing Oklahoma's economy. The Center for the Creation of Economic Wealth operates alongside the University's Office of Technology Development which is the primary source of the center's intellectual property. Through internship programs, CCEW participants engage in entrepreneurial outreach activities and the development of Actual start-up companies. (Sp, F)
ENT	4603	New Venture Development III	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level Business core courses, ENT 3113, ENT 3603, and FIN 3513. This is the capstone course of the entrepreneurship major. The focus is on designing and writing a business plan that can be presented to the OU business plan competition. (F, Sp)
ENT	4710	Topics in Entrepreneurship	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses, 3113 or concurrent enrollment. May be repeated with change of topic; maximum credit six hours. (F, Sp, Su)
ENT	4813	Entrepreneurial Law	Prerequisite: Students must be approved for degree candidacy by Price College, all 3000-level Business core courses. Designed to provide the would-be entrepreneur with a working knowledge of certain essential substantive areas of the law and the ability to work with and use lawyers effectively. The focus will be on the practical legal considerations in forming and sustaining an entrepreneurial enterprise, including entity organization, securities laws, employment benefits, operational liabilities, financing, mergers and acquisitions and intellectual property law. (Sp)
ENT	4823	Venture Capitalization	Prerequisite: student must be approved for degree candidacy by Price College, completion of 3000-level Business core, or permission. Covers various aspects of financing entrepreneurial ventures; from the initial fund raising effort to growth capital needs to harvesting or exiting the business. Topics include sources of capital needed to start or grow a business, including angel investors, venture capitalists, private equity providers, mezzanine financiers and commercial banks. Engage in various valuation concepts necessary when dealing with capital sources and particularly important when harvesting the business. Various means of harvest will be explored, including IPO, private sale and sale to a strategic buyer. (Sp)

ENT	4913	Growth Strategies for Small and Family Businesses	Prerequisite: Students must be approved for degree candidacy by Price College, all 3000-level Business core courses. Growth strategies for small and family businesses will focus on a number of issues that must be addressed as a small company seeks growth. Focuses on growth processes and systems; attracting the right people; managing cash-flow; shareholder decision-making; financial and market-driven options for long-run competitiveness, organizational structures, and management team issues; strategic planning from a resource-based perspective; transition planning for the corporate entity, family dynamics and communication issues; and leadership empowerment. Presents both a theoretical framework for understanding and a practice perspective on working for or consulting to small/family firms and/or working as a family member in the small/family business. (F, Sp)
ENT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ENT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ENT	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ENT	5902	The Entrepreneurial Process	Prerequisite: graduate standing and Management 5702. The entrepreneurial process course rigorously explores the four distinct phases of an entrepreneurial business-opportunity identification; gathering the resources and launch; managing entrepreneurial growth; and harvesting the rewards-with a special emphasis on ethics, morality and life planning skills. The entrepreneurial process is a course designed for students who are committed to: Learning the practical skills, habits, and judgment required to make money; learning to ask the right questions, analyze the right numbers and clearly defend their ideas; learning how to live a "Life of Meaning" so they can make a difference in the world. (Irreg.)
ENT	5912	Capitalizing the New Venture	Prerequisite: graduate standing in Business. This course will cover various aspects of financing entrepreneurial ventures. Topics will include methods of financing, financials, techniques for valuing new businesses and financial structure. Funding sources examined will include commercial banks, small business investment companies SBIC, Business Angels, IPO, Series A & B & C financing, acquisitions, LBO, and venture capital companies. These processes are often referred to as sourcing, diligence and valuation. Concepts are illustrated through Harvard Business School, Babson College, and Stanford Cases, supplemented by notes and readings. (Irreg.)
ENT	5922	Entrepreneurial Intellectual Property	Prerequisite: graduate standing and 5912. A practicum course that provides students with opportunities to apply concepts mastered in previous business courses. The University of Oklahoma is a leading research institution. Many of the patented ideas/technology that come from engineering, chemistry, biology, the Health Sciences Center, etc. need analysis. What is the technology application? Is it enough for a business, a product line, or an add-on to an existing product? The student will answer those questions. (Irreg.)

ENT	5931	Strategic Venture Development I	Prerequisite: Graduate standing the Price College. Entrepreneurship is about the identification and enactment of entrepreneurial opportunities. This class is about learning how to pursue entrepreneurial opportunity, particularly as it relates to starting a new venture. Thus, this course focuses on the development of entrepreneurial opportunities and determining the feasibility of these opportunities in today's business environment. The mastery of concepts covered in this course will lead to an initial evaluation of new venture ideas and provide a foundation for subsequent courses in the major. This course represents an early step in preparing students to start and manage an entrepreneurial venture. (F)
ENT	5932	Strategic Venture Development II	Prerequisite: graduate standing and 5931. This course is designed to teach the student to think, evaluate and prepare a written business plan for a entrepreneurial venture. The entrepreneurial process of developing and launching an entrepreneurial venture is one of the most exciting activities undertaken in business. Creating a business plan can be exhilarating, challenging, and at times frustrating. This course will help students develop a comprehensive strategy and plan for launching and growing a new business. (Irreg.)
ENT	5934	Strategic Venture Development	Prerequisite: graduate standing in Price College of Business. Entrepreneurship is about the identification and enactment of entrepreneurial opportunities. This class is about evaluation of technology and commercialization, opportunity feasibility analysis, initial industry and market analysis, designing and writing a quality business plan, full industry and market analysis, development of sales and distribution structures, resources and financial capital requirements, selling a venture concept to potential investors, oral presentation skills, and compete in business plan competitions. (Irreg.)
ENT	5941	Early Stage Venture Investing and Management I	Prerequisites: graduate standing, majors only, department/instructor permission. Combined classroom and experiential course. Through rigorous classroom lecture and case study, students will learn not only the history and current status of the venture capital industry, but also the process by which investments are made. This process includes not only deal identification and due diligence, but also negotiation, execution and management. (Sp)
ENT	5942	Launching the New Venture	Prerequisite: graduate standing in Business. This class deals with the issues entrepreneurs might face during the launch phase of their new venture and/or new product. The case-based curriculum teaches students the critical questions that must be answered in order to turn products and ideas into sales and revenue. Issues to be covered are opportunity identification, manufacturing, pricing, market segmentation, advertising, promotions, public relations, branding, sales, negotiations, channels, service, franchising, competition, and strategy. (Irreg.)
ENT	5951	Early Stage Venture Investing and Management II	Prerequisites: graduate standing, majors only, department permission, ENT 5941. Continuation of ENT 5941. Students will continue to learn about the history and current status of the venture capital industry, and the process by which investments are made. This course will utilize lectures and case studies. (F)

ENT	5952	Entrepreneurial Opportunity Recognition	Prerequisite: graduate standing. This course focuses on the identification of a market need (customer pain) and the process entrepreneurs can use to determine if there is a potential solution (product or service) that could meet that customer need. Students will study the four elements that create a potentially viable business opportunity, evaluate case studies based on business plans created by other students and entrepreneurs for new ventures, and work in small teams to identify and present a new venture idea. The mastery of concepts covered in this course provides a good foundation for subsequent courses. This course also represents an early step in preparing students to consider starting and managing a new business venture. The course is relevant for those who want to become corporate innovators or entrepreneurs, those who want to help an existing firm (small or large) develop innovative new products or services, or those who want to go into a business servicing entrepreneurial venture such as a bank or accounting firm. (Irreg.)
ENT	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ENT	5962	Foundations in Social Entrepreneurship	Prerequisites: MBA students only. This course introduces students to social entrepreneurship, characteristics of social entrepreneurs and some of the practices associated with starting and growing mission-driven ventures. Social entrepreneurial ventures aim to achieve a double or even triple bottom line with meaningful social and/or environmental returns as well as sustainable financial returns through products, services or other business practices. Solutions to education, health care, the environment, workforce development, international development, and other large societal issues that have traditionally been addressed through non-profit organizations or government initiatives are now being addressed through social entrepreneurial ventures. The focus in this course will be on for-profit ventures. (Irreg)
ENT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ENT	5972	Entrepreneurial Innovation	Prerequisite: graduate standing, majors only. Designed to teach students how to innovate in high velocity environments, using projects in conjunction with texts and case studies. Students will develop skill sets designed to frame opportunities, validate the customer value proposition, develop go-to-market strategies, and develop a business model. (Sp)
ENT	5982	Entrepreneurial Strategies	Prerequisites: graduate standing, majors only. An entrepreneurial case study based on a world class company's entrepreneurial journey, cultural transformation, and unique implementation of alternative leadership paradigms. The course will challenge many current business practices and help students develop frameworks for entrepreneurial strategies. (Sp)
ENT	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ENT	5992	Entrepreneurial Growth Strategies	Prerequisites: graduate standing, majors only. Focuses on growth processes and systems, attracting the right people, managing cash-flow, shareholder decision-making; financial and market-driven options for long-run competitiveness, organizational structures, and management team issues; strategic planning from a resource-based perspective; transition planning for the corporate entity, family dynamics and communication issues; and leadership empowerment. (F)
ENT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

EPHY	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EPHY	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, C S, ECE, ENGR, G E, I E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
EPHY	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EPHY	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Cover materials not usually presented in the regular courses. (F, Sp, Su)
EPHY	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in the student's field. (F, Sp, Su)
EPHY	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
EPHY	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EPHY	4232	Laboratory Glassblowing	(Crosslisted with CHEM 4232) Prerequisite: permission. Discussion of materials and techniques with demonstrations of procedures. Exercises will be performed in the laboratory with special emphasis upon the different types of seals required in the construction of glass apparatus. One hour of lecture and three hours of laboratory will be scheduled each week. Laboratory (F, Sp)
EPHY	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
EPHY	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EPHY	4990	Special Studies	1 to 3 hours. Prerequisite: Physics 2424 or 2524, integral calculus, permission. May be repeated with change of subject matter; maximum credit six hours. (F, Sp, Su)
EPHY	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
EPHY	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
EPHY	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

EPHY	5990	Special Problems	Prerequisite: permission. May be repeated with change of subject matter; maximum credit four hours for the master's degree, or 10 hours for the doctoral degree. (F, Sp, Su)
EPHY	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
EPHY	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
EPHY	6980	Research for Doctoral Dissertation	(F, Sp, Su)
EPHY	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
EUPH	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EUPH	2000	Freshman and/or Sophomore Secondary Euphonium	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
EUPH	2020	Euphonium for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
EUPH	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EUPH	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
EUPH	4000	Junior and/or Senior Secondary Euphonium	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
EUPH	4020	Euphonium for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
EUPH	5000	Master's-Level Secondary Euphonium	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
EUPH	5010	Master's-Level Euphonium for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
EUPH	5020	Master's-Level Euphonium for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
EUPH	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

EUPH	6000	Doctoral Secondary Euphonium	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
EUPH	6010	Doctoral Euphonium for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
EUPH	6020	Doctoral Euphonium for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
EXPO	1113	Principles of Expository Writing	Prerequisite: ACT English 19 or ACT English (CICS) 19 or Undergraduate level ENGL 0113 Minimum Grade of D or Compass English 085 or Compass Writing Placement C or SAT Verbal 450 or SAT Verbal (CICS) 450. An introduction to the basic genres and methodologies of academic writing, with an emphasis on argumentation and audience analysis. (F, Sp) [I-ENGL].
EXPO	1213	Expository Writing	Prerequisite: ENGL 1113 or equivalent or faculty permission. Students will study and practice the craft of writing through four series of sequenced writing assignments that are attuned to selected readings in the topic around which the course is organized. (Each section explores a particular topic area). Entering freshmen who have been exempted from the requirement of a 1200-level writing course may sign up for EXPO 1223, which signifies that the student will receive lower division western civilization and culture credit. (F, Sp) [I-ENGL]
EXPO	1223	Expository Writing	Prerequisite: ENGL 1113 or equivalent or faculty permission. Students will study and practice the craft of writing through four series of sequenced writing assignments that are attuned to selected readings in the topic around which the course is organized. (Each section explores a particular topic area). This course is for entering freshmen who have been exempted from the requirement of a 1200-level writing course. This course code signifies that the student will receive lower division western civilization and culture credit. (F, Sp) [IV-WC]
EXPO	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
EXPO	3103	Advanced Expository Writing	Prerequisite: ENGL or EXPO 1213 and sophomore standing. May be repeated with change of content; maximum credit six hours. Students will learn academic and professional writing techniques such as advanced research methodologies, multimedia/multimodal writing, collaborative writing, writing for the web, and practice in various academic and professional genres. All readings and assignments will be organized around a central theme determined by the instructor. (Irreg.)
EXPO	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
EXPO	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

EXPO	4980	Independent Research	1 to 3 hours. Prerequisite: ENGL 1213, sophomore standing, and permission of department. May be repeated with change of content; maximum credit six hours. An upper-division course used by students to complete independent research projects of their own design under the guidance of Expository Writing faculty. (F, Sp)
EXPO	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
F A	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
F A	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program, junior or senior standing. May be repeated with change of subject; maximum credit six hours. The projects covered will vary. The content will deal with concepts not usually presented in regular coursework. (Irreg.)
F A	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
F A	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
F A	4970	Fine Arts Seminar	(Slashlisted with 5970) 1 to 2 hours. Prerequisite: junior standing or permission of instructor. May be repeated; maximum credit eight hours. Content varies. Interdisciplinary seminar course for Fine Arts. Deals with concepts not usually presented in regular coursework and/or special creative situations, performance opportunities or projects. No student may earn credit for the same topic for both 4970 and 5970. (Irreg.)
F A	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
F A	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
F A	5970	Fine Arts Seminar	(Slashlisted with 4970) 1 to 2 hours. Prerequisite: graduate standing. May be repeated; maximum credit eight hours. Content varies. Interdisciplinary seminar course for Fine Arts. Deals with concepts not usually presented in regular coursework and/or special creative situations, performance opportunities or projects. No student may earn credit for the same topic for both 4970 and 5970. (Irreg.)
F A	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
FIN	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.
FIN	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

FIN	3133	International Financial Management for Non-Majors	Prerequisite: Student must be approved for degree candidacy by Price College, 3303. This class will study the fundamentals of international finance including the international monetary system, the balance of payments, and the market for foreign exchange. The course examines international financial markets, and the opportunities they provide for investment and risk management. The financial instruments used for these purposes will also be emphasized including currency options, forwards, futures, and swaps as well as bonds and equities. This class is strictly for non finance majors. (F, Sp)
FIN	3303	Business Finance	Prerequisite: Accounting 2113, 2123, and Economics 1113, 1123 and 2843. An introductory course in financial administration of the firm. Topics include the finance function, concepts of sources and uses of funds, analysis and estimation of need for funds (short- and long-term), short-term sources, working capital management policy, long-term sources, capital structure policy and implementation, capital budgeting and the cost of capital. (F, Sp, Su)
FIN	3403	Financial Intermediaries and Markets	Prerequisite: Economics 1113 and 1123. Investigates the determination of the level of domestic rates of interest and their implications for international currency markets. Describes the important financial institutions in U.S. financial markets. Details the structure of interest rates. Analyzes the behavior of fixed income prices. Discusses techniques of domestic and international institutions to immunize portfolios. (F, Sp, Su)
FIN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
FIN	3503	Investments	Prerequisite: Student must be approved for Degree Candidacy by Price College, FIN 3303; graduate students: permission of CBA Graduate Programs. Topics covered include the structure and operation of securities markets, introduction to portfolio management and capital market theory, the valuation of common stocks and fundamental analysis, determinants of option prices, the determinants of future prices, portfolio performance measurement and risk management, international portfolio management and international investing. Computer exercises are required. (F, Sp)
FIN	3513	Entrepreneurial Finance	Prerequisite: student must be approved for degree candidacy by Price College, ENT 3113 or concurrent enrollment, FIN 3303 or concurrent enrollment. Not open to Finance majors. Covers various aspects of financing entrepreneurial ventures. Topics will include methods of financing, techniques for valuing new businesses and financial structure. Funding sources examined will include commercial banks, small business investment companies, SBIC, business angles and venture capital companies. These processes are often referred to as sourcing, diligence and valuation. (Irreg.)
FIN	3603	Advanced Corporate Finance	Prerequisite: student must be approved for degree candidacy by Price College and FIN 3303. Development of theory and applications of financial management of the firm with both domestic and international investment decisions, structure and cost of capital, working capital management, dividend policy, long term financial planning and forecasting. The course emphasizes the development of problem solving skills and the use of computerized financial modeling. (F, Sp)
FIN	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program and approval for Degree Candidacy by Price College. May be repeated; maximum credit three hours. Provides an opportunity for the gifted Honors candidate to study materials not usually presented in regular courses. (F, Sp, Su)

FIN	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
FIN	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program; junior standing. May be repeated; maximum credit six hours. Independent research on special projects. (F, Sp, Su)
FIN	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
FIN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
FIN	4113	Derivative Securities and Markets	(Slashlisted with 5113) Prerequisite: FIN 3103 or FIN 4103, completion of 3000-level business core. Uses of futures, option, and swap contracts in investments, banking, business finance, and foreign trade. Topics include valuation, trading mechanics and strategies, and applications. Hedging foreign currencies is included. The course is math and computer intensive. No student may earn credit for both 4113 and 5113. (F, Sp)
FIN	4133	International Financial Management	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses, 3103. Provides the student with the analytical tools needed to evaluate and provide solutions for problems that are commonly encountered in international financial management. Emphasizes basic theoretical models of exchange rate determination and hedging exchange rate risk, international financial transactions, the link between a nation's macroeconomic accounts and its balance of payments accounts, privatization of state-owned enterprises, and international banking. (Irreg.)
FIN	4403	Advanced Topics in Investments	Prerequisite: student must be approved for degree candidacy by Price College, FIN 3103, and all 3000-level business core courses. An advanced course providing in-depth analysis of portfolio management and strategic asset allocation; fund performance measurement; coverage of alternative investments (such as real estate, private equity and venture capital); analyzes activities of hedge funds, closely-held companies and inactively traded securities; discusses investing in financially distressed firms; and covers investing in commodities. (F, Sp)
FIN	4413	Commercial Banking	Prerequisite: 3303 and 3403. Financial management of the banking firm including analysis of bank financial performance, bond portfolio analysis, interest rate risk management, capital management, cost of funds, and loan administration. Regulation of the banking system is discusses as is competition from foreign banks. A computerized bank simulation game is used and international aspects of financial markets are discussed. (F, Sp)
FIN	4513	Financial Risk Management	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level business core, and FIN 3103 or FIN 4103. Emphasizes financial and commodity derivative securities and their use as risk management tools. Emphasis on the commodity side is given to energy related products. A financial market simulator will be used to develop students' trading and valuation skills. (Sp)
FIN	4533	Corporate Risk Management	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level Business core courses, FIN 4113 and FIN 4513. The second course in the sequence of two courses. Builds on the content of Derivatives and Financial Risk Management to explore in-depth the areas of risk and credit derivatives, corporate hedging with derivatives, Enterprise Risk Management, risk monitoring and validation. Discusses hedge fund strategies and risk management issues for hedge funds and private equity. (F, Sp)

FIN	4543	Financial Trading Strategies	Prerequisite: FIN 3103; MGT 3013; MKT 3013; LS 3323; FIN 3303; senior standing. Focus is on practical application of theoretical models of pricing and valuation in finance. In addition to learning about trading in general (market structure, trading mechanics, and trading environment and regulation), students will also learn to trade based on their knowledge of various topics: asset allocation, equity valuation, mergers and acquisitions, fixed income valuation and risk, and derivative securities. While theoretical review of each topic will be done, an equal amount of time will be spent in the computer lab actually trading equities, bonds, and derivatives either to achieve an investment goal, or to make maximum profit, or to hedge risk, or to minimize trading costs. (F, Sp)
FIN	4613	Student Investment Fund	(Slashlisted with 5613) Prerequisite: completion of 3000-level Business core, FIN 3103. The management of a real dollar portfolio of common stocks using the value style approach. Emphasis is on the application of fundamental analysis. Frequent class presentations are required. No student may earn credit for both 4613 and 5613. (F, Sp)
FIN	4700	Internship in Finance	1 to 3 hours. Prerequisite: 3303 and permission of division. Academic projects in the business world applied to practical on-the-job situations. (F, Su)
FIN	4713	Fixed Income Securities and Markets	(Slashlisted with 5713) Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level business core, FIN 3103 and 3403. Students are involved in the management of a fixed income (bond) portfolio. Emphasis is given to the analytics of fixed income security valuation, and the analysis of investment opportunities. Frequent class presentations are required. No student may earn credit for both 4713 and 5713. (F)
FIN	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
FIN	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
FIN	4990	Special Studies	1 to 3 hours. Prerequisite: permission, three or more courses in finance as determined by the nature of the program of study selected. The only passing grade given is the neutral grade of S. (F, Sp, Su)
FIN	5103	Investments (Slashlisted with 4103)	Prerequisite: Permission (Director, CBA Graduate Programs). Topics covered include the structure and operation of securities markets, introduction to portfolio management and capital market theory, the valuation of common stocks and fundamental analysis, determinants of option prices, the determinants of future prices, portfolio performance measurement and risk management, international portfolio management and international investing. Computer exercises are required. (F, Sp)
FIN	5113	Derivative Securities and Markets	(Slashlisted with 4113) Prerequisite: 5043 or Business Administration 5283. Uses of futures, option, and swap contracts in investments, banking, business finance, and foreign trade. Topics include valuation, trading mechanics and strategies, and applications. Hedging foreign currencies is included. The course is math and computer intensive. No student may earn credit for both 4113 and 5113. (Sp)
FIN	5162	Energy Assets and Commodities: Financial Instruments, Pricing and Trading	Prerequisite: Graduate standing in Price College of Business and FIN 5322. Corequisite: B AD 5142. Provides a comprehensive and in-depth review of the market for energy assets and commodities: including trading platforms, pricing issues, forecasting, role and linkage with associated futures, forwards and options contracts, study of "basis" and spreads, and hedging strategies. The course will be anchored solidly within a theoretical conceptual framework and be supported with relevant case studies. (F)

FIN	5202	Energy Corporate Finance	Prerequisite: Graduate standing in Price College of Business, 5312 and 5322. Provides students specialized knowledge of the corporate finance of firms in the energy sector. Provides an integrated perspective on assessing and financing energy projects, corporate risk management in the energy industry, and issues pertaining to mergers, acquisitions and restructuring in energy firms. While the course will be rigorous and solidly grounded in theoretical concepts, it will provide a thoroughly applied perspective on topics covered by the use of case studies and other hands-on learning opportunities. (Irreg.)
FIN	5302	Financial Markets and Securities	Prerequisite: ACCT 5202 and graduate standing. The aim of this course is to provide a strong foundation for an understanding of financial markets and the main types of securities traded in these markets. The topics covered in the course include trading structure, present value calculations, risk and return, portfolio theory, asset pricing models, market efficiency and an introduction to the nature and valuation of equities, bonds, futures, and options. The course will strike a balance between the theoretical paradigms and the empirical literature, and the important links between theory and the real world. The emphasis will be both on principles and on problem solving. The lectures and examinations will focus both on quantitative and conceptual foundations. (Irreg.)
FIN	5303	Advanced Corporate Finance	Prerequisite: graduate standing and permission of department. Development of theory and applications of financial management of the firm with both domestic and international investment decisions, structure and cost of capital, working capital management, dividend policy, and long term financial planning and forecasting. The course emphasizes the development of problem-solving skills and the use of computerized financial modeling. No student may earn credit for both 4303 and 5303. (Irreg.)
FIN	5312	Corporate Finance	Prerequisite: graduate standing and 5302. This course aims to provide students with the basic analytical and conceptual skills required in the modern practice of corporate financial management. Students enrolled in this class will already have been exposed to the concepts of risk and return, the determination of financial security prices, and models useful in predicting the required returns demanded by investors. In addition, students enrolled in this class will already have been exposed to the fundamentals of financial statements and the analysis of such statements. The course will focus on three key areas of financial management: (1) the optimal allocation of capital; (2) the optimal choices for raising capital; (3) the optimal management of risk in conjunction with (1) and (2). The course includes application of finance theory to solving real business problems, and emphasizes the importance of technology and globalization to the modern practice of finance. (Irreg.)
FIN	5322	Derivative Securities and Markets	Prerequisite: graduate standing and 5302. Derivative securities, such as futures, forwards, option, and swaps are studied and analyzed along with their uses in investments, banking, portfolio management, and risk management by non-financial businesses. We will study how futures, swap, and option contracts are constructed, how they are valued and how they are used for speculation, hedging, and risk management. Particular attention is paid to energy derivatives and especially natural gas derivatives. (Irreg.)
FIN	5332	Risk Management and Financial Engineering	Prerequisite: graduate standing, FIN 5322. Sequel to 5322. Emphasis is on applications, risk measurement and management (including risk management using derivatives) and using option modeling in firm decision making. The four main topic areas (in order covered) are: (1) derivatives and financial engineering (continuation of 5322), (2) real options, (3) measuring and managing risk, and (4) examination of corporate failures attributable to derivatives. As in 5322, particular attention is paid to the energy industry and especially the natural gas industry. (Irreg.)

FIN	5342	Advanced Corporate Finance	Prerequisite: graduate standing and 5312. This course is intended for students aspiring to careers in financial management in corporations, banks and other financial institutions. It is designed to strengthen the corporate finance framework developed in 5312 (Corporate Finance) and extend it into the realm of real world applications. The course will cover a broad range of topics that are relevant to the corporate financial management function, including advanced capital project evaluation, financing, dividends and other corporate financial decisions, corporate risk management, and mergers, acquisitions and corporate restructuring. While the course will be rigorous and solidly grounded in the conceptual aspects of corporate finance, including current research. The course will provide a thoroughly applied perspective on the topics covered. (Irreg.)
FIN	5352	International Financial Management	Prerequisite: graduate standing, 5302 and 5312. This course will provide an integrated perspective on the topics of foreign currency and exchange rates, international financial linkages, international financial markets, and investment, financing and risk management in a global context. The first half of the course develops the analytical framework required for understanding the interactions between exchange rates, and cross-border trade and capital flows, inflation, interest rates, economic growth, and government policy. This framework will be used to study exchange rate systems and policies, and their implications, especially in the context of recent exchange rate developments. Related topics such exchange rate determination and forecasting will also be discussed. The second half of the course examines international financial markets, and the opportunities they present for achieving risk management, financing, and investment objectives. The principal focus will be on financial instruments used for these purposes in international financial markets. (Irreg.)
FIN	5362	Fixed Income Fund Management	Prerequisite: graduate standing, FIN 5302. Develops an intellectual and practical understanding of the principles governing the valuation of fixed income securities and their derivatives, the main problems and issues relevant in the management of interest rate risk, and the organization and structure of debt markets, all from the perspective of fixed income fund management. The course is at the cutting edge of both theory and practice. Students in the class also manage a $5 million fixed income fund, thanks to an educational project of the Bank of Oklahoma. This sum is invested in accordance with the recommendations of this class. (Irreg.)
FIN	5403	International Financial Management	Prerequisite: 5043 or Business Administration 5283. Designed to provide the student with the analytical tools needed to evaluate and provide solutions for problems in international financial management. Example topics include exchange rates, international financial markets and the monetary system, risk management. (Sp)
FIN	5513	Financial and Energy Risk Management	Prerequisite: Graduate standing in Price College of Business. Emphasizes financial and commodity derivative securities and their use as risk management tools. Emphasizes the commodity side of energy related products. A financial market simulator will be used to develop students' trading and valuation skills. (Irreg.)
FIN	5613	Student Investment Fund	(Slashlisted with 4613) Prerequisite: graduate standing and by permission. The management of a real dollar portfolio of common stocks using the value style approach. Emphasis is on the application of fundamental analysis. Frequent class presentations are required. No student may earn credit for both 4613 and 5613. (F, Sp)
FIN	5713	Fixed Income Securities and Markets	(Slashlisted with 4713) Prerequisite: FIN 5043 or B AD 5283. Students are involved in the management of a fixed income (bond) portfolio. Emphasis is given to the analytics of fixed income security valuation, and the analysis of investment opportunities. Frequent class presentations are required. No student may earn credit for both 4713 and 5713. (F)

FIN	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
FIN	5970	Special Topics in Finance	Prerequisite: 5043 or Business Administration 5283. May be repeated; maximum credit six hours. Special topics in finance of interest to students in the MBA program. (F, Sp, Su)
FIN	5990	Directed Readings in Finance	Prerequisite: 5043 or Business Administration 5283. May be repeated; maximum credit six hours. Individual graduate study of a specific narrow topic not offered in the current curriculum. (F, Sp, Su)
FIN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
FIN	6602	Finance Research Seminar	Prerequisite: Graduate Standing. Students read, dissect, analyze, and discuss the finance research workshop papers and the relevant literature. The focus is on learning to do financial research by closely studying, analyzing and critiquing what the authors have done (and not done) and why. (F, Sp)
FIN	6603	Introduction to Finance Theory	Prerequisite: graduate standing and permission. Topics include decision making under uncertainty, portfolio theory, models of asset pricing, efficient markets, option pricing, capital structure and agency theory. (Irreg.)
FIN	6703	Portfolio Theory and Asset Pricing	Prerequisite: 6603 and Economics 5213. Topics include utility maximization under uncertainty, portfolio theory, capital market models, and asset pricing including continuous time models. (Irreg.)
FIN	6803	Corporate Finance Theory	Prerequisite: 6603 and Economics 5213. Topics include complete and incomplete markets, capital structure theory, agency theory, property rights, dividend policy, signaling models, corporate control issues, mergers and acquisitions. (Irreg.)
FIN	6903	Financial Markets and Institutions	Prerequisite: 6603 and Economics 5213. Topics include the term and risk structure of interest rates, debt pricing, financial contracting, information economics, duration and immunization, futures and options. (Irreg.)
FIN	6960	Directed Readings in Finance	1 to 3 hours. Prerequisite: 12 hours in finance and/or specifically related subjects, graduate standing, and permission of instructor. May be repeated with change of topic; maximum credit nine hours. Directed readings in various lines of specialization in finance. Conducted on a conference basis by the staff. Scope of reading and credit to be arranged on entry into the course. (F, Sp, Su)
FIN	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
FIN	6973	Seminar	Prerequisite: 12 hours of finance and/or economics, graduate standing, permission. May be repeated with change of topic; maximum credit nine hours. Seminar in latest developments in research and theory from one of the following general areas of the finance field: business finance, capital markets, insurance, investments, money and banking, public finance, real estate. A specific topic is announced for each time of offering. (F, Sp)
FIN	6980	Research for Doctoral Dissertation	(F, Sp, Su)
FIN	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
FLUT	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

FLUT	2000	Freshman and/or Sophomore Secondary Flute	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FLUT	2020	Flute for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
FLUT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
FLUT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
FLUT	4000	Junior and/or Senior Secondary Flute	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FLUT	4020	Flute for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
FLUT	5000	Master's-Level Secondary Flute	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FLUT	5010	Master's-Level Flute for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
FLUT	5020	Master's-Level Flute for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
FLUT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
FLUT	6000	Doctoral Secondary Flute	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FLUT	6010	Doctoral Flute for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
FLUT	6020	Doctoral Flute for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
FMS	1013	Introduction to Film and Media Studies	An examination of the history, role, impact, nature and delivery systems of film and media in the United States and the international community. (F, Sp, Su) [IV-AF]
FMS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

FMS	2013	Film and Media History to 1960	Prerequisite: FMS 1013. Survey of world film and media history from the origins of cinema through 1960, including silent cinema, the transition to sound, classical Hollywood and important international film movements. Emphasizes an understanding of cinema in aesthetic, technological, economic and social terms. (F)
FMS	2023	Film and Media History: 1960 to Present	Prerequisite: FMS 1013. Survey of Hollywood, independent and world film and media since 1960, including various new cinema movements, New Hollywood, media conglomeration and globalization. Emphasizes an understanding of the aesthetic, economic and social dimensions of film and media at the end of the twentieth and the beginning of the twenty-first centuries. (Sp)
FMS	2033	Writing About Film	Prerequisite: 1013, English 1213 or Expository Writing 1213. This course teaches specialized writing skills for writing about film. Topics covered will include the vocabulary of film writing, basic cinema research skills and techniques to write for academic and general audiences. (F, Sp)
FMS	2123	Acting for the Camera	Prerequisite: 2033. Covers the requirements, techniques and discipline of working on camera for film and/or television as a professional actor. (F, Sp)
FMS	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
FMS	3213	Media Theories & Methodologies	Prerequisite: 2013 or 2023. Familiarize students with classical film theory that evolved during the early days of cinema up through contemporary film and media theory, as a foundation for understanding and analyzing the way media shape and reflect culture. (F, Sp)
FMS	3223	Topics in Film Genre	Prerequisite: 1013. May be repeated once with different genres; maximum credit six hours. Offers students a systematic in-depth study of one or two specific genres such as westerns, romantic comedy, horror, film noir, and melodrama. (Irreg.)
FMS	3233	Filmmakers up Close	Prerequisite: 1013. May be repeated once with change of filmmakers; maximum credit six hours. An in-depth study of one or two filmmakers through the study of their films. Filmmakers include directors, screenwriters, actors, and others who have a significant role in making movies. (Irreg.)
FMS	3243	Hispanic Cinema	Prerequisite: 1013. Analytical study of exemplary motion pictures from the Hispanic world: Spain, Mexico, Cuba, Brazil, and Argentina. (Irreg.) [IV-AF]
FMS	3313	Digital Cinema Production	Prerequisite: FMS 2033. Film and media production with narrative structure. Students will learn to handle equipment and edit in-camera. (F, Sp)
FMS	3323	Editing: History, Theory, Practice	Prerequisite: FMS 1013. Combines the history, theory, and practice of digital editing in a narrative context. Explores early experimentation in film editing, the evolution of equipment and techniques, major montage/ editing theories, and famous editors, while also providing hands-on shooting and editing experience. (Irreg.)
FMS	3413	Asian Cinema	Prerequisite: 1013. A survey of major Asian films, exploring aesthetic and narrative traditions from Japan, China, and India as its major concern. Films from other Asian cultures will be offered as availability permits. Students will refine critical, written and verbal skills. (Irreg.)
FMS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

FMS	3513	Children's Cinema	Prerequisite: 1013. Examines recurring archetypal narratives, figures, and visual grammar of children's film throughout film history as well as analyzes film production strategies and values in a variety of sub-genres. Looks critically at how film narratives currently address audiences of children and how they have done so historically. (Irreg.) [IV-AF]
FMS	3683	Social Issues and Film	Prerequisite: 1013. Analytical study of films that engage one or more social issues such as race relations, gender roles, class conflict, nationalism and imperialism. Focus will be on their various aesthetic approaches such as social realism, anti-realist techniques, and satire. (Irreg.) [IV-AF]
FMS	3703	Topics in Film and Media Production	Prerequisite: FMS 1013. May be repeated once with change of content; maximum credit six hours. An in-depth critical and applied study of a particular type of production, with topics such as Advanced Single-Camera Production, Aesthetics and Practice of the Short Film, and Making the Feature Film. (Irreg.)
FMS	3713	Topics in Writing for the Screen	Prerequisite: FMS 1013. May be repeated once with change of content; maximum credit six hours. An in-depth critical and applied study of a particular screenwriting topic such as "Writing for Television," "Writing the Short Film," and "Advanced Screenwriting." (Irreg.)
FMS	3800	Internship	1 to 3 hours. Prerequisite: 1013, junior standing, and permission of instructor. May be repeated with change of internship; maximum credit four hours. Participation in supervised internship with submission of journals describing work performed, regular reports, on-site supervisor evaluation, assigned readings, and final assessment of experience. (F, Sp, Su)
FMS	3801	Career Planning in Film and Media Studies	Prerequisite: FMS 1013. Designed to help students professionalize themselves by gaining general career skills (developing a resume, interviewing skills), information specific to careers in film and media (on-set etiquette and performance expectations), and introductions to industry professionals (through guest lectures and informational interviews with FMS alumni). (Irreg.)
FMS	3810	Variable Topics	1 to 3 hours. Prerequisite: 1013 or permission of instructor. May be repeated with change of content; maximum credit twelve hours. Varied projects concerning particular aspects of film and video history, genre, and methods of film or video production. (Irreg.)
FMS	3833	Masterpieces of World Cinema	Prerequisite: 1013. May be repeated with change of content; maximum credit six hours. Survey of world film and the principles underlying historical and critical approaches to the cinema, emphasizing an appreciation of international cinema as an aesthetic, economic, and social factor in the twentieth century. (Irreg.)
FMS	3843	Topics in National Cinema	Prerequisite: 1013. May be repeated with change of content; maximum credit six hours. Analytical study of exemplary motion pictures in terms of major periods, themes, and formal parameters in relation to national cultural histories, such as the French New Wave, Film Noir or American silent film. (Irreg.)
FMS	3853	Feature Screenwriting	Prerequisite: 1013 and permission of instructor. An introduction to writing for the screen, including a variety of assignments leading up to developing and writing a feature screenplay. (F, Sp)
FMS	3960	Honors Reading (HONORS)	Prerequisite: 1013, permission of the Honors Program. Independent study in film and video history, theory, and production for students enrolled in the Honors Program. In-depth analysis of specialized topics. (F, Sp, Su)
FMS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)

FMS	3980	Honors Research (HONORS)	Prerequisite: 1013, permission of the Honors Program. Open only to students enrolled in the Honors Program. Individualized research with a Film and Video Studies faculty member leading toward work for the Honors thesis. In-depth research of specialized topic in film and video theory, history, or production. (F, Sp, Su)
FMS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
FMS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
FMS	4013	Senior Seminar in Film and Media	Prerequisite: 24 hours of major credit. Special problems or topics in film and media studies selected by the instructor and indicated by its particular title. Emphasis will be on the individual preparation of a research paper and/or creative project in the topic area. (F, Sp) [V]
FMS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
FMS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
FMS	4990	Independent Study	Prerequisite: 1013, permission of the instructor. Specialized study in film and video history, theory, and production, or other topic mutually agreed upon by the student and the instructor. The course enables the student to pursue in-depth analysis of special interest topics in Film and Video Studies. (F, Sp, Su)
FMS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
FR	1013	Beginning French for Reading	Prerequisite: graduate standing. Carries elective credit only. Designed as initial preparation for the advanced-degree reading examination. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F)
FR	1023	Beginning French for Reading	Prerequisite: 1013. Carries elective credit only. Designed as initial preparation for the advanced-degree reading examination. This course does not count for major credit in the department of modern languages, literatures and linguistics. (Sp)
FR	1115	Beginning French	An elementary course in understanding, speaking, reading and writing French. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]
FR	1223	Introduction to French for the Engineering Sciences	Designed as a preparatory course for University of Oklahoma engineering students who are planning to participate in the Engineering Exchange Program in Clermont-Ferrand, France. This course does not fulfill the university-wide language requirement. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (Sp)
FR	1225	Beginning French (Continued)	Prerequisite: 1115. An elementary course in understanding, speaking, reading and writing French. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]

FR	1235	First-Year French Review	Prerequisite: two or more years of high school French or equivalent and placement by examination. A thorough one-semester review of the vocabulary, syntax and grammar of the usual first-year college French course. Oral and written drill sufficient to incorporate these elements, at a satisfactory level of performance, in the understanding, speaking, reading and writing of French. Students who have received credit in 1115 and/or 1225 cannot receive credit for 1235. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp)
FR	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
FR	2113	Intermediate French	Prerequisite: 1225. The systematic cultivation of increased depth and control in the basic skills of listening, speaking, reading and writing French. Laboratory (F, Sp, Su)
FR	2133	French Conversation and Culture	Prerequisite: 1225. Conversation practice based on elementary readings in selected topics from traditional and contemporary French culture, with the objective of developing additional active vocabulary and increased oral fluency while obtaining basic concepts about the French culture. (F, Sp, Su)
FR	2223	Intermediate French (Continued)	Prerequisite: 2113. The systematic cultivation of increased depth and control in the basic skills of listening, speaking, reading and writing French. Laboratory (F, Sp, Su)
FR	2243	French Conversation and Literature	Prerequisite: 2113 or 2133. Conversation practice based on modern literary texts, with the objective of improving reading speed, vocabulary and comprehension, and increased oral fluency, while obtaining an expanded appreciation of French literary texts. (F, Sp, Su)
FR	2263	French Culture Through Songs	Prerequisite: 1225. Through studying and learning songs of famous interpreters like Chevalier, Piaf, Trenet, Brassens, Brel and others, This course will provide students with a unique and entertaining opportunity to perfect pronunciation, vocabulary, grammatical skills, and gain a deeper acquaintance with French high and popular culture. (F)
FR	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
FR	3083	Advanced French Conversation and Phonetics	Prerequisite: 2243 or concurrent enrollment. Intensive practice in speaking French on topics of everyday life; development of specialized vocabularies; fundamentals of French phonetics. (F, Sp)
FR	3293	French in the Sciences	Prerequisite: 2223. Addressed to students in all areas, though particularly in the sciences and professional fields as well as French majors interested in improving their skills in reading, discussing and writing about scientific communications in French and the role of science and technology in French culture. (Irreg.)
FR	3423	Advanced French Composition	Prerequisite: FR 2133 or FR 2243 or FR 2263. The inculcation of proper writing habits, at an advanced level, toward the achievement of idiomatic French. (Sp, Su)
FR	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
FR	3623	Business French	Prerequisite: two years of college French or equivalent. Focuses on terms and expressions used in business settings. Designed to impart an awareness of the differences between French and American business cultures. (F)

FR	3723	French for the Professions	Prerequisite: two years of college French or equivalent. Introduces students to vocabulary in sectors such as advertising, marketing, transportation, medicine, and law. French professional and business cultures are studied. Communication skills for professional and business settings will be practiced in this course. (Sp)
FR	3753	French Culture Through Film	Prerequisite: 2243 or concurrent enrollment. This course deals with contemporary French culture through the medium of cinema. Topics examined include family, education, religion and societal issues, and ethnicity. As a course taught in French, it will also focus on regional accents and generational and ethnic speech. (F)
FR	3853	Introduction to Literary Analysis	Prerequisite: 2223. Designed to introduce students to the language and technique of literary analysis. Also serves to improve reading skills generally, as well as oral/aural and written skills. Representative works from the various literary genres will be studied. (Sp, Su)
FR	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp)
FR	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F)
FR	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
FR	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
FR	4153	Survey of French Literature to 1800	Reading and discussion of major French works and their background from the Middle Ages to the French Revolution. (F, Su)
FR	4163	Survey of French Literature (Continued)	Prerequisite: 4153 or permission. Reading and discussion of major French works and their background from 1800 to the present day. (Sp, Su)
FR	4313	From Lascaux to la Terreur	Prerequisite: FR 3423; HIST 1223 or 1233. The political and social background of French literature from its beginning to the French revolution. (F, Su)
FR	4323	The Making of Modern French Culture	Prerequisite: FR 3423; HIST 1223 or HIST 1233. The political and social background of French literature from the French revolution to the present day. (Sp)
FR	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
FR	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
FR	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)

FR	4993	Senior Capstone in French	Prerequisite: graduating majors in French. Requires undergraduate French majors to synthesize their knowledge of French contributions to world civilization. They will be required, as part of this enterprise, to demonstrate their mastery of the four basic skills involved in learning a foreign language: reading, writing, speaking, and understanding. (Sp) [V]
FR	5223	Seventeenth-Century Theatre	A study of dramatic works of Moliere, Corneille, Racine and other contemporaries. (Irreg.)
FR	5273	Contemporary French Literature	Prerequisite: Graduate standing or permission of instructor. This course presents the work of a variety of French literary writers, texts composed primarily from 1990 to the present, a period of great revival in French letters. Students examine important questions of intellectual and aesthetic impact in literature coming both from France and from Francophone countries across the world. (Irreg.)
FR	5283	Twentieth-Century French Novel	Prerequisite: graduate standing or permission of instructor. Course presents a survey of the major forms of French novel throughout the twentieth century. (Irreg.)
FR	5293	Twentieth-Century French Poetry and Theatre	Prerequisite: graduate standing or permission of instructor. Course examines major developments in French poetry and theatre throughout the twentieth century. (Irreg.)
FR	5313	Introduction to Old French	Prerequisite: 10 hours of college Latin or equivalent; some knowledge of articulatory phonetics useful, but not required. History of the French vernacular from Latin to Modern French: external history, phonology, morphology, lexicon, syntax, with emphasis on phonological evolution; and introduction to the reading of Old French via short excerpts from monuments of literature, from the Strasbourg Oaths to Cent Nouvelles Nouvelles. (Alt. F)
FR	5323	Old French Readings	Prerequisite: 5313. Introduction to a literary understanding and appreciation of the Old French Canon as represented by such texts as the Alexis, the Roland, Chretien's romances, Beroul's Tristan, the Rose, theatre, chronicles and lyric poetry, including Rutebeuf and Villon. (Alt. Sp)
FR	5603	Sixteenth Century French Narrative and Prose	Prerequisite: graduate standing or permission. Narrative and prose writers of the sixteenth century (i.e. Rabelais, Marguerite de Navarre, Montaigne). (Irreg.)
FR	5613	Sixteenth-Century French Poetry and Theatre	Prerequisite: graduate standing or permission of instructor. All major or minor poets will be studied, as well as the revival of classical theatre in French. (Irreg.)
FR	5623	Seventeenth-Century Prose and Poetry	Prerequisite: 4153. A survey of baroque, precieux and classical style, form and content as exemplified in the prose and poetry of the period. (Irreg.)
FR	5633	Eighteenth-Century French Philosophes	Prerequisite: graduate standing or permission. Presents the "philosophes" of the eighteenth century in France such as Montesquieu, Voltaire and Diderot. (Irreg.)
FR	5643	Eighteenth-Century French Narrative and Theatre	Prerequisite: graduate standing or permission of instructor. The course will present an overview of eighteenth-century French narrative and theatre. (Irreg.)
FR	5910	Problems in Research	2 to 4 hours. May be repeated with change of content; maximum credit nine hours. An individual course of intensive research with the area and problem to be determined by the student and directing instructor. (F, Sp, Su)
FR	5930	Seminar in French Literature and Culture	Prerequisite: One 5000 level course in same general area. May be repeated with change of subject matter; maximum credit nine hours. In-depth study of a topic in French literature and culture. (Irreg.)
FR	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
FR	5963	Nineteenth-Century French Novel	Prerequisite: graduate standing or permission of instructor. Course covers the major developments of the French novel throughout the nineteenth century. (Irreg.)

FR	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
FR	5973	Nineteenth-Century French Poetry and Theatre	Prerequisite: graduate standing or permission of instructor. Course surveys the major literary developments in French poetry and theatre throughout the nineteenth century. (Irreg.)
FR	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp)
FR	5990	Independent Studies	1 to 3 hours. Prerequisite: graduate standing, permission of instructor. May be repeated; maximum credit 12 hours. Independent reading on one or more topics under the general direction of a faculty member. (F, Sp, Su)
FR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
FR	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
FR	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
FR	6980	Research for Doctoral Dissertation	2 To 16 Hours. (F, Sp)
FR	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
FR H	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
FR H	2000	Freshman and/or Sophomore Secondary French Horn	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FR H	2020	French Horn for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
FR H	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
FR H	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
FR H	4000	Junior and/or Senior Secondary French Horn	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FR H	4020	French Horn for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)

FR H	5000	Master's-Level Secondary French Horn	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FR H	5010	Master's-Level French Horn for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
FR H	5020	Master's-Level French Horn for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
FR H	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
FR H	6000	Doctoral Secondary French Horn	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
FR H	6010	Doctoral French Horn for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
FR H	6020	Doctoral French Horn for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
FRAN	3343	Retailing Management	(Crosslisted with MKT3343) Prerequisite: Student must be approved for degree candidacy by Price College, MKT 3013. An analytical approach to the management of retail institutions. Addresses strategic and operating level decision making related to delivery of products and services to consumers, focusing on each of the four dimensions of the marketing mix. Includes modules on electronic commerce and ethical responsibility. (F, Sp)
FRAN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
FRAN	3713	Fundamentals of Franchising	(Crosslisted with MKT 3713) Prerequisite: Business Candidacy & 3000 level core or concurrent enrollment. Provides a fundamental understanding of the franchising business model to showcase its unique differential advantages over alternative conventional systems of distribution. In particular, the course will focus on introducing students to operational issues, information flows, financial considerations and relationship processes involved in franchising. (F, Sp)
FRAN	3723	Integrated Franchising Communications	(Crosslisted with MKT 3723) Prerequisite: Business Candidacy, 3000 level core or concurrent enrollment & FRAN/MKT 3713 or concurrent enrollment. It examines how franchisor-created communications and sales promotions can best be combined with franchisee-created social media programs to present a consistent image across the franchise system. Combinations of media vehicles and messages are explored to present an effective communication strategy. (F, Sp)

FRAN	4713	Policies and Strategies in Franchising	(Crosslisted with MKT 4713) Prerequisite: Business Candidacy, 3000 level core & FRAN/MKT 3713. Emphasizes the process of business decision-making within the setting of a contractual channel of distribution with specific focus on the unique context of a franchising enterprise. Students will be exposed to developing skills in synthesizing diverse knowledge areas in order to arrive at holistic, coherent and responsible strategic decisions. (F, Sp)
G E	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
G E	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, C S, ECE, ENGR, EPHY, I E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp)
G E	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
G E	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
G E	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
G E	4503	Applied Oceanography	(Crosslisted with CHEM 4503) Prerequisite: Geology 1124 or 2233, permission of instructor. Interdisciplinary approach in physical, chemical and biological oceanography, whereby ocean processes affect erosion, deposition, development of coastlines and ocean bottoms, and dictate construction practices. Economic factors of life forms in each zone of ocean; controlling chemical aspects of water depths, temperatures, salinities, oxygen content in the ecological system. (Irreg.)
G E	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
G E	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
G E	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
G E	5133	Non-Newtonian Fluid Mechanics	(Crosslisted with P E 5133) Prerequisite: Graduate standing or instructor permission. Characteristics of stress in fluids, the role of Newtonian fluid mechanics, extension of Newtonian analysis to Bingham plastics; fluids without yield stress, time dependent non-Newtonian fluids, laminar and turbulent flow, boundary layers in non-Newtonian fluids. (Sp)

G E	5143	Fluid Flow in Porous Media	(Crosslisted with P E 5143) Prerequisite: Graduate standing or instructor permission. Physical concepts involved in the flow of fluids in porous media; treatment of Darcy's Law in a mathematical sense; the concept of relative permeability applied also in a mathematical sense. (F)
G E	5243	Introduction to Rock Mechanics	(Crosslisted with P E 5243) Prerequisite: Graduate standing or instructor permission. Engineering properties of rock; rock testing techniques; in-situ methods; mathematical approach to stress-strain analysis; discontinuities in rock; application for underground openings; rock slopes; foundations and drilling. (Sp)
G E	5310	Special Problems in Geological Engineering	1 to 3 hours. Prerequisite: Geology 3113, permission. Special studies in stratigraphy, petrology, subsurface geology, sedimentation and petroleum exploitation problems. (F, Sp, Su)
G E	5533	Petroleum Reservoir Development	(Crosslisted with P E 5533) Prerequisite: Graduate standing or instructor permission. Petroleum reservoir development and extension. Simulation methods for evaluating a petroleum reservoir, schemes for oil field development. Engineering application of logging and geological, fluid and well-testing data. Student-oriented reservoir simulation projects. (Sp)
G E	5713	Introduction to Geostatistics	(Crosslisted with GEOL 5713 and P E 5713) Prerequisite: Graduate standing or permission of instructor. Introduction to geostatistical concepts, principles and tools for description and modeling of spatial variability in oil/gas reservoirs and other geological formations. Topics include review of basic statistic concepts, exploratory spatial data analysis, stationary and ergodicity, variogram and covariance, kriging, spatial sampling, stochastic realizations and simulations, conditioning, and indicator kriging. (Sp)
G E	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
G E	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
G E	5980	Research for Master's Thesis	Variable enrollment, 2 to 9 hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
G E	5990	Special Studies	1 to 4 hours. Prerequisite: graduate standing in Geological Engineering. May be repeated with change of topic; maximum credit four hours. Supervised individual study or specialized research in geological engineering. (F, Sp)
G E	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
G E	6153	Transport Phenomena in Porous Media	(Crosslisted with P E 6153) Prerequisite: Graduate standing or instructor permission. Fundamental theory of mass, momentum and energy transport in porous media. Emphasis placed upon enhanced oil recovery processes, in situ energy extraction and other processes relevant to energy production. (Irreg.)
G E	6253	Advanced Petrophysics	(Crosslisted with P E 6253) Prerequisite: Graduate standing or instructor permission. Techniques of sampling petroleum reservoirs with emphasis upon the rock and fluid properties. (Irreg.)
G E	6263	Advanced Rock Mechanics I	(Crosslisted with P E 6263) Prerequisite: Graduate standing or instructor permission. In-situ stress determinations, effects of stress and strain gradients, time-dependent effects, Griffith's theory, crack phenomena, fracture toughness of rocks, poroelasticity concepts. (Irreg.)
G E	6283	Seismic Reservoir Modeling	(Crosslisted with GEOL and P E 6283) Prerequisite: graduate standing or permission of instructor. This course is designed to explore the seismic response of rocks and how it is related to petrophysical parameters. This understanding is key to interpretation of seismic data in terms of subsurface rocks and fluids. (F)

G E	6443	Petroleum Production Systems	(Crosslisted with P E 6443) Prerequisite: graduate standing, permission. Principles of the development and operation of petroleum production systems. Considers the combined behavior of the reservoirs, the surface equipment, the pipeline system, and the storage facilities. Optimization of these systems for various production schedules using queuing theory, linear programming and dynamic programming. (Irreg.)
G E	6573	Advanced Oil Reservoir Engineering	(Crosslisted with P E 6573) Prerequisite: Petroleum Engineering 4513, 4523 and graduate standing. Optimization of material balance equations; saturation calculations, with and without counterflow; dynamics of water drive reservoirs; accelerated blowdown of strong water drive gas reservoirs; conformal mapping of oil and gas fields; the subsidiary equation; tracer methods; streamlines; miscible processes; dispersion models and optimum solvent slug size. (Irreg.)
G E	6583	Enhanced Oil Recovery	(Crosslisted with P E 6583) Prerequisite: graduate standing or permission. New principles of recovery of oil and gas fields including: polymer, surfactants, miscible recovery processes, inert gas injection, emulsions, steam, in situ and wet combustion techniques. (Sp)
G E	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
G E	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
G E	6980	Research for Doctoral Dissertation	Research for Doctoral Dissertation. (F, Sp, Su)
G E	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GCRE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GCRE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GCRE	5051	Graduate Composition Recital	Graduate Composition Recital. Prerequisite: Permission Of Instructor. A Program Of Original Compositions Presented In Partial Fulfillment Of The Requirements Of The Master Of Music Degree In Composition. (F, Sp, Su)
GCRE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GDMA	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GDMA	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GDMA	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GDMA	6042	Graduate Recital-Doctor Of Musical Arts Degree	Graduate Recital--Doctor Of Musical Arts Degree. Prerequisite: Concurrent Enrollment In 6020; Permission Of Adviser And Instructor. May Be Repeated; Maximum Credit Four Hours. May Not Be Elected During First Enrollment. The Preparation And Presentation Of A Public Recital. (F, Sp, Su)

GEOG 1103	Human Geography	An introduction to the humanized Earth; specifically, to the geography of population, the global pattern of cultures and such affiliated elements as language, religion, technology, and political organization, and to the physical expression of those cultures in rural and urban settings. (F, Sp, Su) [IV-WC]
GEOG 1113	The Language of Maps	How to read, analyze and interpret graphic information symbolized on a wide variety of maps. Topics include: scale, location, distance and direction, navigation, interpreting human and physical landscapes, map propaganda, maps in the media and comparisons of maps in western and non-western societies. [I-O]
GEOG 1114	Physical Geography	A systematic introduction to the physical Earth; including Earth materials, landform processes and resultant landforms, Earth-sun relations, weather, climate, the water cycle, natural vegetation, and soil types. Emphasis is placed on the inter-relationships among these phenomena. (F, Sp, Su) [II-LAB]
GEOG 1203	Global Environmental Issues	Surveys the distribution of the world's natural resources and the social conflicts associated with their extraction, allocation, and use. The role of sustainability and its environmental, economic, and cultural elements will guide class discussion about development challenges in different regions, and the strategies that can be used to address them. (F) [III-SS]
GEOG 1213	Economic Geography	A survey of the contemporary global economy and of the analytical approaches developed by geographers studying it. Economic systems are examined at the household, urban, regional, national, and international levels. Special attention is given to changes in resource use, regional specialization, trade, industrial and retail location, and modernization. (F, Sp) [III-SS]
GEOG 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GEOG 2603	World Regional Geography	A broad survey of the world's major culture regions emphasizing basic physical, cultural, economic, and political patterns, as well as the processes that have created those patterns. Emphasis on economic development, ethnic conflict, and environmental degradation, as well as on the changing role of the United States. (F, Sp, Su) [IV-WC]
GEOG 2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
GEOG 3001	Dialogue on the Discipline of Geography	Prerequisite: 1103, 1114 and 1213; or permission of instructor. Introduction to the discipline of geography, nature of geographical research and the interests and ideas of departmental faculty and students.
GEOG 3003	Interpreting Planet Earth	Prerequisite: junior standing or permission of instructor. This one semester, dynamic course integrates human and physical geography. Understanding our planet, its people, issues and global activities will involve "hot topic" discussions, case studies, a team project, plus two outside class field-based activities. (Sp) [III-SS]
GEOG 3023	Principles of Physical Geography	Prerequisite: Upper division standing or permission of instructor. Provides a foundation in physical geography. Students should gain a broad, comprehensive but focused viewpoint if lithospheric, biospheric and atmospheric processes as well as the interdependence among them. (Sp)
GEOG 3203	Globalization and the Environment	Prerequisite: junior standing or permission of instructor. Explores the complex assemblage of economic, political, and cultural processes popularly known as "globalization" and examines their implications for resource use and the environment. A central objective is to facilitate critical thinking on global environmental issues and enable students to challenge the increasingly polarized rhetoric concerning economic growth and the environment. (Irreg.)

GEOG 3213	Principles of Human Geography	Prerequisite: upper-division standing or permission of instructor. Introduction to the distribution of humans and their activities on the surface of the earth and the processes that generate these distributions. Special attention given to the influence of economy, culture, and politics in shaping the land and the spatial character and organization of human life. A key theme is the relationship of human diversity and places to the environment. (F)
GEOG 3223	The British Empire and its Successor States	Prerequisite: junior standing or consent of instructor. An examination of the relationship between ruler and ruled in the parts of Africa and Asia ruled by the British in the 19th and 20th centuries. Particular attention to the writings of the colonized peoples and to the lasting influence of colonialism upon them. (F) [IV-NW]
GEOG 3233	Principles of Sustainability	Prerequisite: junior standing or permission of instructor. Provides a broad introduction to the basic principles of sustainable development with an examination of its social, economic, and environmental dimensions. Students will learn about sustainability strategies and practices from a national and international perspective with attention paid to the ethical and cultural aspects integral to a transition to sustainability. (Sp)
GEOG 3243	Principles of Economic Geography	Prerequisite: upper division standing or permission of instructor. An examination of the distribution of economic activities and the processes that generate them. Special attention is given to principles of economic location and their application to patterns of production, consumption, and exchange. Students will learn the theories and methods used by geographers in studying economic activities from the local to the global scale. (Sp)
GEOG 3253	Environmental Conservation	Contemporary environmental issues and policies. Problems of population growth, food production, energy shortages, resource depletion and pollution impacts will be stressed. The social aspects of conservation management policies will be viewed at both global and national scales. (F) [III-SS]
GEOG 3273	Cultural Geographies of the Colonial Caribbean	Prerequisite: junior standing or consent of instructor. Introduces students to the many ways that Africans, Amerindians, and Europeans established relationships with their environments and one another throughout the Caribbean basin in the early modern period, roughly 1500-1800. (Irreg.) [IV-NW]
GEOG 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GEOG 3443	Environment and Society	Prerequisite: junior standing or permission of instructor. An introduction to the political, economic, and cultural factors that shape human-environmental relations around the world. Special attention is placed on how societies come to value the environment differently, how people struggle over access to and control of natural resources, and the social causes and consequences of environmental change. (F) [III-SS]
GEOG 3483	Remote Sensing & Phenology	(Crosslisted with BIOL 3483) Prerequisite: junior standing. Focus on the analysis of phenology both on the ground and from space. Phenology is the study of the timing of biological phenomena, with a particular emphasis on the linkages between abiotic drivers and biological responses of particular organisms. Land surface phenology explores how quasi-periodic events in terrestrial vegetation appear when observed with satellite images. The course has a field component and the students will be trained as phenological observers. Field trips. (Sp)

GEOG	3513	Political Geography	A survey, stressing current geopolitical conflicts. Special topics include the nation-state, territoriality, the legacies of colonialism, spheres of political influence, regional conflicts, political-geographical integration in such areas as Europe and the Pacific Rim, demographic and resource considerations in world politics, and emerging culturally based conflicts. (F, Sp) [IV-WC]
GEOG	3563	Geography of Natural Resources	Definition and evaluation of mineral, agricultural, forest, and water resources, including their variation over time, between cultures, and as affected by technological innovation. Emphasis is placed on the distribution, technologies, institutions, and landscapes of natural resources in modern economies. (F, Sp)
GEOG	3613	Geography of Oklahoma	A study of the physical regions, populations, distribution, economic development and recreational resources of Oklahoma. (Irreg.)
GEOG	3633	Historical Geography of the United States	America's changing geography is considered under three headings: the Colonial Pattern, the Humid East, and the Dry West. Special attention is given to those human activities that have shaped successive cultural landscapes and to those patterns that persist to give present day regions their distinctive character. (F, Sp) [IV-WC]
GEOG	3773	Geography of the United States	Geography Of The United States. Prerequisite: Junior Standing Or Permission Of Instructor. An Introduction To The Regional Character Of The United States, Including Its Physical, Social, And Economic Elements. (Irreg.)
GEOG	3843	Gender and Environment	Prerequisite: junior standing or permission of instructor. Critically examines the concepts of environment and gender. Particular emphasis is placed on how and why environmental inquiry and academic advocacy intersect. Students will study the organizational practices, institutional policies, and cultural politics with which the concepts of gender and environment are composed, conveyed, and contested. (Sp) [III-SS]
GEOG	3890	Selected Studies in Geography	1 to 3 hours. Prerequisite: junior standing. May be repeated with change of subject matter; maximum credit nine hours. To be used for special intersession courses and occasional (irregularly scheduled) courses of special concern and use for the undergraduate. (F, Sp)
GEOG	3924	Quantitative Methods	Prerequisite: junior standing, completion of a lower division general education math requirements. Introduces students to methods of organizing, classifying and describing geographic data, together with methods of interpreting spatial relationships and areal associations. Laboratory (F, Sp) [I-M]
GEOG	3933	Interpretation of Aerial Photographs	Prerequisite: 1114 or permission. An introduction to the photographic inventory of physical and cultural land resources including current processes of change, and to the use of aerial photographs in evaluating present land use, potential alternatives, and associated risks. (Irreg.)
GEOG	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Su)
GEOG	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
GEOG	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
GEOG	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

GEOG 4003	The Global City and Planning Issues	(Crosslisted with RCPL 4003; Slashlisted with 5003) Prerequisite: English 1213 and junior standing. An introduction to the concept of globalization and its effects on cities, and the city planning issues related to those effects. Characteristics, theories, and strategies of city development are reviewed. Cities are observed from several perspectives: natural and built environment, governance, society, economics, and history. No student may earn credit for both 4003 and 5003. (Sp)
GEOG 4200	Internship in Geography	1 to 6 hours. Prerequisite: sixteen hours of geography and senior standing. Provides career training experience whereby students may apply geographical skills and develop further professional capabilities in a realistic setting. Students will be assigned to particular business firms, governmental agencies and educational institutions on an individual basis. (F, Sp, Su)
GEOG 4203	Geomorphology	(Slashlisted with 5203) Prerequisite: 1114, or comparable work in earth sciences, junior standing. Development and modification of land-surface form by atmospheric, fluvial, glacial, mass-wasting, volcanic and tectonic agents. Emphasis is placed on spatial aspects of the interactions at the interfaces of land, air and water. No student may earn credit for both 4203 and 5203. (Irreg.)
GEOG 4243	Geography of Asia	Prerequisite: junior standing or permission of instructor. A survey of the Middle East and central, south, southeast and east Asia. The course includes overviews of the continent's physical, social, and economic characteristics, but it treats primarily of the evolution of Asia's contemporary cultural landscapes as an expression of Asian cultures. (Sp) [IV-NW]
GEOG 4253	Latin America Geography	Prerequisite: junior standing or permission of instructor. An exploration of the ways in which natural, cultural, and historical processes have combined to shape a unique region of the world. Special emphasis will be placed on the legacies of colonialism, cultural landscapes, social movements, and environmental degradation and resource conservation. (Sp) [IV-WC]
GEOG 4263	Geography of Latin America Through Film	Prerequisite: junior standing or permission of instructor. An advanced undergraduate course designed to introduce students to the various themes shaping the historical and cultural geography of Latin America. Weekly films illustrate exploration and conquest, indigenous encounters, slavery and Africans, colonial society, liberalism, environmental change, urbanization, revolution and issues in contemporary social geography. (F)
GEOG 4273	Regional Climatology	Prerequisite: junior or senior standing; or permission of instructor. Investigates the nature of the Earth's climate and presents a synthesis of contemporary scientific ideas about atmospheric circulation. Topics include radiation, the hydrologic cycle, general circulation, local and regional climates, and global climate change. Specific attention is focused on the climatic water budget, its utility in evaluating local and regional climates, the emerging role of climate models, and issues in global climate change. (Irreg.) [II-NL]
GEOG 4283	Biogeography	(Slashlisted with 5283) Prerequisite: 1114 and junior standing. A survey of spatial patterns and processes in plant populations, plant communities, and vegetated landscapes. Emphasis is placed on the contemporary patterns of species and communities as determined by a combination of factors including physiography, climate, human influences, evolution, and dispersal. Field and laboratory techniques used in biogeographic research are also discussed. No student may earn credit for both 4283 and 5283. (Alt. Sp)
GEOG 4293	Hydrologic Science	(Slashlisted with 5293) Prerequisite: Math 1823 or 1914 and either Physics 2414, 2514 or Chemistry 1315. Study of the processes which control the storage and movement of water at global, regional, and local scales. The emphasis is on the land portion of the hydrologic cycle, and includes the study of processes such as infiltration, soil water flow in the saturated and unsaturated zone, rainfall/runoff and evaporation. Lab sections include exercises on a computer in the field and in a soils lab. No student may earn credit for both 4293 and 5293. (Sp)

GEOG 4333	Corporate Environmental Strategy	(Slashlisted with 5333) Prerequisite: junior standing or permission of instructor. Examination of the importance of environmental science and technology for corporations seeking sustainability. Students attain an understanding of the private sector as a force for positive environmental change and the dimensions of the natural environment in the competitive market. Corporate case students are discussed to improve understanding of strategic decision making. No student may earn credit for both 4333 and 5333. (Sp)
GEOG 4343	Climate, History, and Society	(Slashlisted with 5343) Prerequisite: junior standing or permission of instructor. This course is an overview of the mutual interactions of climate and human activities, and examines historical examples of significant climatic impacts. The course includes investigation of the nature of earth's climate and a synthesis of contemporary scientific ideas about the climate and its environmental and societal impacts. No student may earn credit for both 4343 and 5343. (Irreg.) [II-NL]
GEOG 4433	Cultural and Political Ecology	Prerequisite: junior standing or permission of instructor. An introduction to the political, economic, and cultural factors that shape human-environmental relations among peasant and indigenous societies around the world. Special attention is placed on how people negotiate decisions about resource use within value and belief systems that vary in response to changing social and environmental contexts. (Sp) [III-SS]
GEOG 4443	Urban Ecology	(Slashlisted with 5443) Prerequisite: permission of instructor. An interdisciplinary course that examines how cities acquire, utilize, and modify environmental inputs such as land, water, and energy, and in the process generate a complex set of waste streams and environmental impacts such as solid wastes, atmospheric emissions, and habitat modification. No student may earn credit for both 4443 and 5443. (Irreg.)
GEOG 4513	Applied Climatology	(Slashlisted with 5513) Prerequisite: MATH 1823 and PHYS 2514 with a grade of C or better. The purpose of this class is to broaden the perspective of students to the use of climate information in agriculture, energy, water resources, public health, and other areas of society. Field trip. No student may earn credit for both 4513 and 5513. (Sp)
GEOG 4523	Life Cycle Analysis	(Slashlisted with 5523) Prerequisite: junior standing or permission of instructor. This course provides students with an understanding of Life Cycle Analysis both with respect to its conceptual foundations as well as its applications across a variety of socially important sectors. No student may earn credit for both 4523 and 5523. (Sp)
GEOG 4563	American Indian Geographies	Prerequisite: upper-division standing. A survey of the geographical knowledge among Indians in North America. Historical and contemporary topics are covered in a cross-cultural perspective including land use, environmental perception, concepts of space and place, symbolic landscapes, sacred land, and the idea of resources. (Sp) [IV-NW]
GEOG 4573	Indigenous Peoples and Resources	Prerequisite: junior or senior standing or permission of instructor. A global survey of the role natural resources play in contemporary conflicts among indigenous peoples, neocolonial states and corporations, and non-governmental organizations (NGOs). The integrative-humanistic approach emphasizes understanding the ethical, cultural, economic, and ecological issues at stake in individual case studies set in a global context. Possible solutions to these conflicts are examined. (F) [IV-WC]

GEOG 4583	Renewable Energy Resources	(Slashlisted with 5583) Prerequisite: junior standing or permission of instructor. Designed to provide an understanding of the interdisciplinary elements and perspectives associated with renewable energy. Includes an introduction to the variety of technical and non-technical issues that affect contemporary energy issues as well as the scope of management strategies that are employed to resolve society's continuing effort to reconcile energy production and use with the integrity of natural systems. No student may earn credit for both 4583 and 5583. (F)
GEOG 4853	The Geography of Africa	Prerequisite: junior standing or permission of instructor. Analysis of diversified natural resources and endowment; cultural/historical background; economic, political and environmental implications of colonialism; modern development aid; post-colonial ideologies, policies and regional change; migration and rural-urban interactions; religion, the arts, and civilization; Sahel crises and coping strategies; national master plans and objectives for economic development; project evaluation. (Irreg.)
GEOG 4893	Research Methods and Professional Development	Prerequisite: GIS 4013, GEOG 3924, or concurrent enrollment, and senior standing. Research methods used in contemporary geography, GIS, and environmental sustainability and use of these methods in designing research projects, and preparation for post-graduate employment and/or graduate education. Required prior to enrollment in Capstone. Students complete proposals for research to be undertaken in the subsequent capstone course. The course will include professional development e.g. resume writing, presentation, and interviewing skills. (F)
GEOG 4943	Natural Hazards	(Slashlisted with 5943) Prerequisite: junior or senior standing. Examines changes in patterns of a range of natural hazards and the impact they have on society. Examines general concepts of hazard mitigation and design and our perceptions of risk and how that affects preparedness and mitigation decisions. No student may earn credit for both 4943 and 5943. (F)
GEOG 4953	Capstone	Prerequisite: GEOG 3924, GIS 4013, and GEOG 4893. Completion of research as proposed in GEOG 4893, including a formal presentation of results to faculty and students in the department and submission of a final research report reflecting a culminating experience in the student's degree program. (Sp) [V]
GEOG 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
GEOG 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GEOG 4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topics not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
GEOG 5003	The Global City And Planning Issues	(Crosslisted with RCPL 5003; Slashlisted with 4003) Prerequisite: graduate standing. An introduction to the concept of globalization and its effects on cities, and the city planning issues related to those effects. Characteristics, theories, and strategies of city development are reviewed. Cities are observed from several perspectives: natural and built environment, governance, society, economics, and history. No student may earn credit for both 4003 and 5003. (Sp)

GEOG 5113	Quantitative Methods in Geographical Research	Prerequisite: 3923 or permission of instructor. An introduction for graduate majors in geography and those in allied fields to research design and problem-solving research techniques. (F, Sp)
GEOG 5143	Ecosystem Services	Prerequisites: graduate or senior standing. Explores the availability and value of ecosystem services using scientific, economic, and sociopolitical perspectives. At the end of the course, students should be able to: (i) Define and map ecosystem services; (ii) Gain an interdisciplinary understanding of the processes involved in the creation and distribution of ecosystem services; and (iii) Describe the linkages between natural and human systems and how these impact the availability of ecosystem services. (Sp)
GEOG 5200	Internship in Geography	Prerequisite: graduate standing. May be repeated; maximum credit six hours. Provides career training experience for students, allowing them to apply their skills and theoretical constructs in a real world setting in industry, business, government agencies or educational institutions. (F, Sp)
GEOG 5203	Geomorphology	(Slashlisted with 4203) Prerequisite: graduate standing. Development and modification of land-surface form by atmospheric, fluvial, glacial, mass-wasting, volcanic and tectonic agents. Emphasis is placed on spatial aspects of the interactions at the interfaces of land, air and water. No student may earn credit for both 4203 and 5203. (Irreg.)
GEOG 5213	Principles and Practice of Urban Planning	(Crosslisted with RCPL 5213) Prerequisite: open to seniors in social science departments, architecture and civil engineering and to graduate students in regional and city planning. A lecture course which examines the physical, social, economic and public interest determinants of land use; the economic population and land use studies required to provide the basis for planning; space and location requirements and design characteristics for residential, commercial, industrial and public uses of land; and the study of urban traffic as a function of land use in terms of structure and systems of movement. (F, Su)
GEOG 5243	Systems Thinking and Knowledge Integration	Prerequisites: graduate or senior standing. This course provides students with explicit understanding of contemporary techniques of integrating different fields of knowledge to advance systematic understanding and problem solving in environmental sustainability. Different techniques and approaches are examined first within a systems framework and then followed with detailed study of two complex ecosystems to illustrate application. (F)
GEOG 5253	The Economics of Sustainability	Prerequisites: graduate standing or permission of instructor. This course critiques various approaches to understanding the economics of sustainability, including neoclassical economic perspectives, environmental economics, and ecological economics. Students will examine the links between the natural environment and the human economy. (Sp)
GEOG 5283	Biogeography	(Slashlisted with 4283) Prerequisite: graduate standing. A survey of spatial patterns and processes in plant populations, plant communities, and vegetated landscapes. Emphasis is placed on the contemporary patterns of species and communities as determined by a combination of factors including physiography, climate, human influences, evolution, and dispersal. Field and laboratory techniques used in biogeographic research are also discussed. No student may earn credit for both 4283 and 5283. (F)
GEOG 5293	Hydrologic Science	(Slashlisted with 4293) Prerequisite: Math 1823 or 1914 and either Physics 2414, 2514 or Chemistry 1315, or the equivalents and graduate standing. Study of the processes which control the storage and movement of water at global, regional, and local scales. The emphasis is on the land portion of the hydrologic cycle, and includes the study of processes such as infiltration, soil water flow in the saturated and unsaturated zone, rainfall/runoff and evaporation. Lab sections include exercises on a computer in the field and in a soils lab. No student may earn credit for both 4293 and 5293. (Sp)

GEOG 5333	Corporate Environmental Strategy	(Slashlisted with 4333) Prerequisite: graduate standing or permission of instructor. Examination of the importance of environmental science and technology for corporations seeking sustainability. Students attain an understanding of the private sector as a force for positive environmental change and the dimensions of the natural environment in the competitive market. Corporate case students are discussed to improve understanding of strategic decision making. No student may earn credit for both 4333 and 5333. (Sp)
GEOG 5343	Climate, History, and Society	(Slashlisted with 4343) Prerequisite: graduate standing or permission of instructor. This course is an overview of the mutual interactions of climate and human activities, and examines historical examples of significant climatic impacts. The course includes investigation of the nature of earth's climate and a synthesis of contemporary scientific ideas about the climate and its environmental and societal impacts. No student may earn credit for both 4343 and 5343. (Irreg.)
GEOG 5353	Advanced Cartography	Prerequisite: 3353 or permission of instructor. Training in using state-of-the-art hardware and software for computer mapping systems in digital cartographic data structures, in cartographic modeling, and in map production in computer environments. No student may earn credit for both 4353 and 5353. (Sp)
GEOG 5433	Sustainability: Theory and Practice	Prerequisites: graduate standing or permission of instructor. This course examines the concept of sustainability from a human development perspective. A set of sustainability principles are critiqued to provide an understanding of the difficulty facing human systems to solve environmental, social and economic challenges. (Sp)
GEOG 5443	Urban Ecology	(Slashlisted with 4443) Prerequisite: graduate standing and permission of instructor. An interdisciplinary course that examines how cities acquire, utilize, and modify environmental inputs such as land, water, and energy, and in the process generate a complex set of waste streams and environmental impacts such as solid wastes, atmospheric emissions, and habitat modification. No student may earn credit for both 4443 and 5443. (Irreg.)
GEOG 5513	Applied Climatology	(Slashlisted with 4513) Prerequisites: graduate standing and grade of C or better in MATH 1833 and PHYS 2514. The purpose of this class is to broaden the perspective of students to the use of climate information in agriculture, energy, water resources, public health, and other areas of society. Field trip. No student may earn credit for both 4513 and 5513. (Sp)
GEOG 5523	Life Cycle Analysis	(Slashlisted with 4523) Prerequisite: Graduate Standing. This course provides graduate students with an understanding of Life Cycle Analysis both with respect to its conceptual foundations as well as its applications across a variety of socially important sectors. No student may earn credit for both 4523 and 5523. (Sp.)
GEOG 5543	Advanced Digital Analysis of Remotely Sensed Data	Prerequisite: 4133/5133 and 4233/5233. Advanced course in remote sensing, including RS and GIS applications/modeling; a brief overview of spatial techniques; and an independent research project. (Irreg.)
GEOG 5583	Renewable Energy Resources	(Slashlisted with 4583) Prerequisite: graduate standing or permission of instructor. Designed to provide an understanding of the interdisciplinary elements and perspectives associated with renewable energy. Includes an introduction to the variety of technical and non-technical issues that affect contemporary energy issues as well as the scope of management strategies that are employed to resolve society's continuing effort to reconcile energy production and use with the integrity of natural systems. No student may earn credit for both 4583 and 5583. (F)

GEOG 5610	Field Studies in Regional Geography	1 to 4 hours. Prerequisite: eight hours of geography (or three hours of geography and eight hours in one, or twelve hours in two, of anthropology, economics, political science, history, sociology, geology and permission). May be repeated; maximum credit twelve hours. Written reports based on lectures, observations, field notes, interviews and library research are required of each student. (Irreg.)
GEOG 5623	Seminar in GIS Design	Prerequisite: 4553 or 5553. May be repeated with change of content; maximum credit nine hours. Discusses and practices principles in GIS interface design and project management; integration of spatial data and spatial models with GIS; and spatial decision support systems (SDSS). Students will gain knowledge about the theoretical aspects of GIS technology. (Sp)
GEOG 5943	Natural Hazards	(Slashlisted with 4943) Prerequisite: graduate standing. Examines changes in patterns of a range of natural hazards and the impact they have on society. The course will examine general concepts of hazard mitigation and design and our perceptions of risk and how that affects preparedness and mitigation decisions. No student may earn credit for both 4943 and 5943.(F)
GEOG 5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
GEOG 5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GEOG 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. Laboratory (F, Sp, Su)
GEOG 5990	Selected Studies in Geography	1 to 4 hours. Prerequisite: teacher's certificate or bachelor's degree and permission. May be repeated with change of subject matter; maximum credit eight hours. Designed to afford either an intensive study of a systematic field or an extensive coverage of broad problem topics in geography. (F, Sp, Su)
GEOG 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GEOG 6210	Seminar in Physical Geography	1 to 3 hours. Prerequisite: twelve hours of geography or permission. May be repeated with change of subject matter; maximum credit 15 hours. Directed individual research studies in one of the major divisions of physical geography, such as landform analysis, climatology, the geography of soils, water resources or biogeography. Provides training in oral, written and cartographic presentation. (Irreg.) Sec. 1 - Geomorphology Sec. 2 - Climatology Sec. 3 - Soils Sec. 4 - Hydrology Sec. 5 - Biogeography Sec. 6 - Human Impacts on Physical Environment

GEOG 6220	Seminar in Human Geography	1 to 3 hours. Prerequisite: twelve hours of geography or permission. May be repeated with change of subject matter; maximum credit fifteen hours. Directed studies in one of the major divisions of human geography. (Irreg.) Sec. 1 - Urban Geography Sec. 2 - Settlement Patterns Sec. 3 - Historical Geography Sec. 4 - Cultural Ecology Sec. 5 - Cultural Geography Sec. 6 - Economic Development Sec. 7 - Political Geography Sec. 8 - Social Geography Sec. 9 - Regional Geography Sec. 10 - Political Ecology
GEOG 6230	Seminar in Economic Geography	1 to 3 hours. Prerequisite: twelve hours of geography or permission. May be repeated with change of subject matter; maximum credit 15 hours. Directed studies in one of the major divisions of economic geography. (Irreg.)
GEOG 6240	Seminar in Resource and Environmental Geography	1 to 3 hours. Prerequisite: twelve hours of geography or permission. May be repeated with change of subject matter; maximum credit 15 hours. Directed individual research studies in one of the major aspects of resource or environmental geography. Provides training in collection and analysis of data in oral, written and cartographic presentation. (Irreg.) Sec. 1 - Environmental Geography Sec. 2 - Natural Resources Sec. 3 - Water Resources Sec. 4 - Land Use Sec. 5 - Energy Resources Sec. 6 - Mineral Resources Sec. 7 - Applied Climatology
GEOG 6950	Research Problems in Geography	1 to 6 hours. Prerequisite: graduate standing in geography, permission. May be repeated with change of subject matter; maximum credit 15 hours. Advanced independent research on any systematic or regional topic within the scope of geography appropriate to the library facilities or field study opportunities available to the student. (F, Sp, Su)
GEOG 6953	Research Methods in Geography	Prerequisite: admission to master's or doctoral degree program in geography. An intensive introduction to the definition of research problems in geography, to the range of methods available for analysis, and to the presentation of research results. Students will formulate a research proposal that includes problem identification, recommendation and justification of methods for analysis, and preparation of a critical literature review. (Sp)
GEOG 6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
GEOG 6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
GEOG 6973	Contemporary Geographic Thought	A survey of research philosophies and directions in American geography since World War II. An introduction to the geographical teaching and research interests at the University of Oklahoma. (F)
GEOG 6980	Research for Doctoral Dissertation	(F, Sp, Su)

GEOG	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GEOL	1003	Volcanoes and Earthquakes	Prerequisite: high school chemistry and algebra. Worldwide distribution of volcanic and earthquake activity; types of volcanic eruptions and associated landforms and rocks; causes of and techniques for location of earthquakes; prediction of volcanic eruptions and earthquakes; social consequences of predictions and actual volcanic and earthquake activity. (F, Sp) [II-NL]
GEOL	1013	Global Environmental Change	Relationship between humanity and the environment from an intellectual and historical perspective. Principle of progress and the Industrial Revolution, the Enlightenment and Francis Bacon, the noble savage, conservation and land ethics. Malthusians and Cornucopians, the Gaia Hypothesis, risk analysis, global warming, fossil fuels and alternative energy sources. (Sp)
GEOL	1024	The History of the Earth and Life	The origin of the Earth and solar system. Rocks and minerals; geologic time; plate tectonics and continental drift. The ocean-atmosphere system; climate change over time; biological evolution. The fossil record of early life; the "Cambrian Explosion" of life in the oceans; invertebrate animals and their geological history. Geological history of fishes; evolution of plants. Terrestrial vertebrates, including dinosaurs and mammals. Mass extinctions; human evolution; impact of human activities on the global environment and the biosphere. No student may earn credit for both GEOL 1024 and GEOL 1124. (Sp) [II-LAB]
GEOL	1034	Native Science and Earth Systems of North America	(Crosslisted with METR 1034) Examines Earth systems of North America using both indigenous and Western perspectives, and an Earth science approach. This team-taught course will utilize a combination of geology, geography, meteorology, and Native American sciences, as expressed through the use of art. (Sp) [II-LAB]
GEOL	1104	The Dynamic Earth (Geology for non-Science Majors)	Introduction to the fundamentals of geology and their application to land-use, groundwater, mineral use and fossil fuel problems facing society. Several guest lecturers from industry and state and federal surveys will contribute to the content of the course. Laboratory fee. Three hours lecture, two hours lab. Laboratory. (F, Sp) [II-LAB]
GEOL	1114	Physical Geology for Science and Engineering Majors	Prerequisite: equivalent knowledge of high school chemistry, algebra and trigonometry. Laboratory included. Plate tectonics, the makeup of continents and mountain building. Heat flow, magnetism, gravity, rock deformation, earthquakes and the earth's interior. Surface processes including weathering, erosion, transport and deposition. Landforms, rivers, groundwater, glaciers, ocean processes, and volcanoes. Minerals and rocks. Application of geology to land-use, groundwater, mineral and fossil fuel exploration. Laboratory. (F, Sp) [II-LAB]
GEOL	1124	Earth History	Prerequisite: none; 1114 helpful but not required. Laboratory included; field trip. Physical history of the earth from its origin as a planet through the Great Ice age. Origin and growth of continents and ocean basins. Systematic survey of the history of continents with emphasis on North America: growth and leveling of mountain chains, rift valleys, transgressions and regressions of seas; continental fragmentation, assembly and relative motions. Plate tectonics, particularly as it relates to continent history. Climate and evolutionary changes through geologic time. Principles and methods used to interpret earth history and date rocks. Geologic time. Laboratory includes historical studies of specific regions; study of maps and fossils. Laboratory (F, Sp)

GEOL	1133	Geol Gems and Precious Metals	An applied science course that draws upon a high-school background in general science, chemistry and physics. Course covers the contemporary gem market and trade lingo; the physical and optical properties of gem materials and precious metals; how crystals grow; crystal synthesis, and the conditions that produce large, clear, perfect crystals; the geological processes behind the formation of deposits of precious metals (gold, silver and platinum) and gemstones (diamond, sapphire, ruby, emerald, topaz, beryl, tourmaline) toward an understanding of why these materials are rare in nature; market buying tips and techniques for each gem material. (F)
GEOL	1203	The Age of Dinosaurs	(Crosslisted with BIOL 1203) Introduction to basic principles and theories in biology (evolution, systematics, vertebrate morphology and relationships) and geology (geologic time, earth history, plate tectonics, sedimentation and stratigraphy), focusing on the evolutionary history of Dinosauria. May not be counted for major coursework in Biology or Geology. [II-NL]
GEOL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GEOL	2014	The Earth System	An integrated overview of earth sciences emphasizing earth materials, the oceans and atmosphere, the solar system, and earth's evolution. The interrelationship among the different earth systems will be emphasized. Topics will be explored through a learning-cycle approach. The lab component includes both in-class experiments and one field-based research project. Laboratory (Sp) [II-LAB]
GEOL	2224	Introduction to Mineral Sciences	Prerequisite: CHEM 1315, MATH 1914 or 2423 and any 1000-level GEOL course, and permission of instructor. Main topics include crystal chemistry, optical properties and identification of minerals utilizing the petrographic microscope, mineral stability, crystal symmetry, and an introduction to the rock-forming minerals and their environments of formation. Laboratory (F)
GEOL	2970	Special Topics	NULL
GEOL	3003	Structural Geology and Stratigraphy for Petroleum Engineers	Prerequisite: 1114, Physics 2524 or concurrent enrollment. Treatment of structural and stratigraphic geology with an emphasis on aspects of importance to petroleum engineering. Includes an investigation of mechanical principles relating to the earth's crust, descriptive study of nomenclature, causes of tectonic deformation, sedimentary processes and environments, and stratigraphic principles. Laboratory. (Sp)
GEOL	3013	The Geology of Oklahoma	Prerequisite: junior standing or permission of instructor. Provides an overview of geology emphasizing earth materials, surface processes, natural hazards, and the earth's evolution using Oklahoma as our natural laboratory. The course emphasizes problem solving and includes impact of anthropogenic changes and resources extraction. Required field trip. Grading based on exams, research paper and in-class exercises. (F) [II-NS]
GEOL	3114	Structural Geology	Prerequisite: 2224, Physics 2524 or concurrent enrollment. An introduction to the concepts of stress, strain, the mechanisms of rock deformation, the mechanics of folding and fracturing, and description of structural styles in various tectonic settings. Laboratory. (F)
GEOL	3123	Introductory Field Geology	Prerequisite: 2224, 3114, and 3223 or 3233, or permission (completed laboratory). Techniques of geologic fieldwork including: measuring stratigraphic sections, airphoto analysis, mapping, total station, writing reports. Course includes 10-12 field days in Oklahoma (during weekends) and a weekly laboratory. Students will be charged transportation costs. (Sp)
GEOL	3154	Environmental Geology	Prerequisite: GEOL 1104 or GEOL 1114 or permission. Focuses on the reciprocal interactions between human activities and geological processes, especially soil properties, resource utilization, and geological hazards. Laboratory provides an introduction to techniques and skills relevant to environmental geology. Laboratory; field trip. (Sp)

GEOL	3223	Igneous and Metamorphic Petrology	Prerequisite: 2224 or permission. Laboratory included. Field trip; students will be charged transportation costs. Generation, emplacement and crystallization of magma; phase chemistry; principles of igneous rock classification; the relationship of magma types to geologic setting. Principles of metamorphic petrology; phase chemistry and metamorphic reactions; concepts of metamorphic grade, P-T regimes and relationships to geologic environments; concepts of protoliths and provenance. Laboratory study of the textures, structures and mineral assemblages of igneous and metamorphic rocks utilizing hand specimens and thin sections. Laboratory. (Sp)
GEOL	3233	Sedimentary Petrology and Sedimentology	Prerequisite: 2224 or permission. Laboratory included. Field trip; students will be charged transportation costs. Origin, evolution and interpretation of sedimentary rocks with an emphasis on terrigenous systems; interpretation of mineralogy, textures and structures of terrigenous clastic and carbonate rocks in hand specimen and thin section. Laboratory. (Sp)
GEOL	3333	Geowriting	Prerequisite: English 1113 and English 1213 or Expository Writing 1213. Provides student with the information and skills needed to effectively communicate as professional geoscientists. Students will actively engage in writing and scientific communication exercises through in-class activities, weekly assignments, and semester-long projects. Substitutes for English 3153. (alt. F)
GEOL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GEOL	3513	Fundamentals of Invertebrate Paleontology	Prerequisite: GEOL 1114 or GEOL 1024 or BIOL 1114 or permission of instructor. Fossil preservation and bias in the fossil record. Ontogeny and growth of invertebrates. Interpretation of the life habits of fossil organisms, with case histories from invertebrates and vertebrates. Speciation and macroevolution. Paleoecology of marine communities. Mass extinctions in the fossil record. Biostratigraphy. Laboratory covers classification, morphology and ecology of the major invertebrate fossil groups. Laboratory (F)
GEOL	3633	Introduction to Oceanography	General survey of the scientific framework of the four specializations of the oceanographic study - biological, chemical, geological/geophysical and physical oceanography. Applications of ocean research to social and economic problems; interrelations between the ocean disciplines and other fields of study. (Sp) [II-NL]
GEOL	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
GEOL	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
GEOL	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
GEOL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

GEOL	4113	Depositional Systems and Stratigraphy	(Slashlisted with 5113) Prerequisite: 3114, 3233 or permission. Basic stratigraphic principles as well as reconstruction of ancient depositional systems. The controls on deposition of stratigraphic sequences, completeness of the rock record, biostratigraphy, magneto stratigraphy, and seismic stratigraphy. Field trip; students will be charged transportation costs. No student may earn credit for both 4113 and 5113. Laboratory. (F)
GEOL	4133	Petroleum Geology for Geoscientists	Prerequisite: GEOL 3114,GEOL 3233 and instructor permission. Addresses the origin and characteristics of conventional and unconventional petroleum resources, the petroleum system (source rocks, reservoirs, traps, seals), data and methods for exploration and development (cores, well-log analysis and pay determination, subsurface mapping, seismic interpretation, 3-D reservoir modeling), and reserves calculations. (F)
GEOL	4136	Field Geology	Prerequisite: 3123; senior standing or permission. A six-week summer course held at the Oklahoma Geology Camp at Canon City, Colorado. Applications of field techniques, including use of aerial photographs, construction of geological maps and geophysical methods, to the recognition and interpretation of geologic phenomena. (Su) [V]
GEOL	4143	Petroleum Geology for Business Majors	Prerequisite: 1104 or 1114. The integration of several fields of geology with geochemistry, geophysics, and engineering to provide an overview of the science and technology used in the exploration for and development of oil and natural gas fields. Briefly covers historical development of petroleum geology, amount and location of the world's major oil and gas reserves, and future potential for conventional and non-conventional hydrocarbon resources. (F)
GEOL	4204	Vertebrate Paleobiology	(Crosslisted with ZOO 4204; Slashlisted with 5204) Prerequisite: Zoology 1114 and 1121, or 1124, or Biology 1134, or permission of instructor. Systematics, relationships, zoogeography and evolutionary morphology of the major groups of vertebrates. Field trips. No student may earn credit for both 4204 and 5204 or either Zoology 4204 or 5204. (Sp-odd-numbered years)
GEOL	4213	Earth System History	Prerequisite: 4113 or concurrent enrollment; or permission of instructor. Provides an earth system perspective to earth history that emphasizes tectonic, climatic and biotic interactions throughout geologic time. No student may earn credit for both 4213 and 5213. (F)
GEOL	4223	Principles of Geochemistry (Slashlisted with 5223)	Prerequisite: 2224, Chemistry 1315, and 1415. Experience with calculus recommended. Overview of major topics in geochemistry, emphasizing thermodynamics and kinetics within the context of natural systems. Additional topics will include nucleosynthesis and cosmochemistry, bulk Earth geochemistry, chemistry and bonding of natural materials, solutions and mineral solubility, redox processes, interfacial geochemistry, and isotope geochemistry. No student may earn credit for both 4223 and 5223. Laboratory (Alt. Sp)
GEOL	4233	Subsurface Methods	Prerequisite: GEOL 3114, GEOL 3233, or permission of instructor. Includes a basic oil/gas industry overview, regional basin-scale evaluation, and overview of petroleum data sources and techniques including log correlation and the construction and interpretation of various types of cross-section maps. An overview of seismic principles and techniques is also included. Students will also examine and describe cores and drill cuttings and be introduced to well testing and drilling techniques. The final project is an evaluation of an oil/gas field in which newly acquired correlation, mapping, and evaluation skills are utilized. Course meets biweekly for lectures and integrated lab exercises and is intended to be practical and industry oriented. (Sp)

GEOL	4243	Electron Microbeam Methods	(Slashlisted with 5243) Prerequisite: senior standing and permission of instructor. Provides the background necessary to effectively use electron microbeam (scanning electron microscope, electron microprobe) techniques to conduct spatial and compositional characterization on operational theory coupled with applied (hands-on) utilization of a modern electron microprobe. No student may earn credit for both 4243 and 5243. Laboratory (F)
GEOL	4373	History of Geology	(Slashlisted with 5373) Prerequisite: junior standing. History of science and the scientific method with an emphasis on geology. Greek science, scholasticism, Copernican revolution Francis Bacon, principle of uniformity, evolution, continental drift, climate, progress. Discussion of writings by Plato, Geike, Kuhn, Popper, Chamberlin, Gilbert, Hubbert and others. No student may earn credit for both 4373 and 5373. (F) [IV-WC]
GEOL	4413	Paleobotany	(Crosslisted with BOT 4413; Slashlisted with 5413) Prerequisite: permission of instructor. Introduction to the fossil record of terrestrial plants from algae to flowering plants. Lectures will address anatomy, morphology, taphonomy and paleoecology, including climate and plant-animal interactions. Laboratories will put lecture topics into practice using fossil plants from the Oklahoma Museum of Natural History collection and from fieldwork. Field trips. No student may earn credit for both 4413 and 5413. Laboratory. (Sp, even-numbered years)
GEOL	4513	Evolutionary Paleobiology	(Slashlisted with 5513) Prerequisite: 3513. Evolutionary patterns in the fossil record. Time resolution and bias in fossil assemblages. Taxonomic diversity and community replacement over geologic time. Mass extinctions and evolutionary radiations. Heterochrony and evolution. Application of methods in biosystematics to fossils, including computer-based techniques. No student may earn credit for both 4513 and 5513. (Alt. Sp)
GEOL	4533	Earth's Past Climate (Crosslisted with METR 4533; Slashlisted with 5533)	(Crosslisted with METR 4533; Slashlisted with 5533). Prerequisite: senior or graduate standing, or permission of instructor. Explores earth's climate system, controls on climate change, and evolution of climate history through geologic time as deciphered from climate proxies. No student may earn credit for both 4533 and 5533. (F)
GEOL	4633	Hydrogeology	Prerequisite: MATH 2924 or MATH 2443, PHYS 2524, senior standing in geology, or permission of instructor. Darcy's law, Hubbert's fluid potential, equations of groundwater flow. Physical properties of geologic materials and fluids. Free convection, compaction- and gravity-driven flow. Role of fluids in geologic phenomena, including mineralization, metamorphism, hydrocarbon migration, sedimentary diagenesis, faulting and earthquakes, paleomagnetism. Application of geologic and geophysical techniques to fluid flow problems. (F)
GEOL	4843	Economic Geology--Metallic Deposits	(Slashlisted with 5843) Prerequisite: GEOL 3114, GEOL 3223, and GEOL 3233. Introductory study of the important metallic ore deposits of the world; geology, origin and economic features of the deposits. No student may earn credit for both 4843 and 5843. (Irreg.)
GEOL	4864	Geomicrobiology	(Crosslisted with MBIO 4864; Slashlisted with 5864) Prerequisite: Microbiology 3813 or permission of instructor. Life below the earth's surface. Bacterial degradation of pollutants. Petroleum microbiology. Role of microorganisms in geochemical cycling of carbon, sulfur, and metals. No student may earn credit for both 4864 and 5864. (F) [II-NL]
GEOL	4923	Pegmatites	(Slashlisted with 5923) Prerequisite: GEOL 3223, CHEM 1415, and permission of instructor. Granitic pegmatites are the most complex rocks on earth. Class instructs students in the use of scientific methods, including historical background, working hypotheses, analytical methods, experimental test, and theory as they are utilized in solving the origins of pegmatites. No student may earn credit for both 4923 and 5923. (Sp)

GEOL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
GEOL	4970	Seminar	1 to 3 hours. Prerequisite: permission. May be repeated; maximum credit nine hours. (F, Sp)
GEOL	4983	Senior Thesis in Geology	Prerequisite: senior standing with a major in geology and permission. May not be repeated. Individual research of a geological topic selected by the student in consultation with the instructor. The project may involve fieldwork, theoretical analysis, computer modeling, and/or data analysis and interpretation, culminating in a written thesis. (F, Sp, Su)
GEOL	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit nine hours. Contracted independent study for topics not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
GEOL	5003	Diagenesis	Prerequisite: 26 hours of geology or geophysics or permission. Origin and interpretation of diagenetic features of sedimentary rocks, including porosity, permeability, fluid flow, compaction and cementation. Geochemical approaches are stressed. Laboratory. (Irreg.)
GEOL	5010	Paleomagnetism/Diagenesis Seminar	Prerequisite: Senior or graduate standing; GPHY 5364 suggested. Seminar includes presentations by the professor on research topics as well as presentations by students on papers they read. In addition, each student will also make at least one presentation on their research. Also, students will work through a self-instruction lab with the microscopes. Focuses on recognizing diagenetic features that are important for paleomagnetism. May be taken for a total of six credit hours. (F, Sp)
GEOL	5020	Sedimentology and Stratigraphy Seminar	Prerequisite: graduate standing. May be repeated with change of content; maximum credit twelve hours. Directed seminar on selected aspects of sedimentology and stratigraphy. (F, Sp)
GEOL	5030	Petrology Seminar	Prerequisite: GEOL 3223. May be repeated; maximum credit 12 hours. Topical presentations and discussions in hard-rock petrology, and related geochemistry and mineralogy, given by faculty, graduate students, and visiting school colloquium speakers. (Irreg.)
GEOL	5113	Depositional Systems and Stratigraphy	(Slashlisted with 4113) Prerequisite: 3114, 3233 or permission. Basic stratigraphic principles as well as reconstruction of ancient depositional systems. The controls of deposition of stratigraphic sequences, completeness of the rock record, biostratigraphy, magneto stratigraphy, and seismic stratigraphy. Field trip; students will be charged transportation costs. No student may earn credit for both 4113 and 5113. Laboratory. (F)
GEOL	5130	Advanced Field Geology	1 to 6 hours. Prerequisite: permission. Supervised fieldwork on specific field problems. (Irreg.)
GEOL	5173	Clastic Facies	Prerequisite: 3233 or 4113 or equivalent. Bedforms, sedimentary structures, flow regime, intrinsic versus extrinsic controls on sedimentation, ancient depositional environments and depositional models (alluvial fan, fluvial, deltaic, lacustrine, eolian, shelf, etc.). (F)
GEOL	5204	Vertebrate Paleobiology	(Crosslisted with ZOO 5204; Slashlisted with 4204) Prerequisite: graduate standing and permission of instructor. Systematics, relationships, zoogeography, and evolutionary morphology of the major groups of vertebrates. Field trips. No student may earn credit for both 4204 and 5204 or either Zoology 4204 or 5204. Laboratory (Sp odd-numbered years)
GEOL	5213	Earth System History	Prerequisite: graduate standing or permission of instructor. Provides an earth system perspective to earth history that emphasizes tectonic, climatic and biotic interactions throughout geologic time. No student may earn credit for both 4213 and 5213. (F)

GEOL	5223	Principles of Geochemistry (Slashlisted with 4223)	Prerequisite: graduate standing or permission of instructor. Overview of major topics in geochemistry, emphasizing thermodynamics and kinetics within the context of natural systems. Additional topics will include nucleosynthesis and cosmochemistry, bulk Earth geochemistry, chemistry and bonding of natural materials, solutions and mineral solubility, redox processes, interfacial geochemistry, and isotope geochemistry. No student may earn credit for both 4223 and 5223. Laboratory (Alt. Sp)
GEOL	5243	Electron Microbeam Methods	(Slashlisted with 4243) Prerequisite: graduate standing and permission of instructor. Provides the background necessary to effectively use electron microbeam (scanning electron microscope, electron microprobe) techniques to conduct spatial and compositional characterization of multi-component solid materials, to be achieved through lecture on operational theory coupled with applied (hands-on) utilization of a modern electron microprobe. No student may earn credit for both 4243 and 5243. Laboratory. (F)
GEOL	5343	Stable Isotope Geochemistry	Prerequisite: Chemistry 1315, 1415; senior or graduate standing. Focuses on the stable isotopes of light elements (C, H, O, N, S) in the various processes that have resulted in their redistribution over geologic time. (Alt. F)
GEOL	5353	Carbonates and Sequence Stratigraphy	Prerequisite: Senior undergraduate or graduate standing and permission of instructor. Sedimentology, sequence stratigraphy, paleo-climate, and reservoir attributes of Paleozoic carbonates (and associated eolian, fluvial and deep-water siliciclastics) of the classic Permian basin region. A highlight is a major field trip to world-class exposures in the Sacraments (NM) and Guadalupe (TX) mountains. (Irreg.)
GEOL	5363	Carbonate Geology	Prerequisite: 26 hours of geology and geophysics, or permission. Students will be charged field trip costs. Petrology and petrography of modern and ancient chemical rocks, the reconstruction of their physical/chemical depositional and diagenetic environments in time and space; applied interpretation of cores, petrophysical logs, and seismic; five-day field trip to the Florida Keys. (Irreg.)
GEOL	5373	History of Geology	(Slashlisted with 4373) Prerequisite: graduate standing. History of science and the scientific method with an emphasis on geology. Greek science, scholasticism, Copernican revolution Francis Bacon, principle of uniformity, evolution, continental drift, climate, progress. Discussion of writings by Plato, Geike, Kuhn, Popper, Chamberlin, Gilbert, Hubbert and others. No student may earn credit for both 4373 and 5373. (F)
GEOL	5413	Paleobotany	(Crosslisted with BOT 5413; Slashlisted with 4413) Prerequisite: permission of instructor. Introduction to the fossil record of terrestrial plants from algae to flowering plants. Lectures will address anatomy, morphology, taphonomy and paleoecology, including climate and plant-animal interactions. Laboratories will put lecture topics into practice using fossil plants from the Oklahoma Museum of Natural History collection and from fieldwork. Field trips. No student may earn credit for both 4413 and 5413. Laboratory. (Sp, even-numbered years)
GEOL	5443	Formation Damage	(Crosslisted with P E 5443) Prerequisite: graduate standing or permission of instructor. This course presents an overview of the common formation damage processes, mechanisms, theories, and parameters; methods for diagnosis, determination, and control of formation damage; and application for mathematical models for analysis of laboratory and field data. (Irreg.)
GEOL	5513	Evolutionary Paleobiology	(Slashlisted with 4513) Prerequisite: 3513. Evolutionary patterns in the fossil record. Time resolution and bias in fossil assemblages. Taxonomic diversity and community replacement over geologic time. Mass extinctions and evolutionary radiations. Heterochrony and evolution. Application of methods in biosystematics to fossils, including computer-based techniques. No student may earn credit for both 4513 and 5513. (Alt. Sp)

GEOL	5533	Earth's Past Climate (Crosslisted with METR 5533; Slashlisted with 4533)	(Crosslisted with METR 5533; Slashlisted with 4533) Prerequisite: senior or graduate standing, or permission of instructor. Explores earth's climate system, controls on climate change, and evolution of climate history through geologic time as deciphered from climate proxies. No student may earn credit for both 4533 and 5533. (F)
GEOL	5544	Minerals and the Environment	Prerequisite: graduate standing or permission of instructor. Explores the bonding and reactivity of common environmental minerals. Laboratory methods in environmental mineral analysis including, but are not limited to, diffraction, microscopy, and spectroscopy. Laboratory (F)
GEOL	5713	Introduction to Geostatistics	(Crosslisted with G E 5713 and P E 5713) Prerequisite: Graduate Standing or permission of instructor. Introduction to geostatistical concepts, Principles and tools for description and modeling of spatial variability in oil/gas reservoirs and other geological formations. Topics include review of basic statistic concepts, exploratory spatial data analysis, stationary and ergodicity, variogram and covariance, kriging, spatial sampling, stochastic realizations and simulations, conditioning, and indicator kriging. (Sp)
GEOL	5733	Tectonics and Sedimentation in Rift Basins	(Crosslisted with GPHY 5733) Prerequisites: graduate standing or permission of instructor. Provides a basic understanding of the geodynamics of rifting and the resulting sedimentary response through a series of basic lectures outlining fundamental concepts of rift dynamics and rift sedimentology, followed by discussion-based analysis of rift "case studies" that highlight interesting components of the relationship between tectonics and sedimentation in rift systems. (F)
GEOL	5813	Basin Analysis for Oil and Gas	Prerequisite: permission. Development of exploration guidelines to oil and gas (origin, migration, accumulation) based on regional tectonic styles and related time and place associations of structure, sedimentation, heat history and fluid pressures. Laboratory. (F)
GEOL	5843	Economic Geology--Metallic Deposits	(Slashlisted with 4843) Prerequisite: GEOL 3114, GEOL 3223, and GEOL 3233. Introductory study of the important metallic ore deposits of the world; geology, origin and economic features of the deposits. No student may earn credit for both 4843 and 5843. (Irreg.)
GEOL	5853	Groundwater and Seepage	(Crosslisted with CEES 5853) Prerequisite: graduate standing in civil engineering, environmental science or geology or permission. An applied course dealing with properties of aquifers, modeling of groundwater flow, groundwater hydrology and its interrelation with surface water, well hydraulics, pumping tests and safe yield of aquifers. (F)
GEOL	5864	Geomicrobiology	(Crosslisted with MBIO 5864; Slashlisted with 4864) Prerequisite: Microbiology 3813 or permission of instructor. Life below the earth's surface. Bacterial degradation of pollutants. Petroleum microbiology. Role of microorganisms in geochemical cycling of carbon, sulfur, and metals. No student may earn credit for both 4864 and 5864. (F)
GEOL	5923	Pegmatites	(Slashlisted with 4923) Prerequisite: GEOL 3223, CHEM 1415, and permission of instructor. Granitic pegmatites are the most complex rocks on earth. Class instructs students in the use of scientific methods, including historical background, working hypotheses, analytical methods, experimental test, and theory as they are utilized in solving the origins of pegmatites. No student may earn credit for both 4923 and 5923. (Sp)
GEOL	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
GEOL	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

GEOL	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
GEOL	5990	Special Studies	1 to 3 hours. Prerequisite: permission. May be repeated; maximum credit nine hours. Advanced special studies in geological problems. May include directed reading in geology, fieldwork, laboratory research or preparation of reports. (F, Sp, Su)
GEOL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GEOL	6103	Petroleum Geochemistry	Prerequisite: graduate standing in geology or chemistry. An introduction to the basic concepts of petroleum geochemistry and their role in exploration. Includes the biomarker concept, pyrolysis techniques, isotopes in petroleum exploration, basin modeling and kinetic studies, organic petrography and detailed studies of a number of case histories. (Irreg.)
GEOL	6283	Seismic Reservoir Modeling	(Crosslisted with G E and P E 6283) Prerequisite: graduate standing or permission of instructor. This course is designed to explore the seismic response of rocks and how it is related to petrophysical parameters. This understanding is key to interpretation of seismic data in terms of subsurface rocks and fluids. (F)
GEOL	6453	Topics in Petrology and Plate Tectonics	Prerequisite: graduate standing, GEOL 3114, GEOL 3223, and GEOL 3233. May be repeated with change of subject matter; maximum credit six hours. Geological processes at plate margins with emphasis on the relationship between structural and petrologic features: plate kinematics and petrotectonic associations; the origin of mountain belts, basins, and rock suites at convergent, divergent, and transform boundaries. (Irreg.)
GEOL	6950	Research	1 to 4 hours. Prerequisite: graduate standing and permission of faculty supervisor. May be repeated with change of content; maximum credit twelve hours. Individual research in various areas of geology. (F, Sp, Su)
GEOL	6960	Directed Readings	1 to 6 hours. Prerequisite: graduate standing and permission of faculty supervisor. May be repeated; maximum credit six hours. Supervised reading at an advanced graduate level. (F, Sp, Su)
GEOL	6970	Seminar	1 to 4 hours. Prerequisite: graduate standing and permission of faculty supervisor. May be repeated with change of subject matter; maximum credit 20 hours. Directed seminar on selected aspects of geologic knowledge and inquiry. (F, Sp, Su)
GEOL	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
GEOL	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GEOS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GEOS	2004	Evolution Of The Earth System	Evolution Of The Earth System. Prerequisite: None. Overview Of The Earth From A Systems Perspective. Draws On Knowledge From All Geosciences To Explore Interconnections And Co-Evolution Of The Solid Earth, Atmosphere, Oceans, And Living Things. Evolution Of Earth's Climate Over Geologic Time Including The Hydrologic Cycle, Carbon, Cycle And "Greenhouse Effect". Role Living Thins Play In The Global Environment. Extensive Use Of Numerical Models To Explore Structure And Response Of The Earth System. Students May Find It Helpful To Have Taken Either Geography 1114, Or Geology 1104, Or Meteorology 1004. Laboratory (F)

GEOS	3960	Honors Reading	1 to 3 Hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers topics not usually presented in the regular courses. (F, Sp, Su)
GEOS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
GEOS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GEOS	5510	Selected Topics	Selected Topics. 1 To 9 Hours. Prerequisite: Permission Of Instructor. May Be Repeated With Change Of Subject Matter; Maximum Credit Nine Hours. Current Or Special Topics Relating To The Geosciences; May Be Structured For Students In Other Areas. (Irreg.)
GEOS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GERM	1115	Beginning German	An elementary course in understanding, speaking, reading and writing German. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]
GERM	1225	Beginning German (Continued)	(Continued) Prerequisite: 1115. An elementary course in understanding, speaking, reading and writing German. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]
GERM	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GERM	2113	Intermediate German	Prerequisite: 1225. Develops reading skills and control of grammar. Emphasis on expansion of vocabulary and strong reinforcement of grammatical structures. Reading and discussion of texts of literary and cultural interest. Oral and written assignments. (F, Sp)
GERM	2223	Intermediate German (Continued)	(Continued) Prerequisite: 2113. (F, Sp)
GERM	2323	German Composition and Conversation	Prerequisite: 2113. Exercises in oral and written German. Reading of cultural and literary texts of contemporary interest. Emphasis on writing and speaking German. (F, Sp)
GERM	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
GERM	3013	Scientific German	Prerequisite: 1023 or 1225. Training in the reading of scientific material of gradually increasing difficulty. (Irreg.)
GERM	3123	Scientific German II	Prerequisite: 3013. Continuation of 3013. Training in the reading of scientific material of gradually increasing difficulty. (Irreg.)
GERM	3423	Advanced German Composition	Prerequisite: GERM 2223. The inculcation of proper writing habits, at an advanced level, toward the achievement of idiomatic German. (Sp)
GERM	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GERM	3523	Advanced Conversation	Prerequisite: GERM 2223. Practice in conversational skills at an advanced level. (Sp)

GERM 3623	Business German	Prerequisite: 2223. Introduces German business language as used in retail/wholesale, export/import, transport, and media. Will also familiarize the student with the European Union and cultural aspects of the German speaking business world. (F)
GERM 3723	German for the European Market	Prerequisite: 2223. German business language as used in banking transactions, marketing, business letters, and business firms such as corporations, general and limited partnerships, and trade unions. How to respond to claims by firms in European countries and how to establish subsidiaries in another European country. Prepares students to take the "Prufung Wirtschaftsdeutsch" (International Certificate in Business German). (Sp)
GERM 3853	Literature and Film	Prerequisite: GERM 2223. Introduction to representative works of contemporary German literature and film. Within the context of reading and writing assignments and the viewing and discussion of films, the course is designed to improve language skills and knowledge of German culture. (F)
GERM 3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp)
GERM 3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
GERM 3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp)
GERM 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GERM 4003	History of the German Language	(Slashlisted with 5003) Prerequisite: 3423, 3853. Linguistic, cultural, and social evolution of the German language from Indo-European times to the present. Additional emphasis is given to the place of German within the Germanic family of languages and to significant socio-linguistic issues in German-speaking countries as they enter the new millennium. No student may earn credit for both 4003 and 5003. (F)
GERM 4013	German for Graduate Reading and Research	Prerequisite: permission of instructor. Designed as initial preparation for the advanced reading examination. This course does not count for major credit in the Department of Modern Languages, Literatures, and Linguistics. The course sequence of 4013 and 4023 does not satisfy any component of the University language requirement. (F)
GERM 4023	German for Graduate Reading and Research (Continued)	Prerequisite: permission of instructor. Juniors and seniors must obtain permission of the instructor to enroll. Elective credit only. Designed as continuation of initial preparation for the advanced reading examination. This course does not count for major credit in the Department of Modern Languages, Literatures, and Linguistics. The course sequence of 4013 and 4023 does not satisfy any component of the University language requirement. (Sp)
GERM 4113	The Middle Ages	(Slashlisted with 5113) Prerequisite: 3423, 3853. Secular and religious literature of medieval Germany, Austria, Switzerland, and the Netherlands discussed within the international cultural context of the European Middle Ages. No student may earn credit for both 4113 and 5113. (Alt. F)

GERM 4253	Goethe's Faust and the Problem of Evil	(Slashlisted with 5253) Prerequisite: 3423 and 3853. Intensive study of Faust I, Faust II, and the Urfaust. The social and cultural history of the Faust figure, up to Goethe's Faust, will also be explored. No student may earn credit for both 4253 and 5253. (Irreg.)
GERM 4313	Literature and Culture Pre-1700	Prerequisite: 3423 or 3853. From the beginnings until the end of the seventeenth century. A survey of literature, art, religion, social relations, music and history. (Alt. F)
GERM 4323	Literature and Culture 1700-1890	Prerequisite: 3423 or 3853. Literature from 1700 to 1900. A survey of literature, art, philosophy, social relations, music and history. (Alt. F)
GERM 4333	Topics in the Twentieth Century German Literature and Culture	Prerequisite: 3423 or 3853. From 1900 to the present. A survey of literature, art, film, social relations, music and history. (Sp) [V]
GERM 4433	German Classicism and Romanticism	(Slashlisted with 5433) Prerequisite: 3423, 3853. A comprehensive study of the characteristics of Classicism and Romanticism with emphasis on contrasts in literary theory and techniques. No student may earn credit for both 4433 and 5433. (Alt. F)
GERM 4603	The Sixteenth and Seventeenth Centuries	(Slashlisted with 5603) Prerequisite: 3423, 3853. A survey of the main literary movements of the period with concentrated study on the works of its principal writers. No student may earn credit for both 4603 and 5603. (Alt. Sp)
GERM 4633	Inventing Germany in The Eighteenth Century	(Slashlisted with 5633) Prerequisite: GERM 3423, GERM 3853. This interdisciplinary seminar considers diverse efforts by artists and intellectuals in the late eighteenth century to imagine an ideal public sphere. Many of these visions proved foundational for later conceptions of the German nation. No student may earn credit for both GERM 4633 and GERM 5633. (Irreg.)
GERM 4643	The Nineteenth Century	(Slashlisted with 5643) Prerequisite: 3423, 3853. A study of the literature and literary techniques of Poetic Realism with emphasis on the drama and the novella. No student may earn credit for both 4643 and 5643. (Alt. F)
GERM 4663	Early Twentieth Century Literature	(Slashlisted with 5663) Prerequisite: 3423, 3853. A study of the literature and theory of the first half of the twentieth century. Special attention will be given to naturalism, impressionism, and expressionism. No student may earn credit for both 4663 and 5663. (Alt. F)
GERM 4773	Post-1945 German Literature and Culture in Modern Europe	(Slashlisted with 5773) Prerequisite: 3423, 3853. Study of selected prose, poetry, and drama written after World War II in Austria, East Germany, Switzerland and West Germany, within the context of cultural and economic changes. Also includes contemporary German films. No student may earn credit for both 4773 and 5773. (F) [IV-WC]
GERM 4953	Literature, Art and Culture in Turn-of-the-Century Austria	Prerequisite: 3423, 3853. Examines two antithetical impulses in the Habsburg fin de siecle: to revel in ornamental display and to reveal essences beneath the exterior. Examines the tension and interplay between the two tendencies in the fields of literature, art, architecture, and theory, and consider some representative figures of the period, such as Klimt, Freud, Rilke, and Kafka. No student may earn credit for both 4953 and 5953. (Irreg.)
GERM 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
GERM 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GERM 4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp)

GERM 5003	History of the German Language	(Slashlisted with 4003) Prerequisite: graduate standing. Linguistic, cultural, and social evolution of the German language from Indo-European times to the present. Additional emphasis is given to the place of German within the Germanic family of languages and to significant socio-linguistic issues in German-speaking countries as they enter the new millennium. No student may earn credit for both 4003 and 5003. (F)
GERM 5113	The Middle Ages	(Slashlisted with 4113) Prerequisite: graduate standing. Secular and religious literature of medieval Germany, Austria, Switzerland, and the Netherlands discussed within the international cultural context of the European Middle Ages. No student may earn credit for both 4113 and 5113. (Alt. F)
GERM 5253	Goethe's Faust and the Problem of Evil	(Slashlisted with 4253) Prerequisite: graduate standing. Intensive study of Faust I, Faust II, and the Urfaust. The social and cultural history of the Faust figure, up to Goethe's Faust, will also be explored. No student may earn credit for both 4253 and 5253. (Irreg.)
GERM 5603	The Sixteenth and Seventeenth Centuries	(Slashlisted with 4603) A survey of the main literary movements of the period with concentrated study on the works of its principal writers. No student may earn credit for both 4603 and 5603. (Alt. Sp)
GERM 5633	Inventing Germany in the Eighteenth Century	(Slashlisted with 4633) Prerequisite: graduate standing. This interdisciplinary seminar considers diverse efforts by artists and intellectuals in the late eighteenth century to imagine an ideal public sphere. Many of these visions proved foundational for later conceptions of the German nation. No student may earn credit for both GERM 4633 and GERM 5633. (Irreg.)
GERM 5643	The Nineteenth Century	(Slashlisted with 4643) A study of the literature and literary techniques of Poetic Realism with emphasis on the drama and the novella. No student may earn credit for both 4643 and 5643. (Alt. F)
GERM 5663	Early Twentieth Century Literature	(Slashlisted with 4663) Prerequisite: graduate standing. A study of the literature and theory of the first half of the twentieth century. Special attention will be given to naturalism, impressionism, and expressionism. No student may earn credit for both 4663 and 5663. (Alt. F)
GERM 5773	Post-1945 German Literature and Culture in Modern Europe	(Slashlisted with 4773) Prerequisite: graduate standing. Study of selected prose, poetry, and drama written after World War II in Austria, East Germany, Switzerland and West Germany, within the context of cultural and economic changes. Also includes contemporary German films. No student may earn credit for both 4773 and 5773. (F)
GERM 5910	Problems in Research	2 to 4 hours. May be repeated with change of content; maximum credit nine hours. An individual course of intensive research with the area and problem to be determined by the student and directing instructor. (F, Sp)
GERM 5930	Seminar in German Literature and Culture	2 to 3 hours. Prerequisite: one 5000-level course in same general area. May be repeated with change of subject matter; maximum credit nine hours. In-depth study of a topic in German literature and culture. (Irreg.)
GERM 5953	Literature, Art and Culture in Turn-of-the-Century Austria	Prerequisite: graduate standing. Examines two antithetical impulses in the Habsburg fin de siecle: to revel in ornamental display and to reveal essences beneath the exterior. Examines the tension and interplay between the two tendencies in the fields of literature, art, architecture, and theory, and consider some representative figures of the period, such as Klimt, Freud, Rilke, and Kafka. No student may earn credit for both 4953 and 5953. (Irreg.)
GERM 5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
GERM 5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GERM 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp)

GERM	5990	Independent Studies	1 to 3 hours. Prerequisite: graduate standing, permission of instructor. May be repeated; maximum credit 12 hours. Independent reading on one or more topics under the general direction of a faculty member. (F, Sp, Su)
GERM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GIS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GIS	2013	Geospatial Technologies and Society	Prerequisite: ENGL 1213. Examines the impacts of geospatial technologies on 21st-century society and considers how these rapidly evolving technologies can be used most effectively to promote global environmental sustainability and social justice. (Irreg.)
GIS	2023	Introduction to Spatial Thinking and Computer Mapping	Facilitates the effective communication of geographic information through sound cartographic principles and techniques. Introduces students to geographic information literacy, spatial perspectives on information management, and the use of maps as a communication tool. (Sp)
GIS	2453	Spatial Thinking and GIS Visualization	The course introduces students to spatial perspectives on information management and analysis, and the use of maps as an effective means of information integration and communication. (F)
GIS	3023	Research Methods for Geoinformatics	Prerequisite: GIS 2023 or concurrent enrollment. Introduction to the fundamentals of research methodology in key GIS study areas, as well as the application of these methodologies in answering spatially-based research questions. In addition, students will be introduced to the issue of research ethics in studying human subjects and the role of the Institutional Research Board. (Irreg.)
GIS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GIS	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
GIS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
GIS	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
GIS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
GIS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GIS	4013	Fundamentals of Geographic Information Systems	(Slashlisted with 5013) Prerequisite: GIS 2023. Provides an understanding of the principles of geographic informations systems and develops problem solving skills to apply to technical and spatial problems. No student may earn credit for both GIS 4013 and 5013. (F, Sp)

GIS	4133	Fundamentals of Remote Sensing	(Slashlisted with 5133) Prerequisite: junior standing or permission of instructor. An introduction to the theory and interpretation of remote sensing imagery, with emphasis on photographic, multi-spectral, thermal, and microwave remote sensing systems. Imagery from aircraft, satellite and low-altitude platforms will be used to illustrate geographic and environmental applications of remote sensing. Introduction to preprocessing (DIP). No student may earn credit for both 4133 and 5133. (F)
GIS	4200	Internship in Geoinformatics	Prerequisite: permission of instructor. Provides career training experience whereby students may apply geoinformatics skills and further develop professional capabilities in a realistic setting. Students will be assigned to private industry, government agencies or educational institutions on an individual basis and report on their experience to the instructor. (F, Sp, Su)
GIS	4233	Digital Image Processing	(Slashlisted with 5233) Prerequisite: 4133/5133 or permission of instructor. Theory and techniques for computer processing (DIP) of digital earth resources satellite imagery and incorporation into geographic information systems. (Sp)
GIS	4253	GIS Applications	Prerequisite: GIS 4013. Emphasizes technical and application practices in geographic information systems (GIS). Through weekly exercises and two projects, students will gain experience with applications and utilities of Geographic Information Systems, and learn how to plan and implement a GIS project. No student may earn credit for both 4253 and 5253. Laboratory (Sp)
GIS	4343	Introduction to Earth System Dynamics	(Slashlisted with 5343) Prerequisite: junior standing in a science or engineering major or by permission of instructor. Making use of simple numerical models this course introduces the use of concepts from systems dynamics to better describe and understand the Earth System. Systems dynamics topics will include Lovelock's daisy world, simple radiation budget climate models, the global carbon cycle, flocking of birds and other animals, and the synchronization of the emergence of seven-year locusts, all from a holistic systems perspective. The STELLA systems modeling software will be used throughout the course and students will develop a model of a natural system. No student may earn credit for both 4343 and 5343. (F)
GIS	4353	Survey of Geospatial Information Technologies	Prerequisite: junior standing or permission of instructor. Overview of theories, applications, and practices of modern geospatial information technologies, including global positioning systems (GPS), remote sensing (RS), and geographic information systems (GIS). Course includes lectures, discussions, interactive and hands-on computer exercises, field projects, and site visits to OU research centers, local governments, and private geospatial information technologies companies. (Su)
GIS	4393	Automated Analysis of Spatial Grids	(Slashlisted with 5393; Crosslisted with Meteorology 4393) Prerequisite: MATH 3333 and an introductory programming course or instructor approval. Provides students with a foundation in topics of digital image processing and data mining as applied to geospatial datasets. By the end of this course, students will be able to devise and implement automated techniques to extract information from spatial grids such as radar or satellite weather images. No student may earn credit for both 4393 and 5393. (Irreg.)
GIS	4453	Advanced GIS and Spatial Analysis	(Slashlisted with 5453) Prerequisite: GIS 2023, GIS 4013, and GIS 4253, and upper-division standing; or, permission of instructor. Expands and solidifies the GIS knowledge acquired in introductory and applied GIS classes. Focus on highly complex geographic questions which cannot be solved in simple steps but instead require advanced GIS analysis and sometimes automation. The course is intended to prepare the student for a professional GIS position in the government or business world, or a higher-level graduate position. No student may earn credit for both 4453 and 5453. (Sp)

GIS	4653	Spatial Programming and GIS	Prerequisite: 4453, upper-division standing or permission of instructor.. Introduces students to geocomputation concepts, spatial programming skills and computational approaches to spatial data services and spatial problem solving. No student can earn credit for both 4653 and 5653. (F)
GIS	4733	Environmental Remote Sensing	(Slashlisted with 5733; Crosslisted with Botany 4733) Prerequisite: either a course or hands-on experience in remote sensing, GIS, statistical analysis, computer programming, or permission of the instructor and adviser. This course aims to help students develop comprehensive knowledge and advanced skills of remote sensing, and to apply it to the study of the structure, composition, and functions of vegetation, landscapes, and the biosphere. Students will learn laboratory and field-based hyperspectral data acquisition and analysis; field survey methods; land cover classification from multiple sensors (optical, microwave, and LiDAR) and time series data; and estimation of biophysical and biochemical parameters. Includes image processing software (ENVI) and algorithms. No student may earn credit for both 4733 and 5733. (Sp)
GIS	4923	Spatial Statistics	(Slashlisted with 5923) Prerequisite: GEOG 3924, permission of instructor. Explains and demonstrates methods and techniques in spatial sampling; spatial auto-correlation and spatial composition. It also delves into spatially adjusted regression, local statistics, and geo-statistics and related techniques. Theoretical explanations and derivations as well as practical applications making use of both ArcGIS and R. No student may earn credit for both 4923 and 5923. (Irreg.)
GIS	4953	Geoinformatics Capstone Seminar	Prerequisite: senior standing or permission of instructor. Introduction to contemporary research challenges in geoinformatics and formulating a research question and proposal which will guide the student in senior research project design, implementation and presentation to address fundamental or applied problems with spatial thinking. (Irreg.) [V]
GIS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
GIS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GIS	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GIS	5013	Fundamentals of Geographic Information Systems	(Slashlisted with 4013) Prerequisite: graduate standing. Provides an understanding of the principles of geographic information systems and develops problem solving skills to apply to technical and spatial problems. No student may earn credit for both GIS 4013 and 5013. (F, Sp)
GIS	5133	Fundamentals of Remote Sensing	(Slashlisted with 4133) Prerequisite: graduate standing or permission of instructor. An introduction to the theory and interpretation of remote sensing imagery, with emphasis on photographic, multi-spectral, thermal, and microwave remote sensing systems. Imagery from aircraft, satellite and low-altitude platforms will be used to illustrate geographic and environmental applications of remote sensing. Introduction to preprocessing (DIP). No student may earn credit for both 4133 and 5133. (F)
GIS	5233	Digital Image Processing	(Slashlisted with 4233) Prerequisite: graduate standing, 4133/5133 or permission of instructor. Theory and techniques for computer processing (DIP) of digital earth resources satellite imagery and incorporation into geographic information systems. No student may earn credit for both 4233 and 5233. (Sp)

GIS	5253	GIS Applications	(Slashlisted with 4253) Prerequisite: graduate standing, GIS 5013. Emphasizes technical and application practices in geographic information systems (GIS). Through weekly exercises and two projects, students will gain experience with applications and utilities of Geographic Information Systems, and learn how to plan and implement a GIS project. No student may earn credit for both 4253 and 5253. Laboratory (Sp)
GIS	5343	Introduction to Earth System Dynamics	(Slashlisted with 4343) Prerequisite: MATH 3113 and PHYS 2524 with a grade of C or better, or permission of instructor. Making use of simple numerical models this course introduces the use of concepts from systems dynamics to better describe and understand the Earth System. Systems dynamics topics will include Lovelock's daisy world, simple radiation budget climate models, the global carbon cycle, flocking of birds and other animals, and the synchronization of the emergence of seven-year locusts, all from a holistic systems perspective. The STELLA systems modeling software will be used throughout the course and students will develop a model of a natural system. No student may earn credit for both 4343 and 5343. (F)
GIS	5393	Automated Analysis of Spatial Grids	(Slashlisted with 4393; Crosslisted with METR 5393) Prerequisite: graduate standing, MATH 3333 and an introductory programming course or permission of instructor. Provides students with a foundation in topics of digital image processing and data mining as applied to geospatial datasets. By the end of this course, students will be able to devise and implement automated techniques to extract information from spatial grids such as radar or satellite weather images. No student may earn credit for both 4393 and 5393. (Irreg.)
GIS	5453	Advanced GIS and Spatial Analysis	(Slashlisted with 4453). Prerequisite: GIS 5013 and GIS 5253, graduate standing. Expands and solidifies the GIS knowledge acquired in introductory and applied GIS classes. Focus on highly complex geographic questions which cannot be solved in simple steps but instead require advanced GIS analysis and sometimes automation. The course is intended to prepare the student for a professional GIS position in the government or business world, or a higher-level graduate position. No student may earn credit for both 4453 and 5453. (Sp)
GIS	5653	Spatial Programming and GIS	Prerequisite: graduate standing. Introduces students to geocomputation concepts, spatial programming skills and computational approaches to spatial data services and spatial problem solving. No student can earn credit for both 4653 and 5653. (F)
GIS	5733	Environmental Remote Sensing	(Slashlisted with 4733; Crosslisted with BOT/PBIO 5733) Prerequisite: graduate standing, and either a course or hands-on experience in remote sensing, GIS, statistical analysis, computer programming, or permission of the instructor and adviser. This course aims to help students develop comprehensive knowledge and advanced skills of remote sensing, and to apply it to the study of the structure, composition, and functions of vegetation, landscapes, and the biosphere. Students will learn laboratory and field-based hyperspectral data acquisition and analysis; field survey methods; land cover classification from multiple sensors (optical, microwave, and LiDAR) and time series data; and estimation of biophysical and biochemical parameters. Includes image processing software (ENVI) and algorithms. No student may earn credit for both 4733 and 5733. (Sp)
GIS	5903	Remote Sensing Hydrology	Prerequisite: senior standing, or graduate standing, or permission of instructor. Overview of various orbital satellite platforms/sensors and introduces advances in remote sensing hydrology from space-borne observations, state-of-the-art retrieval algorithms for hydrological variables, and ground validation strategies. Required for Hydrology minors. (Sp)

GIS	5923	Spatial Statistics	(Slashlisted with 4923) Prerequisite: graduate standing, GEOG 3924. Explains and demonstrates methods and techniques in spatial sampling; spatial auto-correlation and spatial composition. It also delves into spatially adjusted regression, local statistics, and geo-statistics and related techniques. Theoretical explanations and derivations as well as practical applications, making use of both ArcGIS and R. No student may earn credit for both 4923 and 5923 (Irreg.)
GIS	5933	Climate Change, Water and Natural Hazards	Prerequisite: senior standing, or graduate standing, or permission of instructor. A workshop style course for undergraduate and graduate students who wish to have a correct understanding of the Earth's climate history, climate variability, and climate extremes. With an overview of the climate change's causes, effects, and solutions, this course further examines how abrupt climate changes impact on natural hazards occurrences and water sustainability. (F)
GIS	5953	Computational Hydrology and Water Resource Systems	(Crosslisted with CEES 5953) Prerequisite: senior standing, or graduate standing, or permission of instructor. Covers fundamental theory and modeling of hydrological processes and basin-based water systems. Emphasis is placed on the application of quantitative methods to the analysis of interactions of hydrology, engineering, and socioeconomics in regional water resources systems. Users will learn how to solve a range of problems from simple linear hydrologic system, multi-objective optimization and distributed model calibration, to fairly complex energy flux and water balance in hydrology and water cycle. MATLAB is used to better understand and analyze numerical solutions for nonlinear hydrologic system. (F)
GIS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
GIS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GIS	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
GIS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GIS	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
GIS	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
GIS	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
GIS	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GMER	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GMER	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

GMER 5052	Graduate Recital-Master Of Music Education Degree	Graduate Recital--Master Of Music Education Degree. Prerequisite: Concurrent Enrollment In 5010, Permission Of Adviser And Instructor. May Not Be Elected During First Enrollment. (F, Sp, Su)
GMER 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GPHY 1103	Adventures in Geophysics	The field of applied near-surface geophysics will be introduced within the broader scope of the geophysical sciences. Key geophysical techniques and tools will be covered through exploration of existing case studies involving fields such as archaeology, law enforcement and ground water resources. There will also be opportunities for 'hands on' experience with high-tech geophysical tools. (Sp) [II-NL]
GPHY 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GPHY 3423	Introductory Petroleum Geology and Geophysics	Prerequisite: GEOL 1114, MATH 2924 or MATH 2423, PHYS 2514, and GEOL 3003. Fundamentals of the utilization of geological and geophysical data in the exploration for and development of petroleum reserves. Fundamental principles, geological and geophysical data acquisition, processing and interpretation. (F)
GPHY 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GPHY 3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
GPHY 3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
GPHY 3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
GPHY 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
GPHY 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GPHY 4133	Colorado Field Geophysics	Prerequisite: 4113; Geology 3123; or permission of instructor. Students become familiar with field methods in geophysics and apply principles of geophysical methods to survey design, data acquisition, data processing, and interpretation. Students plan geophysical surveys, collect field geophysical data in small groups, interpret the acquired datasets in terms of earth structure, and learn about the tectonics and structure of the front range of the Rocky Mountains. Field course is taught at the OU field camp near Canon City, Colorado, and is predominantly field based. Three-week field experience required. (Su) [V]
GPHY 4243	Computational Geosciences	(Slashlisted with 5243) Prerequisite: MATH 2934 or MATH 2443. MATLAB is a C-based programming environment that has become a standard in scientific computing. Beginning with basic concepts of MATLAB programming the course proceeds to one-, two-, and three-dimensional graphics, interpolation and filtering. No student may earn credit for both 4243 and 5243. (F)

GPHY 4413 Global Geophysics	Prerequisites: GEOL 3114; MATH 2924 or 2423; PHYS 2524; or equivalent coursework or permission of instructor. Introduces students to geophysical methods, the structure and physical properties of earth's interior, active processes on earth, and the use of geophysical methods to study structure and processes. No student may earn credit for both 4413 and 5413. Laboratory (Alt. F)
GPHY 4874 Seismic Exploration	Prerequisite: PHYS 2524; MATH 2934 or MATH 2443 or concurrent enrollment. Lectures and laboratory/problem sessions covering theory and applications of reflection and refraction seismic exploration methods. Emphasis is on the common-depth-point reflection method. (F)
GPHY 4953 Senior Thesis in Geophysics	Prerequisite: senior standing with a major in geophysics and permission. May not be repeated. Individual research of a geophysical topic selected by the student in consultation with the instructor. The project may involve fieldwork, theoretical analysis, computer modeling, and/or data analysis and interpretation, culminating in a written thesis. (F, Sp, Su) [V]
GPHY 4960 Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
GPHY 4970 Seminar	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours. (F, Sp)
GPHY 4990 Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit nine hours. Contracted independent study for topics not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
GPHY 5020 Computational Geophysics	Prerequisite: Graduate standing or permission of instructor. May be repeated with change in content; maximum credit 12 hours. Algorithm design. Implementation and application for numerically intensive geophysical problems. Focus will cycle semester to semester from Interactive algorithms (using Matlab and C# languages) to more computationally demanding seismic processing, imaging and inversion algorithms (using Fortran 90, C, and MPI). (F, Sp)
GPHY 5243 Computational Geosciences	(Slashlisted with 4243) Prerequisite: MATH 2934 and MATH 2443. MATLAB is a C-based programming environment that has become a standard in scientific computing. This course begins with basic concepts of MATLAB programming and then proceeds to one-, two-, and three-dimensional graphics, interpolation and filtering. No student may earn credit for both 4243 and 5243. (F)
GPHY 5364 Paleomagnetism	Prerequisite: permission. Concerns the magnetic properties of minerals and rocks and the physical and chemical processes which produce them. Laboratory techniques used in investigations are discussed. (F)
GPHY 5413 Global Geophysics	Prerequisite: Graduate standing or permission of instructor. Introduces students to geophysical methods, the structure and physical properties of earth's interior, active processes on earth, and the use of geophysical methods to study structure and processes. Will be taught every other fall semester. Laboratory included. No student may earn credit for both 4413 and 5413. (Irreg.)
GPHY 5513 3-D Seismic Interpretation	Prerequisite: graduate standing or permission of instructor. Principles of seismic stratigraphy, seismic geomorphology, structural geology, and rock physics to interpret seismic reflection data and associated attributes to delineate faults, fractures, folds, fluvial-deltaic complexes, turbidites, mass transport complexes, karst, and other structural and stratigraphic features of interest. Course is intended for graduate students in geophysics, geology, and petroleum engineering. Laboratory (F)

GPHY 5523	3-D Seismic Processing	Prerequisite: GPHY 4874 or equivalent and MATH 3333. Theory and application of seismic signal analysis to modern 3-D surface seismic surveys including sorting, statics, deconvolution, coherent noise suppression, velocity analysis and migration. At the end of the course, the student will be able to apply appropriate modern work flows to 3-D land data surveys resulting in prestack time migrated images amenable to AVO, attribute, and velocity anisotropy analysis. (Sp)
GPHY 5533	Quantitative Seismic Interpretation	Prerequisite: graduate standing, and GPHY 5513 or current research work in reservoir characterization or simulation. This course is the second part of a two-course sequence on seismic interpretation and will investigate the theoretical foundation and application of tools used in quantitative reservoir characterization. This course is intended for upper level graduate students in geophysics, geology, and petroleum engineering doing research in reservoir imaging, characterization, and simulation. (Sp-even yrs)
GPHY 5613	Introduction to Seismic Stratigraphy	Prerequisite: Physics 2524, Mathematics 3333, or permission. Introduction to the stratigraphic interpretation of reflection seismic data, emphasizing 2-D exploration seismic reflection group analysis. Topics covered include the theory and practice of borehole constrained interpretation, analysis, and mapping of seismic sequences, fault mechanical stratigraphy, chronostratigraphy, seismic facies, relative changes in sea level, and integrated geohistory analysis with emphasis upon providing a foundation for petroleum system analysis. Seismic sections for the analyses are taken from varying tectonic and depositional settings worldwide. (Alt. F)
GPHY 5723	Tectonophysics	Prerequisite: Physics 2524, Mathematics 3333, Geology 5813 or permission. Strongly recommended are 5713 or 5813. Overview of tectonics of plates through the integration of geology and geophysics. Theory, analysis, and modeling of the creation, modification, and destruction of plates, basins, and mountains through geologic time and space through the integration of borehole and outcrop geology with such geophysical disciplines as: earthquake seismology, refraction geophysics, reflections geophysics, heat flow, magnetics, and gravity. Required fieldtrip to the western U.S.
GPHY 5733	Tectonics and Sedimentation in Rift Basins	(Crosslisted with GEOL 5733) Prerequisite: graduate standing or permission of instructor. Provides a basic understanding of the geodynamics of rifting and the resulting sedimentary response. A series of lectures outlining fundamental concepts of rift dynamics and rift sedimentology, followed by discussion-based analysis of rift case studies that highlight interesting components of the relationship between tectonics and sedimentation in rift systems. (F)
GPHY 5864	Gravimetric and Magnetic Exploration	Prerequisite: Graduate standing, MATH 2924 or MATH 2433, PHYS 2524, or permission of instructor. Lectures and laboratory/problem sessions covering theory and applications of gravimetric and magnetic exploration. Includes potential theory, filtering, modeling and interpretation. Emphasis is on exploration for minerals, oil and gas. Concepts of geodesy and isostasy are briefly considered. Laboratory (Sp)
GPHY 5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
GPHY 5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GPHY 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum applicable toward degree, four hours. (F, Sp, Su)

GPHY 5990	Special Studies	1 to 3 hours. Prerequisite: permission. May be repeated; maximum credit nine hours. Advanced special studies in geophysical problems. May include directed reading in geophysics, fieldwork, laboratory research or preparation of reports. (F, Sp, Su)
GPHY 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GPHY 6523	Advanced Seismic Processing	Prerequisite: 5513, or permission. Advanced topics in 2-D and 3-D seismic data processing. Theory and practice with intensive use of mathematical software on selected 2-D and 3-D seismic data sets from around the world. Topics addressed include processing design for complex geologies, advanced amplitude-phase-frequency normalization techniques, advanced filter design including time and spatially variant processes, Q analysis, linear and parabolic Tau-P filtering, 2-D and 3-D AVO data preparation, inversion, and analysis, DMO, pre-stack depth migration, finite-difference, Stolt, Kirchhoff, and other time and depth migration and cascaded model-driven migration methods, surface consistency, coherency, and other topics. (Alt. Sp)
GPHY 6623	Advanced Seismic Stratigraphy	Prerequisite: 5613 or permission of instructor. Advanced topics of theory and practice in seismic stratigraphy with an emphasis upon wavelet analysis in 3-D and 4-D development geophysical settings. Topics covered include the theory and practice of modeling, interpreting, and mapping principle reservoir characterization tools: velocities, frequency, phase, attributes, 2-D and 3-D AVO, and DHIs as well as the seismic characterization of wedges and fans (deltas and turbidites), and carbonate buildups (reefs and banks). Seismic projects are taken form various fields worldwide and include the integration of borehole petrophysical data. (Alt. Sp)
GPHY 6873	Seismic Modeling and Migration	Prerequisite: graduate standing. The theory and limitations of seismic modeling algorithms for both forward (synthetic generation) and reverse applications (i.e. migration). Emphasis will be on the use of commercial modeling and imaging software (primarily 2D) to gain an intuitive understanding of seismic elastic wave propagation and imaging of the subsurface. (odd-Sp)
GPHY 6950	Research	1 to 4 hours. Prerequisite: graduate standing and permission of faculty supervisor. May be repeated with change of content; maximum credit 12 hours. Individual research in various areas of geophysics. (F, Sp, Su)
GPHY 6960	Directed Readings	1 to 6 hours. Prerequisite: graduate standing and permission of faculty supervisor. May be repeated; maximum credit six hours. Supervised reading at an advanced graduate level. (F, Sp, Su)
GPHY 6970	Seminar	1 to 4 hours. Prerequisite: graduate standing, permission. May be repeated with change of subject matter; maximum credit twenty hours. Directed seminar on selected aspects of geophysical knowledge and inquiry. (F, Sp)
GPHY 6980	Research for Doctoral Dissertation	2 to 16 hours. Prerequisite: permission of instructor. (F, Sp, Su)
GPHY 6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
GRAD 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GRAD 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

GRAD	5003	Oklahoma Scholar-Leadership Enrichment Program Graduate Seminar	Prerequisite: graduate standing. May be repeated with change of content; maximum credit 12 hours. An interdisciplinary seminar variable in content changing with each seminar. Seminars are led by prominent national and international scholars and leaders coordinated with a current faculty member in their area of expertise. Emphasis is on enrichment and exploration with scholars to investigate ideas and issues affecting the future of humanity. (F, Sp)
GRAD	5940	Professional Master's Practicum/Internship	1 to 5 hours. Prerequisite: graduate standing and permission of instructor. May be repeated once; maximum credit five hours. Provides a practicum or internship experience for students in the professional master's degree program. The students will apply the knowledge from their core academic discipline (e.g. science, engineering, education, fine arts) in an appropriate supervised professional setting (e.g. business, public administration, international programs) to provide a valid experience related to the core discipline and career context of their professional masters degree. The internship/practicum will serve as the culminating experience for the degree. (F, Sp, Su)
GRAD	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
GRAD	5990	Graduate Special Topics	1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of topic; maximum credit twelve hours. Selected topics in graduate areas not usually covered in traditional courses. For any particular section there may be additional prerequisites required. (F, Sp, Su
GRAD	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GRAD	6980	Research for Doctoral Dissertation	Prerequisite: graduate standing and permission of instructor or Graduate College. May be repeated; Maximum credit twelve hours. (F, Sp, Su)
GRAD	6990	Graduate Advanced Special Topics	1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of content; maximum credit twelve hours. Selected advanced topics in graduate areas not usually covered in traditional courses. For any particular section there may be additional prerequisites required. (F, Sp, Su)
GRK	1115	Beginning Greek	Introductory study of the vocabulary and grammar of the Greek language. Some practice in the reading of simple Attic prose; usually excerpts from Xenophon's Anabasis. (F, Sp, Su) [I-FL]
GRK	1215	Beginning Greek	Prerequisite: 1115, or first year Greek in high school. Introductory study of the vocabulary and grammar of the Greek language. Some practice in the reading of simple Attic prose; usually excerpts from Xenophon's Anabasis. (Sp) [I-FL]
GRK	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GRK	2113	Biblical Greek	Prerequisite: 1215 or equivalent, with a grade of C of better. May be repeated with a change of content; maximum credit six hours. Reading designed mainly to increase the student's proficiency in rapid translation, in excerpts from the New Testament. (F)
GRK	2213	Homer	1215 or equivalent, with a grade of C or better. May be repeated with change of content; maximum credit six hours. Reading selections from Homer; designed to improve the student's proficiency in translation and the understanding of Greek poetic techniques. (Sp)
GRK	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
GRK	3113	Advanced Prose	May be repeated with change of subject matter; maximum credit six hours. Readings in Plato: Crito and Apology; Lysias: Select Orations; Demosthenes: De Corona. (Sp)

GRK	3123	New Testament	Prerequisite: 1115 and 1215 or equivalent. Students will study the grammar, vocabulary and style of the Greek New Testament. Emphasis will be placed on accurate translation. (F)
GRK	3213	Ancient Greek Drama	Prerequisite: junior sanding or permission of instructor. May be repeated with change of subject matter; maximum credit six hours. Extensive reading in representative tragedies and comedies of the Athenian dramatists. Supplementary studies in the development of the Greek theatre and its drama. (F)
GRK	3313	Ancient Greek Prose Composition	Prerequisite: 2113 or 2213 or the equivalent. Students will learn to compose in Greek by translating sentences and continuous passages from English. (Sp)
GRK	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GRK	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program and one intermediate Greek course. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
GRK	3970	Special Topics	Prerequisite: 2113 or 2213 or the equivalent . May be repeated with change of content; Maximum credit six hours. A study of selected topics in Greek literature on subjects not offered in regularly scheduled courses. (Irreg.)
GRK	3980	Honors Research	1 to 3 hours. Prerequisite: admission to the Honors Program and one intermediate Greek course. May be repeated; maximum credit six hours. Will provide an opportunity for the Honors candidate to work at a special project in the student's field. (F, Sp, Su)
GRK	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
GRK	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GRK	4133	Historians: Herodotus, Thucydides, Xenophon	Prerequisite: 3123, 3213, or 3313. May be repeated with change of content; maximum credit nine hours. Introductory course in Greek history. Readings chosen to present memorable persons and episodes in the history of Ancient Greece. (Irreg.)
GRK	4213	Archaic Greek Lyric Poetry	Prerequisite: 3123, 3213, or 3313. May be repeated with change of subject matter; maximum credit six hours. Extensive reading from the works of Greek lyric poets such as Archilochus, Sappho, Theognis, and Simonides. Supplementary studies in the development of lyric poetry and its various themes. (F)
GRK	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
GRK	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

GRK	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
GRK	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
GRK	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
GRK	5990	Special Studies	1 to 4 hours. May be repeated; maximum credit eight hours. Reading and research, arranged and directed in consultation with the instructor, in specified areas of Greek language and literature. (F, Sp)
GRK	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GRRE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GRRE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
GRRE	5042	Graduate Recital-Master Of Music Degree	Graduate Recital--Master Of Music Degree. Prerequisite: Concurrent Enrollment In 5020, Permission Of Adviser And Instructor. Preparation And Performance Of A Public Recital. May Not Be Elected During First Enrollment. (F, Sp, Su)
GRRE	5043	Graduate Recital-Graduate Artist Certificate	Prerequisites: majors only; graduate standing; permission of adviser and instructor. May be repeated; maximum credit 6 hours. Preparation and performance of a public recital. (F, Sp, Su)
GRRE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GTAR	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
GTAR	2000	Freshman and/or Sophomore Secondary Guitar	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
GTAR	2020	Guitar for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
GTAR	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
GTAR	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

GTAR	4000	Junior and/or Senior Secondary Guitar	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
GTAR	4020	Guitar for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
GTAR	5000	Master's-Level Secondary Guitar	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
GTAR	5010	Master's-Level Guitar for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
GTAR	5020	Master's-Level Guitar for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
GTAR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
GTAR	6000	Doctoral Secondary Guitar	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
GTAR	6010	Doctoral Guitar for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
GTAR	6020	Doctoral Guitar for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
H R	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
H R	3003	Human Relations Theory	Prerequisite: junior standing or permission of instructor. Emphasizes key ideas of theorists who have contributed to the interdisciplinary field of human relations. Students are introduced to selected primary readings by influential scholars with the goals of understanding and integrating the various perspectives, and of developing critical thinking skills. (Irreg.)
H R	3013	Introduction to Human Relations	Prerequisite: junior standing. Designed to introduce students to the breadth and depth of the field of human relations. Emphasis is on the processes of communication, problem solving, decision making, conflict and change as they occur in individuals, interpersonal, group and intergroup relations. (F, Sp, Su)
H R	3033	Writing for Human Relations Professionals	Prerequisite: junior standing or permission of instructor. Familiarizes students with the fundamental skills of professional writing and presentation. Student skill development emphasized in the course includes critical thinking, information gathering, comprehensive planning, precise writing, and effective presentations. (Irreg.)
H R	3043	Interpersonal Skills and Group Dynamics	Prerequisite: 3013 or permission of instructor. Students explore interpersonal dynamics that characterize effective communication in families, the workplace, community organizations, and social settings. Focuses on ways to improve relationships and emphasizes observation, analysis, and skill training in relationship development. (Irreg.)

H R	3203	Introduction to Organizational Studies	Prerequiste:3013 or junior standing, or permission of instructor. This course surveys the basic concepts of organizational studies, including organizational behavior, motivation, leadership, teams, change and development, conflict, organizational structure and design, and innovation. (Irreg.)
H R	3213	Interpersonal Skills in the Workplace	Prerequisite: 3013 or junior standing, or permission of instructor. This course examines a variety of social skills used when interacting with others in the workplace, and considers strategies for effective intervention. Course topics include non-verbal communication, questioning, listening, conflict management, negotiating, self-disclosure, assertiveness, and persuading. These skills will be considered in a variety of interview and group meeting situations. (Irreg.)
H R	3223	Computing in Human Relations	Prerequisite: 3013 or junior standing, or permission of instructor. The course will discuss the possibilities of using various computer applications as tools for self-promotion. Students will gain experience in using relevant software to aid in securing and keeping employment in human relations fields. The course is constructed in a way that will address each student's career path, and each assignment will be made according to those individual differences. (Irreg.)
H R	3233	Presentation Skills in Human Relations	Prerequisite: 3013 or junior standing, or permission of instructor. This course is designed to provide students with the skills, knowledge, and strategies to prepare and deliver effective presentations in human relations settings. In this course, students will receive opportunities to plan, develop, deliver and evaluate presentations. (Irreg.)
H R	3243	Professional Development in Human Relations	Prerequisite: junior standing or permission of instructor. This course will explore available careers and options necessary to fulfilling education requirements for human relations. With personal awareness as a beginning, students will narrow choices by experiencing different fields, by interviewing, and with hands-on activities and investigations of job qualifications. (F, Sp)
H R	3303	Family Issues in Human Relations	Prerequisite: 3013 or junior standing, or permission of instructor. This course will focus on contemporary issues challenging families and couples. The text and instruction will explore the ideas of why humans seek intimacy, different forms of human coupling, variations of marriage and family life, parenting, and problems faced by families. (Irreg.)
H R	3313	Ethical Issues in Intercollegiate Athletics	Prerequisite: 3013 or junior standing, or permission of instructor. This course is designed to survey intercollegiate athletics in America and contemporary ethical issues related to major college sports and its place within higher education. Such topics as character development, criminal activity, gender equity, academic scandal, extra benefits, illegal inducements, and compensation of college athletes, etc., are explored in depth. (Irreg.)
H R	3323	Applied Sport Psychology	Prerequisite: 3013 or junior standing, or permission of instructor. This course is designed to assist students in the understanding and application of psychological skills associated with excellence in human performance. The students are encouraged to engage in a thoughtful exploration of their beliefs, attitudes and behaviors associated with performance both in life and sports. (Irreg.)
H R	3403	History of Racism	Prerequisite: 3013 or junior standing, or permission of instructor. Racism is the single most critical barrier to building effective coalitions for social change. Racism has been consciously and systematically erected, and it can be undone only if people understand what it is, where it comes from, how it functions, and why it is perpetuated. This course will examine history and culture to look at racism within the United States of America. (Irreg.)

H R	3413	Cultural Awareness in Human Relations	Prerequisite: junior standing or permission of instructor. Course explores theory and applications of cross-cultural communication from both practical and academic viewpoints through scholarly internet and multimedia resources. The course will provide an understanding of the possible variations in language, culture, and communication styles that affect human relations work and life in general. (F, Sp)
H R	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
H R	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
H R	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
H R	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
H R	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
H R	4013	Social Change Process	Prerequisite: 3013 or permission of instructor. Utilizing interdisciplinary behavioral sciences literatures, students will gain knowledge of selected laws and community programs that characterize social change activities. Through case studies, guest lectures, and field trips, the students will acquire the skills needed to design and carry out a community project that may positively impact the lives of a target population. (Irreg.)
H R	4113	Practicum in Human Relations	Prerequisite: junior standing, two courses in social sciences and permission of instructor. May be repeated with change of content; maximum credit nine hours. Practica are designed for undergraduate and graduate students who wish to acquire experiences in human resources agencies. While directly participating in the helping process, students will learn about the function of professionals in different disciplines, the nature of agencies, their relation to one another and to the community. (F, Sp, Su)
H R	4170	Special Topics in Human Relations	1 to 3 hours. Prerequisite: 3013 or junior standing, or permission of instructor. May be repeated with change of content; maximum credit nine hours. The course is designed to permit the study of topical human relations issues. (Irreg.)
H R	4203	Social Issues in the Workplace	Prerequisite: 3013 or junior standing, or permission of instructor. This course will provide students with an interdisciplinary examination of human relations, social issues, and the workplace. Historical social change will be examined as it is impacted by workplace dynamics. The course will employ a case study approach to explore social justice concerns and sociocultural dynamics in the American workplace. (Irreg.)
H R	4213	Understanding Addiction	Prerequisite: junior standing or permission of instructor. Provides students with introduction to substance use and abuse in United States populations, exploring the biopsychosocial model of addiction. Introduces students to strategies, perspectives, methodologies, intervention and prevention designs and implementation protocols. Incidence, extent, and consequences of substance abuse in American society are also covered. (F, Sp)
H R	4303	Human Relations in Action	Prerequisite: 3013 or permission of instructor. Students apply learning from previous courses to a field project of their choosing. The service learning that takes place is grounded in relevant human relations theory and practice. Each student is required to complete 60 hours of field work. (Irreg.)

H R	4313	Intercollegiate Athletic Administration	Prerequisite: 3013 or junior standing, or permission of instructor. Intercollegiate athletics has many constituencies with differing perceptions about its value to higher education and the community. This course is designed to survey intercollegiate athletics in America and its place within higher education. The contributions of college athletics to higher education will be discussed in depth as well as its values to student-athletes. In addition, the organizational structure and roles of the college athletics department are explored in depth. (Irreg.)
H R	4403	Undoing Racism	Prerequisite: 3403 or permission of instructor. Experience has shown us that organizing skills alone are not sufficient to build the kind of coalitions necessary for a broad-based movement for social change. This course examines history, culture, international dynamics of leadership, and networking in order to bring about self-awareness, and to facilitate for others an understanding of the issues within a racial construct. (Irreg.)
H R	4413	Adolescent Issues in the African-American Community	Prerequisite: 3013 or junior standing, or permission of instructor. This course is designed to introduce students to adolescent issues facing African-Americans. The course will examine development of all adolescents, as well as critically analyze the major issues and challenges facing African-American youth. Students will also identify possible solutions to these issues. (Irreg.)
H R	4423	Women's Issues in Human Relations	Prerequisite: 3013 or junior standing, or permission of instructor. This course examines a perspective on women's development that accurately reflects women's experiences rather than society's traditional view of women. We will explore the effect on women of being silenced, sexualized, and subordinated in a patriarchal culture. Particular attention will be given to self-in-relation theory, a developmental theory proposing that women develop their sense of self through relationships, but eventually discover that this is not valued or required. Since so many of our attitudes are determined in early life, we will explore the construction of identity in adolescent female development. Views of women's experiences in different cultures will also be examined. (Irreg.)
H R	4433	Gender and War	Prerequisite: junior standing or permission of instructor. Course will cover theoretical issues relevant to gender and war as well as applied topics such as child soldiers, refugees, rape as a tool of war, and definitions of human rights. Where relevant, case studies will be used to illustrate the gendered dimensions of warfare. (F, Sp)
H R	4503	Applied Research	Prerequisite: Communication 2513, , Economics 2843, Political Science 3123, Psychology 2003, Social Work 2223, or Sociology 3123. Introduces students to the theoretical and methodological skills necessary to conduct an applied research program. Methodological approaches are varied and emphasize a range of social science orientations. (Irreg.)
H R	4513	Service Learning	Prerequisite: 3003, 3013, 3043, and 4013. Capstone course to be taken in the final semester. Students apply learning from other courses to a project of significant community need. Classes are held both on campus and on-site, and group work, evaluative discussion, and written reflection are integral parts of the course. (Irreg.) [V]
H R	4733	Juvenile Justice and Delinquency Prevention	Prerequisite: junior standing or permission of instructor. Examines the biological, psychological, and sociological perspectives and research, and addresses the role of social forces and social institutions in juvenile delinquency. Explores different approaches to understanding delinquency, social factors that contribute to delinquency, and analyzes current research and data related to juvenile delinquency. Also explores the full range of programs and philosophies involved in the attempt to moderate juvenile crime and delinquency. No student may earn credit for both 4733 and 5733. (F, Sp)
H R	4960	Directed Readings	1 to 3 hours. Prerequisite: Junior standing and permission of instructor. May be repeated; Maximum credit 6 hours. Faculty supervised exploration of an area of human relations not covered in regularly offered courses. (F, Sp, Su)

H R	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
H R	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
H R	5003	Theoretical Foundations Of Human Relations	Prerequisite: admission to the degree program in human relations or permission of department. An analysis of human relations theories and concepts from the perspectives of the social sciences, the humanities and education. (F)
H R	5013	Current Problems In Human Relations	Prerequisite: admission to the degree program in human relations or permission of department. In-depth studies of outstanding problems facing social practitioners, including racism, sexism, poverty and human rights. Strategies for change and ethics of intervention also will be discussed. (F)
H R	5023	Research in Human Relations	Prerequisite: admission to the degree program in human relations or permission of department. Special focus will be upon designing and implementing a research project related to the student's area of concentration in human relations. (Sp)
H R	5033	Seminar in Leadership in Organizations	Prerequisite: graduate standing or permission of instructor. Focus is upon a survey of major leadership approaches and theories and application in organizational settings. Discussions of the leadership process and administration of assessment instruments are used to increase a student's awareness of his/her own leadership style.
H R	5043	Seminar in Organizational Change and Development	Prerequisite: graduate standing or permission of instructor. Focus will be upon the change process and a survey of major approaches used to bring about organizational change, such as confrontation meetings, survey feedback, job enrichment, process consultation and third party intervention. (Sp)
H R	5053	Diversity and Justice in Organizations	Prerequisite: graduate standing or permission of instructor. Focuses on concepts of justice in organizations, and the changing demographics of our society, especially related to race and culture, gender, age, disability, and socio-economic status. The course emphasizes the implications of these factors for effective organizational management. (Irreg.)
H R	5063	Seminar in Strategies of Social Change	Prerequisite: graduate standing or permission of department. A study of techniques for bringing about individual, group or organizational changes. Special focus will be placed on philosophies and results of violent and nonviolent tactics. (F)
H R	5073	Creative Problem Solving	Surveys the nature of creative thinking and creative problem solving. Topics to be covered include creative thinking obstacles, creativity, readiness, major stages of the creative problem-solving process (fact finding, problem finding, idea finding, solution finding and acceptance finding) and use of a variety of individual and group techniques for different stages in the process. (Sp)
H R	5083	Seminar in Group Dynamics	Prerequisite: graduate standing or permission of department and graduate dean. An intensive study and critical evaluation of social-psychological concepts related to sensitivity training as a human relations technique. (CE)
H R	5093	Introduction to Graduate Studies in Human Relations	Prerequisite: admission to degree program in human relations or permission of instructor. Designed to acquaint graduate students with human relations theory and practice in various contexts. Emphasis is placed on the role of human relations professionals as agents of persistence and change at the interpersonal, group, organizational and societal levels of analysis. (F)

H R	5100	Advanced Theories in Human Relations	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated with change of content; maximum credit six hours. Additional in-depth studies of human relations theories and their implications for human relations practitioners will focus on topics such as, but not limited to: affirmative action and reverse discrimination; spiritual aspects of recovery in chemical dependency; conceptual models of violence and nonviolence as a basis for peace curriculum; human relations in the twenty-first century; human values in sexuality; and women and men in organizations. (F, Sp)
H R	5110	Advanced Seminar in Current Problems	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated with change of content; maximum credit six hours. Additional in-depth studies of current social problems and strategies for intervention and change on topics such as, but not limited to: chemical dependency and society; ethnic and gender discrimination issues; disadvantaged children; domestic violence; sexual/physical abuse; physically and emotionally handicapped populations. (F, Sp)
H R	5113	Seminar in Local Issues in Human Relations	Prerequisite: graduate standing or permission of instructor. May be repeated with change of topic; maximum credit nine hours. Variable topics and content related to human relations problems and solutions. (F, Sp, Su)
H R	5123	Decision Making in Adult and Higher Education	(Crosslisted with EDAH 5123) Prerequisite: graduate standing. Provides students with an understanding of various forces which influence the process of decision-making in adult and higher education, as well as provide an opportunity to examine how such decisions can be reached and implemented. The student will examine realistic examples of decision-making in such areas as budgeting, trustee relations, tenure decisions, faculty development, and curriculum. (F, Sp)
H R	5133	Change, Challenge and Creativity in the Workplace	Prerequisite: graduate standing or permission of instructor. This course examines ways to enhance creativity and the creative problem solving process within the context of a rapidly changing workplace. The major changes occurring in today's workplace and the management of change at both the personal and organizational level will also be considered. Particular emphasis will also be placed on examining the creative process, common barriers to creativity, and a variety of individual and group techniques that foster or facilitate the creative process. (Irreg.)
H R	5143	Human Resources for the Human Relations Professional	Prerequisite: graduate standing or permission of department. This course serves as an introduction to the Human Resource Management (HRM) discipline. Specifically, this course is designed to assist students in discovering what HRM is (and is not), recognizing its' multifaceted and ever evolving nature, and how HRM fits into the total organization. An awareness and understanding of the central HRM topics, competencies, terminology, and ethical issues is foundational to the course. In addition, the highly influential nature of federal and state law on HRM is highlighted. Additionally, this course will illuminate the many rewarding career opportunities available within the HRM discipline. (Irreg.)
H R	5153	Human Emotions	Prerequisite: graduate standing. Goal is to become familiar with some of the major conceptualizations of emotions and the evidence used to validate them; to examine a number of emotions such as attachment, love, loss and grief, depression, anxiety, joy, anger, fear, etc. Will be both didactic and experiential. Skills in self-disclosure, active listening, empathy, confrontation, etc. will be used to increase the understanding of emotions and to increase the ability to communicate emotional content. (Irreg.)
H R	5163	Seminar in Nonverbal Behavior in Human Relations	Prerequisite: graduate standing or permission of instructor. Topics include research methods, cross-cultural studies, proxemics, kinesics, vocalics, emotions, touch and human development, dress and appearance, attractiveness and social order. (F or Sp)

H R	5173	Seminar in Applied Interpersonal Dynamics	Prerequisite: 5083, graduate standing or permission of instructor. A human relations learning laboratory in which students can improve their self-awareness, communication skills and conceptual frame of reference. Topics include: self-disclosure, human emotion, concreteness, listening skills, genuineness, confrontation and immediacy. (Irreg.)
H R	5183	Seminar in Issues in Human Relations Training	Prerequisite: 5083 or 5173. Focuses on theory and research in group dynamics (group development, membership, goals, conformity, power, leadership, essentials in laboratory design); ethics, values and professionalism in human relations; and criticisms of human relations training. (CE)
H R	5193	Intervention and Practice in Training	Prerequisite: 3013, 5003, 5013, 5023, 5083 or 5173. Specifically designed to enable advanced students to explore their skills in working with others from both a theoretical and pragmatic perspective. Students are required, through course content, to develop a clear picture of facilitation, leadership, consultant or teacher style. (Sp)
H R	5200	Internship In Human Relations	1 to 6 hours. Prerequisite: admission to the degree program in human relations and permission of department. Field experience in and outside Oklahoma. Each student must have both types of experiences. Agency roles and responsibilities will be learned by on-the-job practice. (F)
H R	5213	Student-Athlete Development	Prerequisite: graduate standing or permission of instructor. Student-athletes, coaches, trainers, and administrators inevitably face many challenges and conflicts every day. While student-athletes are expected to be 100% student, as well as 100% athlete, they are also expected to maintain a healthy balance in their personal and social lives. This course is designed to facilitate exploration of these common, yet complex issues in intercollegiate athletics. Current research and perspectives from the field will be presented, and the sharing of student views and experiences relative to course topics will be imperative. (Irreg.)
H R	5273	Athletics in Higher Education	(Crosslisted with EDAH 5273) Prerequisite: Graduate Standing. Provide Students With An Understanding Of The History, Structure And Administration Of Intercollegiate Athletics, As Well As An Opportunity To Discuss A Wide Variety Of Related Contemporary Issues. (Irreg.)
H R	5323	Organizational Behavior in Human Relations	Prerequisite: graduate standing. Organizational behavior (OB) represents the behavioral approach to management. OB is concerned with human behavior at work and how various structures and work processes influence such behavior. This course will address a number of important organizational issues and processes, including organizational culture, group behavior and teamwork, and leadership. (Su)
H R	5333	Mediation	Prerequisite: graduate standing. Studies how the acceptable third party assists parties in resolving disputes. There will be considerable attention paid to the mediation process and the activities of mediators. Also focuses on negotiations because mediators help parties complete negotiations they are unable to settle on their own. (F)
H R	5343	Conflict Resolution	Prerequisite: graduate standing or permission of instructor. This course will explore the nature and origins of human conflict in modern life. It will emphasize an understanding of conflict and resolution methods useful in professional counseling and other HR settings such as organizational development and interpersonal facilitation. (Irreg.)
H R	5353	Organizational Communication in Human Relations	Prerequisite: graduate standing or permission of instructor. This course will explore organizational communication concepts, theories, research, and practical applications for human relations professionals. (Irreg.)
H R	5363	Program Development, Implementation, and Evaluation	Prerequisite: graduate standing or permission of instructor. This course is designed to facilitate the development of knowledge and skills critical to the conceptualization, planning, development, measurement, implementation, and evaluation necessary to operate public, private, profit or non-profit organization. (Irreg.)

H R	5373	Grant Writing	Prerequisite: graduate standing or permission of instructor. This course will explore fundraising as a dynamic process through which an organization or an individual becomes financially able to accomplish a specific goal by using writing skills, management skills, and solicitation. Students will acquire the skills needed to prepare grant proposals. (Irreg.)
H R	5383	Public Policy for Human Relations Professionals	Prerequisite: graduate standing or permission of instructor. This course examines how public policy is made at various levels of government and how these policies affect society. Particular emphasis will be given to public policy issues that affect human relations professionals, their clients, and the public and private agencies in which they work. (Irreg.)
H R	5403	Psycho-Social Development	Prerequisite: graduate standing or permission of instructor. Covers human psycho-social development. Discussion of the expanding social realm of the developing individual. Theories and research in a variety of areas related to social development will include: attachment, aggression, sex typing, moral development, and parent-child interaction. (F, Sp)
H R	5413	Chemical Dependency	Prerequisite: graduate standing or permission of instructor. Explores how chemical dependency affects individuals in their physical, psychological and social functioning. The dynamics of the illness, treatment and recovery process are explored. Attention is given to the feelings, physical, psychological and social aspects of chemical dependency. Both didactic and experiential. (F)
H R	5423	Family Systems and Family Reconstruction	Prerequisite: permission of instructor. Teaches students how to impact family systems. Through didactic and experiential learning, students will learn how students function in systems and explore their own rules for living in systems. (CE)
H R	5433	Group Counseling in Human Relations	Prerequisite: graduate standing or permission of instructor. Examines a variety of group counseling models, types of groups (process, solution-focused, action-oriented), the role of the group counselor, group members, and techniques and strategies for facilitating group work. (Irreg.)
H R	5443	Adolescent Issues in Human Relations	Prerequisite: graduate standing or permission of instructor. Designed to acquaint human relations professionals with issues facing teens today. The pressures confronting youth along with various adaptive and maladaptive coping behaviors will be studied. (F, Sp, Su)
H R	5453	Ethical Issues in H R Counseling	Prerequisite: graduate standing or permission of instructor. Surveys ethical, legal, and professional issues facing human services workers. (F, Sp, Su)
H R	5463	Counseling Skills in Human Relations	Prerequisite: graduate standing or permission of instructor. Introduce students to the helping professions and provide them with a basic mastery of important counseling skills in human relations. (Irreg.)
H R	5473	Women and Mental Health	Prerequisite: graduate standing or permission of instructor. Examines psychological theory and practice as it pertains to women. This course will look at traditional theories and practice, new approaches to working with women, and topical issues. (Irreg.)
H R	5483	Diagnosis in Human Relations Counseling	Prerequisite: graduate standing or permission of instructor. Introduces students to the diagnostic systems of mental disorders outlined by the American Psychiatric Association and the World Health Organization. Also covers principles and techniques of interviewing which produce a correct diagnosis. (F, Sp)
H R	5493	Assessment and Evaluation in Human Relations	Prerequisite: graduate standing or permission of instructor. Provides an overview of clinical and social assessment procedures used in counseling settings including career and life planning, personality, and mental health assessments. Emphasis is placed on a thorough examination of diagnostic classifications for mental disorders. Also develops a working knowledge of assessment skills along with a bias-free multicultural perspective, and ethical issues applicable to assessment. (F, Sp)

H R	5503	Narrative Metaphor in Counseling	Prerequisite: graduate standing or permission of instructor. This course explores the use of the narrative metaphor in counseling and family therapy. It will explore how social constructionism, postmodern philosophies and the narrative metaphor are being utilized in counseling and therapy. (Irreg.)
H R	5513	Marriage and Family Therapy	Prerequisite: graduate standing or permission of instructor. This course explores different conceptual and theoretical ideas about close interpersonal relationships and marriage. (Irreg.)
H R	5523	Counseling With Children, Adolescents, and Families	Prerequisite: graduate standing or permission of instructor. This course will explore various theories, modalities and practices working with young children, adolescents and their families. Students will be introduced to theories of development; individual, group and family therapies, and a meta-theoretical framework of social construction. (Irreg.)
H R	5533	Counseling Approaches in Human Relations	Prerequisite: graduate standing or permission of instructor. This course emphasizes skills training in counseling approaches utilized by human relations practitioners. The skills training is organized according to basic counseling and psycho-therapy theories, including psychodynamic, behavioral, cognitive, existential-humanistic, multicultural, systemic and integrative approaches. (Irreg.)
H R	5543	Counseling with Diverse Populations	Prerequisite: graduate standing or permission of instructor. This course addresses four populations: women, persons of sexual/gender minority identification, persons with disabilities, and aging persons. Students will examine the special issues of each population and consider appropriate counseling approaches. (Irreg.)
H R	5553	Marital and Family Assessment	Prerequisite: graduate standing or permission of instructor. This course will explore various approaches to conceptualizing assessment of couples and families. (Irreg.)
H R	5563	Career Counseling	Prerequisite: graduate standing or permission of instructor. Explores conceptual and functional tools for enhancing career development of children, youth and adults in both counseling and corporate human resource relationships. Class participants have the opportunity to experience a variety of career assessment tools including interest inventories, personality assessments and values clarification exercises. Career counseling strategies for a variety of life situations are discussed. (Irreg.)
H R	5573	Personality and Personality Disorders	Prerequisite: graduate standing or permission of instructor. This course will explore the historical and contemporary concepts of personality development, personality styles and personality disorders, as well as examine personality disorders and their treatment. (Irreg.)
H R	5583	Social Justice Counseling	Prerequisite: Graduate standing or permission of instructor. This course emphasizes theory and methods to promote social justice in human relations. The ethics of social justice in counseling will also be addressed. Various social justice and counseling theories will be explored, as well as strategies for integrating into human relations counseling. Concepts and skills will be studied through readings, discussion, case studies, exercise, videos, and class projects. (Irreg.)
H R	5593	Multicultural Counseling	Prerequisite: Graduate standing or permission of instructor. The model of multicultural understanding followed in this course is intended to increase the understanding of culturally diverse groups. This class is both practice and theory oriented. Emphasis will be placed on providing a broader knowledge base and developing the skills to counsel individuals from various cultures. (Irreg.)

H R	5613	Human Relations in Education	(Crosslisted with EACS 5613) Prerequisite: graduate standing. Focuses on intrapersonal, interpersonal and intergroup relations problems in the public schools. Specifically, deals with persistent school/classroom problems associated with multiculturism. Attempts to blend theory and practice through a lecture/discussion/problem-solving approach. Emphasizes teacher self-awareness as a major aspect of the human relations approach. (F, Sp)
H R	5703	International Human Relations	Prerequisite: graduate standing or permission of instructor. This course will examine ways to understand people of different cultures. It uses a multidisciplinary approach to look at the roots and explanations of differences between cultures and what these differences mean for working with people of different backgrounds. This course utilizes the tools of history, geography, economics, sociology, and other social and physical sciences to understand why people are different in order to identify strategies for building effective human relations. (Irreg.)
H R	5713	Women, Work, and the Family	Prerequisite: graduate standing or permission of instructor. A creative exploration of the dynamics of women's issues in both the family and in the workplace. It examines the societal conditioning creating the "Superwoman," mother-blaming, balancing roles, the time bind of home and work, discrimination in the workplace, relational practice at work, and companies that care for and about women and families. Exploration will include strategies for innovative planned change. (Irreg.)
H R	5723	Sexism and Homophobia	Prerequisite: graduate standing or permission of instructor. This course will examine the relationship between sexism and heterosexism, homophobia and misogyny. Using a variety of materials and methods, students will be encouraged to familiarize themselves with the history of homosexuality and explore the discrimination faced by gay men and lesbians, as well as the impact on homophobia on our working relationships, our personal and professional lives, and on the institutions in which we participate. (Irreg.)
H R	5733	Juvenile Justice and Delinquency Prevention	Prerequisite: graduate standing or permission of instructor. Examines the biological, psychological, and sociological perspectives and research, and addresses the role of social forces and social institutions in juvenile delinquency. Explores different approaches to understanding delinquency, social factors that contribute to delinquency, and analyzes current research and data related to juvenile delinquency. Also explores the full range of programs and philosophies involved in the attempt to moderate juvenile crime and delinquency. No student may earn credit for both 4733 and 5733. (F, Sp)
H R	5743	Violence Against Women and Children	Prerequisite: graduate standing or permission of instructor. The effects of violence on women, children and families will be presented within an academic and clinical framework for purposes of developing skills for assessment, intervention, and prevention. Students will discuss various strategies for crisis intervention, safety planning, and preferred counseling methods for abuse victims. Students will discuss the historical implications of violence against women and the effects on human relationships in contemporary society. (Irreg.)
H R	5753	Service Learning for Social Change	Prerequisite: graduate standing. Offers an opportunity for students to connect social justice and change theory and practices learned in the classroom with service-based social justice initiatives in communities, organizations or agencies through a field project. (Irreg.)

H R	5803	Total Rewards: Compensations and Benefits for HR Management Professionals for the HR Prof	Prerequisite: H R 5143 or graduate standing or permission of the department. A core Human Resource Management competency, Total Rewards: Compensation and Benefits will provide students with an introduction to compensation and benefit programs. Specifically, students will explore the forms of direct (compensation) and indirect (benefits) compensation used to attract, reward, and retain employees. The design, administration, and evaluation of compensation systems and benefit programs are also examined. Further, students will also analyze the legal and regulatory factors affecting total rewards planning and delivery. Additionally, this course will illuminate the many rewarding career opportunities available in the Total Rewards discipline. (Irreg.)
H R	5813	Business Management and Strategic Planning	Prerequisite: H R 5143 or graduate standing or permission of department. Introduction to the overall strategic planning process of organizations. Students will explore organizational strategic planning processes to include but not limited to: development of mission, vision, values, goals and objectives; policy formation, enforcement, and evaluation. In addition, evaluation of organizational strategic planning is analyzed. Further, students will understand how employees contribute to the overall effectiveness of an organization by studying how organizations assess and deploy human capital. (Irreg.)
H R	5823	Workforce Planning & Employment, A Component of Human Resource Management for the HR Prof	Prerequisite: H R 5143 or graduate standing or permission of department. Workforce Planning and Employment is one of the courses applied to the area of Human Resource Management for the Human Relations Professional. Workforce Planning and Employment highlights the activities necessary to ensure the workforce's ability to achieve the organization's goals and objectives. Specific areas covered include: key laws and regulations (ADA, Title VII, Affirmative Action, etc.), organizational staffing requirements and methods, job analysis and documentation, recruitment, flexible staffing, selection and retention, organizational exit, and employee records and retention. (Irreg.)
H R	5833	Human Resource Development	Prerequisites: H R 5143 or graduate standing or permission of department. Learning and Development (L&D) is a broad discipline utilized in a number of fields. Designated as a core course for the Human Resource certificate program, L&D offers learners an examination of key legislation affecting L&D activities, L&D theory, role of technology in L&D, and the intricacies of Human Resource L&D. In addition, examines the analysis, development, design, implementation, and evaluation of learning and development programs. (Irreg.)
H R	5843	Risk Management for Human Resource Professionals for the Human Relations Professional	Prerequisite: H R 5143 or graduate standing or permission of department. Risk Management for Human Resource Professionals explores the disciplines of safety and security in organizations. The course will examine an organization's efforts to prevent and/or mitigate loss due to risks to or from personnel, threats to its physical assets, damage to its technology and intellectual property, or risks of any other kind arising from all elements surrounding the work environment. Students will also examine the laws and regulatory statues that drive the risk management decisions. Additionally, this course will illuminate the many rewarding career opportunities available within the Risk Management discipline. (Irreg.)

H R	5853	Employee and Labor Relations for HR Management Professions in Human Relations	Prerequisites: H R 5143 or graduate standing or permission of department. Examines the employer/employee relationship. Introduces students to the key employment law, i.e., state, local, and federal laws and regulations that govern organizational structure and operations and help to maintain an ethical, healthy, and safe work environment. Among the ideas analyzed include: how workplace relationships are managed and maintained; how organizations balance employer/employee needs and rights while supporting organizational goals and objectives. A broad overview, students will become familiar with a plethora of employee relations issues such as termination, policy development, and interpretation of the most significant laws that affect HRM. (Irreg.)
H R	5863	Human Resources for the HR Prof Fundamentals of Human Resource Information Systems	Prerequisites: H R 5143 or graduate standing or permission of department. This course examines the ever growing field that is Human Resource Information Systems (HRIS). Specifically, students will explore the metamorphosis of human resource technology; how it has gone from situational asset to mandatory strategic business partner across the Human Resource Management gamut. Designed to develop an awareness and appreciation of the nature and use of data and information systems in organizations, this course will introduce students to the various HRIS systems utilized by organizations and the associated analysis, design, and implementation of those systems. Additionally, this course will illuminate the many rewarding career opportunities available within the HRIS discipline. (Irreg.)
H R	5960	Directed Readings in Human Relations	1 to 6 hours. Prerequisite: graduate standing, permission of instructor. May be repeated; maximum credit six hours. Individual investigations and report of findings on selected problems in human relations education. (F, Sp, Su)
H R	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit six hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
H R	5980	Research for Master's Thesis	Prerequisite: admitted to candidacy for a Master of Human Relations. Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. Original paper in an area of concentration in human relations. (F, Sp, Su)
H R	5990	Independent Study	1 to 4 hours. Prerequisite: 5023 or equivalent and permission of instructor. May be repeated; maximum credit six hours. Individual investigation of special research topics in human relations. (F, Sp, Su)
H R	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
H R	6980	Research Doctoral Dissertation	NULL
HARP	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
HARP	2000	Freshman and/or Sophomore Secondary Harp	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HARP	2020	Harp for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)

HARP	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HARP	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
HARP	4000	Junior and/or Senior Secondary Harp	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HARP	4020	Harp for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
HARP	5000	Master's-Level Secondary Harp	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HARP	5020	Master's-Level Harp for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
HARP	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
HARP	6000	Doctoral Secondary Harp	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HCB	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HCB	3613	Healthcare Marketing and Administration	(Crosslisted with MKT 3613) Prerequisite for Business Majors: Business Candidacy & MKT 3013 Prerequisite for Non-business Majors: MKT 2013 or 3013. Healthcare organizations must be prepared to shift their strategies in order to meet the increasing demands in this dynamic market. The purpose of this course is to apply the systems of marketing and administration to the problems of health care organizations and provide an insight to the business problems healthcare organizations are likely to encounter. (F, Sp)
HCB	3623	Competitive and Economic Environment of Healthcare	(Crosslisted with MKT 3623) Prerequisite for Business Majors: Business Candidacy, MKT/HCB 3613. Prerequisite for Non-business Majors: ECON 1123 and MKT/HCB 3613. A wide range of new governmental regulatory interventions in the healthcare arena and changes to the economic environment are directly linked to uncertainty in the structure of health insurance; the contractual arrangements and relationships that exist between patients, doctors, and hospitals. This course explores these issues in detail and presents case studies that will guide the student to a better understanding of healthcare economics. (F, Sp)

HCB	4363	Business Infrastructure and Cyber Security	(Crosslisted with MIS 4363 and B AD 4363) Prerequisites: junior standing, senior standing; MIS 2113; MGT 3013; MKT 3013; LS 3323; FIN 3303. Focuses on the foundation concepts necessary to gain an understanding of the industry, data communications and telecommunications networks and cyber security concepts. Key topic areas of the course are: OSI and Internet network models, Standards & Protocols, Business Infrastructure Design (LAN, WLAN, Backbone Networks, WAN, Connection to the Internet), Cyber Security Concepts, Basic technical and managerial aspects of business infrastructure, Practitioners concerns and perspectives. (F, Sp)
HCB	4613	Ethical and Regulatory Issues in Healthcare	(Crosslisted with MKT 4613) Prerequisite for Business Majors: Business Candidacy, 3000-level core courses and HCB/MKT 3613. Prerequisite for Non-business Majors: HCB/MKT 3613 and LS 3323. The Healthcare Industry continues to undergo enormous changes with new laws, regulations and policies, fresh innovations and the increasingly higher expectations of the healthcare consumer. With this in mind, it is a necessary requirement to develop a process of creating a strong ethical climate within a healthcare organization. This course explores the complex moral, ethical and legal issues that continue to arise within the healthcare profession. (F, Sp)
HEBR	1115	Beginning Hebrew	An elementary course in modern and Biblical Hebrew. The course provides basic understanding, speaking, writing, and reading Hebrew, both modern and Biblical. Similarities and differences between modern and Biblical Hebrew are explored. (F, Sp) [I-FL]
HEBR	1225	Beginning Hebrew (continued)	Prerequisite: 1115. Focuses on all language skills: understanding, speaking, writing, reading of both modern and Biblical texts; including further exploration of similarities and differences between modern and Biblical Hebrew. By the end of this course, students are expected to write short dialogs. (F, Sp) [I-FL]
HEBR	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
HEBR	2113	Intermediate Hebrew	Prerequisite: 1225. Further training in understanding, speaking, writing, and reading Hebrew, both modern and Biblical. Emphasis is given to grammar as well as to exploring differences in style between various Biblical texts, such as Torah versus prophets. (F)
HEBR	2213	Topics in Hebrew Grammar	Prerequisite: 1225. Further training in understanding, speaking, writing, and reading Hebrew, both modern and Biblical. Emphasis is given to expansion of vocabulary and strong reinforcement of grammatical structures. (Sp)
HEBR	3113	Advanced Hebrew	Prerequisite: 2113 and 2213. Continued training in understanding, speaking, writing, reading literary texts and newspaper articles, as well as Biblical texts, such as poetry. Emphasis is given to discussions on and writing about these texts. (F)
HEBR	3223	Advanced Conversation and Reading Hebrew	Prerequisite: 2113 and 2223. Continued instruction in advanced topics in Hebrew. Emphasis is given to formal and informal discussions on and writing about social and professional topics. (Sp)
HEBR	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HEBR	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

HEBR	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
HEBR	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
HEBR	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
HEBR	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
HEBR	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: 3223 or permission of instructor. May be repeated with change of content; maximum credit 9 hours. This course is designed to give intensive training in listening and speaking in Hebrew for students who have taken 3223. The course develops students' understanding of functional ability of listening and speaking Hebrew. Students will learn unique features of Hebrew language and culture. (Irreg.)
HEBR	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp)
HEBR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
HES	1011	Spinning	Designed to teach specific skills of spinning and form. Class focuses on increasing cardiovascular fitness, working both aerobically and anaerobically through different energy zones. Individuals will become aware of the fundamentals of spinning and be able to perform learned skills and techniques, as well as accurate terms and etiquette. (F, Sp)
HES	1021	Beginning Judo	Consists of skill training in the sport of judo and the associated cognitive acquisition of terminology, contest rules and customs. Skills portion will deal with falling techniques, throws, holddowns, chokes and armbars. Cognitive portion will deal with the training aspects of judo (chiai, randori, kata and uchi komi), basic terminology and contest rules. (F, Sp)
HES	1031	Introduction to Martial Arts	The course is intended to provide students with a broad overview over the variety of martial arts available today. The students will acquire a rudimentary knowledge of various techniques, including self defense, that are common to most martial arts. It is expected that at the end of the course the students will be able to choose the most appropriate art for his/her own personal taste and advancement. (F, Sp)
HES	1041	Yoga	Yoga. Beginning Level Yoga Class Focusing On Basic Asanas (Poses), Breathing, Relaxation And Meditation. Students Will Improve Their Flexibility And Body Awareness. (F,Sp,Su).
HES	1051	Intermediate Judo	Prerequisite: HES 1021 or HES 1031 or permission of instructor. Builds upon basic judo skills and teaches intermediate skills including ukemi, tachiwaza, newaza, uchikomi, randi, etc. Students will learn working knowledge of appropriate protocols and terminology involved with judo training and condition and strengthen the body through the practice of judo. (F, Sp)
HES	1061	Beginning Taekwondo	Teaches the basic skills of taekwondo, including warm-up, stretching, and basic moves. Also teaches conditioning and how to strengthen the body through taekwondo training, as well as provide a working knowledge of taekwondo. (F, Sp)

HES	1071	Intermediate Taekwondo	Prerequisite: 1061 or permission of instructor. Builds upon the principles learned in beginning taekwondo and improves mental discipline and emotional equanimity. Also teaches self-defense techniques, as well as develops a sense of responsibility for oneself and others. (F, Sp)
HES	1081	Beginning Gymnastics	Focuses on the basic gymnastics, including beginning tumbling, stretching and gymnastics conditioning. Students will improve their flexibility and body awareness. Class caters to each student's gymnastics experience and allows for development at each student's ability. Students will gain an understanding of gymnastics warm-up, workout and cool down. (F, Sp)
HES	1091	Intermediate Gymnastics	Prerequisite: 1081 or permission of instructor. Focuses on higher level gymnastics, including tumbling, stretching and gymnastics conditioning. Students will improve their flexibility and body awareness. Students will participate in all gymnastics events and show skill development that is appropriate for each student's level of experience. (F, Sp)
HES	1121	Beginning Weight Training	To learn basic skills of weight training, i.e., warm-up, lifting techniques, training programs, etc.; to condition and strengthen the body through a continuous weight training program; to learn and appreciate the ability of correct weight training to enhance personal fitness and the carry-over value into other sports and activities. (F, Sp, Su)
HES	1131	Intermediate Weight Training	Prerequisite: 1121 or permission. To enhance basic weight training skills by providing a more thorough knowledge of weight training; to learn proper procedures for total physical development; to learn the principles of nutrition and the role it plays in weight training; to learn through proper program design to develop weight training into an overall strength fitness program that can be utilized as a lifetime leisure activity. (F, Sp, Su)
HES	1221	Individual Fitness	May be repeated; maximum credit eight hours. Exercise designed to condition the body for maximum health and fitness; special emphasis on cardiovascular fitness. (F, Sp, Su)
HES	1231	Lifestyle Physical Activity	Individuals learn and practice strategies for incorporating lifestyle physical activity into their daily routines. Class focuses on teaching students a variety of topics such as: an understanding of physical activity and how it is needed to maintain health; how to self-monitor physical activity; how to set achievable and realistic physical activity goals; and how to effectively cope with situations that limit or prevent participation Some classes will include participation in physical activities such as walking, bicycling, or other activities of the student's choice. (F, Sp)
HES	1321	Wall Climbing	The purpose of this class is to learn and practice the basic techniques and safety concerns for rock climbing and bouldering. (F, Sp, Su)
HES	1341	Beginning Bowling	Bowling alley service charge. (F, Sp)
HES	1351	Recreational Activities	May be repeated with change of subject matter; maximum credit three hours. (F, Sp, Su)
HES	1361	Beginning Golf	(F, Sp, Su)
HES	1371	Intermediate Golf	Prerequisite: 1361 or permission. (F, Sp)
HES	1441	Intermediate Bowling	Prerequisite: 1341 or permission. To enhance basic beginning bowling skills by providing a more thorough knowledge of the sport. (F, Sp, Su)
HES	1521	Beginning Swimming	(F, Sp)
HES	1562	Lifeguard Certification	Provides the opportunity to gain knowledge and skills that will allow for students to prevent, recognize, and respond to aquatic emergencies. How to provide professional level care for breathing and cardiac emergencies, injuries and sudden illnesses until EMS personnel arrive and take over will also be learned. Upon successful completion of course, participants will receive an American Red Cross Life Guarding/First Aid/CPR/AED Certification that is valid for 2 years. A pre-test is required to continue in the course. (F)
HES	1661	Beginning Racquetball	Fundamental skills of racquetball, i.e., serving, forehand, backhand, court positions and strategy. (F, Sp, Su)

HES	1681	Beginning Tennis	(F, Sp, Su)
HES	1691	Intermediate Tennis	Prerequisite: 1681 or permission. (F, Sp)
HES	1823	Scientific Principles of Health and Disease	Students will be exposed to the basic science-based principles needed to develop an interdisciplinary understanding of human health. The course is designed to assist students in the development of a basic understanding of the anatomical structures and physiological process that are critical to understanding the development of various diseased/disorders. Students will apply this knowledge to a fact-based model for choosing and developing appropriate lifestyle and health-related interventions (e.g., exercise, nutrition, stress management), both for health enhancement and disease prevention. (F, Sp, Su) [II-NL]
HES	1921	Basketball	Teach a basic understanding of the game of basketball; skills and analysis of skills, nature and rules of the game, and strategies for game situations. (F, Sp, Su)
HES	1941	Soccer	Teach a basic understanding of the game of soccer; skills and analysis of skills, nature and rules of the game, and strategies in game situations. (F, Sp)
HES	1961	Softball	Teach a basic understanding of the game of softball; skills and analysis of skills, nature and rules of the game, and strategies for game situations. (F, Sp)
HES	1981	Volleyball	Basic understanding of the game of volleyball; skills and analysis of skills, nature and rules of the game, and strategies for game situations. (F, Sp, Su)
HES	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
HES	2131	Introduction to Health and Exercise Science	Designed to introduce major students to the fundamentals of HES, including curricular disciplines, basic terminology, career opportunities, and professional associations. Students will also learn basic library research skills and a working knowledge of the support services and technologies available at the University. (F, Sp)
HES	2212	First Aid	Includes the theory related to causes and prevention of accidents, as well as development of sufficient knowledge to determine the nature and extent of injuries. Training focuses on taking proper procedural steps at the proper times. Upon successful completion of the course and its specific requirements, students are awarded the American Red Cross Community First Aid and CPR Certificates. Lecture and laboratory combined. May include online components. (F, Sp, Su)
HES	2823	Introductory Nutrition	(Crosslisted with Clinical Dietetics 1823- an HSC course) Evaluation of basic composition of nutrients and accessory factors required for adequate human nutrition. Application of nutritional principles to the planning of normal and special dietary regimen. [II-NL]
HES	2913	Personal Health	Emphasizes the health knowledge and practices needed for effective living. The course has a holistic focus on personal health and provides both an informational and behavioral basis for health promotion and disease prevention. Topics include: mental health, stress management; fitness; nutrition; alcohol, tobacco, and other drug education; sexuality; and chronic/infectious disease. (F, Sp)
HES	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
HES	3000	Special Topics in Health and Exercise Science	1 to 3 hours. Prerequisite: junior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Topics in health and exercise science not accommodated by the existing curriculum. Example: psychological factors in exercise adherence, i.e., personality traits of select exercise individuals, reinforcement procedures, personal goals as related to exercise needs, etc. (Irreg.)

HES	3021	Sports Officiating: Football and Volleyball	Prerequisite: ENGL 1213 or EXPO 1213. Standards and principles involved in the art of officiating with emphasis on football and volleyball. Laboratory experience required. (F)
HES	3031	Sports Officiating: Basketball, Softball, and Baseball	Prerequisite: English 1213 or Expository Writing 1213. Standards and principles involved in the art of officiating with emphasis on basketball, softball, baseball, and track and field. (Sp)
HES	3052	Theory of Baseball	Prerequisite: 2022. The sciences of coaching baseball. Thorough coverage of the basic fundamentals of defensive and offensive baseball; coaching and teaching techniques; strategy, and administrative duties of the baseball coach. (Irreg.)
HES	3173	Materials and Methods in the Elementary School Physical Education Program	Prerequisite: sophomore standing, permission. Basic philosophy and characteristics of a program of physical education for the elementary school child; how to plan and organize the program; the desirable activities; standards for facilities and equipment; evaluation. (F, Sp, Su)
HES	3213	Principles and Practice of Sport Management for Non-HES Majors	Prerequisite: Non-HES major and junior standing. Survey course covering fundamental management functions, structural components of sport organizations, management and leadership techniques commonly employed in effective sport organizations, human resource management strategies, and current trends in sport management. (F, Sp, Su)
HES	3430	Field Experiences in Health and Exercise Science	1 to 4 hours. Prerequisite: junior standing or permission of department. May be repeated with change of activity or advanced position; maximum credit four hours. Field study related to student's area of interest (athletic coaching, athletic training, exercise science, health promotion, sport management) as approved by the department's field supervisor of adviser. A contract is required prior to beginning the field experience. The contract will address: statement of purpose, process of submitting reports, on-site evaluations, and written evaluations by student and site supervisor. (F, Sp, Su)
HES	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HES	3502	Care and Prevention of Athletic Injuries	Prerequisite: HES 2212 or equivalent CPR/AED/First Aid certification; three hours of biological science and three credit hours of social science. Recognition, cause, prevention, treatment, rehabilitation of athletic injuries; taping methods, protective equipment, and doctor's recommendations; equipping the training room, conditioning the athlete, practice routines and the athlete's diet. Laboratory (F, Sp)
HES	3503	Child and Family Health	Prerequisite; junior standing. Examines the multifaceted determinants of health for children and adolescents, with special emphasis on the roles of the family, school and community. Topics include: body image and dieting; nutrition, obesity and physical activity; adolescent social behaviors; tobacco and alcohol use; mental health and family relationships. Gender-specific and age-appropriate prevention and intervention strategies will be discussed in relation to each of these topics. (F, Sp)
HES	3513	Health Promotion Program Planning	Prerequisite: HES major or permission of instructor. Discussion of health promotion programming in disease prevention, risk reduction, and wellness. Understanding the theoretical issues related to the development and evaluation of health promotion programs and the behavioral dimensions of health promotion. (F, Sp)

HES	3523	Human Sexuality	Prerequisite: 2913, Psychology 1113. An introduction to biological, psychological, and sociological concepts which form the interdisciplinary foundation for studying human sexuality. Current research findings in all areas will be emphasized. Areas of emphasis will include: personal, social, sexual, and gender identity development across the lifespan, interaction and communication within social and intimate relationships, and reproductive and other health-related sexuality issues. (F, Sp)
HES	3533	Aids and its Impact on American Society	Prerequisite: Zoology 1114 and three hours of social science, or permission of instructor. Provide a current overview of the medical and epidemiological aspects of AIDS and HIV spectrum disorders. Also focus on the psychosocial, educational, legal and ethical issues which have evolved in this country as a result of our response to AIDS and HIV.
HES	3543	Health and Wellness Coaching	Prerequisite: junior standing and HES 2913. Encourages participants to successfully adopt healthier lifestyle behavior. Explores the development and efficacy of health and wellness coaching and develops the ability to implement basic coaching skills when working with patients and wellness clients. (Sp)
HES	3553	Wellness in Native Communities	Prerequisite: junior standing and HES 1823 or HES 2913. Designed to explore and understand the principles of individual and community wellness from the perspective of both mainstream society and from within the cultural frame of native beliefs and values. (F)
HES	3563	Lifestyle Intervention	Prerequisite: HES major or permission. Examines the relationship between individual behavior and the health status of a community. Current lifestyle intervention literature will be the focus. Application of intervention strategies will be presented for school, worksite, and community settings. (Irreg.)
HES	3573	Obesity and Weight Management	Prerequisite: junior standing and HES 2913 and either HES 1823 or BIOL 2124. Provides students with knowledge of the physiology and psychology of obesity and overweight. Designed to educate students not only on the scientific background of obesity but how to apply this knowledge to management of obesity in the general and specific populations they will be serving. (F)
HES	3583	Sociocultural Aspects of Health	Prerequisite: junior standing. Designed to offer a comprehensive approach to understanding social injustice and its impact on health. Particular attention will be given to research emphasizing social determinants as the underlying causes of ill health in the American society. (F, Sp)
HES	3593	Sport and Physical Activity in Society	Prerequisite: junior standing. Examines major theoretical perspectives and research with particular emphasis on sport and physical activity in contemporary American society. Issues to be addressed that concern physical activity and sport in our society will be the history, the role of educational institutions, social problems, gender and ethnic minorities and the media's influence on sport and physical activity. (Irreg.)
HES	3703	Consumer Health	Prerequisite: junior standing. Provides an overview of the health marketplace and the processes involved in becoming an intelligent consumer of health information, products and services. (Irreg.)
HES	3803	Exercise Physiology for Non-Majors	Prerequisite: junior standing. Provides an introductory study of the principles and concepts of exercise physiology. Theoretical and scientifically established mechanisms are examined which explain the body's physiological response, adaptation, and resulting regulation during acute and chronic exercise. Explores four major topic areas: Energy Metabolism and Bioenergetics, Cardiovascular and Pulmonary Physiology, Neuromuscular Physiology, and Body Composition. An understanding of the body's function from the cellular to systemic level during exercise will be gained. In addition, the comprehension of different training principles and how the assessment of health and performance will be obtained. (F, Sp)

HES	3813	Principles of Health and Fitness	Prerequisite: HES major or permission of instructor. Study of the underlying principles of life sciences that contribute to an understanding of the role of physical activity in health, fitness, and sports medicine. Specific reference to an overview of public health and disease, anatomy and biomechanics, exercise physiology, health appraisal and fitness testing and programming, human development and behavior, and program management. Laboratory (F, Sp, Su)
HES	3823	Physiology of Exercise	Prerequisite: 3813 and Health and Exercise Science major or permission of instructor. Introductory study of principles and concepts of exercise physiology. Theoretical and scientifically established mechanisms are explored that explain the body's response, adaptation, and concomitant regulation during acute and chronic exercise. Applications presented in the clinical, sport, occupational, and normal exercise settings. Focus is on an understanding of the body's function from the cellular to systemic level during exercise. An understanding of assessment and physical training principles to explain health and performance is emphasized. Specific factors that affect the physiological bases of human performance are investigated. (Irreg.)
HES	3833	Evaluation of Health and Physical Performance	Prerequisite: 3823 or permission of instructor. To develop basic skills and competencies in clinical and experimental laboratory assessment techniques. Emphasis is placed on a healthy population with introductory concepts for special populations. To understand the basic underlying physiological theory and application principles in the exercise physiology laboratory with specific emphasis on learning the assessment techniques to evaluate the responses and adaptations of exercise. Laboratory (Su)
HES	3843	Biomechanics	Prerequisite: BIOL 2255 or BIOL 2234, and junior standing. The integrated study of anatomy, physiology, and mechanics with emphasis on understanding the anatomical and functional aspects of human movement in the area of health and exercise science, such as in clinical, daily living, and sport applications. (Irreg.)
HES	3853	Exercise Testing and Prescription	Prerequisite: HES 3813 and Health and Exercise Science major or permission of instructor. Introduces the exercise science student to the theoretical and functional techniques of graded exercise testing for functional and/or diagnostic assessment. Equal time will be spent between lecture and lab as students will be provided the theoretical background for all testing methods commonly used in both a health and fitness scenario as well as an introduction to how these methods can be used clinically. This course is designed to prepare exercise science students for the American College of Sports Medicine's Health/Fitness Instruction Certification. Laboratory (F, Sp)
HES	3863	Exercise and Health Issues of Women	Prerequisite: 3813 or permission of instructor. Course focuses on topics related to the effects of exercise on the health of adult women, including body composition, reproductive function and hypokinetic diseases. (Irreg.)
HES	3873	Principles of Personal Training	Prerequisite: junior standing. Designed to prepare individuals who are interested in becoming certified personal trainers (CPT) through the National Strength and Conditioning Association. Instruction is provided describing basic exercise physiology as well as the principles of developing a personal training regimen for a typical gym trainee. Course experiences will reinforce training principles and teach the basic skills necessary for certification. (F, Sp)
HES	3883	Principles of Endurance Exercise	Prerequisite: junior standing. Emphasis will be placed on understanding physiology related to endurance performance and principles of endurance training. Current scientific research will be reviewed as it applies to topics covered in class. Performance testing procedures for predicting endurance performance will be conducted throughout the semester. In addition, students will be required to design an endurance training program utilizing the information covered in class. (Irreg.)

HES	3893	Facts and Fallacies of Exercise and Nutrition	Prerequisite: Non-majors only and English 1213 or Expository Writing 1213. Provides meaningful and practical guidelines on how to recognize and dispel many of today's popular myths regarding exercise and nutrition. Course concepts will emphasize the proper use of scientific evidence to either dispel current topics as fallacy or confirm as fact. Sample current topics may include fads, infomercial products, weight loss, aerobic exercise, resistance exercise, dietary supplements, and exercise/sport nutrition, along with the effect of media and advertising and marketing ploys on these topics. (Irreg.)
HES	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Study of current research developments in health and sport sciences. An opportunity for the Honors' candidate to work with a faculty mentor on a research project of special interest to the student in the health and sport sciences. (F, Sp, Su)
HES	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
HES	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
HES	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
HES	4213	Management in Health and Exercise Science	Prerequisite: junior standing. Concentration on the following course topics: defining facility types, management and employees, facility systems, equipment and maintenance, programming and targeting audience, for profit -- not for profit, marketing and sales, finance, budgeting and funding sources, legal responsibilities, safety and quality control. Class will regularly visit a wide range of health clubs, sports facilities, fitness, golf and recreational environments. (Irreg.)
HES	4273	Sport Finance	Prerequisite: HES 3213 or ACCT 2113 or permission of instructor. Discussion and study of methods and techniques for funding sport programs, professional and amateur sports. Topics include financial challenges faced by sport organizations and the garnering of resources from the public sector, external sources, and enterprise activity. Emphasis will be placed on present valuations, financial risk management, the capital budgeting process, and exercising sound financial decision-making. (Sp)
HES	4283	Sports Economics and Policy	Prerequisite: HES 3213 or ECON 1123. Analyzes the unique features of the sport industry relative to the principles of economics. Sport is one of the top twenty industries in the United States, with over eighty billion consumer dollars being spent on an annual basis. Students will review the basics of economic theory and apply these principles to the management decisions of modern and global sport organizations. Emphasis will also be placed on the economic aspects of public finance for sport facility construction and other forms of subsidization within the sports industry. In addition, important current economic issues will be discussed as they relate to the governance of professional sports leagues and intercollegiate athletics. (F, Sp)
HES	4430	Internship in Health and Exercise Science	1 to 4 hours. Prerequisite: HES major and nine credit hours of HES major core, and departmental permission. May be repeated; maximum credit 4 hours. Practical experience in administration, techniques, organizational structure and appropriate materials used with health, fitness or sport-related occupations. (F, Sp, Su)

HES	4434	Internship in Health and Exercise Science	Prerequisite: HES major and nine credit hours of HES major core, and permission of instructor. Practical experience in administration, techniques, organizational structure and appropriate materials used with health, fitness, or sport related occupations. (F, Sp, Su)
HES	4503	Principles of Community Health	Prerequisite: junior standing. Examines the importance of maintaining, protecting, and improving the health of people through organized community efforts. Basic concepts in community health and a review of the historical foundations of community health will be presented. (F, Sp)
HES	4513	Public Policy Impact on Health Promotion	Prerequisite: junior standing and HES 1823 or HES 2913. As health promotion becomes more popular in the workplace, many organizations are struggling with existing and new regulations that help guide and ensure that compliant programs are being created. Examines existing policies and new policies that will have an impact on the delivery of health promotion programs. Topics include, but are not limited to, Healthy People 2020, CDC, State of Oklahoma Health Department, and Economic Theories on Wellness, Health Care Reform Impact and Tobacco Free Policies. (F, Sp, Su)
HES	4523	Human Sexuality II	Prerequisite: 3523 or permission. Indepth study of human sexuality from a biopsychosocial perspective which emphasizes the roles of biology, psychological factors, and social learning. Area studies will include sexual and gender development across the life span; interaction and communication within intimate relationships; reproductive and health-related sexuality topics; and a historical look at the evolution of mating and love relationships. In addition, students will examine the integration of human sexuality issues and education in health-related occupations. (Irreg.)
HES	4543	Comprehensive Stress Management	Prerequisite: Health and Exercise Science major or permission. Helps students gain an awareness of stress and its effects, practice management techniques to reduce personal stress, and implement those techniques in their daily lives as well as the lives of others (school, community, corporation, etc.). Topics include: psychophysiology of stress, stress and disease, nutrition, personal planning and time management, cognitive restructuring, relaxation, and biofeedback. (Irreg.)
HES	4553	Measurement and Evaluation in Health Promotion	Prerequisite: junior standing. Provides basic proficiency in quantitative and qualitative approaches to health promotion program measurement and evaluation. Current trends and issues in community, school and worksite health promotion will be the focus, as well as interpreting results from community-based formative and summative evaluations. Principles of measurement and evaluation, including instrument construction, will also be examined. (F, Sp)
HES	4573	Chronic Disease Intervention	Prerequisite: Health and Exercise Science major or permission of instructor. Provides a basic understanding of disease process in selected chronic diseases and intervention strategies for risk reduction and chronic disease prevention. Basic principles of epidemiology and chronic disease surveillance will also be covered. (Irreg.)
HES	4803	Nutrition and Sport Performance for Non-Majors	Prerequisite: junior standing. A study of nutrition as it relates to optimum performance and health. Nutrient needs, sources, functions, and interactions will be reviewed according to the latest scientific findings. Principles of body conditioning and body composition will be emphasized with attention to diet and lifestyle practices that promote health and decrease risks of nutrition-related diseases. (F, Sp)

HES	4823	Sport and Exercise Nutrition	Prerequisite: junior standing, HES 2823 and CHEM 1315. Provides a basic understanding of the influence of nutrition on sport and exercise performance. Requires students to integrate their knowledge of nutritional physiology, biochemistry and intermediary metabolism with that of exercise physiology and to apply this knowledge to develop a critical understanding of the nutritional and practical dietary needs of individuals participating in sport and exercise. (F, Sp)
HES	4833	Physiology of Exercise Laboratory	Prerequisite: HES Major and HES 3813 or permission of instructor. Laboratory experiments emphasizing the understanding of fundamental physiological mechanisms, regulating responses, and adaptation to exercise. Basic analytical methodologies pertaining to the energy, muscular and circulatorespiratory systems. Includes factors affecting physiological performance capacities and experimental basis of exercise assessment and training. Laboratory (F, Sp)
HES	4843	Tactical Strength and Conditioning	Prerequisite: 3873 or 4873. Advances knowledge of strength and conditioning concepts learned during 3873 or 4873 in a more applied setting, specifically focusing on the needs of tactical athletes, such as military personnel, law enforcement officers, and firefighters who are required to develop and maintain a high level of operational fitness. This course prepares students to take the tactical strength and conditioning (TSAC) certification exam proposed by the national strength and conditioning association (NSCA). Laboratory (F, Sp)
HES	4873	Principles of Strength and Conditioning	Prerequisite: junior standing or permission. Designed to prepare individuals who are interested in becoming certified strength and conditioning specialists (CSCS) through the national strength and conditioning association. Instruction is provided describing the principles of development of pre-season, in-season and off season strength and conditioning programs. Course experiences will reinforce training principles and teach the basic skills necessary for certification. (F, Sp, Su)
HES	4883	Advanced Strength and Conditioning	Prerequisite: 3873 or 4873. Advances knowledge of strength and conditioning concepts learned during 3873 or 4873 in an applied setting. The objective is to prepare students to confidently and specifically design strength and conditioning programs for all populations including athletes, elderly and children, as well as to successfully demonstrate and teach all lifts and conditioning drills. Laboratory (Irreg.)
HES	4933	Drug Education	Prerequisite: 2913. Beneficial and harmful uses and effects of drugs. Motivations behind drug abuse, especially among youth, and implications of this problem on the individual, school and society. Consideration given to legislative and educational efforts. Investigation of interpersonal skills and communication interaction techniques. The use of values-clarification techniques. (Irreg.)
HES	4953	Senior Capstone	Prerequisite: Health and Exercise Science major, senior standing and permission of instructor. An integration and synthesis of the major disciplines of study in the health and exercise science. Readings, discussions and research methods will focus on applications and problem solving approaches related to contemporary policy, economic, social and ethical issues. (F, Sp) [V]
HES	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
HES	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

HES	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
HES	5000	Issues and Procedures in Health and Exercise Science	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated with change of content; maximum credit six hours. Current topics such as the following: exercise prescription for the elderly; adherence to physical activity, exercise/sport. (Irreg.)
HES	5430	Internship in Health and Exercise Science	1 to 3 hours. Prerequisite: graduate standing and successful completion of course requirements in HES area of study; student must have completed a minimum of 12 course hours, including all core requirements, before enrolling in internship. May be repeated; maximum credit six hours. Internship hours will be counted as elective hours towards the normal course requirement (i.e., 30-32 hours). Field experience in area of study. Participation in on-the-job experiences in a wide range of hosting agencies, businesses and institutions. (F, Sp, Su)
HES	5513	Perspectives in Global Health	Prerequisite: graduate standing. Examines major global health challenges, programs and policies. Students will be introduced to the world's vast diversity of determinants of health and disease, and current and emerging global health priorities will be discussed, including: emerging infectious diseases, poverty, conflicts and emergencies, health inequity, health systems reforms, and major global initiatives for disease prevention and health promotion.(F, Sp)
HES	5523	Health Promotion Strategies	Prerequisite: graduate standing. Will provide students with a basic introduction to the principles of health promotion. Specific topics will include risk appraisal and risk reduction, behavior change theories, program planning and management, holistic health/wellness, and others. (F)
HES	5543	Stress Theory Research and Management Applications	Prerequisite: graduate standing. Help students gain awareness of stress and its effects, practice management techniques to reduce personal stress, develop stress research skills and learn ways to implement stress management into their lives as well as into the lives of others (in schools, the community, worksites, etc.).
HES	5553	Health Promotion Evaluation	Prerequisite: graduate standing and permission of instructor. Examination of the processes used to evaluate health promotion and health education programs. Includes: needs assessment, quality assurance evaluation, summarative evaluation, data analysis, and cost benefit analysis strategies. (Irreg.)
HES	5563	Health Behavior I: Individual and Group Influences	Prerequisite: Graduate standing or permission of instructor. Focuses on behavioral theories and research which are pertinent to understanding factors/conditions that influence the development of and change processes related to health behavior in individuals or small groups such as family units. It is designed to provide a knowledge and theoretical base for integration of behavioral principles into research design and health promotion programming. (Sp)
HES	5813	Exercise and Nutritional Biochemistry	Prerequisite: graduate standing. Advanced study of the methodology, techniques and applications of biochemistry research as it applies to exercise and nutrition. Emphasis is on the applied aspects of biochemistry research, especially where exercise and nutritional interventions can mitigate or impact the flux and regulation of the many different enzymes and metabolic pathways that control metabolism and substrate utilization. Additional focus on genetic regulation, control and analytical techniques as they apply to exercise science research. (F, Sp)

HES	5823	Exercise Physiology	(Crosslisted with I E 5823) Prerequisite: Industrial Engineering 4824; Zoology 3104 or 3133; Physiology 5016 or 5019; or permission. Advanced study of physiological responses, regulatory mechanisms and adaptations of human performance and health; factors affecting performance and health; and training and evaluative techniques. (F)
HES	5833	Advanced Exercise Physiology Laboratory	Prerequisite: 5823 or permission. Laboratory experiments of a theoretical and applied nature emphasizing advanced concepts of physiological mechanisms, regulating responses and adaptation to exercise. Analytical and prescriptive methodologies pertaining to the energy, muscular and cardiorespiratory systems, including body composition techniques. Laboratory (Sp)
HES	5843	Biomechanics	(Crosslisted with I E 5843) Prerequisite: 3843 or Industrial Engineering 4824 or permission. Review of muscle, bone and joint structure and function. Review of kinematic and kinetic principles as applied to human movement. Analysis of human movements using film, anthropometric, dynamometer, force platform, electromyographic and performance techniques. Application of human movement analysis to ergonomics, sport and rehabilitation. (Irreg.)
HES	5853	Health Fitness: Theory and Application	Prerequisite: 3513 or 4513 and Zoology 3133, or equivalent; graduate standing. A multidisciplinary study of health-fitness theories and their applications in preventive health. Emphases are threefold: first, to understand the underlying theoretical framework of epidemiological, biological and behavioral concepts; second, to develop skills to implement programs emphasizing physical fitness assessment and prescription; third, to critically examine the role of physical activity and fitness strategies in preventive and therapeutic health settings.
HES	5863	Physiology of Aging	Prerequisite: Physiology 2124, 3104 or Zoology 3133, or permission of instructor. Discuss the various theories of aging as well as the age expected changes in the various physiological systems (cardiovascular, respiratory, muscle, bone, nerve and body composition). In addition, exercise programming concerns for the aged as well as the possible benefits of exercise during aging will be discussed. (F)
HES	5883	Exercise Endocrinology	Prerequisite: 5823 or permission of instructor. In-depth examination of the role of the endocrine system on regulating acute and chronic metabolic responses to exercise. Special endocrine issues related to exercise physiology (i.e., diabetes) will be studied. (Irreg.)
HES	5940	Intensive Studies in Health and Exercise Science	1 to 6 hours. Prerequisite: graduate standing or permission. Completion of research project under faculty supervision. Meets research requirement for non-thesis option. (F, Sp, Su)
HES	5953	Research Methods in Health and Exercise Science	Prerequisite: graduate standing. Methods and techniques used in the design and interpretation of health promotion and exercise science research. Emphasis on scientific writing and library use. (Sp)
HES	5960	Directed Readings in Health and Exercise Science	1 to 6 hours. Prerequisite: graduate standing, permission. Designed for graduate students to provide them with an opportunity to investigate selected problems in the field. Thirty hours library and research work for each credit hour. Consultations with instructor required. Written report. Required for all students in a nonthesis program. (F, Sp, Su)
HES	5963	Statistical Applications in Health and Exercise Science	Prerequisite: graduate standing or permission of instructor. The application of techniques used to organize, analyze, and interpret statistical data unique to health and exercise science. Topics include measures of central tendency, measures of variability, percentiles, sampling, correlation, regression, standard scores, and tests of significance through repeated measures ANOVA and including parametric, non-parametric tests. (Irreg.)
HES	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. Required of all students writing master's thesis. Consultations with major professor required as thesis progresses. (F, Sp, Su)

HES	5990	Independent Study in Health and Exercise Science	1 to 6 hours. Prerequisite: graduate standing or permission. A study of selected problems under guidance of instructor. At least twenty-five hours of library and research time required for each hour of credit carried. Final paper required. (F, Sp, Su)
HES	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
HES	6000	Variable Topics in Health and Exercise Science	Prerequisite: graduate standing or permission of instructor. Course will consist of variable topics in health and exercise science. (Irreg.)
HES	6503	Principles of Epidemiology in Health Promotion	Prerequisite: graduate standing and permission of instructor. Provides a theoretical and skill base to apply basic epidemiology principles and to critically evaluate the application of basic epidemiology research methods in health promotion. Heavily emphasizes application of concepts and student participation in the learning process. (Irreg.)
HES	6513	Qualitative Research Methods in Health Promotion	Prerequisite: graduate standing. Designed to provide students with a theoretical and skill base to apply basic qualitative research methods(observation, interviewing and focus groups)to a wide range of health promotion areas and to critically evaluate the application of qualitative skills to a community setting. Over the semester, a community-based qualitative research project will be conducted. Heavily emphasizes application of concepts and student participation in the learning process. (Irreg.)
HES	6523	Social Marketing in Health Promotion	Prerequisite: 5523 or permission of instructor. Focuses on the incorporation of basic marketing principles into strategies for behavioral and social change. Targeted outcomes include individual behaviors, group/population norms, environmental supports and policies pertinent to health promotion and/or public health issues. (Su)
HES	6543	Physical Activity and Health	Prerequisite: graduate standing and permission of instructor. An examination of physical activity and exercise as they relate to health status and chronic disease prevention. Special emphasis will be placed on epidemiologic evidence of physical activity benefits across the lifespan in a variety of chronic disease states. (Irreg.)
HES	6553	Advanced Measurement and Evaluation	Prerequisite: HES 5553 or permission of instructor. Issues related to measurement and evaluation in health promotion will be discussed. Different measurement techniques and instruments used in health promotion will be examined and critiqued, and principles of instrument development will be addressed. Issues related to the evaluation of health promotion program outcomes will serve as a context for the course. (Irreg.)
HES	6563	Health Behavior II: Community, Organizational and Population Influences	Prerequisite: HES 5563 or permission of instructor and graduate standing. Focuses on examining new and emerging theories used in health promotion to conduct research in organizational/community/individual change, and to improve health and quality of life. Emphasis on exploring the conceptual and methodological issues associated with theory-based research. (Sp)
HES	6573	Intervention Mapping	Prerequisite: 5563 and 6563, or permission of instructor. Course focuses on the process of developing health promotion programs using the steps of intervention mapping. Students are expected to have an understanding of needs assessment, the use of individual and community level behavior changing theories in the development of health promotion intervention, and program evaluation before taking the course. (Irreg.)
HES	6583	Chronic Disease Assessment and Intervention	Prerequisite: graduate standing and permission of instructor. Provides basic understanding of selected chronic diseases including assessment, disease process, pharmacological and medical treatment and intervention strategies for reducing risk. (Irreg.)

HES	6723	Sports Nutrition and Ergogenic Aids	Prerequisite: graduate standing or permission of instructor. Surveys the ergogenic aids that have been shown to be effective (and not) in the newest aids that are being used by competitive athletes. Covers nutritional, physiological and pharmacological ergogenic aids. Ergogenic aids that improve aerobic performance, anaerobic performance, thermal regulation during exercise, strength and body composition are discussed. (Sp)
HES	6743	Signal Acquisition and Analysis	Prerequisite: graduate standing or permission of instructor. Covers a variety of topics in signal acquisition and processing, including sampling theory, filtering, and frequency analysis. Special emphasis will be placed on conditioning biological signals and the development of signal analysis programs using labview programming software. (Irreg.)
HES	6813	Pulmonary Gas Exchange	Prerequisite: graduate standing or permission of instructor. Examines pulmonary structure and function as they relate to the process in which oxygen passes from the atmosphere to arterial blood. Heavily emphasizes the principles of ventilation, diffusion, blood flow, ventilation-perfusion relationships, gas transport, mechanics of breathing, acid-base balance, and the control of ventilation. In addition, an evaluation of how these principles are affected by exercise, disease, and healthy aging is included. (Irreg.)
HES	6823	Cardiorespiratory Exercise Physiology	Prerequisite: 5823 or permission of instructor. This course covers a variety of topics in cardiorespiratory exercise physiology, including factors that regulate fatigue during endurance exercise, factors that limit maximal aerobic power, regulation of heart rate and blood flow during isometric and dynamic exercise, and cardiovascular adaptations to aerobic training programs. Assessment techniques for cardiorespiratory function will be discussed in depth. Laboratory (Irreg.)
HES	6833	Human Body Composition	Prerequisite: 5823 or permission of instructor. Theoretical and applied aspects of body composition assessment. Topics include limitations and usefulness of laboratory and field methods for assessing body composition in research, clinical and health/fitness settings. Evaluation of body composition research and application to health and clinical populations. Laboratory (Irreg.)
HES	6843	Neuromuscular Physiology	Prerequisite: 5823 or permission of instructor. This course examines the structure and function of the central and peripheral nervous systems and skeletal muscle. Emphasis will be placed on how the central nervous system and motor units respond to conditions such as fatigue, exercise training, vibration, stretching, injury and disease. Laboratory (Irreg.)
HES	6883	Endocrinology and Metabolism of Exercise	Prerequisite: 5823 or permission of instructor. Provide in-depth examination of the energy metabolism during exercise and the role of endocrine system in regulating acute and chronic metabolic responses to exercise. Special endocrine issues related to physiology (i.e. diabetes) will be studied. Laboratory (Irreg.)
HES	6943	Current Problems in Health and Exercise Science	Prerequisite: graduate standing or permission of instructor. Special topics in health promotion and exercise science are considered in detail. Emphasis is placed on the intensive study of research literature in a designated specialty area in Health and Exercise Science. (Irreg.)
HES	6960	Directed Readings in Health and Exercise Science	Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit six hours. Special reading programs are designed to enable graduate students (1) to extend their study to fields that are not covered in other courses and/or (2) to provide an opportunity for more intensive study of subjects covered in other courses. (F, Sp, Su)
HES	6970	Seminar in Health and Exercise Science	1 to 4 hours. Prerequisite: graduate standing in HES or permission of instructor. May be repeated with change of subject matter; maximum credit four hours. Study of pertinent and current problems of research. Students may use seminars to identify and develop area of dissertation research. (Irreg.)
HES	6980	Research for Doctoral Dissertation	2 to 12 hours. (F, Sp, Su)

HES	6990	Independent Study in Health and Exercise Science	1 to 3 hours. Prerequisite: master's degree and permission of instructor. May be repeated; maximum credit 12 hours. Supervised research for advanced graduate students on major projects with a faculty member. (F, Sp, Su)
HIST	1113	History of Medieval Europe	History of Europe from the fall of Rome to the end of the 15th century. Emphasis on the development of social structures and culture forms, and the sociocultural background of political and religious developments. (F, Sp)
HIST	1223	Europe, 1500 to 1815	An introductory survey of Europe in the early modern period. Topics include the Reformation, development of the nation-state, the Enlightenment, and the French Revolution and Napoleon. (F, Sp) [IV-WC]
HIST	1233	Europe since 1815	An introductory survey of Europe from 1815 to the present. Examines the major political, economic, social and cultural trends in the major countries and European foreign affairs and overseas expansion. (F, Sp) [IV-WC]
HIST	1483	United States, 1492 to 1865	A general survey of United States history from its colonial origins to the end of the Civil War, with emphasis upon national political, diplomatic, economic, constitutional, social and intellectual developments. (F, Sp, Su) [IV-US]
HIST	1493	United States, 1865 to the Present	A general survey of United States history from the Civil War to the present day, with emphasis upon national political, diplomatic, economic, constitutional, social and intellectual developments. (F, Sp, Su) [IV-US]
HIST	1543	Introduction to American Indian History	A history of American Indian people in North America and their role in shaping American history through the early 1970's. Emphasis will be on how cultural values influenced Indian-European interactions and how cultures change over time. (F, Sp) [IV-NW]
HIST	1613	Western Civilization I	History and culture of western civilization from origins of Greek society to end of religious wars in seventeenth century. (F) [IV-WC]
HIST	1623	Western Civilization II	History and culture of western civilization between 1660 and the present. Emphasis will be placed on western institutions and ideas, their evolution, and their influence elsewhere. (Sp) [IV-WC]
HIST	1723	East Asia to 1600	A general survey of the histories of China and Japan with the history of Korea included as it bears upon the history of Japan. The focus is on the political, social, economic, and intellectual aspects of China and Japan, and their points of contact. (Irreg.) [IV-NW]
HIST	1733	East Asia Since 1600	A general survey of the histories of China, Japan, and Korea from 1600 to the present. Focus is on the political, social, and economic systems of these countries, major historical events and intra-Asian interactions. (Irreg.) [IV-NW]
HIST	1913	World Civilizations to 1600	Deals with the entire globe rather than with some one country or region; deals with all peoples, not just with Western or non-Western peoples. Focuses on historical forces or movements of worldwide influence. Comparative history. (F) [IV-WC]
HIST	1923	World Civilization 1600-Present	Deals with the entire globe rather than with one country or region; deals with all peoples, not just with so-called Western or non-Western peoples. Focuses on historical forces or movements of worldwide influence. Comparative history. (Irreg.) [IV-WC]
HIST	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
HIST	2003	Egypt: From Cheops to Mubarrak	Explores the history of Egypt from earlier times to today. Highlights include the pyramid age, Nefertiti, Cleopatra, the birth of Christian monasticism, the Crusades, Napoleon's invasion, the Suez Canal, Lawrence of Arabia, and peacemaking in the Middle East. No background is required. (Irreg.) [IV-NW]
HIST	2013	Ancient Near Eastern Civilizations	A study of the major civilizations of the Ancient Near East from the last Pluvial period (ca. 8400 B.C.) through the first millennium B.C., with particular emphasis on the historic periods (ca. 3000 B.C. onwards). (Irreg.) [IV-NW]

HIST	2023	Greek and Roman Civilization	Covers the major political events of Greco-Roman history and civilization, but considerable attention will be devoted to Greek and Roman religion, historical writing, Roman law, engineering, and architecture; also Periclean Athens and Augustan Rome. Contributions of these civilizations to our own will be described. (Irreg.) [IV-WC]
HIST	2033	African-American History to 1877	Traces the history of African-Americans from their African origins to the end of the Reconstruction of the southern United States in 1877. (Irreg.) [IV-WC]
HIST	2043	African-American History Since 1877	Traces African-American history from 1877 to the present. (Irreg.). [IV-WC]
HIST	2103	Genocides in Modern History	Globally comparative course introduces students to the types and causes of genocide in the modern era. Focus is on various case studies of exterminatory mass violence, in order to analyze evolutions and patterns in transnational historical contexts, as well as consider methods of resistance and prevention. (Irreg.)
HIST	2123	The Holocaust	Discussion of the Holocaust, how it could happen and how it is remembered today in different European and non-European countries. (Irreg.) [IV-WC]
HIST	2203	Religion/Archaeology of the Near East, Egypt & Mediterranean	Investigates archaeology of key cities and events of the Mediterranean and the Near Eastern cultures. As a part of the study of these cultures we include aspects of religion and architecture. (Irreg.) [IV-WC]
HIST	2223	Evil in Modern Europe	This course uses the ethical, behavioral & experiential category called "evil" to examine key issues in modern European political, social, cultural and intellectual history. (Irreg.) [IV-WC]
HIST	2333	The British Empire	A survey of the development of the British Empire and Commonwealth to the present day. Emphasis upon the period after the American Revolution; includes extension of control in Asia and Africa, movements of independence, the emergence of the Commonwealth and mid-twentieth-century challenges to the Commonwealth. (Irreg.) [IV-WC]
HIST	2403	History of Japanese Culture	Prerequisite: 1723 or 1733 or sophomore standing or permission of instructor. Historical examination of the intellectual and artistic achievements that distinguish Japan's contributions to world culture, put in the context of the country's changing state formations (from imperial state, to feudal regime, to modern nation). (Irreg.) [IV-NW]
HIST	2503	American Jews/Jewish Americans	Through a case study of American Jewry, this class will ask: How to define a minority (religion, race, ethnicity)?. How does a group create lasting institutions? How does a group become American yet retain communal identity? How can a minority shape majority culture? What constitutes "success"? (Irreg.) [IV-WC]
HIST	2573	The History Sleuth	Prerequisite: majors only or permission of department. Introduces students to the craft of history. Students will explore the many types of sources available to reconstruct the past and learn how historians collect, select, and evaluate historical evidence. (F, Sp)
HIST	2613	Colonial Hispanic American History, 1492-1810	The founding and development of the Spanish and Portuguese empires in America with special attention to the conquest of native civilizations and to the political, economic, social and intellectual institutions of the colonial period. (F, Su) [IV-WC]
HIST	2623	History of the Hispanic-American Nations, 1810 to Present	The emancipation and development of the Spanish-American nations (and of Brazil) with special attention to the movements for national independence, political unification, economic developments and social welfare. (Sp) [IV-WC]
HIST	2683	Introduction to Islam	Survey of the history of Islamic civilization in the Near East, North Africa, India and Malaysia from the advent of the Prophet to the modern period. (Irreg.) [IV-NW]
HIST	2713	Survey of African Civilization	Survey of the social, economic, political and cultural development of sub-Saharan African peoples from the emergence of human society to the present. (F) [IV-NW]

HIST	2803	Survey of Russia	An introduction to the history of Russia from its beginnings to the present day. Intended primarily for nonspecialists. (F) [IV-WC]
HIST	2970	Special Topics	1 to 3 hours. Prerequisite: sophomore standing or permission of instructor. May be repeated; maximum credit six hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
HIST	3003	History of Sparta	Traces the history of Sparta from its antecedents in the Heroic Age through the Dorian Invasion to the Roman conquest.(Sp) [IV-WC]
HIST	3013	Archaic Greece	An examination of the history of ancient Greece from the earliest times to the fifth century, with emphasis upon Minoan Crete, Mycenaean Greece, Homeric Greece and the Archaic era (c. 3000 to 500 B.C.). (F) [IV-WC]
HIST	3023	Classical Greece	An examination of the history of ancient Greece during its "Classical" Period, the fifth and fourth centuries B.C., with emphasis upon Athens, Sparta and Alexander the Great (C. 500-300 B.C.). (Irreg.) [IV-WC]
HIST	3033	Alexander the Great	Prerequisite: junior standing. Examines the Macedonian and 4th Century Greek background of Alexander, the career of Alexander, and the legacy of Alexander (the Hellenistic world). Topics include the breakdown of Greek unity, Alexander's conquests and military genius, his sudden death and the resulting wars of succession, the culture of the Hellenistic period. (Alt. F) [IV-WC]
HIST	3043	Egypt and Mesopotamia	Prerequisite: Junior standing or permission of instructor. A study of the ancient histories and cultures, literatures, religious thought, political ideas, and art. (Irreg.) [IV-NW]
HIST	3053	Medieval Italy	Prerequisite: 1113 or 1613 or junior standing. A survey of Italy from circa 400-1350 CE, emphasizing the mix of Roman, Christian, and barbarian traditions, relations between the church and empire, and the role of cities and commerce. (Sp) [IV-WC]
HIST	3060	Topics in Medieval History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected special problem or problems in medieval history. (F, Sp)
HIST	3063	The Ancient Art of War	Traces the history of warfare from its origins through the ancient world to the beginning of the Middle Ages. (Sp) [IV-WC]
HIST	3073	Women in Early Modern Europe	(Crosslisted with HIST 3073) Prerequisite: 1223 or 1623 or junior standing or permission of instructor. Examines the experience of women in Europe from c. 1350 to c. 1650. Examines ideas about women, life cycle, economic activity, education, exercise of power, and religion, noting the enhanced position of women from c. 1350, following the Black Plague, and the decline in that position which began c. 1500. (Irreg.) [IV-WC]
HIST	3083	The American Colonies	A history of the British colonies in North America from the earliest discoveries and of the United States from the Second Continental Congress to the inauguration of Washington in 1789. (Irreg.) [IV-WC]
HIST	3093	The United States: Revolution and New Nation to 1815	The American Revolution and the development of political institutions under the Articles of Confederation and the Constitution; innovations of the Federalists; domestic and foreign affairs. (Irreg.) [IV-WC]
HIST	3103	Slavery in World History	Prerequisite: junior standing. Examines slavery and unfree labor from the earliest times in Mesopotamia to the present and includes an analysis of slavery in the American South and Latin America. Also traces the history of the Abolition Movement. (Irreg.) [IV-NW]
HIST	3113	The Crusades	Prerequisite: 1113 or 1613 or junior standing. Covers crusades to the Holy Land and Europe against Moors, pagans, heretics, and enemies of the Pope. Topics include crusade ideology, relations between Latins, Byzantines, Jews and Muslims, crusader states, techniques of warfare, and the experience of crusading. (F) [IV-WC]
HIST	3120	Topics in Modern European History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected special problem or problems in modern European history. (Irreg.)

HIST	3123	War in European History	Prerequisite: 1223 or 1233. A study of the impact of war on European history and the interaction of armies and society in the period from the fourteenth century to the present. [IV-WC]
HIST	3133	Medieval Women	(Crosslisted with WGS 3133) Prerequisite: 1113 or 1613 or junior standing. Covers social history of women in western Europe from late Antiquity to the late Middle Ages. Topics include stages of life, marriage, families, occupation, law, power, health, religion, love, and education. (F) [IV-WC]
HIST	3143	The Era of the Reformation	An analysis of the forces leading to the religious upheaval in the sixteenth century and the spread of Protestantism in Northern European countries; the Catholic Reformation or Reaction; Thirty Years War; and the relation of the Reformation Era to medieval and modern civilization. (F) [IV-WC]
HIST	3153	The Great War, 1914-18	Prerequisite: 1233 or 1623. Examines the causes, conduct, and consequences of World War I, with primary emphasis on its cultural impact. (F) [IV-WC]
HIST	3163	Europe from the French Revolution to Napoleon	A social, political, military and cultural treatment of Europe from 1789 to 1815. Appropriate attention will also be given to causes of the French Revolution. (Sp) [IV-WC]
HIST	3173	History of the Great Plains	History Of The Great Plains. Prerequisite: 1483 Or 1493 Or Junior Standing Or Permission Of The Instructor. The Course Includes The Following Topics: The Ecosystem Of The Great Plains, The Diversity Of People On The Great Plains, The Role Of The Region In Socio-Economic And Political Systems Of The Nation And Global Communities, What History Of The Great Plains Can Teach Us About Ourselves As A People. (Irreg.) [IV-WC]
HIST	3193	Europe in the Twentieth Century	Major topics include World War I and the postwar settlements; the breakdown of democracy and the rise of totalitarian states; origins and course of World War II; and postwar Europe and the Cold War. (F) [IV-WC]
HIST	3203	Transformation of Jews	Prerequisite: Junior standing or permission of instructor. Introduces students to the era of emancipation in modern Europe and will discuss Jewish approaches to become integrated and assimilated in the different emerging nation states. (Irreg.) [IV-WC]
HIST	3213	Intellectual History of Nineteenth-Century Europe	Examination of the impact on European social and political development of concepts such as Nationalism, Imperialism, Socialism and Darwinism. (Irreg.) [IV-WC]
HIST	3223	Intellectual History of Twentieth-Century Europe	A general survey of the major intellectual developments in Western Europe since 1900, including the areas of social thought, religious thought, political philosophy, scientific thought, literature and drama. In each area the relationship of intellectual expression will be related to the historical context from which it emerged. (Irreg.) [IV-WC]
HIST	3233	Modern Spain	Prerequisite: junior standing. Examines the political, economic, social, and cultural aspects of modern Spanish history (1808-present) and will attempt to place Spain within the context of European history, where it has often been ignored by European historians. (F, Su) [IV-WC]
HIST	3243	European Women & Gender Relations	Prerequisite: 1233 or 1623. Explores the social, cultural, political, and economic history of European women and gender relations from the Scientific Revolution to the present. (Irreg.) [IV-WC]
HIST	3253	Hitler and Nazi Germany	Prerequisite: 1233. Focuses on the man, the part, and the regime. Hitler's personality and ideological beliefs, the party's growth and membership, and the regime's structure and policies are investigated. The topics are discussed within the context of German history and political, social, and economic developments in 20th century Europe. (Irreg.) [IV-WC]
HIST	3263	Germany 1800-1923: The Long Nineteenth Century	Prerequisite: junior standing. This course surveys modern Germany's passage from pre-industrial feudalism at the beginning of the modern period, through national unification under an authoritarian empire, to its first unsuccessful democratic experiment in the aftermath of war and defeat in the 1920's. (Irreg.) [IV-WC]

HIST	3273	History of Ireland, Part I	Examines the early history of Ireland from the third century to 1600. Looks at early tribal culture, the advent of christianity and its effect, the struggle for national unification, and relations with England. (Sp) [IV-WC]
HIST	3283	History of Ireland, Part II	Examines the history of Ireland from 1600 to the present day. Looks at the British conquest of Ireland, subsequent Anglo-Irish relations, events leading to Irish independence, and the origins and causes of present day sectarian violence. (Sp-alternate) [IV-WC]
HIST	3290	Topics in British History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected special problem or problems in British history. (Irreg.)
HIST	3293	Antisemitism	Prerequisite: HIST 1483 or HIST 1493 or junior standing or permission of instructor. Covers the world's oldest prejudice from ancient times to the present. Topics include Christian Antisemitism; medieval demonization of the Jews; Inquisition; Dreyfus case; pogroms; American Antisemitism; Nazism and Holocaust; Arab and Muslim Antisemitism; and African American Antisemitism. (Irreg.) [IV-WC]
HIST	3303	Mexico and the United States	Prerequisite: Junior standing or permission of instructor. Explores the long and complicated relationship between these two nations. Explores economic investment, war, immigration, bilingualism, and culture. (Irreg.) [IV-WC]
HIST	3313	Israeli Culture Through Film	Prerequisite: junior standing or permission of department. Introduces students to the Israeli culture in its modern day context of the young Jewish state. Focuses on the dynamic mosaic of this multi-faceted society which is still evolving. (Sp) [IV-NW]
HIST	3323	Tudor England	A study of England from 1485 to 1603. Topics covered include the establishment of the Tudor dynasty, Tudor administrative and political development, the English Reformation, foreign and colonial relations, economic growth, and sixteenth-century social and cultural life. (F) [IV-WC]
HIST	3333	Stuart England	A study of England from the accession of James I in 1603 to the death of Queen Anne in 1714. Topics covered include economic change and growth, colonial development, the Puritan revolution, constitutional and religious controversies following the Restoration, and social and intellectual developments. (Sp) [IV-WC]
HIST	3343	Eighteenth-Century England	A discussion of the domestic politics, society, economy, foreign affairs and constitutional and imperial development of England from the accession of the Hanoverians in 1714 to the passage of the First Reform Act of 1832. (Irreg.) [IV-WC]
HIST	3353	England Since 1832	Topical analysis of major developments in British life since 1832, including growth of political democracy, adaptation to industrialism, social and cultural change, foreign affairs, imperialism, growth of the welfare state. Britain's changed role in the twentieth century. (Irreg.) [IV-WC]
HIST	3363	Legal And Constitutional History Of England I	The first part of a course of lectures on the development of the English constitution, and of legal concepts, institutions and procedures from the Anglo-Saxons to the present. (Irreg.) [IV-WC]
HIST	3373	Legal and Constitutional History of England II	Prerequisite: junior standing. The second of a two-part course on the development of the English constitution and of legal concepts, institutions and procedures from the Anglo-Saxons to the 20th century. It covers the period 1485-1911. (Irreg.) [IV-WC]
HIST	3383	The American West	A survey of the economic, political, social and cultural development of the American West. Particular attention will be paid to the West as a frontier process and as a causative factor in historical change.(F) [IV-WC]
HIST	3393	History of Oklahoma	Meets the requirement in Oklahoma history for teacher's certificate. A survey of Oklahoma history from its beginning to the present, including its Indian background, formation into territories, achievement of statehood, and general cultural, economic and political development. (F, Sp, Su)

HIST	3413	The History of Ancient Israel	A topical survey from 1400 B.C. to 425 A.D., dealing critically with the main institutions and their historical background from early tribal theocracy to the end of the Rabbinic Patriarchate under Rome. (Sp) [IV-WC]
HIST	3423	War, Prosperity and Depression	Prerequisite: HIST 1483 or HIST 1493 or junior standing or permission of the instructor. Covers United States involvement in the two world wars; decline of socialism; youth culture; changing gender roles and relations; crisis of masculinity; transformation of work; consumerism; racism; antisemitism; depression and New Deal; and America's response to the Holocaust. (Irreg.) [IV-WC]
HIST	3430	Topics in United States History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected problem or problems in United States history. (F, Sp, Su)
HIST	3433	The United States in the Cold War Era	Prerequisite: 1493 or the equivalent. Examines changes taking place in American life during the second half of the twentieth century. Topics include the Cold War, McCarthyism, the New Frontier, Civil Rights Movement, protest in the 60s, the Vietnam War, and adaptations to a global economy. [IV-WC]
HIST	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HIST	3443	American Frontier to 1828	Prerequisite: 1483. An analysis of frontier development in the region east of the Mississippi with special emphasis on a comparative view of world frontiers. (F) [IV WC]
HIST	3453	The American Frontier Since 1828	An analysis of frontier development in the trans-Mississippi West with special emphasis on a comparative view of world frontiers. (Sp) [IV-WC]
HIST	3463	The Life of the Mind in America: to 1815	Main currents in American thought during the nation's first two centuries. How a uniquely American culture developed in response to a unique environment. Special topics: European intellectual background, early religious thought, the enlightenment, evolutionary ideology, racial thought, nationalism and the philosophic foundations of the new experiment in government. (Irreg.) [IV-WC]
HIST	3473	Life of the Mind in America: 1815 to 1877	Main currents in American thought during the nineteenth century. How American culture weathered the tests of expansion, sectionalism, Civil War and economic growth. Special topics: the ideology of American democracy, Romanticism and Transcendentalism, religion, reform, the debate over slavery, the impact of war and the intellectual defense of American capitalism. (Irreg.) [IV-WC]
HIST	3483	Twentieth Century Urban West	Prerequisite: 1493 or junior standing or permission of instructor. 2oth century urban west covers the development of the western states and their cities since 1900 as they move from communities of local significance to ones of national and global participants. Includes the rise of the urban centers, the impact of the two world wars, the great depression, ethno-history, environmental history, and the economic, social, and political events and movements that shaped the modern west. (Irreg.) [IV-WC]
HIST	3493	American Environmental History	Examine American attitudes toward the environment since the founding of American colonies, evolution of natural resource policies, and lives of prominent figures in the "conservation" and "ecology" movements of the late nineteenth and twentieth centuries. (F) [IV-WC]
HIST	3500	Special Topics in History	Prerequisite: junior standing. May be repeated with change of content; maximum credit six hours. Covers topics not covered in current course listings or specific geographic area topics courses. (F, Sp)

HIST	3503	World War II	Prerequisite: junior or senior standing. Treats origins, conduct and outcome of World War II in global setting. Emphasis on roles of national interest, policy making, relations of states, and effects of war on societies involved. (F) [IV-WC]
HIST	3513	Central America and the Caribbean	Prerequisite: Junior standing or permission of instructor. Explores the rise of Caribbean society from Columbus to decolonization. Explores rise of Central America export societies, followed by attempts at reform and revolution. (Irreg.) [IV-WC]
HIST	3523	American Southwest	Prerequisite: 1483 or junior standing or permission of the instructor. History of the American southwest from the exploration, colonization, and development of the southwest under Spanish rule, (1513-1821), through the initial penetration, conquest, and settlement by the united states (1821-1900), including interaction with indigenous people. (Irreg.) [IV-WC]
HIST	3533	The History of Early American Women	Prerequisite: 1483 or 1493, or junior standing. Explores the history of American women from the seventeenth century to the mid-nineteenth century by focusing on women's lives from a wide variety of perspectives including demographic change, sexuality, work patterns, and political involvement. (F) [IV-WC]
HIST	3543	The History of Modern American Women	Prerequisite: 1483 or 1493, or junior standing. Explores the history of American women from the mid-nineteenth century to the present by focusing on women's lives from a wide variety of perspectives including demographic change, family life, sexuality, work patterns, and political involvement. (Sp) [IV-WC]
HIST	3553	The Civil War	A course of lectures on the social, economic, political, intellectual and military aspects of the years 1861 to 1865. (Irreg.) [IV-WC]
HIST	3563	United States Diplomatic History	(Crosslisted with P SC 3563) A survey of American diplomatic history from the War for Independence to the present, emphasizing relations with major European, Latin American and Far Eastern countries. [IV-WC]
HIST	3573	Special Topics Colloquium	Prerequisite: History major and junior standing or permission of instructor. May be repeated with change of topic, maximum credit 15 hours. A writing-intensive, open topic, seminar designed to improve students' research and writing abilities and introduce them to basic methodological issues in history. While the course is specifically meant to prepare students for their senior capstone course, the emphasis on research and writing will enhance their preparation for all upper-division history course. This course must be completed prior to enrolling for the senior capstone. (F, Sp)
HIST	3583	History of Sport in America	Examines the role of sport in American society, and uses sport as a device to explore social, historical and political topics like the commercialization of leisure, changing conceptions of masculinity, violence, racism, labor relations, gender relations, and working-class culture. (Irreg.)
HIST	3593	Women in the American West	Prerequisite: 1483 or 1493. Nineteenth-century gender ideologies, multi-cultural interaction and exchange, work roles and community building, participation in politics, and reform movements of women in Trans-Mississippi West. (Irreg.) [IV-WC]
HIST	3603	Germany 1918-1990: The Short Twentieth Century	Prerequisite: junior standing. Surveys Germany's experience from the period before the first world war into the 1990's. Students will explore the violent stresses challenging Europe's most dynamic industrial society, and the spiral into dictatorship, war and genocide after the failure of a fragile democracy in the first half of the century. The course tracks the subsequent challenges facing divided successor states of east and west between 1945 and the reunification of the 1990's. (Irreg.)
HIST	3623	Conformity and Dissent in the 1950s and 1960s	Examines conformity and dissent in the 1950s and 1960s. Topics include the consumer culture, suburbia, the impact of television, 'McCarthyism', the Beats and the 1960s counterculture, student protest, civil rights and black nationalism, and women's liberation. (Irreg.) [IV-WC]

HIST	3633	American Indian Ethnohistory to 1870	Prerequisite: junior standing. Examines the ways in which native societies in North America responded to European invasions between 1492 and 1890. Emphasis will be placed on Indian culture, the way in which it changed, and the various governmental attempts to destroy it. (F) [IV-NW]
HIST	3643	American Indian: 1870-Present	Prerequisite: junior standing. Examines American Indian history since the 19th century reservation era. Major themes include life patterns, cultural survival patterns, pan-Indian movements, the Indian Reorganization Act, relocation and termination policies, and self-determination issues. (Sp) [IV-WC]
HIST	3663	Political Islam	Prerequisite: junior standing. The study of radical Islamic thinkers, political parties, and governments in the modern Middle East. (Irreg.)
HIST	3673	African-American Thought in the 20th Century	Prerequisite: 2043. Survey of the key African-American thinkers of the 20th century. (Irreg.) [IV-WC]
HIST	3683	Jewish Mysticism	Prerequisite: junior standing or permission of instructor. Introduces students to the main trends of Jewish mysticism, among them Kabbalah. It will familiarize students with ancient and medieval doctrines. (Irreg.) [IV-WC]
HIST	3690	Topics in Latin American History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected special problem or problems in the history of Latin America. (F)
HIST	3693	Political/Socioeconomic History of South Africa	Prerequisite: 2713. Traces the political and socioeconomic experience of South Africans from 1652 to the present. Emphasizes political and social transformation of South African from racial segregation to Apartheid. Also examines the post-Apartheid changes in contemporary South Africa. (Irreg.) [IV-NW]
HIST	3703	Native Peoples of Latin America	Explores the history of Latin America's indigenous peasantry and the issue of ethnicity in the modern world. Focus is on the people of Mexico, Guatemala, Peru and Brazil. (Irreg.) [IV-NW]
HIST	3713	History of Mexico, 1800-Present	Explores the history of Mexico from independence to the present. Particular attention is paid to the issues of statebuilding, dependency, revolution, and post-revolutionary change. (Irreg.) [IV-WC]
HIST	3723	Africa Since 1945	Prerequisite: junior standing. The course thematically and chronologically examines social, political, cultural and economic developments in Africa from the end of World War II to the contemporary period. The growth of millenarian religious movements, nationalism, decolonization, and the post-colonial nation states are among the topics examined. (F) [IV-NW]
HIST	3733	History of Heaven and Hell in Judaism and Christianity	Prerequisite: junior standing or permission of instructor. Traces the evolution of the concept of the afterlife, eternal reward and punishment in Judaism and Christianity from late Antiquity to the high Middle Ages. (Irreg.) [IV-WC]
HIST	3743	Southern Africa Since 1800	Focuses on the socio-economic and political evolution of Southern Africa as a distinctive region from 1800 to the contemporary period. The preponderant role of South Africa in the development of the region will be emphasized, while Zimbabwe, Mozambique and Angola will also be closely studied. (Sp) [IV-NW]
HIST	3770	Topics in Russian and East European History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected special problem or problems in Russian or Eastern European history. (Sp)
HIST	3773	Pan-African Movement	Traces the history of the pan-African idea from Edward Blyden to Kwame Nkrumah, and pays special attention to African efforts to unify the African states under the rubric of the organization of African unity. Highlighted in the course are W.E.B. Dubois, Marcus Garvey, George Padmore, and Kwame Nkrumah. (Irreg.)
HIST	3783	Africa Since 1800	Thematically traces the evolution of Africa during the colonial period and explains how the continent moved to independence in the second half of the twentieth century. Such topics as the development of formal colonies and protectorates, the missionary factor and African nationalism will be studied. (F) [IV-NW]

HIST	3793	Imperial Russia	A study of the origins and growth of the Russian Empire, origins and development of autocracy and serfdom, Russia's emergence as a great power, its reforms and revolutions. (Sp, Su) [IV-WC]
HIST	3803	The Era of the Russian Revolutions	Deals specifically with the conditions and events of change in Russia between 1905 and 1921. Seeks to take into account the broad questions of industrialization and backwardness, the popular responses to these matters and the rise of radical groups. Beyond this setting, major attention will be placed on the dissolution of the old regime during World War I and the two revolutions of March and November 1917, as well as the civil wars and the NEP. (Sp)
HIST	3813	Twentieth-Century Russian History	Detailed study of political, social, cultural and economic developments in the Soviet Union in world affairs. (F) [IV-WC]
HIST	3823	History of Japanese Culture	Prerequisite: junior standing. Surveys the development of Japanese civilization from the earliest times to the present through art, architecture, literature, religions, and political ideas. (Irreg.) [IV-NW]
HIST	3833	Nation Building in East Central Europe, 1790-1939	A comparative study of the social and political processes of nation building among the Polish, Czech, Slovak, Magyar, and Yugoslav peoples; the attempts of the Habsburg and Tsarist empires to deal with national diversity; the emergence of independent nation-states; and the problems of domestic and international instability between the two world wars. (Irreg.) [IV-WC]
HIST	3840	Topics in Asian History	1 to 5 hours. May be repeated for credit with change of content. Discussion of a selected special problem or problems in Asian history. (Sp, Su)
HIST	3843	International Relations in the Middle East	Prerequisite: junior standing or permission of instructor. Covers the major wars of the region beginning with the first world war, when the modern state system was created, and ending with the Gulf War, when the U.S. hoped to construct a new world order. The Arab-Israeli conflict, the Cold War, the contest for control of the Persian Gulf and oil markets are also covered. Discussed will the role of the great powers as well as the major Middle Eastern states in shaping international relations in the region over the past century. (Irreg.) [IV-NW]
HIST	3853	Japan to 1850	Prerequisite: 1723 or 1733 or junior standing. Trace the history of Japan beginning with the earliest Jomon and Yayoi cultures and ending with the unraveling of the last feudal regime in the nineteenth century. (Irreg.) [IV-NW]
HIST	3863	Japan Since 1850	Prerequisite: 1723 or 1733 or junior standing. Designed to introduce students to the history of Japan from the 1850's to the present. Will include the Meiji restoration, industrial development, imperial expansion, wartime mobilization, the U.S. occupation, economic recovery and high growth, and the changing political and popular culture of the 1980s and 1990s. (Irreg.) [IV-NW]
HIST	3873	Early Imperial China	Prerequisite: 1723 or junior standing or permission of instructor. The cultural, political, economic, and social transformations China underwent during the period from the Sui to the Song dynasties. (Alt. F) [IV-NW]
HIST	3883	Late Imperial China	Prerequisite: 1723 or 1733 or junior standing or permission of instructor. The cultural, political, economic, and social transformations China underwent during the rule of its later dynasties from the 13th-century Mongol conquest to the final struggles and collapse of China's existence as an empire with the Revolution of 1911. (Irreg.) [IV-NW]
HIST	3893	Culture and Society in the Middle East	Prerequisite: junior standing or permission of instructor. Covers the major social and cultural conflicts which have defined the peoples and states of the modern Middle East from 1800 to the present. The focus will be on Turkey, Iran, Egypt and Israel. History texts, primary documents, and novels will be read. Particular attention will be paid to the debates over the place of women and religion. (Irreg.) [IV-NW]

HIST	3903	Contemporary Japan	Prerequisite: 1733 Or 3863. Explores the unique politico-economic system that developed in Japan following the Pacific War. While emphasizing the characteristics of this system, students also learn about the people living in it, how they adapt, how some do not, and the challenges facing Japan today. (Irreg.) [IV-NW]
HIST	3913	The Samurai in Japanese History	Prerequisite: 1723 or 1733 or 3853. Explores the history of the most popular figure in Japanese history. Covers warfare and invasion before the formation of the early state up to the suicide of the last Samurai in 1970. (Irreg.) [IV-NW]
HIST	3923	China Since 1911	Prerequisite: 1733 or junior standing or permission of instructor. An examination of Chinese history since the Revolution of 1911, including the development of Republican and Communist thought, warlord rule, China's tumultuous wartime period, and the rise of the People's Republic of China (PRC). The course will also cover the history of the PRC, China after Mao, Taiwan and China's changing position in the world. (Irreg.)) [IV-NW]
HIST	3933	History of the Great Witch-Hunt in Early Mod. Europe & America	(Crosslisted with W S 3933) Prerequisite: junior standing. Covers an important era in the history of human rights and misogyny while offering a view of early modern Europe through social, legal, political, and religious lenses. (Irreg.) [IV-WC]
HIST	3943	Muslim Societies in Africa	Prerequisite: HIST 2713 or junior standing or permission of instructor. Explores the history, nature, and dynamics of Islam in Africa -- Early Islam; Muslin Societies/Groups; Islamic fundamentalism; Women and Islam; Religious practices/education; prayers/rituals; Africanization of Islam. (Irreg.) [IV-NW]
HIST	3950	Topics in Middle Eastern History	1 to 3 hours. Prerequisite: junior standing. May be repeated with change of content; maximum credit nine hours. Discussion of a selected problem or problems in Middle Eastern history. (Irreg.)
HIST	3953	The Modern Middle East	Explores the political and social history of the modern countries of Egypt, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria and Turkey and areas affected by them from 1500 to the present. (F) [IV-NW]
HIST	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program and permission. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
HIST	3963	Rebirth of Israel	Prerequisite: junior standing. Examines the historical evolution of the Zionist movement in the second half of the 19th century through the establishment of the State of Israel in the mid-20th century within the framework of Jewish modernization, antisemitism, and conflicting modern nationalisms. (Irreg.) [IV-WC]
HIST	3973	Judaism - A Religious History	Prerequisite: junior standing. Introductory survey of Judaism from its earliest origins in the ancient Near East to the present. Development of ideas, forms of worship, and religious expression as well as sectarian trends and variations will be examined. (Irreg.) [IV-NW]
HIST	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
HIST	3983	Medieval Jewish History	Prerequisite: junior standing or permission of instructor. Survey of Jewish history from the fall of the Second Temple in 70 C.E. to the expulsion from Spain in 1492. Primary emphasis on the social and intellectual history of the Jewish communities of the Islamic world and of Latin Christendom and their relations with the two great medieval civilizations. (Irreg.) [IV-NW]
HIST	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

HIST	3993	The Evolution of Martyrdom in the Judeo-Christian Civilization	Prerequisite: junior standing. Traces the historical development of martyrdom in Judaism and Christianity to understand what motivated individuals and communities to give up their lives for their convictions. Compare the evolution of the idea of martyrdom in Judaism and Christianity to identify differences and similarities between these two faiths. (Irreg.) [IV-WC]
HIST	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
HIST	4003	Jews and Other Germans	Prerequisite: Junior standing or permission of instructor. Discusses the history and culture of the Jews in Germany from 1750 until the Nazi period. Focuses on the internal dimension of the German-Jewish experience and analyze the contribution of Jews to the German culture. (Irreg.) [IV-WC]
HIST	4013	Modern Italy	Prerequisite: 1233 or junior standing or permission of instructor. Examines the formation of Italy as a nation-state, one of the most significant events in modern European history, particularly in light of colonialism and World War II. (Irreg.) [IV-WC]
HIST	4023	Inquisitions	Prerequisite: 1223 or 1233 or junior standing or permission of the instructor. Examines the historical roots of inquisitions in order to better understand how they have shaped modern conflicts. The mechanisms people used for disciplining themselves, for imposing control on others, and for evaluating who has the right to participate in society reveals people's fears, priorities, and weaknesses. (Irreg.) [IV-WC]
HIST	4033	The Renaissance	Prerequisite: 1223 or junior standing or permission of instructor. Examines the European renaissance, a time period that was crucial to the development of western European culture, intellectual thought, and state formation. This pivotal time period built the foundations of modern western culture. (Irreg.) [IV-WC]
HIST	4043	Modern France	Prerequisite: 1233 or 1623 or junior standing or permission of the instructor. Survey of French social, political and intellectual history from 1648 to the present. Topics include absolutism, enlightenment, revolution, liberalism, socialism, the Franco-Prussian war, imperialism, World War I and World War II, decolonization, and immigration. (Irreg.) [IV-WC]
HIST	4053	The Enlightenment	Prerequisite: 1223 or 1623 or junior standing or permission of instructor. Examination of the intellectual and cultural currents of eighteenth-century Europe and Colonial America. Topics to be considered include enlightenment critiques of orthodox religion, the rise of the public sphere and the relationship between the enlightenment and the French revolution. (Irreg.) [IV-WC]
HIST	4073	Cities in Europe	Prerequisite: HIST 1223 or HIST 1233 or HIST 1613 or HIST 1623 or HIST 1923 or junior standing or permission of instructor. Investigates the impact of industrial modernity upon the European metropolis, primarily via the lens of the leading European cities from the 18th to the 21st century. (Irreg.)
HIST	4083	Museums, Monuments, Memory	Prerequisite: HIST 1223 or HIST 1233 or HIST 1613 or HIST 1623 or HIST 1923 or junior standing or permission of instructor. Globally oriented course that explores how national and ethnic memory play a key role in the formation of social and cultural identities. Emphasis is placed on rituals, "sites of memory," monuments, museums and their publics. (Irreg.)
HIST	4093	Urban Destruction and Reconstruction	Prerequisite: HIST 1223 or HIST 1233, or HIST 1483 or HIST 1493, or HIST 1613 or HIST 1623, or HIST 1923, or HIST 2613 or HIST 2623, or junior standing, or permission of instructor. An urban history course that examines disasters and conflicts as well as reconstruction across a broad spectrum of cities in Europe, Asia, Latin America, and the United States. (Irreg.)
HIST	4103	Mythology in Ancient Greece and Rome	Prerequisite: 1613 or 2023 or junior standing or permission of instructor. Greek and Roman myth through primary sources in translation; social and political context of Greek and Roman myth; archaeological evidence related to Greek and Roman mythology. (Irreg.) [IV-WC]

HIST	4113	The Historical Novel	Prerequisite: HIST 1233 or HIST 1493 or HIST 1623 or HIST 1923 or junior standing or permission of instructor. This course will consider the history of the historical novel treating nationalism and identity from 1814 to the present. We will consider the historical novels' use of history and of psychology with the methods of intellectual history. (Irreg.) [IV-WC]
HIST	4203	Classical China	Prerequisite: 1723 or junior standing or permission of instructor. Examines the roots of Chinese civilization, from its pre-historical origins through its emergence as a formidable empire to its devolution during a lengthy period of civil war after the end of the Han dynasty. (Irreg.) [IV-NW]
HIST	4213	China's Art of War	Prerequisite: 1723 or junior standing or permission of instructor. The scope of this course will be both the theory and practice of warfare in China's pre-modern eras. Relating to the theory, there will be discussion of some of the most renowned texts on military strategy and the theoretical issues that are involved in strategizing about and preparing for war. Study of the cause and effect of various wars from the earliest periods of China's history to just before the beginning of the modern period. Examination of the materials of warfare and the contributions of various technological developments. (Irreg.) [IV-NW]
HIST	4303	Violence in the American West	Prerequisite: 1483 or 1493 or junior standing or permission of instructor. The examination of the pervasive history of violence in the American West and the shaping of western imagery. Key episodes of violence allow exploration of specific strains of violence and application of theoretical approaches. General categories include colonial based violence, social conflict (Including vigilantism, race based violence, labor and class unrest, etc.), and the invention of western violence by purveyors of popular culture. (Irreg.) [IV-WC]
HIST	4323	The African-American Political Tradition	Prerequisite: 1493 or 2033 or 2043 or junior standing or permission of instructor. This course is an upper-division survey of African-American protest and politics from the abolitionist movement to the present. This survey will include analysis of key political thinkers and the most significant protest movements, as well as political campaigns. (Irreg.) [IV-WC]
HIST	4333	Twentieth-Century West	Prerequisite: 1483 or 1493 or junior standing or permission of instructor. The history of the twentieth-century West explores the role of this region in modern American politics, resource development, culture, especially art, literature and the movies, and the role of the West in world affairs. (Irreg.) [IV-WC]
HIST	4343	The Vietnam War	Prerequisites: 1483 or 1493 or junior standing or permission of instructor. This course explores the origins of the Vietnam War, how the United States waged the war, the impact of the war on American culture, and the meaning of the United States defeat in Vietnam. (Irreg.) [IV-WC]
HIST	4353	Origins of American Foreign Policy	Prerequisite: HIST 1483 or HIST 1493, or junior standing, or permission of instructor. Examines American diplomacy from 1775 to 1848. (Irreg.) [IV-WC]
HIST	4363	The United States Constitution, 1776-1804	Prerequisite: HIST 1483 or HIST 1493, or junior standing, or permission of instructor. Examination of the creation of state constitutions in the American Revolution, the writing and ratification of the United States Constitution, and key constitutional developments to the passage of 12th Amendment (1804). (Irreg.) [IV-WC]
HIST	4373	American Constitutional History, 1900 - Present	Prerequisite: HIST 1483 or HIST 1493 or junior standing or permission of instructor. Development of major changes (by amendment, judicial reinterpretation, or congressional redefinition) in the Constitution. Covers social, economic, and political causes and effects of those changes. (Irreg.) [IV-WC]
HIST	4383	Life of the Mind in America, Since 1877	Prerequisite: HIST 1483 or HIST 1493 or junior standing or permission of instructor. Main currents in American thought since Civil War and Industrial Revolution. Examines who an "intellectual" is and how the concept changes across time and across social divisions. Considers relationship of intellectuals to their audience: how they create new (and revive old) meanings together as they wrestle with unsettled controversies. (Irreg.) [IV-WC]

HIST	4393	American Working Class	Prerequisite: HIST 1483 or HIST 1493 or junior standing or permission of instructor. This course examines the working- and lower-class experience in America from the colonial period to the present. Topics include: social banditry and piracy, slavery, rise of the factory, scientific management, women and work, 19th and 20th century labor movement, radicalism, prostitution, and working-class masculinity. (Irreg.)
HIST	4403	Mussolini, Fascism, & America	Prerequisite: HIST 1483 or HIST 1493, or junior standing, or permission of instructor. Explores the nature of fascism & Mussolini's rule from 1922 until his death in 1945, including the cult of Il Duce, fascist architecture and the fascist aesthetic in general, fascism and youth, fascism and conquest, and the American response to Italian fascism in the 1920s and 1930s. (Irreg.){IV-WC}
HIST	4413	Italy, America, and World War II	Prerequisite: HIST 1483 or HIST 1493 or junior standing or permission of instructor. Examines fascist ideology and war, Mussolini's expansionism in Ethiopia and Spain, Italy's disastrous partnership with Germany, and the fate of Italy during the war, including the Allied invasion, Italy's changing sides, and the tragic civil war that engulfed Italy between 1943-1945. (Irreg.) {IV-WC}
HIST	4463	History of West Africa	Prerequisite: 2713 or junior standing or permission of instructor. Addresses the economic, social, political, and cultural strategies west Africans employed to meet the challenges presented by life in their unusual part of the world from 20,000 BCE to the present. Topics include linage, commerce, attitudes toward powers, traditional understandings of history, Islam, slavery, colonialism, and independence. (Irreg.) [IV-NW]
HIST	4493	Africa and the Atlantic Slave Trade	Prerequisite: HIST 2713 or junior standing or permission of instructor. About the changing nature of slavery in and the impact of slave trading on Africans in their homelands and in the diaspora. Origins in Africa; rise of the Atlantic trade; impact of the trade; middle passage, etc. (Irreg.) [IV-NWC]
HIST	4503	Brazil, 1500-2000	Prerequisite: 2613 or 2623 or junior standing or permission of instructor. Surveys the history of Brazil from contact to 2000. Touches on the pre-Columbian period, but focuses on the social, cultural, economic and political transformation of the region under Portuguese and Brazilian rule. (Irreg.) [IV-WC]
HIST	4513	Intellectuals & Artists in Modern Latin America	(Crosslisted with IAS 4513) Prerequisite: 2613 or 2623 or junior standing or permission of instructor. Examines both the history of ideas in modern Latin America as well as the history of intellectuals as a social group. We will consider intellectuals in the process of independence and the consolidation of nation states, the role of "race" in Latin American thought, and the relationship between European and Latin American thought. (Irreg.) [IV-WC]
HIST	4523	Latin American Left	(Crosslisted with IAS 4523) Prerequisite: 2613 or 2623 or junior standing or permission of instructor. This course examines the shifting political tactics and theoretical positions of a variety of leftist movements in Latin America since the early 20th century. We will examine leftist thought on the nature of Latin American development, approaches to commercial culture, and labor organizing, among other topics. (Irreg.) [IV-WC]
HIST	4533	Populism in 20th-Century South America	(Crosslisted with IAS 4533) Prerequisite: 2613 or 2623 or junior standing or permission of instructor. This course examines the phenomenon of Latin American "populism," a set of political movements that held a central place in 20th-century Latin American history. We will focus on three cases as they relate to the broader economic and social processes in the region as a whole: Brazil; Argentina; and Chile. (Irreg.) [IV-WC]
HIST	4543	Latin America in the Age of the Cuban Revolution	(Crosslisted with IAS 4543) Prerequisite: 2613 or 2623 or junior standing or permission of instructor. This course is an in-depth examination of Latin American history of the period 1955-1973. We cover changes in politics, economics, literature, film, music, and theology in what many Latin Americans called the "revolutionary process" of the period. (Irreg.) [IV-WC]

HIST	4553	Environmental History of Latin America	Prerequisite: 2613 or 2623 or junior standing or permission of instructor. This course will serve as a broad-based study of the environmental history of Latin America. We will examine the history of human interactions with the natural world in this region from pre-Colombian and colonial eras through contemporary times. Heavy emphasis will be placed on comparing native life-ways with the changes wrought by European colonization and the results on the land and natural resources. (Irreg.) [IV-WC]
HIST	4603	Genesis Through Jewish Eyes	Prerequisite: junior standing or permission of instructor. Through a close reading of Genesis and its Jewish interpreters, this class takes one mode of reading to ask: How a minority tradition understands key passages, terms & theologies. How deducing the Bible's message depends on one's own pre-suppositions. How another tradition can enhance one's own reading of Scripture. (Irreg.)
HIST	4613	Old Testament: An Introduction	Prerequisite: junior standing or permission of instructor. Introduces students to the Old Testament/Hebrew Bible, specifically the historical background of the Ancient Near East; the key concepts, institutions and theologies of the Hebrew Bible; and the Hebrew Bible's various literary genres (law, narrative history, wisdom and poetry). Through analyzing large sections of the Hebrew Bible, students will gain familiarity with the historical, social and religious developments that drove the most influential literature created by the Ancient Near East. (Irreg.)
HIST	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
HIST	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
HIST	4973	Undergraduate Seminar in History	Prerequisite: History majors may enroll only after completing 75 credit hours of undergraduate coursework, 24 hours of which must be history. Non-majors may enroll with permission of instructor. May be repeated with change of content; maximum credit nine hours. Extensive research in historical sources and literature relating to a special problem or topic selected by the instructor. Emphasis will be on the individual preparation of research papers. (F, Sp, Su) [V]
HIST	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
HIST	5001	Navigating The History Profession	Prerequisite: graduate standing or permission of instructor. Introduction to the various fields of historical inquiry, resources for historical research, and how to navigate the history profession -- conferences, grants, the job market --and the OU graduate programs, M.A. and Ph.D. (F)
HIST	5050	Directed Readings in History	Prerequisite: graduate standing. Graduate-level independent study for master's candidates only. (Irreg.)
HIST	5054	Historical Methods-Bibliography and Criticism	Prerequisite: graduate standing or permission. The nature and philosophy of history; techniques of research and writing. (F)
HIST	5110	Independent Studies in European History	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Independent study, arranged between the professor and student, in the history of Europe. (F, Sp, Su)
HIST	5210	Independent Studies in American History	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content, maximum credit 15 hours. Independent study, arranged between the professor and student, in the history of America. (F, Sp, Su)

HIST	5300	Directed Readings in Medieval History	1 to 5 hours. Prerequisite: graduate standing, a reading knowledge of either French or German, and permission of instructor. May be repeated with change of content and permission; maximum credit 12 hours. A supervised program of readings in a selected special problem in medieval history. (F)
HIST	5310	Independent Studies in Latin American History	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content, maximum credit 15 hours. Independent study, arranged between the professor and student, in the history of Latin America. (F, Sp, Su)
HIST	5320	Research in Medieval History	1 to 5 hours. Prerequisite: graduate standing, reading knowledge of Latin, and permission of instructor. May be repeated with change of content; maximum credit 12 hours. A supervised program of research in the sources for medieval history, preparatory to research for the master's thesis in medieval history. (F, Su)
HIST	5410	Independent Studies in African History	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Independent study, arranged between the professor and student, in the history of Africa. (F, Sp, Su)
HIST	5510	Independent Studies in Asian History	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Independent study, arranged between the professor and student, in the history of Asia. (F, Sp)
HIST	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
HIST	5970	Special Topics	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
HIST	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
HIST	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
HIST	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
HIST	6050	Research Problems	2 to 5 hours. Prerequisite: 12 hours of history and permission. May be repeated with change of content; maximum credit 15 hours. An individual course of intensive research with the area and problem to be determined by the student and directing instructor. (F, Sp, Su)
HIST	6160	Advanced Readings in European History	1 to 4 hours. Prerequisite: permission of instructor; student must be at Ph.D. level. May be repeated with change of content; maximum credit 15 hours. Independent study in the history of Europe; designed to give students the opportunity to do intensive readings in his/her major fields of study under direct guidance of his/her advisory committee. (F, Sp, Su)
HIST	6200	Seminar in European History	2 to 4 hours. Prerequisite: graduate standing with permission. May be repeated with change of content; maximum credit 12 hours. Training in historical research, bibliography and historiography, featuring reports and criticism. (F, Sp)
HIST	6230	Advanced Directed Readings in Medieval History	1 to 5 hours. Prerequisite: master's degree or equivalent in history, reading knowledge of French and German and permission of instructor. May be repeated with change of content and permission; maximum credit 18 hours. A supervised program of readings on a selected special problem in medieval history. (F)

HIST	6240	Advanced Research in Medieval History	1 to 5 hours. Prerequisite: master's degree in history, or its equivalent, reading knowledge of Latin, German and French, and permission of instructor. May be repeated with change of content; maximum credit 18 hours. A supervised program of research in the sources of medieval history, preparatory to the research for the doctoral dissertation in medieval history. (F)
HIST	6260	Advanced Readings in American History	1 to 4 hours. Prerequisite: permission of instructor; student must be at Ph.D. level. May be repeated with change of content; maximum credit 15 hours. Independent study in American history; designed to give students the opportunity to do intensive readings in his/her major fields of study under direct guidance of his/her advisory committee. (F, Sp)
HIST	6300	Seminar in Latin American History	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit nine hours. Training in historical research, bibliography and historiography. Features reports and criticism. (Irreg.)
HIST	6360	Advanced Readings in Latin American History	1 to 4 hours. Prerequisite: permission of instructor; student must be at Ph.D. level. May be repeated with change of content; maximum credit 15 hours. Independent study in Latin American history; designed to give students the opportunity to do intensive readings in his/her major fields of study under direct guidance of his/her advisory committee. (F, Sp)
HIST	6400	Seminar in American History	S1 to 4 hours. Prerequisite: graduate standing with permission. May be repeated with change of content. Training in historical research, bibliography and historiography. Features reports and criticism. (F, Sp)
HIST	6460	Advanced Readings in African History	1 to 4 hours. Prerequisite: permission of instructor; student must be at Ph.D. level. May be repeated with change of content; maximum credit 15 hours. Independent study in African history; designed to give students the opportunity to do intensive readings in his/her major fields of study under direct guidance of his/her advisory committee. (F, Sp)
HIST	6560	Advanced Readings in Asian History	1 to 4 hours. Prerequisite: permission of instructor; student must be at Ph.D. level. May be repeated with change of content; maximum credit 15 hours. Independent study in Asian history; designed to give students the opportunity to do intensive readings in his/her major fields of study under direct guidance of his/her advisory committee. (F, Sp, Su)
HIST	6600	Seminar in Middle Eastern History	1 to 4 hours. Prerequisite: graduate standing with permission. May be repeated with change of content; maximum credit 12 hours. Training in historical research, bibliography and historiography. Features reports and criticism. (Irreg.)
HIST	6800	Seminar in Modern Japanese History	1 to 4 hours. Prerequisite: graduate standing with permission. May be repeated with change of content; maximum credit 12 hours. Training in historical research, bibliography, and historiography. Features reports and criticism. (Irreg.)
HIST	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
HIST	6970	Special Topics	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
HIST	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
HIST	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
HON	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

HON	2501	Campus Culture	Prerequisite: Admission/Eligible to the Honors Program (3.40 GPA). Encourages interaction with many of the cultural events offered by the University. Events include plays, art exhibits, lectures, concerts, film and more. The course emphasizes the critical analysis of culture through in-class conversation, out-of-class writing, and peer-revision of texts. Writing for the class will be uploaded to "our page", an online culture magazine which includes listings of upcoming events. (F, Sp)
HON	2511	Community Citizen	Prerequisite: Admission/eligible to the Honors Program (3.40 GPA). May be repeated once. Students will provide volunteer service at a community agency (hospitals, united way agencies, art museum, etc.) as approved by the course instructor. Students will be asked to discuss their experiences in class, write about the experience, and to participate in peer-revision sessions. Students will be expected to complete a minimum of 30 hours of volunteer service in a semester. (F, Sp)
HON	2963	Perspectives on the Global Experience; Globalizing Africa	Prerequisite: admission to Honors program. This course explores the relationship between economic and cultural processes associated with globalization and sub-Saharan Africa. In order to better understand the nature of globalization and its implications for inequality and day-to-day life, we examine case studies dealing with topics like the marketing of soap in colonial southern Africa, conflicts over the extraction of oil in Nigeria, and undocumented West African migrants living in New York City. (F, Sp, Su)
HON	2970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors College Curriculum. May be repeated; maximum credit six hours. (F, Sp)
HON	2973	Perspectives on the American Experience	Prerequisite: permission of Honors College. May be repeated; maximum credit six hours. An interdisciplinary investigation of the social, economic, and political realities of American life and culture from the late nineteenth century to the present. Topics to be treated include immigration, the rise of mass production and consumer culture, the Great Migration, the Cold War, 1960s social movements, and current "culture wars." (Sp) [IV-WC]
HON	3103	Writing Workshop	Prerequisite: Admission to the Honors College and permission of the instructor, and 2973. The course will help the student learn more about writing and helping others to write well. Designed to help students become familiar with rhetorical theory as well as practice. Students will develop effective strategies for work in the honors college writing assistant program. Focus is on two key questions: What is good writing? How can we help others to become better writers? (Sp)
HON	3223	American Thought and Culture in the 1940s	Prerequisite: English 1213 and permission of Honors College. Study of America in the 1940s through an examination of American intellectual and cultural life. Among the themes discussed are wartime American culture, modern American liberalism and conservatism, the effects of McCarthyism, the changing place of women and minorities in American life, and anxieties about life in the atomic age. (Irreg.) [IV-WC]
HON	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

HON	3513	Biotechnology	Prerequisite: Zoology 1114 or Microbiology 3813 or Botany 1114 and permission of Honors College. Survey of the most active areas in the field including recombinant DNA technology, protein engineering, large-scale cultivation of microorganisms, commercial exploitation of microorganisms, mammalian cells in culture and their application in vaccine production and monoclonal antibody production, gene therapy, and genetic engineering in plants. (F)
HON	3713	Religion in America	Prerequisite: permission of Honors College. Traces the development, character and impact of religion in America from the pre-colonial era to the present. (Irreg.) [IV-WC]
HON	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor. The content will emphasize work not presented in other courses. (F, Sp, Su)
HON	3970	Honors Seminar	1 to 3 hours. Prerequisite: member of Honors College Curriculum in good standing. May be repeated; maximum credit six hours. An upper-division Honors College course to be used by departments and by the Honors College. (F, Sp, Su)
HON	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of content; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project under the guidance of a professor in the student's field. (F, Sp, Su)
HON	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
HON	3993	Honors Colloquium	Prerequisite: admission to and good standing in Honors College Curriculum. May be repeated with change in course topic. An interdepartmental course involving two or more instructors from different departments. (Sp)
HON	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
HON	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
HPCD	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
HPCD	2000	Freshman and/or Sophomore Secondary Harpsichord	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HPCD	2020	Harpsichord for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 8 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
HPCD	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HPCD	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

HPCD	4000	Junior and/or Senior Secondary Harpsichord	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HPCD	4020	Harpsichord for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: Majors only; junior standing. May be repeated; maximum credit 14 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
HPCD	5000	Master's-Level Secondary Harpsichord	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HPCD	5010	Master's-Level Harpsichord for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
HPCD	5020	Master's-Level Harpsichord for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
HPCD	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
HPCD	6000	Doctoral Secondary Harpsichord	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
HPCD	6010	Doctoral Harpsichord for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
HPCD	6020	Doctoral Harpsichord for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
HPER	1021	Beginning Judo	Consists of skill training in the sport of judo and the associated cognitive acquisition of terminology, contest rules and customs. Skills portion will deal with falling techniques, throws, holddowns, chokes and armbars. Cognitive portion will deal with the training aspects of judo (chiai, randori, kata and uchi komi), basic terminology and contest rules. (F, Sp)
HPER	1281	Rhythmic Aerobics	Understanding of exercise elements within a healthy lifestyle, and development of physical fitness through rhythmic activities. Activities include warm-up, workout and cool-down as important elements in personal exercise programming.
HPER	1821	Track and Field	To teach a basic understanding of the games of Track and Field; skills and analysis of the skills, nature and rules of the games and strategies in order to successfully make application in teaching and coaching situations. Perform the basic skills of Track and Field and perform these skills in a game situation (within the rules of the sport).
HPER	1861	Tumbling and Gymnastics	To teach a basic understanding of Tumbling and Gymnastics; skills and analysis of skills, nature and rules of the sport and strategies in order to successfully make application in teaching and coaching situations. Perform basic skills.
HPER	1881	Beginning Swimming	To teach a basic understanding of beginning swimming; the skills and analysis of skills, the nature and rules of the sport and strategies in order to successfully make application in teaching and coaching situations. Perform basic Skills.

HPER	1921	Basketball	To teach a basic understanding of the game of basketball; skills and analysis of skills, nature and rules of the game and strategies in order to successfully make application in teaching and coaching situations. Perform the basic skills of basketball and perform in a game situation.
HPER	1941	Soccer	To teach a basic understanding of the game of soccer; skills and analysis of skills, nature and rules of the game, and strategies in game situations in order to successfully make application in teaching and coaching situations. To perform the basic skills and perform in a game situation. (F, Sp)
HPER	1961	Softball	To teach a basic understanding of the game of softball; skills and analysis of skills, nature and rules of the game, and strategies in order to successfully make application in teaching and coaching situations. Perform basic skills and perform in a game situation.
HPER	1981	Volleyball	Basic understanding of game of volleyball; skills and analysis of skills, nature and rules of the game and strategies in order to successfully make application in teaching and coaching situations. Perform basic skills and perform in a game situation.
HPER	3533	Aids and Its Impact on American Society	Prerequisite: Zoology 1114 and 3 hours of social science; or permission of instructor. Provide a current overview of the medical and epidemiological aspects of aids and HIV spectrum disorders. Also focus on psychosocial, educational, legal and ethical issues which have evolved in this country as a result of our response to AIDS and HIV.
HPER	4543	Comprehensive Stress Management	Prerequisite: Psychology 1113, Zoology 1114, or equivalent. Helps students gain an awareness of stress and its effects, practice management techniques to reduce personal stress, and implement those techniques in their daily lives as well as the lives of others (school, community, corporation, etc.). Topics include: psychophysiology of stress, stress and disease, nutrition, personal planning and time management, cognitive restructuring, relaxation, and biofeedback. (Irreg.)
HPER	4833	Physiology of Exercise Laboratory	Prerequisite: Zoology 3104 or 3133 and industrial engineering 4823, or permission. Laboratory experiments emphasizing the understanding of fundamental physiological mechanisms, regulating responses, and adaptation to exercise. Basic analytical methodologies pertaining to the energy, muscular and circulatorespiratory systems. Includes factors affecting physiological performance capacities and experimental basis of exercise assessment and training.
HPER	5513	Health Promotion Programming	Prerequisite: 2913 and an additional three hours of health education/promotion, or permission of instructor. Health problems; appropriate learning activities planned and demonstrated with emphasis upon good health practices. Focus on multi-setting health promotion programming, e.g., individual, community, corporate, school. No student may earn credit for both 4513 and 5513.
HSCI	1113	Science, Nature and Society: Historical Perspectives	An introduction to the study of science, technology, and medicine in light of historical, philosophical, and cultural analysis. Focusing on the relationships between science, nature, and society, this class introduces some of the big questions about who we are, who we have been, and who we might become. (Irreg.) [IV-WC]
HSCI	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
HSCI	2133	Science and Popular Culture	Draws on interdisciplinary perspectives to examine the interplay between science and popular culture from the Scientific Revolution to the present. Topics include representations of science, scientists, and nature in popular literature, television, films, and documentaries; the development of zoos and science museums; children and science, and science journalism. (Sp) [IV-WC]

HSCI	2213	The Darwinian Revolution	The "Darwinian Revolution" was a revolution in culture as well as biology. We consider the history of the social, political, and theological issues associated with the development of evolutionary thought from the early nineteenth century to the present. (Irreg.) [IV-WC]
HSCI	2223	Lives in Science: History of Science through Biography	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Explores the history of science, medicine, and technology from a more personal perspective, looking at the lives of scientists, engineers, and physicians, both real and fictional. Course materials include novels and films as well as biographies. (Irreg.) [IV-WC]
HSCI	2423	Social and Ethical Issues in Science, Technology, Environment and Medicine	An introduction to a range of social and ethical issues in the history of science, technology, environment and medicine. Including the social, political and ethical implications of technology and scientific knowledge, and the role they play in shaping our environment and our selves. (Irreg.) [IV-WC]
HSCI	2453	God and Nature in the Pre-scientific World	Explores the changing and multifaceted relationship between science and religion throughout the history of western culture up to the eighteenth century. Discusses collaborations as well as conflicts between Christianity and scientific investigation. (Irreg.) [IV-WC]
HSCI	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
HSCI	3013	History of Science to the Age of Newton	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. A survey of Western people's efforts to understand the natural world, from earliest historical times to the seventeenth century. (F, Sp, Su) [IV-WC]
HSCI	3023	History of Science Since the Seventeenth Century	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. A survey of the historical and intellectual development of modern science. (F, Sp, Su) [IV-WC]
HSCI	3223	Gender Issues in Science, Technology and Medicine	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Historical analysis of gender issues in science, technology and medicine, and in comparison with current practices. Topics will include questions in scientific method, particularly the concept of "objectivity," bio-social theories of gender; gender issues in scientific inquiry, in the development of and engagement with technologies, and in medical thought and practice; media images; and feminist science fiction. (Irreg.) [IV-WC]
HSCI	3243	Women and Medicine	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Surveys the relationship between women and medicine in the modern period (roughly between 1750 and the present). Examines the interrelated histories of women as medical practitioners, patients and objects of medical knowledge. Also includes discussion on how women experienced illness in the past and the expectations and norms that shaped their illness experiences. Finally, a look at medical knowledge about women and how ideas about gender have been constructed by the medical professions. (Sp) [IV-WC]
HSCI	3253	Race and Science	Prerequisite: junior standing or completion of one History of Science course or permission of instructor. Examines the rise and fall of scientific conceptions of race from 1800 to the present, paying particular attention to its connections to 19th Century evolutionary theory, eugenics, the modern evolutionary synthesis, and recent genetics and genomics. Also looks at the role of cultural values associated with race in science more broadly. Course materials include films and novels as well as nonfiction. (F, Sp) [IV-WC]

HSCI	3313	Science and Technology in Asian History	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Examines science and technology in east, south, and southeast Asia from 1000 A.D. to the present. We examine the influence and interaction of knowledge traditions (especially Chinese, south Asian and Islamic), how they circulate around and beyond Asia, and interactions with European knowledge traditions, culminating in examinations of political and ethical dimensions of science and technology in contemporary Asia. (Irreg.) [IV-NW]
HSCI	3333	Technology and Society in World History	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. A survey of the history of technology since 1500. Emphasizes historical contexts and cultural meanings, not technical details, as it explores the key steps in the construction of our modern technological world. Materials include literature and film as well as non-fiction. (Sp) [IV-WC]
HSCI	3353	Science, Exploration, and Empire	Prerequisite: junior standing or one previous HSCI course or permission of instructor. Examines the contested history of exploration and empire from both western and non-western perspectives, learning about colonial and post-colonial encounters in science, both imagined and lived. Materials include travelers' tales, explorers' accounts, fiction, and films as well as nonfiction. (Irreg.) [IV-WC]
HSCI	3413	Biomedical Ethics	Prerequisite: Junior standing, or completion of one History of Science lower-division course, or permission of instructor. Introduces key concepts in biomedical ethics. Topics may include: the doctor/patient relationship; medical research on humans and animals; reproductive rights and technologies; medical decisions at the end of life; and the allocation of scarce resources. (Irreg.) [IV-WC]
HSCI	3423	Modern Medicine - A Historical Introduction	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Examines the history of modern medicine in Europe and America. Aims to connect medical ideas and practices to the broader social and cultural contexts in which they were developed. (Irreg.) [IV-WC]
HSCI	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
HSCI	3443	Science in a Religious World	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. An overview of major events in the intersection of science and religion from the Middle Ages to the present. A detailed look at the historical record and exploration of the background of the people involved, the social and political context, and the reasons why certain issues mattered so much. (Sp) [IV-WC]
HSCI	3453	Science and Civilization in Islam	Prerequisite: junior standing or permission. History of scientific traditions and ideas in Islamic civilization, from the origins of Islam to the early modern period. Emphasis is on the derivation, development and transmission of Islamic science, as well as on the assimilation and influence of science within Islamic culture. (Sp) [IV-NW]
HSCI	3463	Cold War Science	Prerequisite: junior standing or permission. Science and technology during the Cold War, including strategic weapons and SDI, medical experiments, the space race, science in popular culture, and science and foreign policy. (Irreg.) [IV-WC]

HSCI	3473	History of Ecology and Environmentalism	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Explores the historical development of ecology as a science and as a political stance, from the eighteenth through the twentieth century. Topics may include: climate change, population control, deforestation, globalization, resource management, and environmental ethics. (Irreg.) [IV-WC]
HSCI	3483	Technology, Politics, and International Development	Prerequisite: Junior standing, or completion of one History of Science lower-division course, or permission of instructor. Explores the interactions between politics and technology that have informed efforts to produce "developed" industrial societies around the world. Examines the emergence of development thinking and practice in Japan and the colonized world, international development and the technopolitics of decolonization, and contemporary issues in technology and development. (Irreg.) [IV-NW]
HSCI	3493	The History of Media	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. An introduction to the history of informational technologies and communications media from the printing press to the internet. Topics will include the print revolution, the advent of electronic communications, the growth of broadcast media, the development of the digital computer, and the internet boom. Course materials include novels and films as well as non-fiction. (Irreg.) [IV-WC]
HSCI	3533	Science and Global Politics in the Modern Era: Cross-Cultural Perspectives	Prerequisite: Junior standing. Focuses on interactions between professional scientists, corporate entities, advocacy groups, NGOs, the public, and the state, with case studies drawn from different national contexts in order to make cross-cultural comparisons. Students will develop an international perspective on this topic by focusing on both western and non-western national contexts. Topics may include such issues as public health; biotechnology; bioprospecting; organ trafficking; the information revolution; clinical trials for drug-testing; expert testimony; climate change; weapons development; mass transit; and science and engineering education. (Irreg.) [IV-WC]
HSCI	3550	Topics in the History of Science	1 to 3 hours. Prerequisite: junior standing or permission of instructor. May be repeated with change in content; maximum credit six hours. Topics of special interest in the history of science. (Irreg.)
HSCI	3813	Science in the Ancient World	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission. An examination of science in antiquity. Topics include the origins of ancient science, the transmission and interaction of various scientific traditions, the relation between science and philosophy, the development of a concept of science, and the place of science within the cultures of the period. (Irreg.) [IV-WC]
HSCI	3823	Science in Medieval Culture	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission. A survey of the historical development of medieval scientific, mathematical, medical, and philosophical thought. (Irreg.) [IV-WC]
HSCI	3833	The Scientific Revolution	Prerequisite: junior standing, or completion of one History of Science lower-division course, or permission of instructor. Explores the history of the "scientific revolution" of the sixteenth and seventeenth centuries. Study includes understanding debates not just about what happened in the past but about how we today define science and how we understand the place of science in the modern world. (Irreg.) [IV-WC]
HSCI	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor. The topics will cover materials not usually presented in regular coursework. (F, Sp, Su)
HSCI	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project. (Irreg.)

HSCI	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
HSCI	3993	Junior Seminar	Prerequisite: 9 hours of history of science classes or permission of instructor; if repeating course, permission of undergraduate academic adviser. May be repeated with change of content; maximum credit 6 hours. Offers students the chance to work on an extended research topic in the history of science, technology, environment and medicine. The themed seminar format will allow for small group discussion and close supervision of student projects. Students will be introduced to the methods and tools of advanced research. Seminar themes will vary. (Sp)
HSCI	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
HSCI	4613	Issues and Methods in the Digital Humanities	(Slashlisted with 5613) Prerequisite: junior standing or one previous HSCI course or permission of instructor. Through interdisciplinary exploration students read, discuss, hack, and reflect with experts in the areas of history and history of science, information studies, geography, literature, classics, computer science, media studies, anthropology, political science, communication, and more. Students will not only become more literate in interpreting digital culture but in applying the technologies of the digital world, acquiring new competencies and insights in the process. No student may earn credit for both 4613 and 5613. (Irreg.)
HSCI	4623	Practicum/Internship in the Digital Humanities	(Slashlisted with 5623) Prerequisite: junior standing or one previous HSCI course or permission of instructor. May be repeated; maximum credit 9 hours. A practical, project-based internship, focused on the design and development of a project in the digital humanities under the close supervision of a faculty member. No student may earn credit for both 4623 and 5623. (F, Sp)
HSCI	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
HSCI	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
HSCI	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
HSCI	4993	Capstone in History of Science, Technology, and Medicine	Prerequisite: junior standing and permission of instructor. This course fulfills the capstone requirement for a major in the history of science, technology and medicine. The goal of this seminar-format course is to provide students with the opportunity to further develop their skills in research, writing, and critical analysis with respect to the historical study of science. The course provides the opportunity for in-depth individualized research within the framework of shared study. (F) [V]
HSCI	5513	Advanced Studies in the History of Ancient and Medieval Science	Prerequisite: 3013 or equivalent, or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Thematic historical analyses of ancient and/or medieval foundations of science, focusing on the development of particular disciplines or scientific institutions, the relationship between science and religion, or transmission of science. Includes examination of sources and critical assessment of scholarly interpretations. (Irreg.)

HSCI	5523	Adv. Stds. In The History Of Renaissance & Early Modern Sci.	Advanced Studies In The History Of Renaissance And Early Modern Science. Prerequisite: 3013 Or 3023, Or Equivalent; Or Permission Of Instructor. May Be Repeated With Change Of Content; Maximum Credit 12 Hours. Thematic Historical Analyses Of Scientific Ideas And Practices In The Scientific Revolution And The Enlightenment, 16th-18th Centuries. Includes Examination Of Sources And Critical Assessment Of Scholarly Interpretations. (Irreg.)
HSCI	5533	Advanced Studies In The History Of Modern Science	Advanced Studies In The History Of Modern Science. Prerequisite: 3023, Or Equivalent Or Permission Of Instructor. May Be Repeated With Change Of Content; Maximum Credit 12 Hours. Thematic Historical Analyses Of Modern Science And Culture Focusing On The European And American Development And Professionalization Of Scientific Disciplines, Interdisciplinary Relationships Among The Sciences, And Intersections Between Scientific And Public Culture. Includes Examination Of Sources And Critical Assessment Of Scholarly Interpretations. (Irreg.)
HSCI	5550	Topics In The History Of Science	Topics In The History Of Science. 1 To 3 Hours. Prerequisite: Graduate Standing Or Permission Of Instructor. May Be Repeated With Change Of Content; Maximum Credit Twelve Hours. Topics Of Scholarly Interest In The History Of Science.
HSCI	5601	Digital Humanities Online Colloquium	Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit two hours. An online professional development seminar for graduate students doing advanced work in digital humanities through coursework, internships, and research projects. Students will read and discuss relevant literature, debate issues in digital humanities, critique digital humanities projects, conduct chat sessions and asynchronous discussions with experts, and develop portfolios that demonstrate their skills, expertise, and project work. (F, Sp)
HSCI	5613	Issues and Methods in the Digital Humanities	(Slashlisted with 4613) Prerequisite: graduate standing or permission of instructor. Provides a graduate-level introduction to the central issues, methods, and tools in the emerging field of the digital humanities. Digital humanities is an interdisciplinary set of methods, concepts, values, and practices that enable scholars to create and apply new technologies to answer social, cultural, and historical questions. No student may earn credit for both 4613 and 5613. (Irreg.)
HSCI	5623	Practicum/Internship in the Digital Humanities	(Slashlisted with 4623) Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 9 hours. A practical, project-based internship, focused on the design and development of a project in the digital humanities under the close supervision of a faculty member. No student may earn credit for both 4623 and 5623. (F, Sp)
HSCI	5960	Directed Readings in the History of Science	1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of content; maximum credit six hours toward M.A. degree, 12 hours toward Ph.D. degree. Intensive readings in a selected area of the history of science, under the direction of a graduate faculty member. (F, Sp, Su)
HSCI	5970	Seminar: Research, Criticism and Analysis	2 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Fundamentals of investigation and exposition in the history of science. (F, Sp)
HSCI	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
HSCI	5990	Special Studies	3 to 5 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours. Specialized studies in the history of science. Individual research culminating in the preparation of a research paper. (F, Sp, Su)
HSCI	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

HSCI	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
HSCI	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp, Su)
HSCI	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
I D	1011	Introduction to Interior Design	Prerequisite: for majors only. Introduction to interior design and issues and factors that define the quality of interior spaces, including an overview of design history, a discussion of current trends, and professional responsibility of interior designer. (F)
I D	1112	Cultures of Collaborating, Creating and Constructing	Prerequisite: Interior Design major. Introduction to the foundations of the various planning, design, and construction disciplines. Focus on the collaborative process for creating and constructing the built environment. Histories of expertise areas such as planning, architecture, landscape architecture, interior design, construction science, engineering, and graphic environmental design will be explored and related to how these have evolved to their contemporary conditions. (F)
I D	1133	Design and Graphics I	Prerequisite: for majors only. An introduction to visual communications for the design professions, including technical drawing, empirical perspectives and freehand drawing. Other topics include introduction to basic building materials; their history, sources, manufacture, properties, products and systems. Studio/Laboratory (F)
I D	1145	Design and Graphics II	Prerequisite: 1133 with a grade of C or better. An introduction to basic principles and fundamental concepts for design professionals, with emphasis on color theory and application; materials and proportioning systems. Additional topics include cultural, social, and behavioral factors and their implications for the planning and design of the built environment. Studio/Laboratory (Sp)
I D	1151	Graphics I	Prerequisite: Interior Design major. Individual projects at an introductory level focused on the fundamentals of drawing and sketching through observation, incorporating theory, concepts/terminology and problem-solving techniques. Apply concepts and terminology both visually and verbally and demonstrate a comprehensive integration of social, cultural, theoretical, and environmental influences as it applies to graphic techniques. (F)
I D	1153	Design I	Prerequisite: Interior Design major. Individual and/or team projects at an introductory level focused on the fundamentals of design, incorporating theory, concepts/terminology and problem-solving techniques. Apply concepts and terminology both visually and verbally and demonstrate a comprehensive integration of social, cultural, theoretical, and environmental influences as it applies to design. (F)
I D	1154	Design and Graphics Studio I	Prerequisite: for majors only. Individual and/or team projects at an introductory level focused on the comprehensive integration of social, cultural, theoretical, environmental, and technical influences. Application of professional techniques of representation and communication required. (F)
I D	1251	Design II	Prerequisite: Completion of ID 1151, ID 1153 with a "C" or better and Interior Design major. Introduction to the basic principles and fundamental concepts for design professionals. Topics include cultural, social, theoretical and behavioral factors and their implications for planning and designing the built environment. Application of professional techniques of representation and communication are required.(Sp)

I D	1253	Graphics II	Prerequisite: successful completion of ID 1151, ID 1153 with a "C" or better and Interior Design major. Emphasis on visual communications, technical and freehand drawing, through perspective construction. Introduction to drafting tools, and techniques, equipment, and architectural graphics used to communicate design ideas. Individual and/or team projects at an introductory level focused on the fundamentals of presentation drawings incorporating theory, concepts/terminology and problem-solving techniques. Application of concepts and terminology both visually and verbally. (Sp)
I D	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
I D	2532	Graphics III	Prerequisite: I D 1251 and I D 1253 with a grade of C or higher. Issues of form and space, natural light, climate, and site to include theory and methods of measured perspective; shade and shadow; applied graphics to produce drawings present in the various design phases. (F)
I D	2533	Design III	Prerequisite: I D 1251 and I D 1253. Issues of form and space, natural light, climate, and site. An introduction to issues of building design focused on landscape, interiors, and the building; the exploration of design elements and principles with an understanding of space planning strategies, interior architectural components, design programming, and design development. (F)
I D	2535	Design and Graphics III	Prerequisite: 1254 with a grade of C or better. Emphasis on issues of form and space, natural light, climate, and site. An introduction to issues of building design focused on landscape, interiors, and the building. Additional topics include theory, and methods of measured perspective; shade and shadow; and an introduction to computer graphics. Studio/Laboratory (F)
I D	2543	Design and Human Factors	Prerequisite: I D 2532 and I D 2533 with grade of C or better. Study of human needs and activities as design determinants; lectures and individual projects. Emphasis on the design implications of spatial relationships, scale and function. Additional emphasis on the relationship between architecture and interior design. (Sp)
I D	2763	Computer Applications in Interior Design	Prerequisite: Interior Design major or permission. Use of computer-aided design and its role in interior design professional practice. Applications to demonstrate design process and problem-solving solutions in two- and three-dimensional representation and modeling. (F, Su)
I D	2773	Interior Construction	Prerequisite: I D 2532 and I D 2533 with a grade of C or better. Introduction to the building and finish materials used in the design of non-loadbearing interior construction. Intended to develop an accurate and efficient expression of selection and detailing of materials and assemblies in construction drawings. Additional topics include mechanical and electrical systems, building codes, and planning standards. Field trips required. Studio/Laboratory (Sp)
I D	2793	Furniture Design	Prerequisite: I D 2532 and I D 2533; Corequisite: I D 2543 and I D 2773. The design and construction of furniture. Emphasis on ergonomics, design, and construction processes, working drawings, materials and methods for custom and manufactured furniture and casework. Other topics include the application of design elements and principles in furniture design. Project evolve from hand drawings to scaled models of furniture to full-scale furniture. (Sp)
I D	3223	Advanced Computer Applications	Prerequisite: Permission of the instructor. Computer graphics, three-dimensional computer modeling, animation, rendering and programming to provide representation strategies for interior design problem-solving and presentation. (Sp, Su)

I D	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
I D	3723	Lighting Design	Prerequisite: I D 2543, I D 2773 with a grade of C or better, or permission of the instructor. Introduction to lighting design of interiors. Studio/lecture presentations; focus on design principles in lighting, lighting quality, lighting quantification codes, and energy conservation. Emphasis is on integration of lighting with interior spaces, techniques in lighting design, fixture design, and exploration of computer visualization. (F)
I D	3724	Interior Design II: Lighting Design	Prerequisite: 2544, 2773 with a grade of "C" or better, or permission of the instructor. Introduction to lighting design of interiors. Studio/lecture presentations; focus on design principles in lighting, lighting quality, lighting quantification codes, and energy conservation. Emphasis is on integration of lighting with interior spaces, techniques in lighting design, fixture design, and exploration of computer visualization. Studio/Laboratory (F)
I D	3733	Commercial Design	Prerequisite: I D 3723 with a grade of C or better; Corequisite: ARCH 4623. Introduction to planning processes and the application of design principles to commercial design projects. Space planning process, design philosophy, specifications and oral presentations will be expected on each project. (Sp)
I D	3743	Construction Drawing and Detailing for Interiors	Prerequisite: 2763 and 2773 with a grade of "C" or better, or permission of instructor. Focus on the preparation of drawings, schedules, and specifications as an integrated system of contract documents. Projects will illustrate how design solutions and interior construction are related. (Sp)
I D	3753	History of Interior Design	Prerequisite: ARCH 2243. Historical survey of architectural interiors and of the decorative arts. Cultural and socioeconomic factors which influenced interior spaces and furnishings will be an emphasis in addition to readings, lectures and discussion about the art, composition and aesthetic theories that give value to historical interiors. (Sp) [IV-WC]
I D	3763	History of Interior Design, 19th and 20th Centuries	Prerequisite: 3753 with a grade of "C" or better or permission. History of interiors with emphasis on cultural and socioeconomic factors which led to their development. Emphasis on designers and patrons and on the major furnishings styles and design ideas of the nineteenth and twentieth centuries. (Sp)
I D	3773	Furniture Design	Prerequisite: 2544, 2773 and 2783, or permission of instructor. The design and construction of furniture. Emphasis on ergonomics, design, and construction processes, working drawings, materials and methods for custom and manufactured furniture and casework. Other topics include the application of two- and three-dimensional design elements and principles in furniture design. Projects evolve from hand and CAD drawings to scaled models of furniture to full-scale furniture. Course requires material purchase and field trips. Studio/Laboratory (F)
I D	3793	Interior Materials and Specifications	Prerequisite: I D 2543, I D 2773, and I D 2793 with a grade of C or better, or permission of the instructor. Study of the basic characteristics and installation of materials and finishes used in the design of interiors, building codes, fire safety and regulations for accessibility. Emphasis on writing specifications for FF&E and non-loadbearing construction. (F)
I D	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics in keeping with student's major program. Topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

I D	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Content deals with concepts not usually presented in regular coursework. (Irreg.)
I D	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for work on special projects under the guidance of a faculty member. (F, Sp, Su)
I D	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
I D	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
I D	4463	Interior Design Office Professional Practice	Prerequisite: I D 3793 or permission of instructor; Corequisite: I D 3733. Study of the professional practice of interior design: office practice, business procedures and professional ethics. Contract practice, design project management, and project completion are important emphases of coursework. (Sp)
I D	4712	Interior Design Portfolio I	Prerequisite: I D 4463 or permission of instructor. Introduction to various means of preparing a professional portfolio. Assessment of personal strengths and goals to inform decisions will be a focus. An emphasis on design, organization and delivery methods to exhibit personal design achievements will assist students in the transition to the professional arena or graduate school. (F)
I D	4722	Interior Design Portfolio II	Prerequisite: I D 4712 or permission of instructor. A continuance of I D 4712, Portfolio I. Preparation and presentation of portfolio in a professional setting to be assessed by industry professionals and educators. A continuation of assessment of personal strengths and goals to inform decisions will be a focus. Emphasis on design, organization and delivery methods to exhibit personal design achievements will assist students in the transition to the professional arena or graduate school. (Sp)
I D	4743	Institutional and Corporate Design	Prerequisite: I D 3733 and I D 3793, or permission of instructor. Design projects develop conceptual and critical thinking in design of institutional and corporate interiors. Lighting, interior systems, construction detailing and scheduling integrated into design projects. (F)
I D	4744	Interior Design IV: Institutional and Corporate Design	Prerequisite: 2783, 3734, or permission of instructor. Design projects develop conceptual and critical thinking in design of institutional and corporate interiors. Lighting, interior systems, construction detailing and scheduling integrated into design projects. Studio/Laboratory (F)
I D	4772	Interior Design Capstone (Pre-Design)	Prerequisite: I D 3733 or permission of instructor. This is the first phase of the Capstone studio. Project research is the focus of the course. Students work with interior design practitioners using real projects with FF&E from current markets. Emphasis on building codes and regulations, site considerations, and building feasibility as it pertains to the capstone project. Collaboration at all levels is encouraged. (F) [V]
I D	4774	Interior Design Capstone (Design Phase)	Prerequisite: I D 4743 and I D 4772, or permission of instructor. This is the second phase of the Capstone studio with projects that are specific design situations. Students continue working with interior design practitioners as they develop their projects. Emphasis on professional design experiences and a comprehensive overview of the major. Collaboration at all levels is encouraged. (Sp)
I D	4783	Topics in Computer Applications	Prerequisite: Permission of instructor. Emerging technology and its application to interior design problem-solving. (Irreg.)

I D	4940	Field Work	1 to 3 hours. Prerequisite: permission of instructor. Field study related to the student's major in a position approved by the instructor. One hour credit per 120 hours of field work or equivalent. Documentation and evaluation is required. (F, Sp, Su)
I D	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
I D	4970	General Departmental Seminar	1 to 6 hours. Prerequisite: junior standing or permission of instructor. May be repeated with change in content; maximum credit twelve hours. Special topics in interior design. (F, Sp, Su)
I D	4990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and director. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in scheduled courses. Study may include research and/or field projects. (F, Sp, Su)
I D	5123	Environment and Human Behavior	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Introduces students to environmental psychology for design and illustrates situations that a designer will likely encounter while pursuing a design career. Sharpens analytical and deductive skills. Students will analyze situations and draw upon past knowledge and particular circumstances to deduce an outcome. (F)
I D	5133	Research Methods	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Introduction to research methods with emphasis on the built environment. Topics will include interpretive-historical research, qualitative research, co-relational research, logical argumentation and case study/mixed methods. (Sp)
I D	5143	Design Theory Analysis and Evaluation	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Examines the ways in which designers and theorists express and conceptualize interiors. Readings from significant works detailing the history of interior design and its role in the future. Through discussion, research papers and independent analysis, students are expected to develop skills in analyzing and conceptualizing interior design principles. (F)
I D	5153	Practice and Leadership in a Global Design Market	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Exploring ethical dimensions of work within and related to the settings of interior design. Students will look in detail at the dilemmas that occur within professional practice. These are comprised of theories that encourage and inform thinking about moral issues and frameworks that guide ethical decision making. (Sp)
I D	5163	Design Computation Visualization and Analysis	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Focus is on the software used to introduce basic functions of (Building Information Modeling) BIM. Topics concentrate on techniques and methods for creating building parts, the production of construction documents, and renderings. Tools are also introduced for material and construction analysis as well as costing and scheduling data. (F)
I D	5213	Design Process Document Management	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Focus on the use and management of documents necessary for completion of a design project. Content specific topics include principles, procedures, requirements, and processes for drawings, specifications, schedules, and other contract documents that are used throughout the design process. (Sp)
I D	5223	Advanced Materials and Methods	Prerequisite: Graduate standing in College of Architecture or permission of instructor. The study and use of building materials specified during the design and construction process. Coursework will emphasize the analysis of current practices and applications involving material types and construction methods. (F)

I D	5243	Budget Management and Costing	Prerequisite: Graduate standing in College of Architecture or permission of instructor. An examination of the financial factors considered throughout the design process. Emphasis includes cost analysis and budgetary constraints that must be implemented for final design and construction. (F)
I D	5313	Sustainable Living and Design Principles Concepts	Prerequisite: Graduate standing in College of Architecture or permission of instructor. The theories and practices for designing interior environments that fulfill and balance environmental, economic and social needs without compromising the well-being of current and future generations. (Sp)
I D	5323	Sustainable Products & Building Design Principles	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Topics focus on the in-depth analysis of sustainable interior materials including their properties, performance, manufacturing process, output management and lifecycle. Coursework will also concentrate on techniques and processes for sustainable construction methods. (F)
I D	5343	Indoor Environmental Quality	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Course focuses on the examination of the factors that contribute to indoor environmental quality and the design practices and techniques for improving indoor environmental quality. Specific topics include daylight, views, acoustic control, lighting, thermal comfort and air quality. (F)
I D	5413	Indoor Controls and Technology	Prerequisite: Graduate standing in College of Architecture or permission of instructor. The technology of luminaries and control systems, including solid systems, dimming control and other building management systems, are introduced, analyzed, and applied to one design of space. Students will be taught how to design and coordinate lighting control for energy effectiveness, flexibility of space, and increase occupant satisfaction. (Sp)
I D	5423	Fixture Design	Prerequisite: graduate standing in College of Architecture or permission of instructor. Design theory, process and lighting technologies applied to a light fixture design. Emphasis will be on aesthetics, energy efficiency and sustainability. The student will design and build a full scale fixture. (F)
I D	5443	Lighting Design Computation and Visualization	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Focus is on computation and visualization techniques for representation, simulation, and quantification of lighting in the built environment. (F)
I D	5940	Field Work	Prerequisite: Graduate standing in College of Architecture or permission of instructor. Field study related to the student's interest in architectural lighting approved by graduate liaison. One credit hour per 120 hours of fieldwork or equivalent. Documentation and evaluation required. (F, Sp, Su)
I D	5950	Masters of Science in Interior Design Project	2 to 6 hours. Prerequisite: Permission of director/graduate coordinator. May be repeated with change of content; maximum credit six hours. Professional project of significant scale and complexity in the student's area of concentration. (F, Sp)
I D	5960	Directed Readings	1 to 4 hours. Prerequisite: graduate standing; permission of instructor, adviser and dean. May be repeated; maximum credit six hours. (F, Sp)
I D	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
I D	5980	Research for Master's Thesis	2 to 6 hours. Prerequisite: Permission of director/graduate coordinator. Variable enrollment, two to six hours; maximum credit applicable toward degree, 6 hours. (F, Sp)
I D	5990	Special Studies	1 to 6 hours. Prerequisite: permission of instructor, adviser and dean. The opportunity is provided for students with above-average grades to do individual library or laboratory work on special problems not included in present courses. (F, Sp)
I D	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

IAS	1203	Philosophy and Human Destiny, East and West	(Crosslisted with PHIL 1203) An inquiry into values bearing upon human destiny or fulfillment with special attention to values inspired by religion in both western and eastern traditions. (Irreg.) [IV-WC]
IAS	1223	Introduction to Asian Philosophy	(Crosslisted with PHIL 1223) Survey of the major figures and schools of philosophy in Asia. Includes study of Hinduism, Buddhism, Confucianism, and Daoism. (Irreg.) [IV-NW]
IAS	1303	Introduction to Latin American Studies	Examines the history and culture of Latin American societies from a multi-disciplinary standpoint. Surveys major current issues in Latin American politics and international relations. Sources include films and readings from the disciplines of history, literature, political science, journalism, and anthropology. (Sp) [IV-WC]
IAS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
IAS	2003	Understanding the Global Community	The world today is an interdependent global community that requires an awareness of international politics and economics. This course seeks to enhance our understanding of the global community because of the impact of international relations on our lives and the lives of others around the world. (F, Sp) [III-SS]
IAS	2103	Survey of Asian Civilizations and Cultures	Studies the three regions of Asia (India, east Asia and southeast Asia) with emphasis on philosophical, religious and cultural traditions, and patterns of social, economic and political change. Prepares students for further in-depth study of Asia and its greater regional influences. (Irreg.) [IV-NW]
IAS	2113	Perspectives on South Asian Society	Prerequisite: ENGL 1213 or concurrent enrollment. An introduction to South Asia, investigating the core theme of culture and society in South Asia using an interdisciplinary approach. Examines the challenge of cultural pluralism in South Asia by looking at how society is structured and identities are formed; explores social structures such as family, gender, caste and class, social change, and provides students with frameworks to better understand South Asian identities and worldviews. Other topics include popular culture in South Asia such as visual art, music, dance, film and literature. (Irreg.) [IV-NW]
IAS	2123	China Today	China has the largest population in the world, the largest standing army, and a GDP of over $7 trillion. The long-term economic development of every country depends on China, and China's rapid modernization is changing the face of global politics and culture. In this course, students will be exposed to the diversity and complexity of modern China. They will think creatively about the problems and opportunities facing China today; they will examine China from multidisciplinary perspectives; and they will learn to develop critical and analytical arguments. (F, Sp)
IAS	2413	Islam	Survey of Islamic history and theology in the Near East, North Africa, and Asia from the advent of the prophet to the modern period. (Irreg.) [IV-NW]
IAS	2603	Governments Around the World	(Crosslisted with P SC 2603) Prerequisite: Political Science 1113. Gateway course in political science and international and area studies. Provides an introduction to the varieties of politics and governmental systems around the world. Students will develop skills in comparative analysis to understand why countries have distinct types of government. (F) [IV-WC]
IAS	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
IAS	3000	Special Topics in International and Area Studies	Prerequisite: junior standing or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Special topics are courses of variable credit that examine international or global issues. (Irreg.)

IAS	3003	Topics in International and Area Studies	Prerequisite: junior standing. May be repeated with change of content; maximum credit 15 hours. A maximum of 12 hours may be applied to the major. An examination of several selected topics in international and area studies. (Irreg.)
IAS	3013	International Law	Prerequisite: junior standing or permission of instructor. Examines international law. Broad issues include the different sources of international law, the relationship between international law and states, individuals and other international actors, the content of international law as it pertains to different issues areas, and how these bodies of law generally affect international relations. (Irreg.) [IV-WC]
IAS	3023	Genocide	Prerequisite: junior standing or permission of instructor. Addresses the historical, legal, and political facets of the concept of genocide. Acquaints the student with the problem of large-scale killings in human history, the political developments that culminated in the genocides convention of 1948, the international-legal nuances of genocide, and recent instances of genocide. Special emphasis in this course is placed on the United States' response to genocide. (Irreg.) [IV-WC]
IAS	3033	International Human Rights	Prerequisite: junior standing or permission of instructor. Examines the increasingly complex body of substantive law and political practices related to the protection and promotion of human rights and fundamental freedoms in international law and politics. Explores major international and regional systems of enforcement, and the growing role of human rights in domestic politics and international relations. (Irreg.)
IAS	3043	Global Security	Prerequisite: junior standing or permission of instructor. Examines some of the major security challenges confronting the United States and the international community in the 21st century, and how these challenges differ from our expectations of conflict -- major, minor, inter-state, and intra-state -- in recent decades. (Irreg.) [IV-WC]
IAS	3053	Globalization: The Politics of Global Governance	Prerequisite: junior standing or permission of instructor. Introduces students to the actors, institutions and processes by which international cooperation and coordination are created and maintained. The first part introduces students to key concepts, puts global governance into historical context, and provides a brief introduction to International Relations theories that will serve as analytical foundations. The second part of the course explores several major themes in the study of global governance: power, authority and legitimacy; institutions; intentionality and design; centralization versus subsidiarity; and the appropriate roles for both public and private actors. The third part of the course applies theoretical and thematic knowledge to specific areas of global governance including humanitarian intervention, Internet governance, the global economy, the environment, public health and poverty/inequality. (Irreg.) [IV-WC]
IAS	3063	Politics of Developing Countries	Prerequisite; junior standing or permission of instructor. Analyzes political development, political institutions and political culture in low and middle income countries, with a particular emphasis on democratization and regime change. (Irreg.) [IV-WC]
IAS	3073	Global Economic Relations	Prerequisite; junior standing or permission of instructor and Economics 1113 or Economics 1123. Examines relations among states from the perspective of economic competition and cooperation. Explores political conflicts that have risen over trade, capital flows, and other international economic exchanges. The primary focus is on the role of states and international organizations in shaping the global economy. (Irreg.) [III-SS]

IAS	3083	International Activism	Prerequisite: junior standing or permission of instructor. Examines the role that nongovernmental actors play in international relations as they work independently and in concert to advocate for various transnational causes. Specifically, explores the concept of transnational advocacy and the ways in which individual and group activists affect change around the world. (Irreg.) [IV-WC]
IAS	3103	Activism, Art & Leadership	Prerequisite: Departmental permission. This course is taught on-site in Arezzo, Italy, and is for President's Leadership Class students only. This course examines the leadership role that governmental actors and individual activists play in international relations and various other sectors as they work independently and collectively to advocate for certain local, regional, national and transnational causes. Specifically, the class explores the concept of international advocacy and the ways in which individual and group activists frame and promote issues of concern in an effort to affect change around the world. The goal of this course is to raise our awareness about and enhance our understanding of the multitude of actors - from individual political leaders, to nongovernmental organizations, to artists - that work to address issues of concern. (Irreg).
IAS	3113	Women in East Asia	Prerequisite: junior standing or permission of instructor. The history of women and gender in China, Japan, Korea from 1800 to the present. Will also examine how the philosophies of Buddhism and Confucianism help determine gender and social relationships. (Sp)
IAS	3143	Chinese Politics	Prerequisite: junior standing or permission of instructor. Provides a comprehensive introduction to Chinese politics. Examines China's revolutionary heritage, state-market-society relations in China today, and explores China's new nationalism and prospects for democratization. (Irreg.) [IV-NW]
IAS	3153	Chinese Foreign Policy	Prerequisite: junior standing or permission of instructor. Provides a comprehensive introduction to Chinese foreign policy. Examines several key issues and concepts, including China's external relations prior to "Liberation" in 1949, international relations theory, the history of the PRC's foreign relations, and vital foreign policy issues confronting China in the 21st century. (Irreg.)
IAS	3163	International Relations of East Asia	Prerequisite: junior standing or permission of instructor. The primary objective is to provide students with critical perspectives of various issues related to international relations of East Asia. Geographically, explores international relations of three East Asian countries: China, Japan, and Korea. Topics include national security, foreign policy, political economy, democracy, human rights and Asian regionalism. (Irreg.) [IV-NW]
IAS	3173	Rural Life in Modern China	Prerequisite: junior standing or permission of instructor. Examines changes over the 20th century in economics, politics, work patterns, social structure, culture and gender norms, and family life in China's hinterland. It also explores key rural issues causing instability in China today including corruption, pollution, health care, education, family and gender dynamics, rural-urban relations, and internal migration. (Irreg.)
IAS	3183	Political Economy of Japan	Prerequisite: junior standing or permission of instructor. Surveys Japan's post-World War II market economy and political system. Explores how Japan achieved rapid economic growth and industrialization during the 1950s and 1960s and also studies how the Liberal Democratic Party was able to maintain political power during the last four decades of the 20th century. (Irreg.)

IAS	3193	Environment and Disease Crises in China	Prerequisite: junior standing or permission of instructor. Explores the intertwined relationship of environment, agriculture, economic development, pollution, disease, patriotism, domestic security, and international conflict in China and how it deals with environmental issues and disease crises -- two key problems within the country. Of particular concern are China's devastating water shortage that threatens to leave much of northern China without water in the next twenty years, major epidemics such as SARS and AIDS, and China's aging, rural population lacking health care. (Irreg.)
IAS	3203	The Middle East Since World War I	Prerequisite: Junior standing or permission of instructor. This course attempts to explain the roots of instability in the Middle East by following the rapid change over the last 100 years that has transformed sprawling Islamic empires into nation states. This course will examine the major religions and ethnic groups of the region, as well as explore how the largest ethnic groups have decided to define their national identities: Arabs, Jews, Turks, Iranians and Kurds. Other topics will include the Arab-Israeli conflict and possibilities of peace, and the Gulf regions where Iran, Saudi Arabia and Iraq have fought for supremacy and control of oil and the Gulf. (Irreg).
IAS	3213	European Union, Nato, and European Security	Prerequisite: junior standing or permission of instructor. This course explores changes in security and foreign policy issues in eastern Europe. Specifically, it examines the enlargement of the European Union, expansion of NATO and the development of the European security and defense policy. (Irreg.)
IAS	3223	Modern Iran: Islam, Politics, and the State, 1500 to the Present	Prerequisite: junior standing or permission of instructor. Surveys the history of Iran from the 16th century to the present. Topics include the rise of the Safavid dynasty in the sixteenth century, the establishment of Shi'ism, reform in the nineteenth century, great power politics, Western cultural and intellectual influence, nationalism, the Islamic revolution of 1979, and Iran since the revolution. (Irreg.) [IV-NW]
IAS	3233	Nationalism and the Middle East	Prerequisite: junior standing or permission of instructor. Survey of the history of the Middle East from 1800 to the present with an emphasis on the emergence of the nationalism as a new form of political identity in the region. Analyzes the origins of this form of politics in the region as a result of transformations rooted in the nineteenth century, its rise to dominance as a form of politics and ideology during the twentieth century, as well as countervailing trends that today challenge its continued dominance. (Irreg.)
IAS	3243	Contemporary Europe	Prerequisite: junior standing or permission of instructor. Assesses how expansion of the European Union has changed the way European governments handle public policy challenges, and examines how these changes have altered European cultures, economies, policies and societies. Focuses on themes such as the multi-cultural challenges of European immigration, how migration among European countries fosters a common European identity, how economic integration has created a common marketplace of goods, services and ideas, and what has happened to the Transatlantic relationships between Europe and the US. (Irreg.)
IAS	3253	Africa in the World Economy	Prerequisite: Junior standing or permission of instructor. This course focuses on economic policies and outcomes in African countries with a special attention to how they affect the rest of the world. Discussions include Africa's contribution to the global economy, current economic opportunities and challenges as well as socio-economic situations in African countries and what the perspectives are for the future. (Irreg.)

IAS	3263	The Economic Lives of the Poor and Rural Development	Prerequisite: Junior standing or permission of instructor. The goal of this course is to understand the lives of the poor around the world and explore some of the potential solutions to addressing global poverty and rural development. Topics of discussion include the constraints that the poor face in their daily decision making process, how the poor organize their socio-economic lives, and why the poor are more likely to have more children. Different approaches to addressing poverty around the world will be examined. (Irreg.)
IAS	3273	The European Union	Prerequisite: Junior standing or permission of instructor. Is EU an economic superpower? Can the EU reach the objective of rivaling the U.S. diplomatically shared by many political leaders in Europe? This course will help students understand contemporary debates about the nature of the European Union, its place in the world, and its current economic and political challenges. Topics of discussion includes the historical development of the EU, the institutions of the EU and how they function, the emergence of the single European market and the project of economic and monetary union that culminated in the introduction of the euro. The course also examines the global engagement of the EU, including EU-US relations; the role of the EU in the global economy; EU relations with China; the global diplomatic role of the EU; the relationships between the EU and its neighboring countries in the Balkans and Eastern Europe; and the EU as a provider of development and humanitarian aid. (Irreg.)
IAS	3283	Culture, Power, and Global Environment	Prerequisite: Junior standing or permission of instructor. Under the broad theme of human-environment interactions, this course has two main foci. First, it surveys some of the diverse ways in which human populations adapt to, understand, and transform their environments. Second, it explores how social and cultural differences within and among human populations complicate efforts to address the myriad environmental problems we face - from neighborhoods struggling with contaminated soil, to ecosystem restoration and wildlife management on a regional scale, to transnational climate-change mitigation efforts. Though readings and guiding principles will come primarily from the fields of environmental anthropology and political ecology, conversations and assignments will emphasize policy applications and will be open to perspectives from other disciplines. (Irreg.) [IV-NW]
IAS	3293	Women, Gender, and Family in Contemporary Europe	Prerequisite: Junior standing or permission of instructor. Explores the ways in which some of the major events of the twentieth century have shaped the lives of women and families in Europe, and the ways in which both individual women and women's movements have shaped contemporary European history and policy today. Topics of discussion also include contemporary issues, such as family policy; reproductive rights; labor policy; gender and immigration; women's political representation, and sexual equality within the EU. (Irreg.)
IAS	3303	Mexican Economic Development	Prerequisite: Junior standing or permission of instructor. Is Mexico a failing narco-state or a fast growing, tiger economy? Or is the reality somewhere in between? After some tough times in the 1980s and 90s, Mexico has emerged as one of the economic leaders of the region. Where does it stand among other emerging markets and what are its prospects for the future? In this course we will study the modern Mexican economy, the unique elements of development in a one-party, authoritarian regime, the challenges the country faced in getting to this point, and some of the challenges that remain. (Irreg.)
IAS	3313	Latin American International Relations	Prerequisite: junior standing or permission of instructor. Examines international relations of Latin America in an interdisciplinary fashion. International relations is broadly defined in this course, and includes economic and cultural aspects as well. (Irreg.) [IV-WC]

IAS	3323	The Political Economy of Development	Prerequisite: junior standing or permission of instructor. Examines the relationship between politics and economics in less developed countries. Reviews the history of economic theories of development and also examines the economic effects of inward looking trade policies and political stability in Latin America and India, as well as the political economy of recent reforms in both areas. (Irreg.) [IV-NWC]
IAS	3333	North American Free Trade Agreement	Prerequisite: junior standing or permission of instructor. Examines the North American Free Trade Agreement (NAFTA). After first exploring the nature of international law generally and the economic basis of free trade, it also reviews the history and legal framework of NAFTA. Other topics include NAFTA's main obligations, structure and its coverage with respect to trade in goods, services, investment and intellectual property, dispute settlement mechanisms and the impact of NAFTA on selected industries. (Irreg.)
IAS	3343	Chinese Philosophy	(Crosslisted with PHIL 3343) Prerequisite: six hours of philosophy or junior standing. Survey and analysis of the major texts and schools of philosophy in China, from the ancient world to the contemporary era. (Irreg.) [IV-NW]
IAS	3353	Modern Brazil	Prerequisite: junior standing or permission of instructor. Introduction to contemporary Brazilian history and culture. A broad overview of Brazil's colonial history and emergence as a modern nation, and an exploration of the country's incredible cultural and regional diversity, as well as some of the challenges it currently faces. Course material includes exploration of indigenous realities, the rural landless movement, poverty and crime, gender, family, race, contemporary religion, and popular culture-- samba, carnival, hip-hop and Brazilian funk music. (Irreg.)
IAS	3363	Comparative Philosophy	(Crosslisted with PHIL 3363) Prerequisite: six hours of philosophy or junior standing. A study of topics of significant philosophical interest that includes study and analysis of both western and non-western philosophical sources. (Irreg.) [IV-WC]
IAS	3373	Latin American Narco-Regimes	Prerequisite: junior standing or permission of instructor. Focus is on the ongoing armed conflicts between narcotraffickers, cartels, and rebels and the governments of Brazil, Mexico, and Colombia. Through case studies in historical and cultural perspective, students will develop an understanding of the organization and activities of narco-regimes in the region, the conditions that gave rise to their florescence, and the nature of state response to the threats in security and sovereignty they pose. (Irreg.)
IAS	3403	US-Iranian Relations: History, Politics, and the Road to Confrontation	Prerequisite: Junior standing or permission of instructor. Examines the history of US-Iranian relations from the earliest contact in the nineteenth century to the present. Issues to be examined include: the history American missionaries in Iran and their contribution to the history of Iranian education, the literary discovery of Persian literature by Americans, political and economic relations in the early twentieth century, the Cold War and the overthrow of Mohammad Mossadeq, the U.S. relationship with the Shah, the Islamic revolution and the hostage crisis of 1979-1981, and the recent political history of US relations with the Islamic Republic. Emphasis will be placed on the long-term evolution of this relationship from friendship and cooperation to political conflict and diplomatic impasse. (Irreg.)
IAS	3413	Iran & Islam to 1800: History, Culture, and Society in the Pre-Modern Period	Prerequisite: Junior standing or permission of instructor. Surveys the role of Iran within Middle Eastern history, culture, and society from antiquity to the eve of the modern period. Topics include: Iranian empires in the ancient period, the history and religious thought of Zoroastrianism, the advent of Islam and the Arab conquest of Iran; the contribution of Iranian culture to the formation of Islamic thought; the emergence of a Persian literary tradition within Islamic culture; the emergence of the Turko-Persian Safavid state in the sixteenth century and the formation of a Shi'ite-Iranian culture; and the beginning of European influence at the end of the 18th century. (Irreg).

IAS	3423	Politics and Society in Iraq	Prerequisite: junior standing or permission of instructor. This course explains the historical, political, social, and economic background of current events in Iraq. The course borrows from political science, history, anthropology, and economics in its analysis. Students will be prepared to better comprehend the complexity of politics and society in this important Middle Eastern Country. (Irreg.)
IAS	3433	International Relations in the Middle East	Prerequisite: junior standing or permission of instructor. This course examines the major wars of the region beginning with the First World War and ending with the US invasion of Iraq. The course covers the Arab-Israeli conflict, the cold war, and the contest for control of the Persian gulf and oil markets. It also investigates the role of the great powers as well as the major Middle Eastern states in shaping international relations in the region over the past century. (Irreg.) [IV-NW]
IAS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
IAS	3443	Political Islam	Prerequisite: junior standing or permission of instructor. Examines the Muslim brotherhood since its founding in 1928, its radicalization under Sayyid Qutb, and the many groups that look to it for inspiration. Covers Al-Qaida, Hizbullah, and Hamas, the tensions between Shiites and Sunnis, and how some Middle Eastern countries have dealt with the growth of radical Islamic groups. (Irreg.)
IAS	3453	The World of the Arabian Nights	(Crosslisted with MLLL 3453) Prerequisite: junior standing. Explores the most famous literary product of the Arabo-Islamic civilization. Examines the work's structural narrative techniques, characters, settings and themes as well as the various aspects of its cultural and social milieu. In addition, the course examines the Western perception of the Orient from the 18th century to today, and the reception of the work in the Medieval period and in the present Arab world. (Irreg.)[IV-NWC]
IAS	3463	Arab Culture and Society through Modern Fiction (Crosslisted with MLLL 3463)	Prerequisite: junior standing. Introduces a broad range of themes and issues of modern Arabic culture and society, such as religion, family, gender, identity, emigration, colonialism, resistance, nationalism, freedom of expression, corruption, and war. (Irreg.)[IV-NWC]
IAS	3473	The Arab-Israeli Conflict	Prerequisite: junior standing or permission of instructor. A survey of the history of the conflict around Eretz Israel/Palestine, with the aim of providing a better understanding of its roots and recent developments. The land which for Jews in ancestral Eretz Israel and for the Arabs is Palestine has been the center of one of the modern world's longest and most intricate disputes. The course also looks at both sides of the conflict at various moments throughout its history and will present two very different historical narratives: the Israeli/Jewish and the Palestinian/Arab. (Irreg.)
IAS	3483	Shi'a Islam: History, Memory and Protest in the Middle East	Prerequisite: junior standing or permission of instructor. Examines the history, memory, and protest movements in the Middle East's Shi'i Crescent, stretching from Iran through Iraq and the Persian Gulf to Lebanon. Addresses the historical development of Islam's Shi'i sect and the emergence of Shi'i communities in Iraq, Iran, and Lebanon; the process of cultural change in the Shi'i world and the emergence of revolutionary movements in each of these countries, as well as the contemporary challenge of building national identity and democracy in each country. (Irreg.) [IV-NW]

IAS	3493	Iran Since 1979: Politics and Society in the Islamic Republic	Prerequisite: junior standing or permission of instructor. An examination of Iranian politics and society since the 1979 revolution. An examination of the revolutionary upheaval of 1978-79, the ideological character of the Islamic revolution, the eight years of war with Iraq, economic and social changes, recent cultural, intellectual, and artistic developments, the Green Movement and the disputed presidential election of 2009, and contemporary prospects for Iranian democracy. Not intended as an introduction to Iranian or Middle Eastern history or politics; some previous Middle Eastern Studies coursework is recommended. (Irreg.)
IAS	3503	The United States and the Middle East: 1945-Present	Prerequisite: junior standing or permission of instructor. This course is an introduction to the historical and contemporary relationship between the United States and the Middle East from the nineteenth century until the present, with a concentration on the period since 1945. The course will focus on the political and economic aspects of US-Middle East relations but will also consider the cultural and social dimensions of this interaction. At the end of the course students should have a basic historical knowledge of some of the major events in the Middle East over the last sixty years and how they have impacted US foreign policy. Topics include the domestic politics of the Middle East; wars, social movements, and revolution in the Middle East; Oil and US foreign policy; the US relationship with Iran from the 1950s to the present; Afghanistan (1979-present); Iraq (1989-present); reasons behind the 9/11 attack; definitions of terrorism; terrorist networks; and US national security. (Irreg.)
IAS	3513	Twentieth Century India	Prerequisite: junior standing or permission of instructor. How India moved from being a part of the British Empire to an independent country, a country most observers consider to be vital to the next century. How India defined itself as a nation and how its citizens defined their role in India, specifically subjects like nationalism and colonialism, gender and sexuality, caste and class, and religious conflicts to understand India's complex imagination of itself. (Irreg.)[IV-NWC]
IAS	3523	Women and Gender in South Asia	Prerequisite: junior standing or permission of instructor. Considers the way women and gender have been thought, from the 19th century articulation of "The Women's Question" and Women's Reform to the present day rethinking of state based rights strategies and normative gender constructions in the Indian Subcontinent. Scholarly articles, primary sources, fiction, and film interrogate questions about women's place in society, women and the state, gendering work, and women's lives in South Asia. (Irreg.)
IAS	3533	Communication in Contemporary Chinese Contexts	Prerequisite: COMM 1113, or COMM 2003, or junior standing, or permission of instructor. Explores what and how Chinese people, or people in Chinese contexts communicate. Content areas include interpersonal, family, business, and religious issues. (Irreg.)
IAS	3543	Colonialism in the Modern World	Prerequisite: junior standing or permission of instructor. Explores the ways that colonial domination affected colonized countries during colonial rule, as well as its lingering effects. Focus is on the mechanisms of colonial knowledge, domination, rationalizations, and effects; reactions to colonialism by colonial subjects during the fight for independence and after; as well as the ways that the world has attempted to come to terms with a colonial past. (Irreg.)
IAS	3553	Violence and Culture in the Developing World	Prerequisite: junior standing or permission of instructor. Examines the cultural practice of violence in the 'developing world' from an anthropological perspective. Begins with a discussion of warfare and aggression on the part of colonial powers and the modern state, and subsequently covers the 'everyday violence' of inequality and poverty, as well as individual and collective acts of physical violence, and the ways in which violence is 'witnessed' and memorialized in different cultural contexts. (Irreg.) [III-SS]

IAS	3563	International Politics of South Asia	Prerequisite: junior standing or permission of instructor. Examines the historical and geopolitical context for understanding South Asia's international relations followed by a focus on the international setting of the Cold War and its aftermath. Also, explores contemporary issues impacting international politics in South Asia such as nuclear proliferation, religious extremism, the politics of energy and natural resources, globalization and economic reform. (Irreg.)[IV-NW]
IAS	3573	Religious Conflict in Asia	Prerequisite: junior standing or permission of instructor. Examines some of the major religions in Asia including Hinduism, Buddhism, Islam, Confucianism, Daoism, and folk religions. Also explores how these religions disseminated and transformed as they traveled across Asia and how they acted as a force for political change. The course concludes with the examination of a number of current case studies of ethno-religious discord including conflicts in China, Burma, India, and Bangladesh. While the focus is on religion, also discussed is how religion is often exploited as a marker for disputes stemming from ethnic, economic, political, strategic, and nationalist causes. (Irreg.) [IV-NW]
IAS	3583	Managing US-China Relations	Prerequisite: Junior standing or permission of instructor. Provides a comprehensive and systematic assessment of a critical but complex, challenging bilateral relationship between a rising power aiming to return to its historical prestige and a currently dominant power searching to augment its over-stretched power resources. It begins with an in-depth examination of the historical context of how the two countries have engaged with each other at the global, regional, and bilateral levels primarily since the founding of the People's Republic of China in 1949. (Irreg.)
IAS	3593	Introduction to Southeast Asia	Prerequisite: Junior standing or permission of instructor. This course will offer an introductory survey of Southeast Asia. Students will develop a foundational understanding of the region's peoples, their histories, and some of the issues they face today. Students will also reflect on how the region has interacted with the West economically, politically, and culturally. The first unit will offer a brief historical survey, with discussions of precolonial societies, colonial empires, World War II, decolonization, and the Vietnam War. Attention will then turn to a series of contemporary issues, from the experiences of migrants from Southeast Asia, to the challenges of regional integration and democratization, to environmental politics, to cinema. (Irreg).
IAS	3613	International Politics, Literature & Film	Prerequisite: junior standing or permission of instructor. Examines two forms of international political commentary, literature and film, in an effort to heighten awareness of specific international issues. Also explores how these issues are conveyed and presented in an entertaining medium. (Irreg.)
IAS	3623	Comparative National Security	Prerequisite: 2003 or Political Science 2503 or junior standing. Explores the national security concerns and perspectives for the major countries and regions of the world. Examines the connection between alternative constructions of national security and the security politics of nation-states. (Irreg.)
IAS	3633	Global Economic Crisis	Prerequisite: junior standing or permission of instructor. Examines the ways in which domestic political and economic systems adjust to global or regional economic crises. Topics of discussion include the Great Depression, the establishment and collapse of the postwar global economic order, two oil crises, the debt crisis in Latin American, and the East Asian financial crisis. Also includes debates on globalization, welfare states, and the ongoing global financial crisis. (Irreg.)

IAS	3643	Illicit Trafficking	Prerequisite: junior standing or permission of instructor. Focuses on some of today's most troubling security issues - the persistent and growing problems associated with the trafficking and smuggling of drugs, money, humans, guns, and commodities of all sorts. Closely examines the issue of trafficking in a global context, providing case studies of trafficking in women, illegal workers, drugs, weapons, and even butterflies. Includes case studies and examples of illicit trafficking and the local, national and global consequences. (Irreg.)
IAS	3653	Energy, Climate, and Security	Prerequisite: Junior standing or permission of instructor. Examines how states pursue and protect energy security. It provides an analytical framework of energy security and detailed case studies of the constant quest for energy security by states around the world. Climate and energy security have increasingly become two prominent issues of global governance in the 21st century assuming the characteristics of global public goods and requiring global collective action. The course examines challenges and prospects of global energy governance. (Irreg.)
IAS	3663	Comparative Politics of the Middle East	Prerequisite: Junior standing or permission of instructor. Introduction to comparative politics approaches to Middle East politics. Students will become familiar with the major concepts and theories involved in the study of Middle Eastern politics. Topics and themes to be discussed in class include: states and state formation in the Middle East; the persistence and dynamics of authoritarianism in the region; political liberalization and democratization; civil society; nationalism and identity; oil and theories of the rentier state; Islamist politics, and the Arabic Uprisings or "revolutions". (Irreg.)
IAS	3673	Egyptian Politics & Society	Prerequisite: Junior standing or permission of instructor. Examines Egyptian politics and society from the birth of the first Egyptian republic in 1952, through the January 2011 uprising and subsequent political developments. It attempts to understand the dynamics of different Egyptian political regimes. The course examines the major actors and major issues in Egyptian politics, including the character and identity of the nation; the relationship between religion and state; economic orientation and economic policies; external relations and foreign affairs, and questions about authoritarianism and struggles for democracy. (Irreg.)
IAS	3810	Journey to Africa	1 to 6 hours. Prerequisite: sophomore standing and completion of ENGL 1213, or permission of instructor. May be repeated; maximum credit 12 hours. Journey to Africa is a summer study abroad program designed for OU students. Students will travel with an OU faculty member and other OU students throughout an African country or region, and learn about various cultural, historical, political, social, economic or linguistic issues relevant for an understanding of one or more African countries. Academic instruction for this program takes place in English. (Su)
IAS	3910	International Studies Internship	Prerequisite: 45 completed hours and a minimum of a 2.75 overall GPA. May be repeated; Maximum credit six hours. This course allows students to receive academic credit for internship work with an internationally oriented public or private organization. The award of academic credit for the internship requires an element of reflection, research, and writing about the work undertaken. This academic component can strongly enhance what is gained from the internship opportunity and improve a student's ability to articulate knowledgeably the requirements, benefits and lessons of work in the public or non-profit sector. (F, Sp, Su)

IAS	3920	Journey to Italy	1 to 6 hours. Prerequisite: sophomore standing and completion of ENGL 1213, or permission of instructor. May be repeated; maximum credit 12 hours. Journey to Italy is a program designed for OU students in collaboration with the University of Siena, an OU partner university in Arezzo. Students will travel with an OU faculty member and other OU students throughout Italy, and learn about various cultural, historical, political, social, economic or linguistic issues relevant for an understanding of contemporary Italy. Academic instruction for this program takes place in English. (Su)
IAS	3930	Journey to China	1 to 6 hours. Prerequisite: sophomore standing and completion of ENGL 1213, or permission of instructor. May be repeated; maximum credit 12 hours. Journey to China is a summer study abroad program designed for OU students, who will be hosted by OU partner universities in cities across China. Students will travel with an OU faculty member and other OU students throughout China, and learn about various cultural, historical, political, social, economic or linguistic issues relevant for an understanding of contemporary China. Academic instruction for this program takes place in English. (Su)
IAS	3940	Journey to Latin America	1 to 6 hours. Prerequisite: sophomore standing and completion of ENGL 1213, or permission of instructor. May be repeated; maximum credit 12 hours. Journey to Latin America is a summer study abroad program designed for OU students. Students will travel with an OU faculty member and other OU students throughout a Latin American country or region, and learn about various cultural, historical, political, social, economic or linguistic issues relevant for an understanding of one or more Latin American countries. Academic instruction for this program takes place in English. (Su)
IAS	3950	Journey to Turkey	1 to 6 hours: Prerequisite: sophomore standing and completion of ENGL 1213, or permission of instructor. May be repeated; maximum credit 12 hours. Journey to Turkey is a summer program designed exclusively for OU students. Participants travel with an OU faculty member for up to one month throughout the country of Turkey. Experimental activities, cultural events and lectures from host nationals add to expert OU faculty lectures to give Journey to Turkey participants a broad introduction to the historical context and contemporary issues facing Turkey and the Middle Eastern region today. All accepted applicants will receive a travel fellowship to offset the cost of international airfare. Academic instruction for this program takes place in English. (Irreg.)
IAS	3960	Honors Reading	1 to 6 hours. Prerequisite: admission to Honors Program, permission of instructor and junior standing. May be repeated once with change of content. Independent study in international and area studies for students enrolled in the Honors Program. Will consist of topics not usually presented in regular courses. (F, Sp, Su)
IAS	3980	Honors Research	1 to 6 hours. Prerequisite: admission to Honors Program, permission of instructor and junior standing . May be repeated once with change of content. Provide international and area studies students an opportunity to work on an international research project. (F, Sp, Su)
IAS	3990	Independent Study	1 to 6 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
IAS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
IAS	4013	Senior Capstone Seminar in International and Area Studies	Prerequisite: international and area studies major, senior standing, and permission of the department. May be repeated with change of content; maximum credit 6 hours. Devoted to analysis, research, writing, and synthesizing on one of several selected interdisciplinary topics in international and area studies. (F, Sp) [V]

IAS	4343	Early Chinese Philosophy	Prerequisite: Permission of the instructor. Survey of pre-Qin Chinese philosophy, including the major texts and figures of Confucianism, Daoism, and other notable schools. No student may earn credit for both 4343 and 5343. (Irreg.)
IAS	4513	Intellectuals & Artists in Modern Latin America	(Crosslisted with HIST 4513) Prerequisites: History 2613 or 2623 or junior standing or permission of instructor. Examines both the history of ideas in modern Latin America as well as the history of intellectuals as a social group. We will consider intellectuals in the process of independence and the consolidation of nation states, the role of "race" in Latin American thought, and the relationship between European and Latin American thought. (Irreg.) [IV-WC]
IAS	4523	Latin American Left	(Crosslisted with HIST 4523) Prerequisite: History 2613 or 2623 or junior standing or permission of instructor. This course examines the shifting political tactics and theoretical positions of a variety of leftist movements in Latin America since the early 20th century. We will exam leftist thought on the nature of Latin American development, approaches to commercial culture, and labor organizing, among other topics. (Irreg.) [IV-WC]
IAS	4533	Populism in 20th-Century South America	(Crosslisted with HIST 4533) Prerequisites: History 2613 or 2623 or junior standing or permission of instructor. This course will examine the phenomenon of Latin American "populism," a set of political movements that held a central place in 20th century Latin American history. We will focus on three cases as they relate to the broader economic and social processes in the region as a whole: Brazil; Argentina; and Chile. (Irreg.) [IV-WC]
IAS	4543	Latin America in the Age of the Cuban Revolution	(Crosslisted with HIST 4543) Prerequisites: History 2613 or 2623 or junior standing or permission of instructor. This course is an in-depth examination of Latin American history of the period 1955-1973. We cover changes in politics, economics, literature, film, music, and theology in what many Latin Americans called the "revolutionary process" of the period. (Irreg.) [IV-WC]
IAS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
IAS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
IAS	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
IAS	5003	U.S. Foreign Relations	Prerequisite: graduate standing or permission of instructor. Examines current events and the historical and economic aspects of American foreign policy. Gives students an understanding of the main theories, actors, and debates in the field. (Irreg.)
IAS	5013	International Law	Prerequisite: graduate standing or permission of instructor. Examines different sources of international law; the relationship between international law and states, individuals and other international actors; the content of international law as it pertains to different issue areas (e.g. the use of force, human rights, the environment); and how these bodies of law affect international relations more generally. (Irreg.)

IAS	5033	International Human Rights	Prerequisite: graduate standing or permission of instructor. Provides a historical and theoretical overview of the idea of human rights and also examines how human rights operate in both international law and international relations. Topics under examination include the historical and philosophical foundations of human rights, their codification in contemporary international law, and the interaction between human rights considerations and state (primarily U.S.) foreign policy in the post-Cold War era. (Irreg.)
IAS	5043	Global Security	Prerequisite: graduate standing or permission of instructor. Examines some of the major theoretical and practical approaches to the study of global security, and focuses on the causes of war, the impact of various actors, technologies, resources and other transnational problems on violent conflict, and the different approaches to and dimensions of security solutions. (Irreg.)
IAS	5053	Global History	Prerequisite: graduate standing or permission of instructor. Defines global history not only as the history of globalization or the history of state-to-state relations, but also more broadly as the evolution of events, forces, ideas, and processes that were common to several areas of the globe and that led to the shaping of the modern world. Considers a wide range of ways of being global through the centuries. (Irreg.)
IAS	5113	Field Seminar in International Studies	Prerequisite: graduate standing or permission of instructor. Examines practical issues of contemporary global affairs. Course topics include the practice of dipomacy as a profession, the role of transnational institutions such as the United Nations, the international role of NGO's as well as career opportunities in international affairs. (Irreg.)
IAS	5133	Chinese Politics	Prerequisite: graduate standing or permission of instructor. Surveys major themes and approaches to the study of Chinese politics. Through a close reading and analysis of important works in the field, participants explore multiple methods and sources of information used to answer recurring questions about politics in China. (Irreg.)
IAS	5143	Political Economy of China	Prerequisite: graduate standing or permission of instructor. Explores the debates over the political economy of China, and examines theories of institutional change and economic performance, state capacity and political development, rent-seeking and corruption, class formation and collective action. (Irreg.)
IAS	5153	Chinese Foreign Policy	Prerequisite: graduate standing or permission of instructor. Examines key issues and concepts, introduces a number of key international relations theories and conceptual lenses relevant to the study of China, and explores Chinese foreign policy in practice. (Irreg.)
IAS	5213	Politics of the European Union	Prerequisite: graduate standing or permission of instructor. Examines the historical process of European integration. Topics include the structure of the EU institution, the process of law making in the EU, the international role of the EU, the trans-Atlantic relationship. (F)
IAS	5223	European Security	Prerequisite: graduate standing or permission of instructor. Focuses on the subject of European security by highlighting the European institutions of the EU and NATO and their efforts to develop a European security and defense identity. Also focuses on the larger trans-Atlantic community and how a growing Europe will affect relations with the United States. (Irreg.)
IAS	5273	Survey of International Economics	Prerequisite: graduate standing. Examines topics in international trade and finance including an evaluation of economic policies and international institutions. Public policy topics such as the impact of tariffs, quotas and exchange rates will be discussed. (Irreg.)
IAS	5323	The Political Economy of Development	Prerequisite: graduate standing or permission of instructor. Studies the relationship between politics and economics in less developed countries. Reviews the history of economic theories of development and examines the economic effects of different trade strategies in Latin America, India, and East Asia. (Irreg.)

IAS	5343	Early Chinese Philosophy	Prerequisite: Permission of the instructor. Survey of pre-Qin Chinese philosophy, including the major texts and figures of Confucianism, Daoism, and other notable schools. No student may earn credit for both 4343 and 5343. (Irreg.)
IAS	5353	Latin American International Relations	Prerequisite: graduate standing or permission of instructor. Surveys the hemisphere's international relations with emphasis on U.S.-Latin American relations. Focuses on post-Cold War issues in hemispheric affairs, and gives students a skill set appropriate for internationally related careers. (Irreg.)
IAS	5433	International Relations in the Middle East	Prerequisite: graduate standing or permission of instructor. Surveys how the modern states of the region were constructed by the European powers and local authorities following the destruction of the Ottoman and Persian empires in WWI. Concentrates on two regional conflicts, the Arab-Israeli conflict and the Gulf conflict, and discusses how policy could have been improved and what the U.S. should be doing in the Middle East today. (Irreg.)
IAS	5453	Politics and Policy of the Middle East	Prerequisite: graduate standing or permission of instructor. Focuses on the historical issues of state formation and emergence of the modern Middle East; the contemporary question or persistent authoritarianism from social, economic, and political perspectives; and aspects of the U.S. involvement in the Middle East. (Irreg.)
IAS	5503	Theory and Practice of International Politics	Prerequisite; graduate standing or permission of instructor. Focuses on political relations among states, the role and function of non-state actors, the nature of the international system, factors that affect state behavior, analytical and practical tools relevant for foreign policy decision-making, and various policy relevant issues in the international arena. (Irreg.)
IAS	5523	Global Political Economy	Prerequisite: graduate standing or permission of instructor. Examines economic relations, cooperation, and competition among states and non-state actors. Students in this course can gain a familiarity with the principles of international trade and finance, understand the functions and power of international economic institutions and how these have evolved and changed, and understand different theories that have been offered to explain international political economy. (Irreg.)
IAS	5623	Inequality Around the World	Prerequisite: Graduate standing or permission of instructor. This course will derive coherence from a focus on economic inequality, specifically on the social and political consequences of economic inequality. Material will address such questions as: what is the scope of economic inequality in modern societies? Why does inequality matter? Do societies necessarily become more unequal as they grow more prosperous? Might inequality at some level harm economic growth? (Irreg)
IAS	5693	Political Economy of China	Prerequisite: graduate standing or permission of instructor. Explores debates over the political economy of China. Examines theories of institutional change and economic performance, state capacity and political development, rent-seeking and corruption, and class formation and collective action. How do China's reforms over the past three decades confirm or challenge the assumptions and propositions central to these established social science theories? How have recent studies of political economy in China advanced our understanding of these theories or suggested new approaches to the study of comparative political economy? These and other core questions will be covered including topics such as popular protest, global capitalism, corruption, and the nature of one-party rule in China. (Irreg.)

IAS	5790	Graduate Studies in International Relations	Prerequisite: Graduate standing or permission of instructor. Designed to provide students with a foundation for success in coursework for the MA degree in International Relations. The course begins with a focus on effective analytical writing in the field of international relations. The remaining sections of the course concentrate on essential building blocks in the field of international relations, with a particular emphasis on the relationship between domestic and international levels of explanation of international phenomena, from treaties/international agreements to economic sanctions to war. (Irreg)
IAS	5803	Global Affairs Practicum	Prerequisite: Graduate standing or permission of instructor. This course satisfies the practicum requirement for the MA degree in Global Affairs. All students are expected to engage in a research project resulting in a written document that examines, analyzes and critiques a specific government or international policy. The paper should ultimately propose specific policy recommendations that are intended to be an improvement upon the current policy. The project may be conducted under the auspices of the Diplomacy Lab. The projects are intended to contribute to the policymaking process by offering relevant research on topics of interest to the US State Department. (Irreg)
IAS	5810	Field Studies in Africa	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. The Field Studies in Africa course is a summer program designed exclusively for OU students. Participants travel with an OU faculty member for up to one month throughout one or more countries in Africa. Academic instruction for this program takes place in English, but some foreign language training may be included in the program. Experiential activities, cultural events and lectures from host nationals add to expert OU faculty lectures to give Field Studies in Africa participants a comprehensive understanding of the historical context and contemporary issues facing the countries of study and the African continent today. All accepted applicants receive a travel fellowship to offset the cost of international airfare. (Su)
IAS	5820	Field Studies in Italy	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. The Field Studies in Italy course is a summer program designed exclusively for OU students. Participants travel with an OU faculty member for up to one month throughout the country of Italy. Academic instruction for this program takes place in English, but some foreign language training may be included in the program. Experiential activities, cultural events and lectures from host nationals add to expert OU faculty lectures to give Field Studies in Italy participants a comprehensive understanding of the historical context and contemporary issues facing Italy and the continent of Europe today. All accepted applicants receive a travel fellowship to offset the cost of international airfare. (Su)
IAS	5830	Field Studies in China	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. The Field Studies in China course is a summer program designed exclusively for OU students. Participants travel with an OU faculty member for up to one month throughout the country of China. Academic instruction for this program takes place in English, but some foreign language training may be included in the program. Experiential activities, cultural events and lectures from host nationals add to expert OU faculty lectures to give Field Studies in China participants a comprehensive understanding of the historical context and contemporary issues facing China and the Asian region today. All accepted applicants receive a travel fellowship to offset the cost of international airfare. (Su)

IAS	5840	Field Studies in Latin America	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. The Field Studies in Latin America course is a summer program designed exclusively for OU students. Participants travel with an OU faculty member for up to one month throughout the one or more Latin American countries. Academic instruction for this program takes place in English, but some foreign language training may be included in the program. Experiential activities, cultural events and lectures from host nationals add to expert OU faculty lectures to give Field Studies in Latin America participants a comprehensive understanding of the historical context and contemporary issues facing Latin American countries and the entire region today. All accepted applicants receive a travel fellowship to offset the cost of international airfare. (Su)
IAS	5850	Field Studies in Turkey	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. The Field Studies in Turkey course is a summer program designed exclusively for OU students. Participants travel with an OU faculty member for up to one month throughout the country of Turkey. Academic instruction for this program takes place in English, but some foreign language training may be included in the program. Experiential activities, cultural events and lectures from host nationals add to expert OU faculty lectures to give Field Studies in Turkey participants a comprehensive understanding of the historical context and contemporary issues facing Turkey and the Middle Eastern region today. All accepted applicants receive a travel fellowship to offset the cost of international airfare. (Su)
IAS	5902	Global Political Turbulence	Prerequisite: Graduate standing or permission of instructor. This is one of three core courses in the MAGA program focused on aspects of global turbulence. The Global Political Turbulence course explores the sources, consequences and implications of turbulence in the international political system. It will examine political turbulence in a global context, as well as turbulent affairs in each region of the world. We will concentrate on the political turbulence that characterizes global affairs today and will highlight turbulent relations in each region of the world. (Irreg)
IAS	5912	Global Economic Turbulence	Prerequisite: Graduate standing or permission of instructor. This is one of three core courses in the MAGA program focused on aspects of global turbulence. This course explores sources of turbulence in the global economy and their consequences -- from the increasing global diffusion of economic power, to the volatility produced by free movement of large amounts of capital around the world. We will begin by examining shifts in the global distribution of economic power. We also will consider the 2008-9 global financial crisis, the aftermath of which continues to have dramatic consequences across governments and international organizations worldwide. (Irreg)
IAS	5913	International Studies Internship	Prerequisite: graduate standing or permission of instructor. Students receive academic credit for internship work with an internationally oriented public or private organization. Internship credit requires an element of reflection, research, and writing about the work undertaken, and can strongly enhance what is gained from the internship opportunity and improve a student's ability to articulate knowledgeably the requirements, benefits and lessons of work in the public or non-profit sector. (Irreg.)
IAS	5922	Global Social Turbulence	Prerequisite: Graduate standing or permission of instructor. This is one of three core courses in the MAGA program focused on aspects of global turbulence. This course examines the layered causes and consequences of social turbulence around the world. It explores how peoples interact with each other and the world around them. Additionally, students will address how people react to societal and environmental changes. At the end of this course, students should have a firmer grasp on societal interaction and reaction along a number of important areas. (Irreg)

IAS	5923	International Studies Policy Exercise	Prerequisite: graduate standing or permission of instructor. Policy exercise offers students the option of a Capstone project that demands the integration of skills developed in the MAIS program core. Each semester the faculty will develop a policy exercise based on a contemporary global problem. Students will be responsible for gathering extensive evidence and analyses bearing on the problem at hand from a variety of perspectives. (Irreg.)
IAS	5930	Seminar in International Studies	1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of content; maximum credit nine hours. Analysis, research, and writing on one or several selected topics in international studies, international development, and/or international management. (Irreg.)
IAS	5940	Topics in International Studies	1 to 4 hours. Prerequisite: graduate standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Analysis of one or several selected topics in international studies, international development, and/or international management. (Irreg.)
IAS	5950	Research Problems	2 to 5 hours. Prerequisite: graduate standing. May be repeated with change of content; maximum credit six hours. Directed research and writing on selected topics in international relations, international development, and international management. (F, Sp, Su)
IAS	5960	Directed Readings	1 to 3 hours. Prerequisite: permission of instructor and graduate standing. May be repeated; maximum credit six hours. Directed individual readings on selected topics in international relations; international development, and international management. (F, Sp, Su)
IAS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
IAS	5980	Research for Master's Thesis	2 to 6 hours. Prerequisite: permission of instructor and admission to M.A. in International Relations. May be repeated; maximum credit four hours. Directed individual research and writing on master's thesis. Student must be admitted to the M.A. in International Relations program. (F, Sp, Su)
IAS	5981	Thesis Writers' Seminar	Prerequisite: admission to M.A. in International Relations. Provides guidance for Work on the master's thesis and discusses problems of research design, assembling bibliography, identifying sources, and effective written presentation of research findings. Students will present a thesis prospectus, working bibliography, and chapters for comment. (Irreg.)
IAS	5990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and graduate standing. May be repeated; maximum credit six hours. Directed individual work on topics in international relations, international development, and/or international management. (F, Sp, Su)
IAS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ILAC	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
ILAC	2960	Individual Study	1 to 4 hours. Prerequisite: good standing in University; fewer than 62 total hours; approval of instructor and dean. May be repeated; maximum credit four hours. Designed to provide an introduction to the study of education through a rigorous program of readings under the direction of a member of the faculty. (Irreg.)

ILAC	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides students with the opportunity to develop an appropriate body of reading materials on topics not covered in detail in routine coursework. Students will be obliged to assume the primary initiative in selecting the topic, compiling the bibliography and completing the reading, and will report their progress in weekly sessions to their instructor. Credit will be given only after an intensive oral examination. (Irreg.)
ILAC	3970	Honors Seminar	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Covers variable subjects in education with in-depth studies of issues not covered in the standard course offerings. (Irreg.)
ILAC	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for honors students to work on a special project under the guidance of a professor in the student's major area of study. (Irreg.)
ILAC	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
ILAC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ILAC	4003	Partnerships: Working With Parents and Community	Prerequisite: admission to Teacher Education program. Approaches for working with students, parents, guardians, and the community (both locally and globally) will be addressed. Primary content for the course includes: student, parental and community involvement in schools, interaction/communication skills, diversity of families, available resources, and emerging trends. Community involvement and non-traditional field experiences will also be an integral part of the course. (F, Sp)
ILAC	4043	Teaching Diverse Populations	Prerequisite: EDEL 4101. Corequisites: EDLT 4313, EDMA 4053, EDSC 4193, and EDSS 4323; or EDMA 4243 (Math Ed majors). Open only to elementary and mathematics education majors. Development of a multicultural perspective to teaching including an understanding of theoretical frameworks, methods, and experiences working with culturally diverse populations. (F, Sp)
ILAC	4143	Theory and Research in Education	(Slashlisted with 5143) Prerequisite: permission of College of Education Undergraduate Academic Advising Office. This course is designed to help students evaluate their own practice and develop educational research habits of mind. Specifically as a result of the course students will better understand: a.) Reflective practice (oraxus) and b.) the value of educational research. No student may earn credit for both 4143 and 5143. (F, Sp)
ILAC	4960	Directed Readings in Education	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students preparing to teach who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ILAC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ILAC	4980	Practicum in Education	1 to 3 hours. Prerequisite: nine hours of education courses. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. (Irreg.)

ILAC	4990	Special Problems in Education	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of title and subject. Variable as to subject and credit for areas of specialty and/or interest not otherwise provided in the standard offering of courses. (Irreg.)
ILAC	5003	Models of Instruction	Prerequisite: completion of undergraduate teacher education. Students will study teaching models and their strategies intended to improve abilities to analyze student-teacher interactions and to increase teacher effectiveness as instructor and manager in a variety of educational situations. (F, Sp)
ILAC	5043	Analysis of Teaching and Learning	Prerequisite: graduate standing; corequisite: EDUC 5920 (Internship). An understanding of how to analyze teaching and learning using a variety of reflective techniques including journals, oral inquiries, classroom/school studies, and theoretical analysis. (F, Sp)
ILAC	5133	Multicultural Art Education	Prerequisite: Graduate standing. Creative expression explores the arts as means of social critique, self expression, and identity development. We consider implications both for teaching and learning. (Sp)
ILAC	5143	Theory and Research in Education Slashlisted with 4143)	Prerequisite: graduate standing or permission of instructor. An introduction to the processes and products of educational research such as stages in designing a study, introduction to research methods, identification of the components of a research-based article. Develops critical consumers of educational research. No student may earn credit for both 4143 and 5143. (F, Sp, Su)
ILAC	5233	Understanding Different Cultures	Prerequisite: graduate standing or permission of instructor. Provides information on cultural styles and characteristics of various ethnic and economic groups with emphasis on how teachers can understand and honor differences and similarities and adjust their teaching in order to be effective with a variety of students and families. (F)
ILAC	5910	Practicum in ILAC--Master's	1 to 4 hours. Prerequisite: graduate standing, permission of instructor and dean. May be repeated; maximum credit six hours. Variable as to title and subject profession. Provides field-type experience under faculty supervision and is designed to introduce the student to the practical application of theory within an environment in which professional practice takes place. Seminar experience is to be included. (Irreg.)
ILAC	5920	Internship in Education--Master's	1 to 6 hours. Prerequisite: 5910, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. Available to master's degree programs specifically requiring an internship in addition to thirty-two hours of other coursework as part of the degree. Introduces the student to the profession under the supervision of a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
ILAC	5940	Field Studies in ILAC	1 to 4 hours. Prerequisite: 12 hours of education. May be repeated with change of subject matter; maximum credit eight hours. Practical problems in education as defined by members of the classes. Typical topics: defining educational objectives, relating school programs to established objectives, developing teaching-learning aids, organization for participation in developing and evaluating instructional programs, using community resources for learning, improving evaluation procedure. (Irreg.)
ILAC	5960	Directed Readings	1 to 4 hours. Prerequisite: 12 hours of education, approval of instructor, adviser and dean. May be repeated; maximum undergraduate credit eight hours; maximum graduate credit four hours. (Irreg.)
ILAC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ILAC	5972	Pre-Master's Seminar	Prerequisite: 12 hours of education, graduate standing, permission of instructor. May be repeated; maximum credit four hours. Enrollment limited to students who are in early post-baccalaureate curricula. (Irreg.)

ILAC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
ILAC	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing or permission by instructor. May be repeated with change of subject matter; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ILAC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ILAC	6003	Curriculum Theory	Prerequisite: admittance to Instructional Leadership & Academic Curriculum doctoral program. Supports five core themes: scholarly discourse; philosophical thinking/intellectual curiosity; the praxis of curriculum and instruction; democracy, diversity, and community; research knowledge, skills, and attitudes. (F)
ILAC	6013	Proseminar in Instructional Leadership and Academic Curriculum	Prerequisite: admittance to Instructional Leadership & Academic Curriculum doctoral program. Required for new doctoral students, to be taken in sequence with 6023. Intended to introduce students to interdisciplinary, cross-disciplinary, and specialization studies in the field; university educators and fellow students; and the ethos of doctoral study and the academy. (F)
ILAC	6023	Theoretical Issues in Instructional Leadership	Prerequisite: admittance to Instructional Leadership & Academic Curriculum doctoral program. Required for new ILAC doctoral students, to be taken in sequence with 6013. Focus on important theoretical issues which impact the research, curriculum, and practice of schools and other educational agencies. (Sp)
ILAC	6033	Critical Research Paradigms	Prerequisite: admission to Ph.D. program or permission of instructor. Compares research paradigms and epistemologies and examines critical and transformative research approaches. (Irreg.)
ILAC	6902	Pre-Doctoral Seminar	Prerequisite: graduate standing. An introduction to advanced graduate scholarship in education, including a review of advanced level trends and issues in specific fields within education. (Irreg.)
ILAC	6910	Practicum in Educ--Doctoral	1 to 6 hours. Prerequisite: admission to doctoral program, permission of instructor. May be repeated; maximum credit six hours. Variable as to title and subject profession. An advanced practicum for post-master's level students only. The object is to provide professional experience under faculty supervision in fields requiring a high degree of professional skill. Seminar experience is to be included. (Irreg.)
ILAC	6920	Internship in Education--Doctoral	1 to 6 hours. Prerequisite: written permission of the instructor. May be repeated; maximum credit 12 hours. Variable as to title and subject profession. An advanced internship for post-master's level students only. The object of the internship is to cultivate within the student a high degree of proficiency and professional independence. Field supervision is by a practitioner whose credentials are equal to those of the graduate faculty. (Irreg.)
ILAC	6930	Intensive Studies in Education	1 to 6 hours. Prerequisite: 12 hours of education and permission of instructor. Repeatable with change of title and subject. Opportunity offered for professional educators and others interested in education, cooperatively, to seek solutions to educational problems. Organized groups work in curriculum, guidance, instruction, administration and supervision. Competent leadership and expert consultant service provided. (Irreg.)
ILAC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

ILAC	6970	Post-Master's Seminar	2 to 4 hours. Prerequisite: master's degree, 24 hours of education, permission of instructor. May be repeated with change of subject matter; maximum credit twelve hours. Enrollment limited to students who hold the master's degree. (F, Sp, Su)
ILAC	6980	Research for Doctoral Dissertation	Maximum of 15 hours credit for the Ed.D. and 30 hours for the Ph.D. (F, Sp, Su)
ILAC	6990	Individual Study in Education	1 to 4 hours. Prerequisite: 12 hours of education, graduate standing and permission of the instructor. May be repeated with change of subject matter; maximum credit eight hours. For advanced graduate students who need to study some problem or area not adequately covered in the organized courses, under the direction of a staff member in whose area of specialization the problem lies. (Irreg.)
ILAW	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ILAW	5000	Law Study Abroad	Prerequisite: permission of the College of Law. Course is designed to facilitate student participation in law study abroad and reciprocal exchange programs. (Irreg.)
INTL	1000	Study Abroad	1 to 15 hours. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
INTL	2000	Study Abroad	1 to 15 hours. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	2001	Study Abroad	May be repeated; Maximum credit three hours. Course is designed to facilitate student participation in study abroad. (F, Sp, Su)
INTL	2970	Special Topics	1 to 15 hours. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	3000	Study Abroad	1 to 15 hours. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	3116	Graz, Austria Summer Program	Prerequisite: junior standing or permission of International Exchange Programs office. Survey of the history and current political realities of south eastern Europe. Comprises Austrian history within a Balkan context, history of Yugoslavia, and study of the integration of south east European states in European institutions following the demise of communism. Experiential learning through field trips (Vienna, Zagreb, Ljubljana). Intensive German language course and fine arts component (concerts, opera, architectural monuments). (Su)
INTL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
INTL	4000	Study Abroad	1 to 15 hours. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	4970	Special Topics	1 to 15 hours. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	5000	Study Abroad	1 to 15 hours. Prerequisite: permission of the graduate dean and the student's major department before enrollment. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
INTL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

INTL	6000	Study Abroad	1 to 15 hours. Prerequisite: permission of the graduate dean and the student's major department before enrollment. Designed to facilitate student participation in study abroad and reciprocal exchange programs. (F, Sp, Su)
IPE	1013	Consumption and the Environment	An introduction to the interdisciplinary aspects of human consumption and the environment. Aspect of the production and consumption of food, energy, transportation, and housing are considered for their contributions to global climate change, air and water pollution, and habitat alteration, as well as other relevant topics regarding the environment. Students will learn how complex interactions between natural processes and human activities shape aspects of the global, regional and local environment. (F, Sp) [III-SS]
IPE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
IPE	2003	Environmentally Conscious Living	Recent media attention on environmental issues, including climate change, have led more people to ask, "what can I do?" This course will present a brief overview of the major environmental issues confronting our planet and the ways in which everyday people are unwitting contributors to those issues. After reviewing the individual's role in these issues, information will be provided on how we can make choices that help students be a part of the environmental solution. (Irreg.)
IPE	3003	Nature and Culture	Prerequisite: junior standing or permission of instructor. Nature and culture are always interrelated. As humans, we are active participants in our environment, affecting it and also being affected by it. How a culture perceives itself and its place in the world affects how people view nature. In this course, we will think about how the human race has lived with nature, how twentieth-century culture impacted the global environment, how humans have transformed nature to appease their desires, and how our living patterns and attitudes toward nature might influence our future. (Irreg.)
IPE	3013	Globalization, Culture, and the Environment	Prerequisite: junior standing or permission of instructor. Examines debates on the environment and culture in a global context. Explores the heterogenous nature of encounters between local and global environmental concerns as we consider topics ranging from conservation, ecotourism, and bioprospecting to trade, global security, and environmental justice. (Irreg.)
IPE	3023	The Psychology of Environmentalism	Prerequisite: junior standing or permission of instructor. A survey of psychological and social processes associated with environmentalist attitudes and behaviors. Consider the question of whether and how psychology may be helpful for the understanding and promotion of pro-environmental behaviors. Topic areas to be addressed include personal attitudes, beliefs, and values, perceptions of social norms, social ideologies and worldviews, and the role of intention when it comes to environmentalism. Models of psychological functioning that attempt to provide some level of integration of these factors are also reviewed, along with how these construct and models in environmental psychology may be useful for encouraging greater pro-environmental behaviors in society more broadly. (Irreg.)
IPE	3103	Sustainable Business and the Environment	Prerequisite: junior standing or permission of the instructor. Increases awareness that systems are interrelated and that the environment and business are connected. The hope is to create environmentally savvy business people who can create profitable business enterprises capable of being economically sustainable while maintaining the natural resource base rather than depleting it. Commerce must live off the interest, not the capital, of nature. (Irreg.)

IPE	3203	Sprawl and the Environment	Prerequisite: junior standing or permission of instructor. The built environment, in particular our pattern of cities surrounded by suburbs, has impacts on the environment. These impacts are both direct and indirect. Direct effects include impact on water quality, habitat fragmentation, endangered species and the covering of natural habitat with impervious surfaces. Indirect impacts include increased reliance on automobiles and subsequent increases in air pollution and greenhouse gasses. Students will examine patterns in land use and their impacts and how different development patterns and practices can minimize environmental impacts. (Irreg.)
IPE	3213	Law and the Environment	Prerequisite: junior standing or permission of instructor. Examines the general underlying foundations of the United States constitutional principles. Study of the constitutional and structural conflicts when environmental law is at issue. The focus of the class will shift to practical information and exercises regarding environmental law. Finally, the class will study the three sections of specialized law and their interrelationship with the environment. (Irreg.)
IPE	3223	Environmental Justice	Prerequisite: junior standing or permission of instructor. Examines the impact of industrial societies on human beings, especially minority and low income populations. Students are introduced to evidence of disproportionate impact in certain populations, potential causes of the problems, theoretical concepts of environmental justice and how some of these concepts may be implemented to solve problems affecting the various communities. Additionally, students will review the legal and social implications, as well as potential methodology that is defining, refining, and shaping the environmental justice landscape. (Irreg.)
IPE	3233	Sustainable Communities	Prerequisite: junior standing or permission of instructor. Explores the form and organization for communities of the future. Covers transition topics such as peak oil, water scarcity, social equity, carrying capacity, sustainable agriculture, green transportation, and renewable energy. (Irreg.)
IPE	3303	Food, Agriculture, and the Environment	Prerequisite: junior standing or permission of the instructor. Food production, both large scale and small scale, has impacts on the environment. From erosion to water pollution to intensive use of fossil fuels, these impacts affect a variety of environmental elements. Since most of us buy our food pre-packaged at the supermarket, we do not see these impacts, nor typically are these impacts reflected in the price we pay. Most of our food arrives from far away, transported over long distances, in many cases from the southern hemisphere. This class will examine the impact of our food production systems on all aspects of the environment including air, soil, and water, as well as its demands and impacts on energy production. (Irreg.)
IPE	3313	Gardening, Community, and the Environment	Prerequisite: junior standing or permission of instructor. Explores fundamental concepts and styles of gardening with an emphasis on edibles and organic methods. Class assignments help students connect gardening to environmental and community issues at the personal, local, regional, and global levels. A service learning component promotes hand-on experiences and responsibility to the community. (Irreg.)
IPE	3413	Human Health, Disease, and the Environment	Prerequisite: junior standing or permission of the instructor. Students will explore the relationship between human diseases and the environment, specifically the interaction between humans and both biotic (living) and abiotic (non-living) elements of the environment. Biotic and abiotic elements of the environment and the changes brought upon those elements by humans will be explored with the resulting consequences for human health. Students will gain a better understanding of the multiple interactions among humans, the environment, microorganisms, and disease vectors. (Irreg.)

IPE	3423	Human Health, Man-Made Contaminants, and the Environment	Prerequisite: junior standing or permission of the instructor. Man's varied activities since the industrial revolution have allowed us to live comfortable, well-fed lives, free from many of nature's diseases and environmental fluctuations. This progress has come at a cost, however, to the natural environment, which in turn, has impacted our health in subtle, but often dangerous, ways. This course examines the ways man's activities have impacted the environment and the consequences of those impacts on human health in the past and present and also speculates on man's future impacts. (Irreg.)
IPE	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
IPE	3503	Energy Use, Climate Change, and the Environment	Prerequisite: junior standing or permission of instructor. The way we live in the modern industrialized world is extremely energy intensive. We will examine our energy use across all sectors, from the fuels used to generate the electricity to run our computers to the energy we are most familiar with, that which we use to fill our cars. (Irreg.)
IPE	3603	Wildlife Conservation and the Global Perspective	Prerequisite: junior standing or permission of instructor. A conservation biology course with primary attention aimed at wildlife. Explores the complex relationships that exist between our species and wildlife throughout the world. Group activities and detailed assessment of case studies will introduce students to finding solutions to threats that can provide wildlife conservation in a way that is also beneficial (or at least not harmful) to humans. (Irreg.)
IPE	3613	The Politics of Wildlife Conservation	Prerequisite: junior standing or permission of instructor. Exploration of the politics of wildlife conservation from a variety of perspectives. Review the history of our own species' impact on the lives of free-ranging animals and examine the many ways that human-wildlife symbiotic relationships have influenced biodiversity loss and growth. Students will learn about the process of implementing national laws and international treaties aimed at conserving wildlife, while also practicing methods of working with local people and key decision makers. Through a series of problem-solving activities and assessment of several relevant case studies, we will focus on the more general "politics" of wildlife conservation. (Irreg.)
IPE	3623	Human-Wildlife Interactions	Prerequisite: junior standing or permission of instructor. Examine both the negative and positive aspects of human-wildlife interactions. Conflicts caused through habitat destruction, poaching, and forced sharing of space can be disastrous for human and wildlife species will be studied through examination of case studies, evaluation of their efficacy, and develop additional solutions to these and similar problems arising in wildlife conservation. Includes online discussions and group projects. (Irreg.)
IPE	3800	Environmental Internship	1 to 3 hours. Prerequisite: junior standing and permission of IPE coordinator. Supervised work experience at a business, government or non-profit agency, dealing with an environmental issue. May require specific preparation, as appropriate. S/U grade based on completion of advance preparation, if any; evaluation by workplace supervisors; and coordinator's evaluation of a report on the issue dealt with during the internship. (F, Sp, Su)
IPE	3810	Mark Coleman Fellowship	1 to 3 hours. Prerequisite: junior standing and permission of instructor. May be repeated once; maximum credit three hours. Research and field work leading to a written report and public presentation on a specific environmental issue relating to the state of Oklahoma . Students may be required to enroll for two consecutive semesters. (F, Sp)

IPE	3913	Special Topics in Interdisciplinary Perspectives on the Environment	Prerequisite: junior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Designed to permit the study of specific and changing issues and problems in environmental studies. (Irreg.)
IPE	3960	Honors Reading	Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in regular course work. (Irreg.)
IPE	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
IPE	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors program. May be repeated; maximum credit six hours. Provides an opportunity for the Honors candidate to work at a special project under the guidance of a professor on a specific environmental related issue. (Irreg.)
IPE	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
IPE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
IPE	4003	Practicum on Environmental Issues	Prerequisite: Permission of IPE coordinator. Students work in small groups on an environmental problem facing central Oklahoma. A variety of skills and concepts will be applied to cooperatively propose a solution that incorporates the perspectives of the sciences, social sciences, and the humanities. (Sp)
IPE	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
IPE	4970	Seminar	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit six hours. Interdisciplinary topics with regard to the environment; May include field work, special presentations, or other activities not covered in regularly scheduled courses. (Irreg.)
IPE	4990	Independent Study	1 to 3 hours. Prerequisite: junior standing or permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled coursework. May include library and/or research and field projects. (Irreg.)
IPE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ISE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
ISE	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, C S, ENGR, EPHY, ECE, G E, P E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
ISE	2303	Design and Manufacturing Process	(Crosslisted with AME 2303) Prerequisite: AME 2113 or CEES 2113 or ENGR 2113. Mechanical and physical properties of engineering materials. Introduction to design concepts, manufacturing processes and equipment used in engineering. (Sp)

ISE	2311	Computer Aided Design and Graphics Laboratory for Industrial Engineers	Corequisite: 2303. Provides students with a basic understanding of technical graphics communication and computer-aided design for industrial engineering applications. By using computer-aided design/drafting software, SolidWorks/autoCAD, students will learn basic principles of engineering graphics and geometric modeling to assist in design problem visualization and planning. (Sp)
ISE	2823	Enterprise Engineering	Prerequisite: Sophomore standing. Introduction to the industrial engineering role as enterprise system integrator. Systems concepts, modeling and analysis; integrated product/service and operational process design; productivity and quality improvement; computer technology insertion; project, operations, and global supply chain management.(F)
ISE	3293	Applied Engineering Statistics	Prerequisite: MATH 2433 or MATH 2924. Introduction to probability, one and higher dimensional random variates, function of random variables, expectation, discrete and continuous distributions, sampling and descriptive statistics, parameter estimation, use of statistical packages. Not available for graduate credit for students in engineering disciplines. (F, Sp)
ISE	3304	Design and Manufacturing II	Prerequisite: 2303, 2311, Civil Engineering and Environmental Science 2153 (or concurrent enrollment) Or Aerospace and Mechanical Engineering 3143 (or concurrent enrollment). Dimensioning and tolerancing; tolerances-type, design and specification; assembly and fit design; tolerance standards, process planning-precedence representation in machining, operation and machine sequencing; jigs and fixtures-design and analysis; time and cost estimation for machining; automation; process/system integration. Laboratory (F)
ISE	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ISE	3960	Honors Reading (HONORS)	1 to 3 Hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the Student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
ISE	3980	Honors Research (HONORS)	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
ISE	3990	Special Topics	1 to 3 hours. Directed study for undergraduates. (F, Sp, Su)
ISE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ISE	4113	Spreadsheet Dec Support Sys	Prerequisite: I E/ISE 4623 or concurrent enrollment in I E/ISE 4623, Computer Science 1313 or C S 1323, or permission of instructor. Covers all aspects of spreadsheet-based software functionality that are relevant to supporting decision-making. Microsoft Excel is used as the subject tool. Students will learn advanced functions of Excel that are available through the spreadsheet interface, the Visual Basic language and its integration with the spreadsheet environment, principles of decision-support systems studied in a variety of applications, including facility layout, warehousing, portfolio optimization, and various statistical inference problems. (F)

ISE	4223	Fundamentals of Engineering Economy	Prerequisite: MATH 2423 or 2924. Development and use of time value of money interest formulas. Inflation considerations and bond problems. Bases for comparison of alternatives, including present worth, annual worth, rate of return and savings-investment ratio methods. Decision-making among independent, dependent, capital-constrained and un-equal lived projects. Depreciation methods and their effect on corporate income taxes, leading to after-tax cash flow analysis. Benefit-cost and cost effectiveness analysis. (Sp)
ISE	4333	Production Systems/Operations	Prerequisite: 2823 and 4623, or by permission. Operations-oriented topics for production systems. Supply chain process (tactical planning, operational scheduling and sequencing, management and planning, demand promising). Customer service process; E-Business and information technology applications for production systems. (F)
ISE	4363	Facility Planning/Warehousing	(Slashlisted with 5363) Facility Planning, Warehousing, And Material Handling. Prerequisite: 4623. Facility Location And Layout Models, Design, Analysis, And Improvement Of Warehousing Operations, Material Handling Systems In Manufacturing And Warehousing Operations, Informational Technologies For Management Of Operations, Supply Chain Relationships. (Sp)
ISE	4383	Systems Evaluation	Prerequisite: I E/ISE 3304, I E/ISE 4223, I E/ISE 4563, I E/ISE 4633, I E/ISE 4804. Focuses on the development and evaluation of alternate system and process designs. Development of system goals, requirements, and performance measures; ranking of alternatives and decision analysis techniques. Review and development of trade studies. Applications in facility layout, maintenance, supply chain, and other contexts. (F)
ISE	4393	Capstone Design Project	Prerequisite: ISE 4333, ISE 4383, ISE 4663, and ISE 4853. Restricted to graduating industrial & systems engineering students; to be taken in the last semester. Current problems drawn from production and service organizations will be presented by personnel from these organizations. Students will solve these problems under the guidance of their instructor, using industrial engineering methodology. (F, Sp) [V]
ISE	4553	Data-Driven Decision Making I	(Slashlisted with 5553) Prerequisite: I E/ISE 3293. Fundamentals of statistical models for describing engineering systems and processes. Analysis of variance, multiple regression, logistic regression, time series, clustering. Emphasis is placed on decision making. No student may earn credit for both 4553 And 5553. (F)
ISE	4563	Quality & Reliability Engineer	(Slashlisted with 5563) Prerequisite: I E/ISE 3293, and I E/ISE 4553 or I E/ISE 5553. The use of statistical methods for quality control and improvement in product and process environments, as well as introductory applied probability for component and system reliability. Topics include philosophies of quality management, control chart theory and application, process capability, and performance metrics of reliability. Focus is given to decision making in engineering systems. No student may earn credit for both 4563 and 5563. (Sp)
ISE	4623	Deterministic Systems Models	Prerequisite: I E/ISE 2823. Problem solving using analytical models: theory, methodology, and application. Topics include linear programming, simplex algorithm and sensitivity analysis, integer programming, and dynamic programming. Practical applications in transportation networks, project management and scheduling, deterministic inventory models, decision making, and systems integration. Solution methods using computer software. (F)
ISE	4633	Probabilistic Systems Models	Prerequisite: I E 3293 or ISE 3293 AND I E 4623 or ISE 4623. Problem solving using stochastic models: theory, methodology, and application. Topics include probability distributions, Poisson processes, Markov chains and Markov decision processes, queuing theory, and Monte Carlo simulation. Practical applications in probabilistic inventory models, maintenance activities, decision making, and systems integration. Solution methods using computer software. (Sp)

ISE	4663	Systems Analysis Using Simul	Prerequisite: Engineering 3293 or 3293, 4633. Implements the science of systems analysis through the use of simulation modeling and statistical analysis; inclusive of time study analysis for performing input modeling tasks. Laboratory (F)
ISE	4804	Ergonomics in Systems Design	Prerequisite: junior standing or permission of instructor. Human-systems integration, considering the impacts of the physical structure, the information flow, and the environmental conditions on human performance. Students learn how to design, evaluate and improve systems from the perspective of the human(s) working in and impacted by the system. (Sp)
ISE	4853	Data-Driven Decision Making II	(Slashlisted with 5853) Prerequisite: 4553 and 4804. Experimental methodology for empirical decision making. Includes the development of empirical hypotheses, designs, performance criteria, and analyses. Techniques for empirical reporting. The measurement of human performance is typically the vehicle used for students in this course. No student may earn credit for both 4853 and 5853. (F)
ISE	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ISE	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit twelve hours. Special topics in the various fields of industrial engineering -- data analysis, engineering financial analysis, human factors, manufacturing, operations research, production, simulation, sustainability, systems. (Irreg.)
ISE	4990	Special Studies	1 to 3 hours. Prerequisite: senior standing. May be repeated once; maximum credit six hours. Directed study for undergraduates. (F, Sp, Su)
ISE	5013	Fundamentals of Engineering Statistical Analysis	Prerequisite: graduate standing. Introduction to probability, expectation, discrete and continuous distributions, sampling and descriptive statistics, parameter estimation, and statistical tests to aid decision making. The student will learn analysis techniques for verification of systems parameters. (F, Sp)
ISE	5023	Systems Optimization	Prerequisite: graduate standing. Introduction to basic systems models and their solution with modern computer packages. Emphasis on modeling, computer solution, and sensitivity analysis with limited reference to model theory and development of algorithmic methods. (F)
ISE	5033	Systems Engineering	Prerequisite: graduate standing. The complexities of systems, design, sustainment, and modernization in the context of systems engineering. (Irreg.)
ISE	5103	Intelligent Data Analytics	Prerequisite: graduate standing or permission of instructor; ISE 3293 or ISE 5013; CS 1313 or CS 1323. In our society, data is rapidly increasing in volume, velocity, and variety. At the same time computing power and the sophistication of data analysis techniques are increasing. However, even with the expanding capabilities, businesses and organizations often find themselves "data rich, but information poor." Intelligent Data Analysis is a holistic approach to addressing real-world data intensive problems that integrates human intuition with data analysis tools to best draw out meaningful insights. To this end, the course has four underlying themes: defining the Problem, understanding and coping with Data, selecting and using appropriate Analytical Tools, and discovering and communicating the Insight. Techniques covered include data cleansing and pre-processing, exploratory analysis and visualization, dimension reduction, linear and logistic regression, decision trees, and clustering. This course will introduce students to a powerful open source statistical programming language (R) and include extensive hands-on data analysis and team projects. (F)

ISE	5113	Advanced Analytics and Metaheuristics	Prerequisite: ISE 5103, graduate standing or permission of Instructor. Course builds on the foundation established in Intelligent Data Analytics (ISE 5103) to explore and apply advanced techniques for addressing complex, potentially data intensive problems. Focus is on developing and employing problem solving strategies using advanced methods in the context of Data Science and Analytics. Topics include both continuous and combinatorial optimization with an emphasis on techniques such as simulated annealing, neural networks, evolutionary algorithms, and swarm optimization. Students will use the statistical programming language (R) and/or Python to work on applied projects. (Sp)
ISE	5123	Software Tools-Dec Support	Prerequisite: Computer Science 1313 or 1323, or permission of instructor. Covers an integrated set of software tools that is used in development of a wide variety of decision models and support systems. Students will learn Python programming language and several of its major libraries. Applications will be developed in data extraction and processing, and development of statistical, simulation, and optimization models. (Irreg.)
ISE	5303	Computer-Aided Manufacturing	Prerequisite: 3304 or permission. The course introduces a general understanding of computer applications to machines and processes in manufacturing systems, numerical control principles, computer-assisted n/c programming (apt, g-codes) and rapid prototyping. Machining processes such as volume milling, trajectory milling, and surface milling will be taught using pro/manufacture. Rapid prototyping technologies such as the sla, sls, fdm and 3dp will be introduced. The course will also provide hands-on prototyping experience using the zcorp (tm) 3dp machine. (Irreg.)
ISE	5313	Advanced Metal Cutting	Prerequisite: 3304 and permission of instructor. Theory of metal cutting or machining. Mechanics and dynamics of metal cutting are discussed with relevance to existing literature. The role of sensors in automation of machining is explored. Laboratory (Irreg.)
ISE	5323	Advanced Productn Systems/Ops	Prerequisite: 4333 or by permission. Laws of factory physics that describe the basic behavior of discrete manufacturing systems. Limitations of traditional control approaches (i.e. MRP and DRP). Modern approaches to planning of material and capacity. Differences between push system and pull systems. Theory of constraints. The corrupting effect of variability on a manufacturing system. Operational performance measures. Industry-specific differences in business drivers and system behavior. (Irreg.)
ISE	5343	Reliability in Engr Design	Prerequisite: Engineering 3293 or permission of instructor. Probabilistic reliability models for the lifetimes of manufactured components. Structure functions, system reliability calculations, lifetime distributions, models of dependence, parameter estimation, availability, maintainability, burn-in, preventive maintenance. Laboratory (Irreg.)
ISE	5363	Facility Planning/Warehousing	(Slashlisted with 4363) Prerequisite: 4623. Facility location and layout models, design, analysis, and improvement of warehousing operations, material handling systems in manufacturing and warehousing operations, information technologies for management of operations, supply chain relationships. No student may earn credit in both 4363 and 5363. (Sp)
ISE	5383	Systems Evaluation (Slashlisted with 4383)	Slashlisted with 4383. Prerequisite: permission of department. Focuses on the development and evaluation of alternate system and process designs. Development of system goals, requirements, and performance measures; ranking of alternatives and decision analysis techniques. Review and development of trade studies. Applications in facility layout, maintenance, supply chain, and other contexts. No student may earn credit for both 4383 and 5383. (F)

ISE	5393	Intro-CAD Tissue Engineering	Prerequisite: graduate standing or permission of instructor. Designed for graduate and senior undergraduate students in Engineering majors. Describes advanced computer-aided technology for medical implant design and tissue engineering applications. Topics include reverse engineering, biomodeling and layered manufacturing. Course content is delivered through lecture- and laboratory-based hands-on training. (Irreg.)
ISE	5523	Applied Probabilistic Models	Prerequisite: 4633 or permission of instructor. Review of probability theory, random variables, discrete and continuous distributions, moment generating functions and conditional probability; introduction to Markov chains, Markov processes and renewal theory; applications to queuing theory, inventory systems and reliability models. (Irreg.)
ISE	5553	Data-Driven Decision Making I	Data-Driven Decision Making I. Prerequisite: I E/ISE 3293. Fundamentals of statistical models for describing engineering systems and processes. Analysis of variance, multiple regression, logistic regression, time series, clustering. Emphasis is placed on decision making. No student may earn credit for both 4553 and 5553. (F)
ISE	5563	Quality & Reliability Engineer	Prerequisite: I E/ISE 3293 and I E/ISE 4553 or I E/ISE 5553. The use of statistical methods for quality control and improvement in product and process environments, as well as introductory applied probability for component and system reliability. Topics include philosophies of quality management, control chart theory and application, process capability, and performance metrics of reliability. Focus is given to decision making in engineering systems. No student may earn credit for both 4563 and 5563. (Sp)
ISE	5573	Stat Analysis-Simulatn Models	Prerequisite: 4663, and Engineering 3293; or permission. Probabilistic and statistical aspects in the design and analysis of stochastic simulations: random number generation, random variate generation, input modeling, output analysis (including time series models and spectral analysis), ranking and selection and variance reduction techniques. Laboratory (Irreg.)
ISE	5613	Multicriteria Optimization	Prerequisite: 4623. Survey of developments and applications of theory and methods pertinent to decision making under conflicting criteria. Goal programming and interactive methods for multicriteria mathematical programming will be emphasized with applications. (Irreg.)
ISE	5623	Linear Programming	Prerequisite: 4623. Introduction to set theory and vector spaces, convexity analysis, special matrices. Properties and solution methods of linear inequalities, Farkas' Lemma, optimality conditions, polyhedral sets and cones. Simplex method, theory of duality, simplex based algorithms, bounded variable and decomposition approaches, sensitivity and parametric analysis, geometrical interpretations, complementary pivot theory. (Irreg.)
ISE	5633	Supply Chain Mgt & Transport	Prerequisite: graduate standing or by permission. Introduces transportation and supply chain concepts along with the important issues in supply chain system design and operation. Students learn how to formulate and analyze systems models for supply chain systems using information technology skills and decision support systems. (Irreg.)
ISE	5643	Engineering Optimization	Prerequisite: 4623 or permission. Basic computational tools for solving nonlinear unconstrained and constrained optimization problems arising in engineering practice. Emphasis is on models and methods applicable to problems in engineering design, process operations, control, production planning, manufacturing and management. (Irreg.)
ISE	5653	Engr Network Flow Analysis	Prerequisite: 5623. Modeling network flow problems, algorithms and computational analysis of networks. Topics include: graph theory, shortest path problems, network flow problems, computer applications. (Irreg.)
ISE	5663	Simulation I	Prerequisite: 4663, Engineering 3293 or permission of instructor. Advanced network modeling, continuous modeling, discrete event modeling, animation. (Irreg.)

ISE	5673	Simulation II	Prerequisite: 5663. Advanced study of simulation methodology. Provides practical experience in building and running computer simulation models of industrial systems. Utilization of statistical techniques for analyzing the output from a simulation is also emphasized. Addresses discrete event simulation as well as animation. (Irreg.)
ISE	5713	Engineering Project Management	Prerequisite: ISE 3293 or permission of instructor. Review of the various technical and managerial aspects of project management. Introduction to extensions of CPM and PERT. Specific topics include network development and analysis, precedence constraints, resource allocation, time-cost trade-off, heuristics, criticality index, computer applications, design and analysis of engineering projects, and optimization techniques for project scheduling. (Irreg.)
ISE	5743	Mgt of Engineering Function	Prerequisite: 2823 or graduate standing. Explores major concepts of engineering management and how to apply these concepts in managing the engineering function in an enterprise. Intensive analysis of the specialized problems of engineering organizations which include technical human power. Procedures and design for the control of engineering projects. Specific examples and cases of management problems and experiences are used. A research project is required that involves at least one of the functions of engineering management. (Irreg.)
ISE	5753	Organization Systems	Prerequisite: graduate standing or permission. The organization is examined as a complex of subsystems to accomplish production or service objectives. Individuals as members of the subsystems are examined as human factor elements in contributing to the analysis of effectiveness and efficiency of systems. Organizations are viewed from a macro standpoint with emphasis on engineering organizations. Current trends and cases are reviewed with case presentations required. A research project evaluating and organization is required from an engineering management viewpoint. (Irreg.)
ISE	5813	Cognitive Engineering and Decision Making	Prerequisite: ISE 4804. Analysis, design, and evaluation of human behaviors and decision making processes in simple and complex systems. Integration of human factors, human computer interaction, and systems engineering. (Sp)
ISE	5823	Exercise Physiology	(Crosslisted with HES 5823) Prerequisite: 4824; Zoology 3104 or 3133; Physiology 5016 or 5019; or permission. Advanced study of physiological responses, regulatory mechanisms and adaptations of human performance and health; factors affecting performance and health; and training and evaluative techniques. (F)
ISE	5833	Ergonomics in Safety Research	Prerequisite: senior or graduate standing and 4824 or 5813 or permission of instructor. Designed to introduce the student to concepts of product liability, workers' compensation, occupational safety and health, and systems safety from both a historical and current standards and practices perspective. Methods of controlling product liability losses and reducing workers' compensation cost are discussed. Safety concepts and methodologies as they relate to large-scale systems design are presented and discussed. (Irreg.)
ISE	5843	Biomechanics	(Crosslisted with HES 5843) Prerequisite: 4824 or HES 3843 or permission. Review of muscle, bone and joint structure and function. Review of kinematic and kinetic principles as applied to human movement. Analysis of human movements using film, anthropometric, dynamometer, force platform, electromyographic and performance techniques. Application of human movement analysis to ergonomics, sport and rehabilitation. (Irreg.)
ISE	5853	Data-Driven Decision Making II	(Slashlisted with 4853) Prerequisite: 4553 and 4804. Experimental methodology for empirical investigation. Includes the development and measurement of empirical hypotheses, designs, performance criteria, and analyses. Techniques for empirical reporting. The measurement of human performance is typically the vehicle used for students in this course. No student may earn credit for both 4853 and 5853. (F)

ISE	5863	Product Usability	Prerequisite: Graduate standing or permission of instructor. Theoretical and practical methods of analyzing usability, which include the use of questionnaires and surveys, experimentation, task analysis, and cognitive modeling. Students will learn to justify performing usability studies through cost/benefit analysis and increased customer satisfaction. By the end of the course, students should be able to analyze the usability of a product as well as design products that are more usable. Because of the relationship between usability and quality, the students will learn how to increase product quality. (Irreg.)
ISE	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ISE	5970	Seminar-Industrial Engineering	1 to 3 hours. Prerequisite: graduate standing or permission. May be repeated with change of content; maximum credit 12 hours. Special topics in the various fields of industrial engineering, engineering, economy, operations research, ergonomics, production, manufacturing, simulation, engineering statistics and computer systems. (Irreg.)
ISE	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
ISE	5990	Special Studies	1 to 4 hours. Prerequisite: senior standing, permission. May be repeated; maximum credit six hours. (F, Sp, Su)
ISE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ISE	6623	Nonlinear Programming	Prerequisite: 5623. Theory and computational aspects of nonlinear optimization problems. Topics include: applications and problem formulation, convexity, Kuhn-Tucker conditions, duality, quadratic programming, unconstrained optimization techniques, direct search method, penalty function, optimization methods, feasible direction methods, separable programming, geometric programming. (Irreg.)
ISE	6643	Integer Programming	Prerequisite: 5623. An introduction to the applications and computational techniques available for solving integer programming problems. Topics include: branch and bound, cutting plane methods, Bender's partitioning algorithm, set covering and set partitioning algorithms and knapsack method. (Irreg.)
ISE	6663	Advanced Simulation Topics	Prerequisite: 5673, or permission of instructor. Advanced simulation topics; simulation language design; special purpose languages, continuous process simulation. (Irreg)
ISE	6673	Support Vector Machines	Prerequisite: 5623, 5643 or by permission. Develops the foundation of kernel methods and support vector machines and their computer implementations. Applications include current problems in financial engineering and data analysis (including building statistical learning models, managing risk, and solution of large scale machine learning problems), weather prediction, and computational biology. (Irreg.)
ISE	6853	Human Factors-Computer Systems	Prerequisite: 5813 or permission of instructor. Important factors involved in designing the human/computer interface based on established principles of ergonomics, existing guidelines and current research. Topics include: identifying user characteristics, code design, menus, interactive dialog procedures, graphical user interfaces, input and output devices, documentation, training and vdt workplace. Students may be required to make class presentations. (Sp)
ISE	6933	Special Topics	Prerequisite: graduate standing or permission. May be repeated; maximum credit 12 hours. Evaluation and simulation of various industrial engineering systems emphasizing the system as an integrated structure. (Irreg.)
ISE	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

ISE	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
ISE	6980	Research Doctoral Dissertation	(F, Sp, Su)
ISE	6990	Special Studies	1 to 6 hours. Prerequisite: graduate standing. May be repeated; maximum credit six hours. Special problems in the various fields of industrial and systems engineering. Special studies in data analytics, systems modeling and design, computational optimization, logistics and supply chain management, human-system integration, engineering education, advanced manufacturing, or biomedical manufacturing. (F, Sp, Su)
ITAL	1115	Beginning Italian I	An elementary course in understanding, speaking, reading and writing Italian. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp) [I-FL]
ITAL	1225	Beginning Italian Ii	Prerequisite: 1115. Fundamentals of Italian continued. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp) [I-FL]
ITAL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
ITAL	2113	Intermediate Italian	Prerequisite: 1115. Fundamentals of Italian continued. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp) [I-FL]
ITAL	2223	Intermediate Italian Continued	Prerequisite: 2113. Emphasizes advanced reading skills and mastery of grammar. Emphasis on sophisticated vocabulary and understanding of grammatical structures. Literary and cultural texts discussed in oral and essay form. (Sp)
ITAL	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
ITAL	3073	Italian Conversation	Prerequisite: 2223. Intensive practice in speaking Italian on topics of everyday life. (Sp)
ITAL	3423	Advanced Italian Composition	Prerequisite: 2223. The inculcation of proper writing habits, at an advanced level, toward the achievement of idiomatic Italian. (F)
ITAL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ITAL	3553	Survey of Italian Literature and Culture I	Prerequisite: 2223 or permission. Survey of the history of Italian literature and culture from early development of the Italian language in the 13th century up to the Italian Risorgimento (second half of the 18th century). Students will read selected texts of the Italian literary tradition in order to develop a foundational understanding of literary traditions that have constructed "Italian" identity(ies). Students will also read secondary readings to facilitate an understanding of historical, political, and cultural contexts. (F)
ITAL	3663	Survey of Italian Literature and Culture II	Prerequisite: 2223 or permission. Survey of the modern history of Italian literature and culture from the Italian Risorgimento to the contemporary period. Introduces students to literary and cultural discourses that define modern Italy, and also secondary readings to facilitate an understanding of historical, political, and cultural contexts. (Sp)

ITAL	3853	Readings in Italian Literature	Prerequisite: 2223. Designed to improve reading comprehension and to introduce the techniques of literary analysis. Representative works from the various literary genres will be studied. (Sp)
ITAL	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp)
ITAL	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
ITAL	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors program. May be repeated; maximum credit six hours. Provides an opportunity for the Honors candidate to work on a special project in the student's field. (F, Sp)
ITAL	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
ITAL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
ITAL	4513	Topics in Medieval and Renaissance Italian Literature and Culture	Prerequisite: 3073 or 3423. May be repeated with change of content; Maximum credit nine hours. This course will focus on a particular author, genre, or theme from the origins of Italian literature (1225) through 1550. Students will read primary texts in ;the original language with an emphasis on understanding the texts through close textual analysis. (Sp)
ITAL	4563	Topics in Modern Italian Literature and Culture	Prerequisite: 3073 or 3423. May be repeated with change of content; maximum credit nine hours. This course will focus on an author, genre, or theme present in contemporary Italian literature (1700-Present). Students will read primary sources in the original language with an emphasis on understanding the text through close textual analysis. (F)
ITAL	4630	Internship	Prerequisite: permission of instructor and junior standing.1 to 3 hours. May be repeated; maximum credit three hours. For advanced language students studying in Italy as part of the OU in Arezzo program. Students enrolling in this variable credit course will enter into internships with area businesses, local, regional, and national government offices, non-profit organizations, and other local entities. Although the nature of the internships will vary depending on the partners, all internships will have the following requirements: the activities will be performed entirely in Italian; translation from English to Italian will not be the primary role of the intern; the sponsoring partner will provide at least weekly feedback; an OU faculty member will oversee the internship; at minimum students will complete an entrance, mid-term, final interview with the instructor; and a written final report. (F, Sp, Su)
ITAL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
ITAL	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ITAL	4990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)

ITAL	4993	Italian Geographies	Prerequisite: 3423. The term "geographies" broadly encompasses spatial, symbolic, and rhetorical constructions of Italy across centuries. Course is structured around tropes, utopia, regionalism and mobility. Approach will include readings of literary and cultural materials, and will map an abstract geography of connected "Italies" that both informs and gives shape to the discourse of Italian identity. (Sp) [V]
ITAL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
JAPN	1115	Beginning Japanese	An elementary course in understanding, speaking, reading and writing Japanese. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F) [I-FL]
JAPN	1225	Beginning Japanese (Continued)	(Continued) Prerequisite: 1115. An elementary course in understanding, speaking, reading and writing Japanese. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (Sp) [I-FL]
JAPN	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
JAPN	2013	Intermediate Japanese Listening and Speaking	Prerequisite: JAPN 2113 or concurrent enrollment with JAPN 2113. Provides intensive training in listening and speaking in Japanese for students who have taken first year Japanese. Through a systematic review of grammar and vocabulary taught in 1000-level Japanese coursework, develops students' understanding of functional ability to understand and speak Japanese and introduces unique features of Japanese language and culture, including formal and casual speech levels in Japanese. (F, Sp)
JAPN	2113	Intermediate Japanese	Prerequisite: 1225. Combination of basic Japanese grammar and vocabulary and their application to spoken and written Japanese. Laboratory (F)
JAPN	2223	Intermediate Japanese (Continued)	(Continued) Prerequisite: 2113. Develops control of the grammar, vocabulary and idioms of spoken Japanese and provides a thorough introduction to the Japanese writing system as well as some grammatical structures peculiar to written Japanese. Laboratory (Sp)
JAPN	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
JAPN	3013	Advanced Japanese Listening and Speaking	Prerequisite: 2223 or concurrent enrollment. Designed to give intensive training in listening and speaking in Japanese for students who have taken Japanese 2113. Develops students' understanding of functional ability of listening and speaking Japanese. Students will learn unique features of Japanese language and culture, including casual /polite speech, honorifics, giving-receiving verbs, variety of new forms, such as transitive/intransitive, causative, passive, causative-passive forms. (F, Sp)
JAPN	3113	Advanced Japanese I	Prerequisite: JAPN 2223. Trains students in advanced Japanese language skills of speaking, listening, reading, and writing and introduces new grammatical forms, vocabularies and expressions. Prepares students to understand Japanese society. (F, Sp)
JAPN	3123	Advanced Japanese Practice	Prerequisite: 2223. This course trains students in advanced Japanese language Skills in speaking, listening, reading and writing. Students learn grammatical forms and new vocabularies and expressions. Reading materials emphasize practice of Japanese everyday language. (Irreg.)
JAPN	3133	Advanced Japanese-Contemporary Colloquial Japanese	Prerequisite: 2223 or concurrent enrollment. This course will focus on the study of contemporary colloquial Japanese. Students will study various styles of the spoken Japanese language as produced by the differences in gender, age, and social settings. Students will increase their vocabulary and learn expressions that are frequently used in the spoken speech. (Irreg.)

JAPN	3223	Advanced Japanese II	Prerequisite: JAPN 3113 or equivalent. An advanced course in conversation and composition covering cultural topics. Develops listening and speaking skills to communicate orally in authentic Japanese and expands spoken and written vocabulary knowledge. Presenting ideas in speech and composition effectively will be practiced. (Sp)
JAPN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
JAPN	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
JAPN	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
JAPN	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
JAPN	3990	Independent Study	1 to 3 hours. Prerequisite: 2223. May be repeated; maximum credit 12 hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
JAPN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
JAPN	4013	Topics in Japanese Culture	Prerequisite: JAPN 2223. Offers students an opportunity to perfect their Japanese speaking skill and their understanding of Japanese culture. (F)
JAPN	4113	Advanced Japanese Reading and Writing	Prerequisite: 3223. May be repeated with change of content; maximum credit six hours. This course is designed to develop the advanced-level proficiency in reading and writing. Authentic reading materials on various topics will be used in combination with discussions, oral, and written reports. Emphasis is put on strengthening correct usage of grammar, increasing knowledge of Kanji and compound terms using expressions and idioms in Japanese. (Sp)
JAPN	4223	Advanced Japanese Conversation and Composition II	Prerequisite: 3223. May be repeated with change of subject matter; maximum credit six hours. A continuation of 3223. An advanced course in conversation and composition covering cultural topics. Develops listening and speaking skills to communicate orally in authentic Japanese and expands spoken and written vocabulary knowledge. Students will practice presenting their ideas in speech and composition effectively. (F)
JAPN	4543	Introduction to Classical Japanese	Prerequisite: JAPN 3223. Students will learn classical Japanese grammar, major Japanese literary texts, as well as Japanese customs in ancient Japan. (Sp)
JAPN	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
JAPN	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

JAPN	4990	Independent Study	Prerequisite: junior standing and permission of instructor. May be repeated with change of content; maximum credit six hours. Contracted independent study on one or more topics not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
JAPN	4993	Senior Capstone in Japanese	Prerequisite: JAPN 4113. Examines Japanese modern literature with a focus on the questions of Japanese modernity, post-modernity, nationalism, and cultural identity. (Sp)
JAPN	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
JAPN	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
JAPN	5990	Independent Study	Prerequisite: Graduate standing and permission of instructor. May be repeated with change of content; maximum credit 12 hours. Contracted independent study on one or more topics not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory and field projects. (F, Sp, Su)
JAPN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
JMC	0123	Fundamentals of Writing for the Media	Emphasis will be on fundamentals of writing technique for journalists and other communicators, with a minimum of thirty writing assignments, most in a timed laboratory environment, but some on a take-home basis. Examination of information, logical arrangement of facts, and straightforward, literate writing of the material to prescribed length will be taught. Special attention given to fundamentals in grammar and syntax. Not acceptable for degree credit at the University of Oklahoma. Laboratory (F, Sp)
JMC	1013	Introduction to Mass Communication	Development, scope, functions and information resources of mass media, emphasizing the role of professionals in mass communication and in solving contemporary problems in the mass media. (F, Sp) [I-O]
JMC	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
JMC	2033	Writing for the Mass Media	Prerequisite: 1013 or concurrent enrollment; passage of the school's writing skills test, and permission of instructor. Introduction to journalistic writing: the expository and persuasive formats; supervised practice in writing for the print, broadcast and photographic media; study of professional demands of organizing and presenting information in the various media. Laboratory (F, Sp)
JMC	2623	Electronic Media Writing	Prerequisite: 1013, 2033. Introduction to the various styles of writing used in broadcast and electronic media including narrative, promotional, news and documentary. (F, Sp)
JMC	2644	Introduction to Video Production	Prerequisite: 1013. Provides an overview of both studio and location video production. Lecture, labs and self-paced study will examine production, writing and performance concepts and applications. (F)
JMC	2683	Survey of Electronic Media	Prerequisite: 1013. Conceptual overview of electronic media in both the national and international contexts. Course will cover technology, history, ethics, regulation, programming, diversity, advertising, management and production. (F, Sp)
JMC	2970	Special Topics	1 to 3 hours. Prerequisite: sophomore standing. May be repeated with change of content; maximum credit nine hours. Deals with content and concepts not usually offered in regular coursework and/or special creative situations or projects. (Irreg.)

JMC	3003	Multimedia Journalism	Prerequisite: 2033. Introduces concepts and practices necessary for working in a multi-platform media environment. Provides instruction in the use of photographs, graphics, audio, video and the written word to create stories and content for print, broadcast and online media. (F, Sp, Su)
JMC	3011	Mass Media Practicum	Prerequisite: permission of instructor. May be repeated; maximum credit three hours, two hours may be in the same area. Sections include The Wire, tv programming and operations, Oklahoma Daily, radio station KGOU, OUNightly News, the Sooner Yearbook student staff members, and other JMC major co-curricular opportunities. Discussion and analysis of current problems. (F, Sp, Su)
JMC	3013	Multimedia News Gathering	Prerequisite: 2033, 3003. Development of practical and professional methods of gathering news and information, including exercising news judgment, initiating story ideas, conducting research and interviewing, and producing news content for print, broadcast and online media. (F, Sp, Su)
JMC	3023	Feature Writing	Prerequisite: 2033 and 3003. Recognition and development of ideas for feature stories for various media. Instruction in background research and interviewing methods, writing and rewriting to develop an individual writing style. Students research, write and rewrite a minimum of eight feature stories. (Irreg.)
JMC	3043	Community Journalism	Prerequisite: 2033. The meaning of community is evolving with the importance of new media in the cultural mix. While geographical communities continue to define media consumers, so do online communities, ethnic and racial communities, gender communities and other ways of grouping together to find and exchange relevant information through the media. Explores a variety of forms of community journalism from its roots in the small town newspapers that have provided a verbal/visual town square for centuries to current redefinitions of the concept of community and the media manifestations of those redefinitions. (F, Sp)
JMC	3063	Introduction to Broadcast Journalism	Prerequisite: 2033 and 3003, or concurrent enrollment or permission. Introduction to the professional standards, vocabulary, processes, and newsroom organization of broadcast news. Focus is on learning how a broadcast newsroom functions and the collaboration needed to create a productive and efficient newsroom environment. (F, Sp, Su)
JMC	3083	Business of Media	Prerequisite: 2033 and completion of OU Math requirement. Explores the dual purpose of news and information media - the public service ethic rooted in journalism values and the financial interest rooted in business - and how the values of journalism co-exist and conflict with the values of business. (F, Sp)
JMC	3103	News Editing	Prerequisite: 2033, 3003. Work on newspapers, including correction of errors of fact and expression. The factors considered in selection of news. Good taste in editing copy; avoidance of libel; headline writing; techniques of copy control; newspaper makeup and arrangement. Laboratory (F, Sp)
JMC	3143	Basic News Photography	Prerequisite: 2033. Basic photographic skills needed to produce photographs suitable for newspaper and magazine publication. Content includes 35mm photography, darkroom techniques, news judgment, ethics, privacy issues, crime scene, courtroom and government protocol. 35mm camera required. Laboratory (F)
JMC	3153	Magazine Industry and Issues	Prerequisite: 2033. Examines development of the magazine industry and its current state, including ethical and legal issues and the impact of e-zines. Explores the trend toward niche magazines - including the strong ethnic/minority niche - and the specific requirements of magazine journalism, design and production. (F, Sp)
JMC	3303	Introduction to Advertising	Prerequisite: 1013, 2033 or permission. Survey of the field of advertising and career areas within the field with emphasis on the relationship between marketing and advertising and the media which serve as channels of advertising communication. (F)

JMC	3333	Advertising Research	Prerequisite: 1013, 2033, 3303. Introduction to concepts of research. Survey and use of secondary and primary data sources as basis for formulating basic advertising plans, including advertising and communications goals and objectives. (Sp)
JMC	3353	Advertising Copy and Layout	Prerequisite: 1013, 2033, 3303 or permission. Principles and their application in advertising design and copywriting. Stress on the analysis of appropriate appeals and the development of advertising concepts to convey these through the various media. Emphasis on practice in making rough layouts and writing finished copy. Laboratory (Sp)
JMC	3363	Advertising Media	Prerequisite: 1013, 2033, 3303. Characteristics of the major advertising media. Problems of rates, coverage and costs of using various media mixes. Emphasis on the planning of the media schedule and its relationship to the creative strategy. (F)
JMC	3393	Advanced Copywriting	Prerequisite: 1013, 2033, 3303, 3333, 3353. Extended practice in application of creative copy principles for major advertising media including newspapers, magazines, radio and television. (Irreg.)
JMC	3413	Introduction to Public Relations	Prerequisite: 1013, 2033. The history, scope, ethics and functions of public relations. Particular attention given to ways of gaining public support for an activity, cause, movement or institution. (F, Sp)
JMC	3423	Public Relations Writing	Prerequisite: 1013, 2033, 3413. Fundamentals and practice in preparation of public relations copy for various media and channels, including news and feature stories, photo captions, public service broadcasts and telecasts, viewbooks, annual reports, plans-programs memos, speeches, letters and direct mail materials. Techniques in dealing with management and various publics, including the news media. Laboratory (Sp)
JMC	3433	Public Relations Publications	Prerequisite: 1013, 2033, 3413, 3423. Planning, writing and producing company and institution magazines with special emphasis on design, layout and content. Laboratory (F)
JMC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
JMC	3504	Introduction to Professional Writing	Prerequisite: JMC 1013, JMC 2033, JMC 3011 or concurrent enrollment in JMC 3011, and instructor permission. Basic theory, orientation and fundamental techniques of fiction writing. (F, Sp)
JMC	3514	Writing the Short Story	Prerequisite: 1013, 2033, 3504 and permission. Techniques and theory of fiction writing and plots, with emphasis on current American short stories. (F, Sp)
JMC	3534	Professional Writing: Magazine Writing	Prerequisite: 1013, 2033, 3023 or 3504. Research, preparation, technical devices, marketing of the nonfiction article or book. Study of current trends, with emphasis on magazine nonfiction. (Irreg.)
JMC	3613	Electronic Field Production	Prerequisite: 2033, 2644 and/or 2623 or concurrent enrollment. Single-camera field production. Studies in methods for visual storytelling with electronic media. Students learn to gather, evaluate and post-produce content for traditional and emerging new media. (F, Sp)
JMC	3622	Writing for Broadcast	Prerequisite: 1013, 2033. Introduction to the various styles of writing news and non-news material for presentation on radio, television and motion pictures. Laboratory consists of time-bound practice in application of principles to different media. Laboratory (F, Sp)

JMC	3633	Audio Production	Prerequisite: 1013, 2033. Studies in audio technology, recording techniques and technology, audio for television, film, radio and other distribution technologies. The study of processes including foley, synchronization, live mixing, talent microphone techniques, and audio engineering. Production of multiple audio elements for a variety of applications including news, advertising, promotion and others. (F, Sp)
JMC	3653	Radio News	Prerequisite: 2033 and 3003 or 2623. Study and practice of writing, editing and preparation of radio newscasts. Laboratory (F)
JMC	3663	Electronic News Gathering Techniques	Prerequisite: 2033 and 3003. The history, theory and application of electronic news gathering techniques. Students learn to gather audiovisual information, evaluate it, edit it, and prepare the data for distribution through traditional and emerging news media. (F, Sp)
JMC	3673	Radio-Television Sales	Prerequisite: 1013 and 2033. Interpretation of sales, market and media data used in making sales presentations on behalf of radio and television media. Emphasis is on creative use of these data regarding sales problems. (Irreg.)
JMC	3683	Interactive Multimedia	Prerequisite: 2033 and 3003 or permission of instructor. Description and history of interactive multimedia. Students explore current uses of these new technologies and receive instruction in practical application. Students conceive and design iam programs, incorporating computer graphics, text, animation, audio and video. (F, Sp)
JMC	3703	Photojournalism	Prerequisite: 3143. Assignments include preparation of portfolio involving techniques to add interest to photographic content and two photo stories submitted for sale to news and magazine editors. Laboratory (Irreg.)
JMC	3713	History of Motion Media	Prerequisite: 2644 and 2683, or permission of instructor. History and development of film, television and emerging media as a communication medium. Varied critical perspectives are offered; exemplary media presented, preceded by lectures on history and technique, followed by discussion periods. (Irreg.)
JMC	3723	Introduction to Documentary	Prerequisite: 1013 and 2644, or permission of instructor. History and development of the documentary medium. Varied perspectives are offered; exemplary films and videos are presented, preceded by lectures on history and technique. Includes discussion periods and practice. (Irreg.)
JMC	3753	Electronic Media Criticism	Prerequisite: 1013, 2033. Offers basic skills to interpret the role that internet, video, film and audio play as a cultural force in society. Students will learn to become critical analysts of media texts. (Sp)
JMC	3763	Visual Writing and Aesthetics	Prerequisite: 2033, 2644. Course covers how shots and their sequencing communicates specific messages to audiences. Focus is on writing short-form dramatic scripts. Students, using visual language as a basis, will script a television series or a number of short films. (F, Sp)
JMC	3773	Television News	Prerequisite: 3003, 3013, 3063 and 3663. Television news principles and practice in use of ENG (electronic news gathering), editing of video tape stories and preparation of television news programs. Laboratory (F, Sp)
JMC	3783	Voice and Performance	Prerequisite: 2644 or 3633. The development of disciplines controlling vocal, visual mechanics and interpretative performances for the microphone or on camera. (F, Sp)
JMC	3800	Internship	2 or 3 hours. Prerequisite: 3.00 grade point average required with a total of 75 semester hours completed of which 15 semester hours are required in JMC. Variable Credit, student may choose 2 or 3 credit hours. May be repeated; maximum 6 credit hours. Participation in supervised intern experience; grade of S or U based on work performance, regular reports, on-site supervisor evaluation. (F, Sp, Su)
JMC	3813	Typography and Design	General survey of development of graphic arts. Emphasizes techniques, processes and procedures for putting words and illustration into print media primarily, with particular attention to elements of effective design. Laboratory (Sp)

JMC	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of content; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program; covers materials not usually presented in regular courses. (F, Sp, Su)
JMC	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of content; maximum credit six hours. Projects vary; deal with concepts no usually presented in regular coursework. (F, Sp, Su)
JMC	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of content; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
JMC	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content; maximum credit six hours. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
JMC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
JMC	4013	Reporting Public Affairs	Prerequisite: 3003 and 3013 or graduate standing. Coverage of government news at the local level with special attention on court procedures, assessments, taxes, budgets and current city, county, state and school problems. Practical experience on city hall and courthouse assignments. (F)
JMC	4023	Advanced News Editing	(Slashlisted with 5023) Prerequisite: 3003 and 3103. Studies and laboratory experience in creative editing and newsroom management for the daily newspaper or magazine, including photo selection and editing, copy handling procedures, assignments, edition planning, handling of special themes and areas of interest, personnel motivation and ethical problems of the editor. No student may earn credit for both 4023 and 5023. Laboratory (Irreg.)
JMC	4033	Magazine Production	Prerequisite: 3003 and 3153. Focuses on the overall business structure of the magazine industry and how to create a business plan for a magazine start up. Explores the creative side of magazine, creating a magazine prototype that accompanies the publication's business plan. The class focuses on what is required to take a magazine from concept to sustainable circulation. No student may earn credit for both 4033 and 5033. (F, Sp)
JMC	4043	Reporting in Specialized Fields	Prerequisite: 3003 and 3013. Emphasis on writing stories - how to plan, report, write and edit in-depth enterprise stories. Gain knowledge in story forms, including news, feature, investigative, trend profile and narrative, with emphasis on depth of reporting and complexity of theme, material and structure. No student may earn credit for both 4043 and 5043. (F, Sp)
JMC	4053	Advanced Reporting	(Slashlisted with 5053) Prerequisite: 3013. The development of advanced skills in informational, feature and beat reporting, and the advanced study of news gathering, presentation and gatekeeping theory. No student may earn credit for both 4053 and 5053. (Sp)
JMC	4103	Mass Communication Technology	(Slashlisted with 5103) Prerequisite: upper-division standing. An examination of new communication technologies and their impact on the mass communication industry and on society, in the framework of the information revolution. Topical areas include the electric revolution, print and broadcasting technologies, communication satellites and computers and their convergence, interactive communication systems, electronic age, and international impacts. No student may earn credit for both 4103 and 5103. (Sp)
JMC	4123	Mass Communication Theories	Prerequisite: junior standing and twelve hours of journalism credit. Introduction to theories and theoretical concepts in mass communication, including an overview of the theoretical approaches to understanding media uses, media effects, influences on media content, and the functions of media in societies and cultures. (F, Sp)

JMC	4183	Advanced Multimedia Journalism	Prerequisite: 3003, 3013, any two skills streams, or permission of instructor. Advanced instruction in multimedia journalism, with focus on producing news and information content using text, photography, audio and video for a web-based product. No student may earn credit for both 4183 and 5183. (F, Sp)
JMC	4193	Principles of Media Entrepreneurship	(Slashlisted with 5193) Prerequisite: JMC 1013 and JMC 2033. An in-depth examination of media entrepreneurship and distribution in the digital age. Students will learn how to create their own company, design a business plan, create budgets, and find financial backers and sponsors. Current approaches to marketing and distributing media products of various forms to the media industry will also be explored. No student may receive credit for both 4193 and 5193. (F, Sp, Su)
JMC	4223	Digital Advertising	(Slashlisted with 5223) Prerequisite: JMC 1013, JMC 2033 and JMC 3033. Recognizing the growing importance of newly emerging forms of advertising/promotions using non-traditional or alternative media, this course is designed to explore a new view of advertising in the current marketing/media environments. Along with learning the traditional advertising theories, students will understand how to effectively measure the use of interactive advertising media. No student may earn credit for both 4223 and 5223. (Irreg.)
JMC	4233	Advertising Portfolio	Prerequisite: 1013, 2033, 3303, 3353. Designed for students interested in advertising copywriting, art direction, account planning, advertising media, and advertising account management. Students will learn how to create an advertising portfolio by exploring all aspects of portfolio creation and strategies for marketing it to real professionals. No student may earn credit for both 4233 and 5233. (Irreg.)
JMC	4243	Strategic Fashion Communication	Prerequisite: 1013, 2033, 3303, 3413. Offers both a critical and practical exploration of the fashion communication business covering the complete cycle of the fashion industry from the concept and production stages to marketing campaigns, product sales, and events planning. Focusing on the lifecycle of the fashion brand. No student may earn credit for both 4243 and 5243. (Irreg.)
JMC	4253	British Media Studies	(Slashlisted with 5253) Prerequisite: JMC 1013, JMC 2033, and permission of instructor. Critical analysis of the products of the media and the impact that the British media have upon their and our culture. Students will gain the ability to understand similarities and differences in British and American media cultures. No student may earn credit for both 4253 and 5253. (Irreg.)
JMC	4263	British News Media Systems	(Slashlisted with 5263) Prerequisite: junior standing and permission of instructor. Examines the structure, role, history and future of the news media in the United Kingdom and Europe. Covers print, broadcast, and web-based news media, with particular emphasis on broadcast/journalism and the current challenges it faces. There will be site visits to advertising and public relations agencies. Students will learn about the role of public service media in the U.K. as well as more market-based media. Explores how U.S. media companies operate outside their home country and the issues they face. No student may earn credit for both 4263 and 5263. (Irreg.)
JMC	4273	Communicating Culture Tourism Media: Concepts and Theory	(Slashlisted with 5273) Prerequisite: JMC 1013, JMC 2033 & JMC 3413 & permission from instructor; corequisite JMC 4283. Through an immersion experience in an international location, students will analyze the cultural traditions and history of modern travel media. Studies include the major contexts and motives of tourism, as well as the foundations of contemporary forms of travel media. No student may earn credit for both 4273 and 5273. (Irreg.)

JMC	4283	Communicating Culture Tourism Media: Travel Genres	(Slashlisted with 5283) Prerequisite: JMC 1013, JMC 2033, JMC 3413 & permission of instructor; corequisite JMC 4273. Through an immersion experience in an international location, this course will teach students the elements of narrative storytelling for media, and give them opportunities to hone and develop their individual writing styles through applied assignments. Students will gain the strategic and applied skills for feature-style writing that will allow them to produce media that meet professional standards. No student may earn credit for both 4283 and 5283. (Irreg.)
JMC	4303	International Advertising	(Crosslisted with MKT 4303; Slashlisted with 5303) Prerequisite: 3303. May be repeated with change of subject matter; maximum credit six hours. Designed to provide basic understanding of advertising and culture that applies to advertising in non-American locations. No student may earn credit for both 4303 and 5303. (Irreg.)
JMC	4313	Integrated Marketing Communication	Prerequisite: permission of instructor or graduate standing. Designed to provide a basic understanding of the integrated marketing communication approach to senior-level and graduate students in any of the functional marketing communication areas such as advertising or public relations, or students in marketing. Focuses on the use of the traditional marketing communication tools of advertising, marketing public relations, sales promotion, and direct marketing in a way that promotes byth synergy and a continuing dialogue with the consumer as an individual. (Irreg.)
JMC	4323	Advertising Account Planning	(Slashlisted with 5323) Prerequisite: 3303. Discussion and practice of the advertising agency function of representing the target audience. Emphasis on learning to think like a consumer. Incorporates creativity, market research, consumer behavior and critical thinking to help in understanding target audiences. No student may earn credit for both 4323 and 5323. (F)
JMC	4333	Contemporary Problems in Advertising	(Slashlisted with 5333) Prerequisite: 1013, 2033, 3303, 3333. Survey of contemporary problems in advertising, including current social and economic criticisms, legal and self-regulation problems, and agency and media-related problems. No student may earn credit for both 4333 and 5333. (F)
JMC	4343	Advertising Campaigns	Prerequisite: 1013, 2033, 3303, 3333, 3353, 3363 and senior standing. This is the senior capstone course for the advertising sequence. Working as members of competitive advertising agency teams, students research, plan, develop marketing, creative and media strategy and make formal presentations to a major client for a complete advertising campaign. Laboratory (F, Sp) [V]
JMC	4403	Public Relations Campaigns-Capstone	Prerequisite: 1013, 2033, 3413, 3423, 3433. Capstone course for the Public Relations sequence. Detailed analysis of current case studies in the planning, execution and evaluation of public relations programs and projects, including practical work in the field. Emphasis given to fact finding, researching publics, setting objectives, planning the program/project, execution and evaluation. (Sp) [V]
JMC	4413	Crisis Communication	Prerequisite: 3413 or instructor permission. Examine strategic communication practices throughout the three stages of a crisis event. Special emphasis is placed on crisis planning, media relationships, image restoration, ethical responses, and organizational learning. No student may earn credit for both 4413 and 5413. (F, Sp)
JMC	4423	Public Relations Case Studies	(Slashlisted with 5423) Prerequisite: 1013, 2033, 3413. Designed to demonstrate how to apply public relations theory to a wide range of possible situations. Requires the student to adapt the communications and PR models learned in the public relations principles course to a number of case studies and problems. No student may earn credit for both 4423 and 5423. (Irreg.)

JMC	4433	Sports Public Relations	(Slashlisted with 5433) Prerequisite: 1013, 2033, 3413. A study of public relations as it is practiced in the sports industry featuring guest and video presenters representing various sports publicity, promotion and public relations positions. Includes representatives of newspaper, television, and radio sports departments. No student may earn credit for both 4433 and 5433. (Irreg.)
JMC	4443	Financial Public Relations	(Slashlisted with 5443) Prerequisite: 3413. Instruction and practice designed to develop an understanding of the investor relations function in public relations activity for corporations. Study of the stock market, the roles of the principal players on Wall Street and relevant regulatory powers. Analysis of annual reports and how they are produced as well as financial statements and communication efforts aimed at investors and the news media. No student may earn credit for both 4443 and 5443. (Irreg.)
JMC	4453	Public Relations Research	(Slashlisted with 5453) Prerequisite: 3413. To build skills in the use of various public relations research methodologies available for exploratory, evaluation, and management assessment of programs. No student may earn credit for both 4453 and 5453. (Sp)
JMC	4463	Public Relations Management	Prerequisite: 3413 or graduate standing. Theory and concepts of public relations as a management function. Emphasis on practical applications and case studies. Topics explored, in seminar fashion, include social and organizational contexts of public relations management, systems and strategies for planning, implementing and evaluating public relations activities, and tasks involved in public relations management. (F, Sp)
JMC	4483	Global and International Public Relations	(Slashlisted with 5483). Prerequisite: JMC 1013, JMC 2033 and JMC 3413. Investigate current issues in global public relations practice. Students will examine how political, socio-economic, cultural, and historical particularities, together with pop culture, influence modern public relations practice. Students will also learn what role the social media plays in shaping global public relations strategies, as well as what role globalization plays in shaping strategic communication messages on international markets. No student may receive credit for both 4483 and 5483. (F, Sp, Su)
JMC	4503	Tutorial in Writing	Prerequisite: 1013, 2033, 3504, 3514 and permission. May be repeated once for credit; maximum credit six hours. May accompany 3514 with permission. Individual conferences devoted entirely to preparation, criticism, editing and preparation for marketing of the student's original manuscript, both fiction and nonfiction. (F, Sp)
JMC	4514	Writing the Novel	Prerequisite: 1013, 2033, 3504 and 3514; or permission. May be repeated; maximum credit eight hours. Analysis of the practical creative problems involved in writing novels. Instruction in specific approaches and techniques useful in plotting, characterization, setting, scene, etc. Supervised writing of a novel by each student. (F, Sp)
JMC	4524	Writing the Short Story	(Slashlisted with 5524) Prerequisite: majors only; JMC 1013, JMC 2033, JMC 3504 and permission of instructor or department. Techniques and theory of fiction writing and plots, with emphasis on current American short stories. No student may earn credit for both 4524 and 5524. (F, Sp)
JMC	4543	Sci-Fi & Fantasy Writing	(Slashlisted with 5543) Prerequisite: JMC 3504. Although most people lump science fiction and fantasy stories together, these two genres are worlds apart. This course will help you expand your understanding of the two areas by focusing on world building, tech, and magic as well as potential societal differences. Sci-Fi & Fantasy Writing allows participants to dig more deeply into genres they wish to explore. No student may earn credit for both 4543 and 5543. (F, Sp)

JMC	4563	Category Fiction	(Slashlisted with 5563) Prerequisite: 3504 and 3514, or permission of instructor. May be repeated once with change of content; maximum credit six hours. In-depth study of current popular fiction genres and techniques used by category authors. Discussion of books in terms of fiction devices and application of such techniques to student's own work. No student may earn credit for both 4563 and 5563. (F)
JMC	4573	Theories of Professional Writing	(Slashlisted with 5573) Prerequisite: majors only; JMC 3504. Study of significant theories of the writing process, the motivation to write, and intended effects of writing. Students will address aesthetics, philosophy and values relating to careers in writing. No student may earn credit for both 4573 and 5573. (F, Sp)
JMC	4583	Romance & Suspense Writing	(Slashlisted with 5583) Prerequisite: JMC 3504. These two genres exist independently of each other, yet can blend to make a hybrid that remains a highly successful type of story. This course will illustrate the core values of Romance and Suspense, touching on the various subgenres of each, then show participants how to use those core elements to create romantic suspense stories. Romance & Suspense Writing allows interested participants to gain a more rounded knowledge of each genre so that they can write in either field or combine the two. No student may earn credit for both 4583 and 5583. (F, Sp)
JMC	4603	Business of Professional Writing	Prerequisite: JMC 4573 & Senior Standing. The capstone course should reflect the culmination of the student's training in writing technique and craftsmanship and demonstrate the student's ability to apply such knowledge in his or her own writing. Furthermore, the student should show awareness of the marketplace and what constitutes work that is commercial, professional, and saleable. (F, Sp) [V]
JMC	4623	Producing and Directing for Multi-Camera	(Slashlisted with 5623) Prerequisite: 2644. Covers the techniques of multi-camera for studio and/or location production. Preparatory, practical, technical, and theoretical issues regarding pre-production, production, and directorial work for live television. No student may earn credit for both 4623 and 5623. (Irreg.)
JMC	4633	Advanced Video Production	(Slashlisted with 5633) Prerequisite: 2033, 3613. May be repeated once; maximum credit six hours. Advanced single-camera class. Units on aesthetics, lighting, visualization, post-production and the integrations of sound. Intensive practice and skill development in television production techniques. No student may earn credit for both 4633 and 5633. Laboratory (F, Sp)
JMC	4643	Advanced Audio Production	(Slashlisted with 5643) Prerequisite: 2623, 3633. Advanced study of the technology, capabilities and utilization of audio media. Units on advanced audio techniques for radio, television and film. Intensive practice and skill development in audio production techniques. No student may earn credit for both 4643 and 5643. Laboratory (Irreg.)
JMC	4653	Issues And Ethics In Electronic Media	Prerequisite: 90 hours including twelve hours of Journalism and Mass Communications courses. Capstone course for Broadcasting and Electronic Media. Identification, examination, and analysis of current and ethical issues affecting media and media industries. Course content varies. (Sp) [V]
JMC	4673	Advanced Broadcast News	(Slashlisted with 5673) Prerequisite: 3013 and 3773. Study of current requirements for and practice of public affairs programming, including news. Evolution of broadcast documentary form; writing, filming, editing techniques; budgeting and scheduling; actual preparation of public affairs programs of various types with emphasis on the extended-length news documentary. No student may earn credit for both 4673 and 5673. Laboratory (Sp)

JMC	4683	Multimedia Content Management	(Slashlisted with 5683) Prerequisite: 3013 and 3683. Examines working with media content in a variety of formats such as text, audio, video, photography and graphics, for online media. Instruction and practice in editing designing, presenting, and managing news and information content for online media. No student may earn credit for both 4683 and 5683. (F, Sp) [V]
JMC	4693	Broadcast and Electronic Media Management	(Slashlisted with 5693) Prerequisite: 1013, 2033, 2683. Operational and organizational management of media technologies in broadcast, corporate communications, internet and other media-based industries. Includes discussion of legal, human resource, economic and policymaking issues. No student may earn credit for both 4693 and 5693. (Irreg.)
JMC	4734	Film Script Writing	Prerequisite: 2033, 3504 or permission. May be repeated; maximum credit eight hours. Analysis of practical creative problems in writing the feature length narrative screenplay. Instruction in specific approaches and techniques including outlining, the three-act structure, format, dialogue, and characterization. Supervised writing of an original screenplay by each student. (Sp)
JMC	4753	Documentary Research and Writing	(Slashlisted with 5753) Prerequisite: 2644, 3723 or concurrent enrollment or permission. Covers the preparation of a documentary from both practical and critical/theoretical directions. Focuses on research, writing and submission of documentary proposals, and practical writing exercises. No student may earn credit for both 4753 and 5753. (F)
JMC	4763	Documentary Producing and Directing	(Slashlisted with 5763) Prerequisite: 4753. Emphasis is on the production and post-production phases of producing a documentary and developing the necessary skills. These include camera, lighting, sound recording, styles of visual coverage, interviewing, etc. The post production skills may include editing sound, visuals, writing and recording narration and voice over tracks, along with titles and graphics to complete a documentary. Students will shoot and complete a documentary project. No student may earn credit for both 4763 and 5763. (Sp)
JMC	4773	Post Production and Graphics	(Slashlisted with 5773) Prerequisite: 3613. Practice and understanding of the aesthetic and technical applications of digital editing and design. Advanced non-linear editing techniques, DVD creation, graphic design, soundtrack creation, and compositing are covered in the context of fiction and non-fiction visual storytelling. No student may earn credit for both 4773 and 5773. (F, Sp)
JMC	4783	Advanced Interactive Multimedia Design	(Slashlisted with 5783) Prerequisite: 4683. Explores blending content with delivery in computer-based media. Studies combining text, audio, video, and images on different platforms. Develops advanced skills in conceptualization, planning, and design. No student may earn credit for both 4783 and 5783. (F, Sp)
JMC	4793	Broadcast Advertising Production	(Slashlisted with 5793) Prerequisite: 2623 and 3613, or permission of instructor. Addresses all the major stages of creating broadcast advertising messages from research and development of scripts through production, post production and final presentation. Emphasis will be placed on working in teams to create commercial messages. No student may earn credit for both 4793 and 5793. (Irreg.)
JMC	4803	History of Journalism	Prerequisite: junior standing and twelve hours of Journalism credit hours. European background and development of the colonial press. Emergence of the partisan and penny newspapers. Evolution of personal and independent journalism. Major trends in printed and other communication media in the twentieth century. (F, Sp)

JMC	4813	Mass Communication Law	Prerequisite: ninety hours, including thirteen hours of journalism and mass communication. Capstone course for the Journalism sequence. Examines the principles by which the mass media exercise their public functions and fulfill the mission of the First Amendment. Areas studied include: the right to know, truth and fairness, responsibility, libel, privilege, fair comment, privacy, contempt, copyright, regulation of advertising and the rules, regulations and industry codes which affect the broadcast media. (F, Sp) [V]
JMC	4833	Journalism Ethics	(Slashlisted with 5833) Prerequisite: junior standing and twelve hours of journalism and mass communication courses. Press criticism; organizational performance; reportorial performance; print/broadcast distinctions. No student may earn credit for both 4833 and 5833. (F, Sp)
JMC	4843	Literature of Journalism	(Slashlisted with 5843) Prerequisite: ninety hours, to include twelve in journalism, or permission of instructor. Reading and discussion of influential books about journalism and mass communication to expose students to the ideas of classic and contemporary writers and thinkers in the field. The course connects a journalism education to broader social science concepts in a manner that should stimulate critical thinking about the role of the media in American and international societies. No student may earn credit for both 4843 and 5843. (Irreg.)
JMC	4853	Race, Gender and the Media	(Slashlisted with 5853) Prerequisite: junior standing and twelve Journalism and Mass Communication credit hours. Survey of past and present relationships between women and racial and ethnic minorities in the U.S. and the media. Media portrayal, employment, ownership and access will be studied. No student may earn credit for both 4853 and 5853. (Sp)
JMC	4863	Journalism, Ethics and Democracy	Prerequisite: 90 hours, including 24 hours in Journalism. Journalism Capstone course that immerses majors in a conceptual examination of the crucial role of news professionals in a participatory democracy. Emphasizes freedom of speech and press, ethical principles, the watchdog function of journalism, and social and professional responsibilities of journalists in an age of rapidly changing media forms. (F, Sp) [V]
JMC	4903	Client-Based Production	(Slashlisted with 5903) Prerequisite: 4633 or permission of instructor. Students work on actual client projects. The class simulates a production house operation. Working in teams, students are responsible for budgeting, working with clients, scripting, shooting, editing and follow-through on the project. No student may earn credit for both 4903 and 5903. (F, Sp)
JMC	4913	Dramatic Series/Short Productions	(Slashlisted with 5913) Prerequisite: 3763 and 4633. Focuses on the production of dramatic narrative content appropriate for electronic media distribution. Includes concepts used in the development of serial storytelling and short focused productions. No student may earn credit for both 4913 and 5913. (F, Sp)
JMC	4923	World Media	(Slashlisted with 5923) Prerequisite: 2033 and junior standing. Analyzes the relationship between multi-dimensional globalization and the processes of communication. The analysis will highlight the social, cultural and political implications of globalization and the specific influence of communication in the social dimensions of globalization. No student may earn credit for both 4923 and 5923. (Sp)
JMC	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
JMC	4970	Special Topics	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Varied projects with experimental, innovative and creative approaches, to communicating through the mass media. (Irreg.)

JMC	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department; 3.00 grade point average on all college work. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
JMC	5001	Professional Practices	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit six hours. Discussion and practice in specialized skills related to news and information, strategic communication, or media arts. (F, Sp)
JMC	5023	Advanced News Editing	(Slashlisted with 4023) Prerequisite: graduate standing and permission. Studies and laboratory experience in creative editing and newsroom management for the daily newspaper or magazine, including photo selection and editing, copy handling procedures, assignments, edition planning, handling of special themes and areas of interest, personnel, motivation and ethical problems of the editor. No student may earn credit for both 4023 and 5023. Laboratory (Irreg.)
JMC	5033	Magazine Production	Prerequisite: graduate standing and permission of instructor. Focuses on the overall business structure of the magazine industry and how to create a business plan for a magazine start up. Explores the creative side of magazine, creating a magazine prototype that accompanies the publication's business plan. The class focuses on what is required to take a magazine from concept to sustainable circulation. No student may earn credit for both 4033 and 5033. (F, Sp)
JMC	5043	Reporting for Specialized Fields	Prerequisite: graduate standing and permission of instructor. Emphasis on writing stories - how to plan, report, write and edit in-depth enterprise stories. Will gain knowledge in story forms, including news, feature, investigative, trend profile and narrative, with emphasis on depth of reporting and complexity of theme, material and structure. No student may earn credit for both 4043 and 5043. (F, Sp)
JMC	5053	Advanced Reporting	(Slashlisted with 4053) Prerequisite: graduate standing and permission. The development of advanced skills in informational, feature and beat reporting, and the advanced study of news gathering, presentation and gatekeeping theory. No student may earn credit for both 4053 and 5053. (F)
JMC	5063	Readings in Mass Communication	Prerequisite: graduate standing and permission. Exploration of key works defining the field of mediated communication. Students will examine an area of inquiry of interest to them in depth through readings, discussion, and writing. Includes an examination of online resources, bibliographies, histories, theoretical concepts and issues, and critical biographies of key figures. (Sp)
JMC	5073	Conceptual Issues in Graduate Study in Journalism and Mass Comm	Prerequisite: graduate standing. Introduction to key study areas in journalism and mass communication. Historical foundations, theoretical development and research trends will be outlined. Students will meet graduate faculty members and discuss major ideas and issues in the field. (F)
JMC	5083	Mass Communication Theory	Prerequisite: graduate standing or permission. Theoretical perspectives and issues in mass communication. Emphasis on processes and effects that affect mass communication practices and media. Exploration of contemporary research and its contribution to the growing body of knowledge about mass communication. No student may earn credit for both 5083 and 6083. (F)
JMC	5091	Thesis/Project Seminar	Prerequisite: graduate standing. Choice and development of appropriate research topics and proposals for thesis and professional projects. Discussion of the rigor and expectations for this research. (Sp)
JMC	5093	Introduction to Research Methods in Mass Communication	Prerequisite: graduate standing. Introduction to research methods used in the study and practice of mass communication. Addresses how to formulate research problems and choose appropriate methods to study them, including both quantitative and qualitative approaches. (F)

JMC	5103	Mass Communication Technology	(Slashlisted with 4103) Prerequisite: graduate standing. An examination of new communication technologies and their impact on the mass communication industry and on society, in the framework of the information revolution. Topical areas include the electric revolution, print and broadcasting technologies, communication satellites and computers and their convergence, interactive communication systems, electronic age, and international impacts. No student may earn credit for both 4103 and 5103. (Sp)
JMC	5113	Qualitative Research Methods	Prerequisite: graduate standing. Surveys a range of conceptual and methodological approaches appropriate for qualitative research in mass communication. Topics include conceptualization of research problems, framing research questions, the nature and sources of evidence, modes of interpretation, and conceptual framework from which evidence is analyzed in qualitative studies. No student may earn credit for both 5113 and 6113. (Sp)
JMC	5123	International Media Systems	Prerequisite: graduate standing or permission of instructor. Introduction to world press systems and description of the broad dimensions of global mass media communication. Global controversies, questions and problems; regional media systems and technological similarities/differences of various countries' media systems. (Irreg.)
JMC	5133	Quantitative Research Methods	Prerequisite: graduate standing. Quantitative research methods commonly used in the study of the process and effects of mass communication and the application of the scientific method to such inquiry. No student may earn credit for both 5133 and 6133. (Sp)
JMC	5153	Special Topics in Media Arts	Prerequisite: graduate standing and permission of department. May be repeated with change of content; maximum credit twelve hours. Investigation of a problem relating to such subjects as a significant trend, practice, medium, idea, critical principle, or significant person in television, film, book, and other artistic or entertainment media. (Irreg.)
JMC	5163	Special Topics in News and Information	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit twelve hours. Investigation of a problem relating to such subjects as a significant trend, practice, medium, idea, critical principle, or significant person in journalism, news, and information fields. (Irreg.)
JMC	5173	Special Topics in Strategic Communication	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit twelve hours. Investigation of a problem relating to such subjects as a significant trend, practice, medium, idea, critical principle, or significant person in advertising, public relations, and strategic communication fields. (Irreg.)
JMC	5183	Advanced Multimedia Journalism	Prerequisite: graduate standing and permission of instructor. Advanced instruction in multimedia journalism, with a focus on producing news and information content using text, photography, audio and video for a web-based product. No student may earn credit for 4183 and 5183. (F, Sp)
JMC	5193	Principles of Media Entrepreneurship	(Slashlisted with 4193) Prerequisite: JMC 1013 & 2033 and graduate standing. An in-depth examination of media entrepreneurship and distribution in the digital age. Students will learn how to create their own company, design a business plan, create budgets, and find financial backers and sponsors. Current approaches to marketing and distributing media products of various forms to the media industry will also be explored. No student may receive credit for both 4193 and 5193. (F, Sp, Su)
JMC	5223	Digital Advertising	(Slashlisted with 4223) Prerequisite: graduate standing in Journalism. Recognizing the growing importance of newly emerging forms of advertising/promotions using non-traditional or alternative media, this course is designed to explore a new view of advertising in the current marketing/media environments. Along with learning the traditional advertising theories, students will understand how to effectively measure the use of interactive advertising media. No student may earn credit for both 4223 and 5223. (Irreg.)

JMC	5233	Advertising Portfolio	Prerequisite: graduate standing in Journalism. Designed for students interested in advertising copywriting, art direction, account planning, advertising media, and advertising account management. Students will learn how to create an advertising portfolio by exploring all aspects of portfolio creation and strategies for marketing it to real professionals. No student may earn credit for both 4233 and 5233. (Irreg.)
JMC	5243	Strategic Fashion Communication	Prerequisite: graduate standing in Journalism. Offers both a critical and practical exploration of the fashion communication business covering the complete cycle of the fashion industry from the concept and production stages to marketing campaigns, product sales, and events planning. Focusing on the lifecycle of the fashion brand. No student may earn credit for both 4243 and 5243. (Irreg.)
JMC	5253	British Media Studies	(Slashlisted with 4253) Prerequisite: graduate standing and permission of instructor. Critical analysis of the products of the media and the impact that the British media have upon their and our culture. Students will gain the ability to understand similarities and differences in British and American media cultures. No student may earn credit for both 4253 and 5253. (Irreg.)
JMC	5263	British News Media Systems	(Slashlisted with 4263) Prerequisite: graduate standing and permission of instructor. Examines the structure, role, history and future of the news media in the United Kingdom and Europe. Covers print, broadcast, and web-based news media, with particular emphasis on broadcast/journalism and the current challenges it faces. There will be site visits to advertising and public relations agencies. Students will learn about the role of public service media in the U.K. as well as more market-based media. Explores how U.S. media companies operate outside their home country and the issues they face. No student may earn credit for both 4263 and 5263. (Irreg.)
JMC	5273	Communicating Culture Tourism: Concepts and Theory	(Slashlisted with 4273) Prerequisite: graduate standing and permission of instructor; corequisite JMC 5283. Through an immersion experience in an international location, students will analyze the cultural traditions and history of modern travel media. Studies include the major contexts and motives of tourism, as well as the foundations of contemporary forms of travel media. No student may earn credit for both 4273 and 5273. (Irreg.)
JMC	5283	Communicating Culture Tourism Media: Travel Genres	(Slashlisted with 4283) Prerequisite: graduate standing and permission from instructor; corequisite JMC 5273. Through an immersion experience in an international location, this course will teach students the elements of narrative storytelling for media, and give them opportunities to hone and develop their individual writing styles through applied assignments. Students will gain the strategic and applied skills for feature-style writing that will allow them to produce media that meet professional standards. No student may earn credit for both 4283 and 5283. (Irreg.)
JMC	5303	International Advertising	(Slashlisted with 4303) Prerequisite: graduate standing. May be repeated with change of subject matter; maximum credit six hours. Designed to provide basic understanding of advertising and culture that applies to advertising in non-American locations. No student may earn credit for both 4303 and 5303. (Irreg.)
JMC	5313	Advertising Management	Prerequisite: 5013 and graduate standing. Case-study approach to the problems in planning, developing, appraising and administering advertising and promotion activities. In-depth analysis of the problems and functions involved in managing the advertising function within an agency or within an organization. (Irreg.)
JMC	5323	Advertising Account Planning	(Slashlisted with 4323) Prerequisite: 3303. Discussion and practice of the advertising agency function of representing the target audience. Emphasis on learning to think like a consumer. Incorporates creativity, market research, consumer behavior and critical thinking to help in understanding target audiences. No student may earn credit for both 4323 and 5323. (F)

JMC	5333	Contemporary Problems in Advertising	(Slashlisted with 4333) Prerequisite: graduate standing and permission. Survey of contemporary problems in advertising; including current social and economic criticisms, legal and self-regulation problems, and agency and media-related problems. No student may earn credit for both 4333 and 5333. (F)
JMC	5413	Crisis Communication	Prerequisite: graduate standing and instructor permission. Examine strategic communication practices throughout the three stages of a crisis event. Special emphasis is placed on crisis planning, media relationships, image restoration, ethical responses, and organizational learning. No student may earn credit for both 4413 and 5413. (F, Sp)
JMC	5423	Public Relations Case Studies	(Slashlisted with 4423) Prerequisite: graduate standing and permission. To demonstrate how to apply public relations theory to a wide range of possible situations. Requires the student to adapt communications and PR models to a number of case studies and problems. No student may earn credit for both 4423 and 5423. (Irreg.)
JMC	5433	Sports Public Relations	(Slashlisted with 4433) Prerequisite: graduate standing. A study of public relations as it is practiced in the sports industry featuring guest and video presenters representing various sports publicity, promotion and public relations positions. Includes representatives of newspaper, television, and radio sports departments. No student may earn credit for both 4433 and 5433. (Irreg.)
JMC	5443	Financial Public Relations	(Slashlisted with 4443) Prerequisite: graduate standing and permission. Instruction and practice designed to develop an understanding of the investor relations function in public relations activity for corporations. Study of the stock market, the roles of principal players on Wall Street and relevant regulatory powers. Analysis of annual reports and how they are produced as well as financial statements and communication efforts aimed at investors and the news media. No student may earn credit for both 4443 and 5443. (Irreg.)
JMC	5453	Public Relations Research	(Slashlisted with 4453) Prerequisite: graduate standing and permission. To build skills in the use of various public relations research methodologies available for exploratory, evaluation and management assessment of programs. No student may earn credit for both 4453 and 5453. (Sp)
JMC	5483	Global and International Public Relations	(Slashlisted with 4483) Prerequisite: graduate standing. Investigate current issues in global public relations practice. Students will examine how political, socio-economic, cultural, and historical particularities, together with pop culture, influence modern public relations practice. Students will also learn what role the social media plays in shaping global public relations strategies, as well as what role globalization plays in shaping strategic communication messages on international markets. No student may receive credit for both 4483 and 5483. (F, Sp, Su).
JMC	5503	Graduate Tutorial in Writing	Prerequisite: graduate standing and permission. May be repeated once; maximum credit six hours. Individual conferences devoted entirely to preparation, criticism, editing and preparation for marketing of the student's original manuscript, both fiction and non-fiction. (F, Sp)
JMC	5514	Writing the Novel-Graduate	Prerequisite: graduate standing and permission. May be repeated; maximum credit eight hours. Analysis of the concepts, principles and practical creative problems involved in writing novels. Instruction in specific approaches and techniques useful in plotting, characterization, setting, scene, etc. Supervised writing of a novel by each student. (F, Sp)
JMC	5524	Writing the Short Story	(Slashlisted with 4524) Prerequisite: JMC 1013, JMC 2033, JMC 3504 and permission of instructor or department. Techniques and theory of fiction writing and plots, with emphasis on current American short stories. No student may earn credit for both 4524 and 5524. (F, Sp)

JMC	5543	Sci-Fi & Fantasy Writing	(Slashlisted with 4543) Prerequisite: JMC 3504 and graduate standing. Although most people lump science fiction and fantasy stories together, these two genres are worlds apart. This course will help you expand your understanding of the two areas by focusing on world building, tech, and magic as well as potential societal differences. Sci-Fi & Fantasy Writing allows participants to dig more deeply into genres they wish to explore. No student may earn credit for both 4543 and 5543. (F, Sp)
JMC	5553	Contemporary Problems in Professional Writing	Prerequisite: eight hours in professional writing or equivalent, graduate standing. May be repeated once for credit with change in content. Extensive study of specific trends, shifts in public taste, and technical devices used by the authors. Discussion of books in terms of specific technical devices and how they can be used in the student's own work. (F)
JMC	5563	Category Fiction	(Slashlisted with 4563) Prerequisite: graduate standing and permission. May be repeated once with change of content; maximum credit six hours. In-depth study of current popular fiction genres and techniques used by category authors. Discussion of books in terms of fiction devices and application of such techniques to student's own work. No student may earn credit for both 4563 and 5563. (F)
JMC	5570	Special Topics in Professional Writing	1 to 3 hours. Prerequisite: graduate standing. May be repeated with change of subject matter; maximum credit nine hours. Variable topics related to theory and practice of fiction, nonfiction and dramatic writing. (Irreg.)
JMC	5573	Theories of Professional Writing	(Slashlisted with 4573) Prerequisite: JMC 3504 and graduate standing. Study of significant theories of the writing process, the motivation to write, and intended effects of writing. Students will address aesthetics, philosophy and values relating to careers in writing. No student may earn credit for both 4573 and 5573. (F, Sp)
JMC	5583	Romance & Suspense Writing	(Slashlisted with 4583) Prerequisite: JMC 3504 and graduate standing. These two genres exist independently of each other, yet can blend to make a hybrid that remains a highly successful type of story. This course will illustrate the core values of Romance and Suspense, touching on the various subgenres of each, then show participants how to use those core elements to create romantic suspense stories. Romance & Suspense Writing allows interested participants to gain a more rounded knowledge of each genre so that they can write in either field or combine the two. No student may earn credit for both 4583 and 5583. (F, Sp)
JMC	5594	Writing the Commercial Nonfiction Book	Prerequisite: graduate standing and permission. May be repeated; maximum credit eight hours. Techniques, structure and elements of writing commercial nonfiction. Each student will work on an original book project and create a submittable book proposal with a list of suitable markets. No student may earn credit for both 4594 and 5594. (F)
JMC	5623	Producing and Directing for Multi-Camera	(Slashlisted with 4623) Prerequisite: graduate standing and permission of instructor. Covers the techniques of multi-camera for studio and/or location production. Preparatory, practical, technical and theoretical issues regarding pre-production, production and directorial work for live television. No student may earn credit for both 4623 and 5623. (Irreg.)
JMC	5633	Advanced Video Production	(Slashlisted with 4633) Prerequisite: graduate standing and permission of instructor. May be repeated once; maximum credit six hours. Advanced single-camera class. Units on aesthetics, lighting, visualization, post-production and the integrations of sound. Intensive practice and skill development in television production techniques. No student may earn credit for both 4633 and 5633. (F, Sp)

JMC	5643	Advanced Audio Production	(Slashlisted with 4643) Prerequisite: graduate standing and permission of instructor. Advanced study of the technology, capabilities and utilization of audio media. Units on advanced audio techniques for radio, television and film. Intensive practice and skill development in audio production techniques. No student may earn credit for both 4643 and 5643. (Irreg.)
JMC	5673	Advanced Broadcast News	(Slashlisted with 4673) Prerequisite: graduate standing and permission. Study of current requirements for and practice of public affairs programming, including news. Evolution of broadcast documentary form; writing, filming, editing techniques; budgeting and scheduling; actual preparation of public affairs programs of various types with emphasis on the extended-length news documentary. No student may earn credit for both 4673 and 5673. Laboratory (Sp)
JMC	5683	Multimedia Content Management	(Slashlisted with 4683) Prerequisite: graduate standing and permission of instructor. Examines working with media content in a variety of formats such as text, audio, video, photography and graphics, for online media. Instruction and practice in editing designing, presenting, and managing news and information content for online media. No student may earn credit for both 4683 and 5683. (F, Sp)
JMC	5693	Broadcast and Electronic Media Management	(Slashlisted with 4693) Prerequisite: graduate standing and permission of instructor. Operational and organizational management of media technologies in broadcast, corporate communications, internet and other media-based industries. Includes discussion of legal, human resource, economic and policymaking issues. No student may earn credit for both 4693 and 5693. (Irreg.)
JMC	5734	Writing the Screenplay	Prerequisite: graduate standing and permission. May be repeated; maximum credit eight hours. Analysis of the form and structure of the narrative screenplay. Specific approaches and techniques useful in developing plotting, characterization, setting, scene, etc. Supervised writing of feature-length screenplay by each student. (Sp)
JMC	5753	Documentary Research and Writing	(Slashlisted with 4753) Prerequisite: graduate standing and permission of instructor. Covers the preparation of a documentary from both practical and critical/theoretical directions. Focuses on research, writing and submission of documentary proposals, and practical writing exercises. No student may earn credit for both 4753 and 5753. (F)
JMC	5763	Documentary Producing and Directing	(Slashlisted with 4763) Prerequisite: graduate standing and permission of instructor. Emphasis is on the production and post-production phases of producing a documentary and developing the necessary skills. These include camera, lighting, sound recording, styles of visual coverage, interviewing, etc. The post production skills may include editing sound, visuals, writing and recording narration and voice over tracks, along with titles and graphics to complete a documentary. Students will shoot and complete a documentary project. No student may earn credit for both 4763 and 5763. (Sp)
JMC	5773	Post Production and Graphics	(Slashlisted with 4773) Prerequisite: graduate standing and permission of instructor. Practice and understanding of the aesthetic and technical applications of digital editing and design. Advanced non-linear editing techniques, DVD creation, graphic design, soundtrack creation, and compositing are covered in the context of fiction and non-fiction visual storytelling. No student may earn credit for both 4773 and 5773. (F, Sp)
JMC	5783	Advanced Interactive Multimedia Design	(Slashlisted with 4783) Prerequisite: graduate standing and permission of instructor. Explores blending content with delivery in computer-based media. Studies combining text, audio, video and images on different platforms. Develops advanced skills in conceptualization, planning and design. No student may earn credit for both 4783 and 5783. (F, Sp)

JMC	5793	Broadcast Advertising Production	(Slashlisted with 4793) Prerequisite: graduate standing and permission of instructor. Addresses all the major stages of creating broadcast advertising messages from research and development of scripts through production, post production and final presentation. Emphasis will be placed on working in teams to create commercial messages. No student may earn credit for both 4793 and 5793. (Irreg.)
JMC	5800	Graduate Internship	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit six hours. Professional work experience in mass communication with associated readings, analysis, and critical research. (F, Sp, Su)
JMC	5833	Journalism Ethics	(Slashlisted with 4833) Prerequisite: graduate standing and permission. Press criticism; organizational performance; reportorial performance; print/broadcast distinctions. No student may earn credit for both 4833 and 5833.(F)
JMC	5843	Literature of Journalism	(Slashlisted with 4843) Prerequisite: graduate standing. Reading and discussion of influential books about journalism and mass communication to expose students to the ideas of classic and contemporary writers and thinkers in the field. The course connects a journalism education to broader social science concepts in a manner that should stimulate critical thinking about the role of the media in American and international societies. No student may earn credit for both 4843 and 5843. (Irreg.)
JMC	5853	Race, Gender and the Media	(Slashlisted with 4853) Prerequisite: graduate standing and permission. Survey of past and present relationships between women and racial and ethnic minorities in the U.S. and the media. Media portrayal, employment, ownership and access will be studied. No student may earn credit for both 4853 and 5853. (Sp)
JMC	5880	Graduate Project	2 to 4 hours. Prerequisite: graduate standing in journalism and mass communication. For students electing the project track (nonthesis track). Students will develop, under their project committee's direction, a creative or professional project, such as a novel, a film, an advertising or public relations campaign, or a management plan for a media-related organization. (F, Sp, Su)
JMC	5903	Client-Based Production	(Slashlisted with 4903) Prerequisite: graduate standing and permission of instructor. Students work on actual client projects. The class simulates a production house operation. Working in teams, students are responsible for budgeting, working with clients, scripting, shooting, editing and follow-through on the project. No student may earn credit for both 4903 and 5903. (F, Sp)
JMC	5913	Dramatic Series/Short Productions	(Slashlisted with 4913) Prerequisite: graduate standing and permission of instructor. Focuses on the production of dramatic narrative content appropriate for electronic media distribution. Includes concepts used in the development of serial storytelling and short focused productions. No student may earn credit for both 4913 and 5913. (F, Sp)
JMC	5923	World Media	(Slashlisted with 4923) Prerequisite: graduate standing and permission of instructor. Analyzes the relationship between multi-dimensional globalization and the processes of communication. The analysis will highlight the social, cultural and political implications of globalization and the specific influence of communication in the social dimensions of globalization. No student may earn credit for both 4923 and 5923. (Sp)
JMC	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
JMC	5970	Seminar	1 to 3 hours. May be repeated with change of subject matter; maximum credit 12 hours. Methods of research. Selection, evaluation and development of research problems. (Irreg.)
JMC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

JMC	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing; permission of instructor. May be repeated with change of subject matter; maximum credit six hours. (F, Sp, Su)
JMC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
JMC	6083	Advanced Mass Communication Theory	Prerequisite: graduate standing and permission. Advanced study of theoretical understandings in mass communication with attention to historical roots of the field. Exploration of a variety of perspectives such as the American progressives, the effects tradition, critical theory, and British cultural studies. (Sp)
JMC	6091	Ph.D. Seminar	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit six hours. Discussion and presentation of research by doctoral students, faculty and visiting scholars. Designed to enhance faculty-student interaction and collaboration on research, and to provide preliminary feedback toward development of dissertation proposals. (F, Sp)
JMC	6113	Advanced Qualitative Methods	Prerequisite: graduate standing and permission. Advanced exploration of the nature of communication research and the place of qualitative methods in that research. Examination of a variety of qualitative techniques and their appropriateness for addressing particular issues in mediated communication. (Sp)
JMC	6133	Advanced Quantitative Methods	Prerequisite: graduate standing and permission. Builds upon introductory methods courses and provides a conceptual and practical framework for using multivariate statistics in mass communication research. Explores the most effective and efficient methods of creating and improving quantitative measures. Emphasis on analyzing data and interpreting results. (Sp)
JMC	6153	Advanced Topics in Media Arts	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit twelve hours. Advanced investigation and analysis of a problem relating to such subjects as a significant trend, practice, medium, idea, critical principle, or significant person in television, film, book, and other artistic or entertainment media. (Irreg.)
JMC	6163	Advanced Topics in News and Information	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit twelve hours. Advanced investigation and analysis of a problem relating to such subjects as a significant trend, practice, medium, idea, critical principle, or significant person in journalism, news, and information fields. (Irreg.)
JMC	6173	Advanced Topics in Strategic Communication	Prerequisite: graduate standing and permission. May be repeated with change of content; maximum credit twelve hours. Advanced investigation and analysis of a problem relating to such subjects as a significant trend, practice, medium, idea, critical principle, or significant person in advertising, public relations and strategic communication fields. (Irreg.)
JMC	6183	Approaches to Teaching in Mass Communication	Prerequisite: graduate standing and permission. An overview of pedagogy related to teaching college classes, specifically in journalism and mass communication programs. Immediately helpful to graduate students with teaching assistantships, and ultimately helpful for all students interested in teaching careers. (F)
JMC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
JMC	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
JMC	6980	Research for Doctoral Dissertation	Prerequisite: graduate standing and permission. Research for Doctoral Dissertation. (F, Sp, Su)

JMC	6990	Independent Study	Prerequisite: Graduate standing and permission. May be repeated with change of content; maximum credit eight hours. An individual course of intensive study with the area and problem to be determined by the student and the instructor responsible for supervising the study. (F, Sp, Su)
JRRE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
JRRE	3021	Junior Recital	Prerequisite: concurrent enrollment in 4020, during the junior year, permission of adviser and instructor. Preparation and performance of a public recital by students in the B.M. degree program. (F, Sp, Su)
JRRE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
JRRE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
KIOW	1713	Beginning Kiowa	Introduction to the structure of the Kiowa language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
KIOW	1723	Beginning Kiowa-Continued	Prerequisite: 1713. A continuation of the study of the structure of the Kiowa language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community are emphasized. (Sp) [I-FL]
KIOW	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
KIOW	2733	Intermediate Kiowa	Prerequisite: 1723. A systematic review of the structure of the Kiowa language. Syntactic control and vocabulary expansion are emphasized. Conversational practice and traditional oral texts are used to develop proficiency. (F)
KIOW	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
KIOW	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
KIOW	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
KM	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
KM	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
KM	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite; senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
KM	4980	Honors Research	1 to 3 hours. Prerequisite: admission to the Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field of study. (F, Sp, Su)

KM	4990	Independent Study	1 to 3 hours. Prerequisite: senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
KM	5023	Management of Information and Knowledge Organizations	(Crosslisted with LIS 5023) Prerequisite: 5033. Theories, processes, behaviors, and issues that allow knowledge based institutions to transform themselves in to ones that organize and share knowledge in an effective, efficient manner; leadership, motivation and organizational communication; management of knowledge workers, ethical and legal aspects of managing information and knowledge organizations. (F, Sp, Su)
KM	5033	Information and Knowledge Society	(Crosslisted with LIS 5033) Prerequisite: graduate standing or permission of instructor. The nature of knowledge and information; National and global organizational information infrastructure. The role of information and knowledge professionals in the knowledge society; information policy; economics of information; information industries; legal and ethical considerations in information and knowledge system. This course is a prerequisite or corequisite for all courses required for the MLIS or MSKM and must be completed in a student's first semester of summer session as an MLIS or MSKM student. (F, Sp, Su)
KM	5043	Organization of Information and Knowledge Resources	(Crosslisted with LIS 5043) Prerequisite: 5033. Organization of internal and external sources of information; information services and tools; basic concepts of information storage and retrieval systems; design and structure of information systems; identification and organization of knowledge resources such as expertise, skills and competencies; knowledge organization methods such as classification, cataloging taxonomies and metadata; search strategies and information retrieval. (F, Sp)
KM	5053	Information Users in the Knowledge Society	(Crosslisted with LIS 5053) Prerequisite: 5033. Information use by people in various roles, situations, and contexts, individually and in groups. Information behavior and the influence of learning and cognitive process; value systems; and situational, psychological, sociological, and political perspectives. Application of study of user information behavior to textual, graphical, and visual representation of knowledge. Includes both theoretical models and practical methodologies for study of uses and for user-centered design of information and knowledge systems and services. (F, Sp)
KM	5063	Information and Communication Technology	(Slashlisted with 4063, Crosslisted with LIS 5063) Prerequisite KM 5033. Introduction to the theory and applications of information and communication technologies including hardware, software, systems, systems analysis and the nature and functionality of networks; social, technical and organizational influences on the use and users of information technology. No student may earn credit for both LIS 4063 and KM/LIS 5063. (F, Sp)
KM	5223	Information Technology Management	(Crosslisted with LIS 5223) Prerequisite: 5033 and 5603 or permission of instructor. Fundamentals of planning, designing, implementing, and managing information technology solutions; market and trend analysis; planning and assessment techniques and tools; human factors in technology management. (Irreg.)
KM	5263	Organizational Learning and Learning Organizations	(Crosslisted with LIS 5263) Prerequisite: 5033; 5053.Theories and models of individual, group, team, and organizational learning; creation and management of learning organization; organizational behavior and organizational culture; group team management; group team, and organizational leadership; conflict and agreement; change management. (Irreg.)
KM	5413	Indexing and Abstracting	(Crosslisted with LIS 5413) Prerequisite: 5033 and 5043. History, principles and techniques and applications of indexing, abstracting, and vocabulary control. Includes file organization and maintenance, information representation and coding, natural language process, and thesaurus construction. (Irreg.)

KM	5433	Design and Implementation of Web-Based Information Services	(Crosslisted with LIS 5433) Prerequisite: 5033 and 5043. Design fundamentals for web-based information services. Emphasis on networked information, information architecture, and usability, based on analysis and evaluation of current connectivity infrastructure and characteristics and behavior of networked audiences. (F)
KM	5473	Document and Records Management	(Crosslisted with LIS 5473) Prerequisite: LIS 5033 and 5043. The systematic capture, acquisition, processing, storage, and control of documents in all formats, including their management as records throughout the life cycle from creation to final disposition. Introduction to principles, methodologies, administration, tools, and techniques in various settings. (Irreg.)
KM	5523	Online Information Retrieval	(Crosslisted with LIS 5523) Prerequisite: 5033 and 5053. Structure, content, and application of online databases for education, research, business, and public use. Principles and techniques for the evaluation of online databases and services. Document representation, information need specification, and query formulation for online information retrieval. (Alt. F, Irreg. Su)
KM	5553	Competitive Intelligence	(Crosslisted with LIS 5553) Prerequisite: KM/LIS 5033, KM/LIS 5053 and permission of instructor. An introduction to competitive intelligence in various contexts, appropriate for non-profit and for-profit environments. Topics will include developing and implementing the competitive intelligence process, accessing and validating sources, information gathering, auditing, and decision making with special emphasis on strategies, systems, and ethics in competitive intelligence. (Irreg.)
KM	5603	Information and Communication Technology	(Crosslisted with LIS 5603) Introduction to the theory and applications of information and communication technologies including hardware, software, systems, systems analysis, and the nature and functionality of networks; creation, storage, and retrieval of digital resources; social, technical, and organizational influences on the use and users of information technology. (Irreg)
KM	5653	Preservation of Information Materials	(Crosslisted with LIS 5653) Prerequisite: 5033. Theory and practice of preservation and conservation of intellectual content and physical artifacts, including paper, microfilm, and digital records. Emphasis on planning and administering disaster prevention and recovery, preservation, and digitization programs. (Alt Sp, Irreg. Su)
KM	5673	Knowledge Management Tools and Technologies	Prerequisite: KM/LIS 5033. An introduction to technologies necessary for knowledge management in a variety of environments; the course includes internet and web technologies, KM processes and corresponding technologies, collaboration tools, information and knowledge portals and KM readiness and IT infrastructure. It also addresses evaluation of and selection criteria for knowledge management tools. (Irreg.)
KM	5683	Database Design for Information Organizations	(Crosslisted with LIS 5683) Prerequisite: KM 5033. Introduction to the theory and application of database design including information storage and retrieval, data modeling, record structure, data normalization, data security, relational database models, query language, client-server systems, data warehousing and data mining. The social, technological and organizational needs in database design will be examined. (Sp)
KM	5713	Research Methods	(Crosslisted with LIS 5713) Prerequisite: 5023, 5033, 5043, 5053. Methods of investigation library and information problems; evaluating research studies in library and information science; developing original research designs. (Sp, Irreg. Su)
KM	5723	Knowledge Management Design Project	Prerequisite: LIS/KM 5023, 5043, 5113, 5453, and permission of instructor. Design and development of an operational prototype for a system to support knowledge management in a selected organizational setting. (F, Sp, Su)

KM	5823	Internship in Knowledge Management	Prerequisite: 18 hours of knowledge management coursework and permission of adviser and supervising faculty. Provides an opportunity for student synthesis of principles and theories acquired in coursework and application of these principles and theories in an appropriate setting. Professional supervision; requires 135 hours. (F, Sp, Su)
KM	5920	Directed Research	(Crosslisted with LIS 5920) 1 to 3 hours. Prerequisite: 5713 and permission of instructor and adviser. May be repeated; maximum credit six hours. Faculty supervised research; requires a written report. (F, Sp, Su)
KM	5940	Directed Project	(Crosslisted with LIS 5940) 1 to 3 hours. Prerequisite: 24 hours of LIS/KM coursework and permission of instructor. May be repeated; maximum credit three hours. Design and implementation of a professional project that applies principles and theories acquired in coursework to the solution of professional problems in practical settings. Requires a project prospectus and a written report at conclusion of the project. Conducted under faculty supervision. May not be taken for credit toward the MSKM degree by students electing thesis option. (F, Sp, Su)
KM	5960	Directed Readings	(Crosslisted with LIS 5960) 1 to 3 hours. Prerequisite: 15 hours of knowledge management coursework and permission of instructor and adviser. May be repeated; maximum credit six hours. Faculty supervised exploration of an area of knowledge management not covered in regularly offered courses. (F, Sp, Su)
KM	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
KM	5980	Research for Master's Thesis	(Crosslisted with LIS 5980) 2 to 9 hours. Prerequisite: Permission of instructor. May be repeated; maximum credit applicable toward degree six hours. (F, Sp, Su)
KM	5990	Special Problems	(Crosslisted with LIS 5990) 1 to 3 hours. Prerequisite: Permission of instructor. May be repeated; maximum credit nine hours. Examination and discussion of current problems in knowledge management. (Irreg.)
KM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
L A	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
L A	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
L A	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
L A	4103	Introduction to Landscape Architecture	(Slashlisted with 5103) Prerequisite: junior standing and permission of instructor. Introduction to the multidisciplinary design profession of landscape architecture. This course will highlight the profession of landscape architecture as a leader in today's sustainable construction and design industry. No student may earn credit for both 4103 and 5103. (F)

L A	4213	Introduction to Revit	(Slashlisted with 5213) Prerequisite: Junior standing or permission of instructor. This introductory course will enable students to create full 3D architectural and landscape architectural project models and working drawings using Autodesk(R) Revit(R) Architecture software. The focus will be on the basic tools that the majority of users will need in a typical design process. No student may earn credit for both 4213 and 5213. (F, Sp)
L A	4613	Landscape Architecture Computer Applications	(Slashlisted with 5613) Prerequisite: junior standing or permission of instructor. A survey of computer applications common to the profession of landscape architecture including word processing, desktop publishing, computer image manipulation, computer-aided drafting, spreadsheets and databases with particular emphasis on computer image manipulation and computer-aided drafting. No student may earn credit for both 4613 and 5613. (F)
L A	4743	Garden History from Ancient to Contemporary	Prerequisite: junior standing. This course examines the history of human design and use of land through an examination of the gardens different civilizations built. Gardens from pre-history to the twenty-first history in Asia, Latin and South America, Europe and the United States will be studied as products of conscious design. This course will trace archetypes of garden types so students may understand the social, cultural and economic contexts within which historic garden styles emerged. (F, Sp)
L A	4943	History and Theory of Landscape Architecture	(Slashlisted with 5943) Prerequisite: Junior standing or permission of instructor. A survey of American landscape architecture trends and personalities. Includes an overview of European and Asian landscape and garden design precedents. The framework of modern architecture, modern art, and public art which provide a context for and influence upon landscape architecture will be discussed in historical and theoretical terms. No student may earn credit for both 4943 and 5943. (Sp)
L A	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: junior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
L A	5052	Professional Practice	(Crosslisted with ARCH 5052) Prerequisite: 5043 or permission of instructor. Survey of career options, internship, registration, firm organization, office management, professional conduct and ethics within the practice of architecture. (F, Sp)
L A	5103	Introduction to Landscape Architecture	(Slashlisted with 4103) Prerequisites: graduate standing, permission of instructor. Introduction to the multidisciplinary design profession of landscape architecture. This course will highlight the profession of landscape architecture as a leader in today's sustainable construction and design industry. No student may earn credit for both 4103 and 5103. (F)
L A	5213	Introduction to Revit	(Slashlisted with 4213) Prerequisite: Graduate standing or permission of instructor. This introductory course will enable students to create full 3D architectural and landscape architectural project models and working drawings using Autodesk(R) Revit(R) Architecture software. The focus will be on the basic tools that the majority of users will need in a typical design process. No student may earn credit for both 4213 and 5213. (F, Sp)
L A	5243	Landscape Architecture Technology: Materials and Construction	Prerequisite: graduate standing and permission of instructor. Technical requirements and design characteristics of landscape construction materials. Brick, concrete, asphalt, stone, wood, paving curbs, walls, steps, small structures, site furnishings, lighting, and basic construction documentation. Laboratory (F)
L A	5343	Landscape Architecture Technology: Site Issues	Prerequisite: graduate standing and permission of instructor. Technical aspects of land and water interactions in site planning and landscape engineering. Introduction to contours, grading and earthwork; watershed and site drainage; horizontal and vertical curves; erosion control, and sedimentation. Laboratory (Sp)

L A	5402	Res Methods Landscape Arch	Prerequisite: graduate standing or permission of instructor. Introduces basic research methods applicable to landscape architecture. (F)
L A	5513	Landscape Architecture Drawing and Graphics	Prerequisite: graduate standing or permission of instructor. Basic techniques for visual thinking/seeing and basic graphic techniques for two- and three-dimensional representation. Different methods of communication such as sketching, diagramming, plan, section and elevation drawing, rendering, one and two point perspective, and axonometric drawing for layout and composition. (F)
L A	5515	Landscape Architecture Introductory Graduate Studio I	Prerequisite: graduate standing and permission of the instructor. Small-scale problems in landscape architecture with particular emphasis on principles and elements of design, design of individual sites, design as a process including communication of site analysis, design, development and final design proposals. (F)
L A	5525	Landscape Architecture Introductory Graduate Studio II	Prerequisite: graduate standing and permission of instructor. Introduction to site planning at small to medium scales with particular emphasis on design process where consideration of natural and human factors influence design solutions. Subject matter varies and is reflective of a host of problems and issues common to landscape architecture. (Sp)
L A	5535	Landscape Architecture Intermediate Graduate Studio III	Prerequisite: 5515, 5525, graduate standing, and permission of instructor. Studio work concerned with park, recreation, and open space issues pertinent to contemporary needs. Subject matter may include park typologies and their design, recreation typologies, public education, greenways, scenic byways, eco-tourism, schools, art in the landscape, and community gardens. (F)
L A	5545	Landscape Architecture Intermediate Graduate Studio IV	Prerequisite: 5515, 5525, graduate standing, and permission of instructor. Focus on housing and community planning as related to site planning and site design with particular emphasis on urban environments, housing typologies, community participation, community facilities, and the landscape architect's approach to integration of proposed developments within natural and human contexts. (Sp)
L A	5613	Landscape Architecture Computer Applications	(Slashlisted with 4613) Prerequisite: graduate standing and permission of instructor. A survey of computer applications common to the profession of landscape architecture including word processing, desktop publishing, computer image manipulation, computer-aided drafting, spreadsheets and databases with particular emphasis on computer image manipulation and computer-aided drafting. No student may earn credit for both 4613 and 5613. (F)
L A	5713	Plant Material and Technology	Prerequisite: graduate standing and permission of instructor. Identification and classification of native and ornamental woody evergreen and deciduous trees, shrubs, vines, and ground covers. Study of their morphology, cultural characteristics, landscape uses, pruning maintenance, planting and establishment. Includes basic horticultural principles, plant processes, and factors affecting plant growth. (F)
L A	5923	Planting Design	Prerequisite: LA 5713, graduate standing and permission of instructor. An intensive lecture/ lab course emphasizing the use of plants in landscape architecture design. Laboratory (Sp)
L A	5940	Field Work	1 to 4 hours. Prerequisite: 4515 and permission of instructor. Studies in landscape architecture not suited to the conventional classroom setting. (F, Sp)
L A	5943	History and Theory of Landscape Architecture	(Slashlisted with 4943) Prerequisite: graduate standing and permission of instructor. A survey of American landscape architecture trends and personalities. Includes an overview of European and Asian landscape and garden design precedents. The framework of modern architecture, modern art, and public art which provide a context for and influence upon landscape architecture will be discussed in historical and theoretical terms. Students may not earn credit for 4943 and 5943. (Sp)

L A	5950	Graduate Project Proposal	2 to 4 hours. Prerequisite: graduate standing and permission of instructor. Proposal development for terminal graduate project in landscape architecture. (F, Sp)
L A	5960	Directed Readings	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours. Selected readings in landscape architecture. (F, Sp, Su)
L A	5970	General Department Seminar	1 to 4 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of topic; maximum credit nine hours. Advanced professional topics in landscape architecture and experimental course offerings. (Sp)
L A	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
L A	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
L A	6595	Graduate Project	Prerequisite: 6950 or permission of instructor. An approved individual project or thesis exploiting or integrating the student's specialization with landscape architecture. Laboratory (Sp)
L A	6643	Urban Design Theory	(Crosslisted with ARCH 6643 and RCPL 6643) Prerequisite: graduate standing. A survey of theory relevant to the urban design process, including social and behavioral concepts, visual and aesthetic theory, spatial and geographic factors of urban form. (Sp)
L A	6950	Applied Research in Landscape Architecture	1 to 4 hours. Prerequisite: 6013 and permission of instructor. Approved individual research in landscape architecture coordinated with electives in preparation for the graduate project. (F)
L A	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
L A	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
L A	6990	Graduate Special Studies	1 to 6 hours. Prerequisite: graduate standing and permission of instructor. May be repeated with change of content; maximum credit 12 hours. Selected topics in landscape architecture. (F, Sp, Su)
L S	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
L S	2970	Special Topics	NULL
L S	3003	Introduction to Law and Legal Reasoning	Prerequisite: junior standing or permission of department. An introduction to Anglo-American law, emphasizing Anglo-American legal history, comparative legal systems, the interdisciplinary nature of law, and critical legal reasoning. [IV-WC]
L S	3323	Legal Environment of Business	Prerequisite: junior standing. The legal environment of business organizations with ethical considerations and the social and political influences affecting such environments. (F, Sp, Su)
L S	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

L S	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
L S	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
L S	3980	Honors Research (HONORS)	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
L S	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
L S	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
L S	4523	The Law of Commercial Transactions	(Slashlisted with 5523) Prerequisite: 3323. A comprehensive survey of commercial transactions, including the law of sales, warranties, risk of loss, negotiable instruments, bank collections and deposits, electronic fund transfers, secured transactions and bankruptcy. No student may earn credit for both 4523 and 5523. (F, Sp)
L S	4613	Real Property Law	Prerequisite: 3323. General law of real property; historical development, acquisition of title to personal property, estates in land, landlord and tenant relations, easements, deeds, mortgages, adverse possession, wills and trusts. (F, Sp)
L S	4710	Special Topics in Legal Studies	1 to 6 hours. Prerequisite: 3323 or permission. May be repeated with change of subject matter.
L S	4713	The Law of International Business Transactions	Prerequisite: 3323. Examines the legal and ethical environment of international business. Topics include international treaties and conventions, comparative legal systems, extraterritoriality of U.S. and foreign laws, the Act of State Doctrine and the resolution of international business disputes. (Sp)
L S	4803	Energy Law	Prerequisite: 3323, student must have been approved for degree candidacy by Price College. Regulation of natural resources capable of energy fuels production; environmental technological and economic impacts of coal, water, oil, gas, uranium, and solar energy sources through exploration, development, production, transportation, and end use; legal context of natural resource conservation, allocation, and distribution. (Irreg.)
L S	4813	International Petroleum Transactions	Prerequisite: 3323, 4523, 4613, Petroleum Engineering 4103, senior standing, Energy Management major, and permission. The international oil and bas business covering: the sovereign rights to minerals; how crude oil is bought and sold on the world market; various types of host government contracts to assign development rights to private companies; how disputes between a private company and host government are resolved; contracts between private companies engaged in exploration and production operations. (Irreg.)
L S	4823	Oil and Gas Contracts	Prerequisite: 3323, 4523, 4613, Petroleum Engineering 4103, and senior standing. Examination of contracts for the oil and gas industry. Covers exploration, production and development of oil and gas properties, investments, relationships created by such contracts, rights and duties of the parties, income tax consequences, and governmental regulation. (Irreg.)
L S	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

L S	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
L S	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
L S	5523	The Law of Commercial Transactions	Prerequisite: L S 3323, graduate standing and permission of instructor. A comprehensive survey of commercial transactions, including the law of sales, warranties, risk of loss, negotiable instruments, bank collections and deposits, electronic fund transfers, secured transactions and bankruptcy. No student may earn credit for both 4523 and 5523. (Irreg.)
L S	5713	International Business Law	Prerequisite: 5323. Study of international and domestic regulations affecting multi-national enterprises and international business transactions. Examines and compares inter-governmental organizations, world legal systems, business structures, and regulatory and tax systems, and provides students with practical legal knowledge of how international transactions are carried out. (F)
L S	5802	Business Ethics/Legal	Prerequisite: graduate standing. Review of the American legal process and ethical frameworks for gauging business decisions. (Irreg.)
L S	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
L S	5970	Topics in Legal Studies	1 to 6 hours. Prerequisite: 5323 or permission. May be repeated with change of subject matter. (Irreg.)
L S	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
L S	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
LAT	1115	Beginning Latin	Introductory study of the vocabulary and grammar of the Latin language, with practice in the reading of sentences and connected prose from selected Latin authors. (F, Sp) [I-FL]
LAT	1215	Beginning Latin	Prerequisite: 1115, or the equivalent, with a grade of C or better. Introductory study of the vocabulary and grammar of the Latin language, with practice in the reading of sentences and connected prose from selected Latin authors. (F, Sp) [I-FL]
LAT	1315	Intensive Introductory Latin	Prerequisite: permission of Honors Program. Alternative to the Latin 1115 and 1215 introductory sequence. Covers in one semester the essentials of the material in Latin 1115 and 1215. Students who have completed 1115 and 1215 may not enroll in 1315. (F) [I-FL]
LAT	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
LAT	2113	Intermediate Latin Prose: Cicero, Livy, Pliny, Gellius, Vulgate	Prerequisite: 1215, or equivalent, with a grade of C or better. May be repeated with change of content; maximum credit six hours. Readings in the companion textbooks to those in use in Latin 1115 and 1215, designed to ease the transition into reading the authentic prose of major Latin authors. (F, Sp, Su)
LAT	2213	Ovid	Prerequisite: 1215, or equivalent, with a grade of C or better. May be repeated with change of content; maximum credit six hours. Reading selections from the works of Ovid; designed to improve the student's proficiency in translation and the understanding of the Latin Poetic technique. (F, Sp)

LAT	2313	Latin Composition	Prerequisite: 1215, or the equivalent, with a grade of C or better. Composition and translation designed to provide a systematic review of grammar and improve control in writing Latin.
LAT	3113	Advanced Prose: Cicero, Pliny the Elder, Pliny the Younger	Prerequisite: 2113 and 2213. May be repeated with change of subject matter; maximum credit six hours. Readings from the works of Cicero or Pliny, representing the height of prose style in the Republican and Imperial periods, respectively. (Irreg.)
LAT	3213	Vergil	Prerequisite: 2113 and 2213. May be repeated with change of content; maximum credit six hours. Selected readings from the works of Vergil, whose writings established the forms for all subsequent epic, didactic, and pastoral poetry in the west. (Irreg.)
LAT	3313	Latin Composition	Prerequisite: one intermediate level Latin course or the equivalent. In this course the student will learn to compose in Latin by translating sentences and continuous passages from English. (Sp)
LAT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LAT	3510	Selected Topics	Prerequisite: 2113 or 2213 or the equivalent. May be repeated with change of content; maximum credit six hours. A study of selected topics in Latin literature on subjects not offered in regularly scheduled courses. (Irreg.)
LAT	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
LAT	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
LAT	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
LAT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
LAT	4133	Historians: Livy, Tacitus, Caesar, Sallust	May be repeated with change of subject matter; maximum credit nine hours. Introductory course in Roman history. Readings chosen to present memorable persons and episodes in the ascendancy of the Republic, the critical issues of the Civil Wars, and the social and political decadence of the Early Empire. (Irreg.)
LAT	4213	Latin Lyric Poetry	Prerequisite: junior standing or permission of the instructor. May be repeated with change of subject matter; maximum credit six hours. Readings in the works of Horace, Catullus, and the elegiac poets. Biographical and historical aspects of the poems. Supplementary studies in the development of lyric poetry and its various themes. (Irreg.)
LAT	4313	The Teaching of Latin	Investigation of recurrent problems in Latin pedagogy; aims, traditional and experimental methods, evaluation and choice of texts, instructional aids and special problems in phonology and syntax. (F, Sp)

LAT	4503	Latin Capstone Course	Prerequisite: senior standing in major. Students work on an individual basis in conjunction with a Classics faculty member and write a senior paper on a topic to be chosen in consultation with the faculty member. The paper must demonstrate a comprehensive understanding of the Latin language and of one of the major areas of Greco-Roman civilization. [V]
LAT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
LAT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LAT	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
LAT	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
LAT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LAT	5990	Special Studies	1 to 4 hours. May be repeated; maximum credit eight hours. Reading and research, arranged and directed in consultation with the instructor, in specified areas of Classical philology. (F, Sp)
LAT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
LAW	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
LAW	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
LAW	5103	Civil Procedure I	Civil procedure in state and federal courts; introductory survey of procedures by which questions of substantive law commonly are raised and determined; procedural and remedial background; law governing controversies in federal courts; details of procedure in a lawsuit, including forum selection, pleading, joinder of claims and parties, discovery, the pretrial conference, disposition without trial, trial before a judge or jury, post-trial motions and appeals; issue and claim preclusion. (F)
LAW	5114	Contracts	Prerequisite: admission to College of Law. Basic first-year survey course which explores the nature and enforceability of promises. Subjects include contract formation, performance, termination of contracts, material breach, remedies for breach of contract, mistake and excuse for nonperformance, statute of frauds, interpretation of contract language, conditions, assignment and delegation, and third party beneficiaries. (F)
LAW	5122	Legal Research, Writing & Advocacy I	Introduction to legal research and techniques of legal writing including legal memoranda and briefs. (F)
LAW	5133	Torts I	Prerequisite: admission to the College of Law. Introduction to basic principles of civil liability with study of intentional wrongs, negligence, causation, defenses and immunities, and joint responsibility. (F)

LAW	5134	Constitutional Law	Selected issues, including: judicial review; the judicial process in construing and applying the United States Constitution; federal and state powers, federalism and separation of powers; an introduction to the concepts of equal protection and due process. (Sp)
LAW	5143	Torts II	Prerequisite: admission to College of Law. Course principally covers strict liability, products liability, vicarious liability, defamation, compensatory and punitive damages, wrongful death claims, nuisance, misrepresentation and fraud. (Sp)
LAW	5202	Legal Research, Writing & Advocacy II	Introduction to oral advocacy and brief writing. (Sp)
LAW	5203	Civil Procedure II	Civil procedure in state and federal courts; introductory survey of procedures by which questions of substantive law commonly are raised and determined; procedural and remedial background; law governing controversies in federal courts; details of procedure in a lawsuit, including forum selection, pleading, joinder or claims and parties, discovery, the pretrial conference, disposition without trial, trial before a judge or jury, post-trial motions and appeals; issue and claim preclusion. (F)
LAW	5223	Criminal Law	General principles of criminal responsibility and the elements of common law, statutory crimes, and defenses. Emphasis is placed on the subject of criminal intent. (Sp)
LAW	5234	Property	Introduction to basic property concepts, including: adverse possession; estates in land; landlord and tenant; concurrent estates; nonpossessory interests (including easements, licenses, covenants and equitable servitudes); and real estate transactions. (Sp)
LAW	5303	Criminal Procedure I	The administration of criminal justice, including rights of accused persons, initiation of prosecution, preliminary examinations, and an overview of procedural steps. Emphasis is placed on the privilege against self-incrimination, rules on arrest, search and seizure, and the exclusionary rule. (F, Sp)
LAW	5314	Evidence	Presentation of evidence; judicial control and legal reasoning in the determination of issues of fact; topics relating to the admissibility of evidence, including relevancy, testimonial and real evidence; the original writing rule; and topics relating to the exclusion of evidence, including hearsay, the right of confrontation and privileged communications. (F, Sp)
LAW	5323	Professional Responsibility	The nature of law as a profession; problems facing the profession and the individual lawyer. Fundamentals of legal ethics and responsibilities, with emphasis on the Model Rules of Professional Conduct of the American Bar Association. (F, Sp, Su)
LAW	5403	Administrative Law	Basic considerations relating to administrative agencies, including nondelegation doctrine, fact versus law distinction, agency rule making, adjudication, due process requirements, information gathering, and judicial review. (F, Sp, Su)
LAW	5410	Bankruptcy	3 to 4 hours. Rights and remedies of debtors and creditors; bankruptcy including liquidation, reorganization, and wage earner plans; attachment, judgment execution; garnishment, fraudulent conveyances, bulk sales and collection remedies including compositions and assignments. (F, Sp)
LAW	5433	Corporations	Formation of corporations; duties and powers of corporate management; corporate control; shareholder rights, shares, dividends; derivative suits, fundamental changes and dissolution. (F, Sp)
LAW	5443	Family Law	The rights, obligations, and liabilities arising from marital and nonmarital relations; divorce; marital property alimony, child support. (F, Sp, Su)
LAW	5450	The First Amendment	2 to 3 hours. Prerequisite: 5214. The First Amendment: Individual rights of expression, assembly, association and religion. Permissible government restrictions and regulations in relation to activities protected by the First Amendment. (Irreg.)

LAW	5460	Equality of Rights in American Constitutional Law	Prerequisite: 5134. The study of individual rights in federal constitutional law emphasizing cases not generally covered in the introductory constitutional law course, with emphasis on the concepts of substantive due process, procedural due process, takings, the contracts clause, suspect and invidious governmental classifications in violation of the equal protection clause. (F, Sp)
LAW	5463	Income Taxation of Individuals	Structure of the federal income tax with emphasis on operation of the system through use of concepts such as income, basis, gains and losses, realization and recognition, exclusions and deductions. (F, Sp)
LAW	5470	Wills and Trusts	3 to 4 hours. Intestate succession, execution, interpretation, amendment, revocation and contest of wills, rights of decedent's family, will substitutes and the avoidance of probate; creation, validity, funding, amendment and termination of trusts and the fiduciary obligation. (F, Sp)
LAW	5520	Alternative Dispute Resolution	2 to 3 hours. Negotiation, mediation and arbitration; includes court-ordered arbitration, mini-trials, summary jury trials and other formal and informal means of resolving disputes short of formal court adjudication. (Irreg.)
LAW	5530	Civil Pretrial Litigation	2 to 3 hours. The study of litigation tactics and techniques prior to trial. Included are discovery, motion practice, witness preparation, settlement, alternate dispute resolution, pretrial conferences, mini-trials, summary jury trials, and other related areas. (F, Sp)
LAW	5533	Conflict of Law	The law relating to transactions with elements in more than one state or nation, jurisdiction of courts and enforcement of foreign judgments, choice of law problems, constitutional issues, and the theoretical basis of choice of law, including an introduction to the problems of renvoi and characterization. (Irreg.)
LAW	5543	Federal Courts	Examines concepts of case or controversy, federal subject matter jurisdiction; supplemental jurisdiction; venue; removal; substantive law applied in federal courts; and the relationship of the state and federal courts. (Irreg.)
LAW	5553	Remedies	A study of remedies available in court actions, including specific performance, injunctions, and other equitable remedies. (F, Sp)
LAW	5600	Selected Legal Problems in American Indian Law	2 to 3 hours. Content varies. Study of current legal problems as they relate to Indian law. (Irreg.)
LAW	5602	Comparative Indigenous Peoples' Law Seminar	Prerequisite: admission to College of Law. Seminar will examine the differences and similarities between Canadian, United States, Australian and New Zealand laws affecting native peoples. Participants in the seminar will include students from law schools at University of Ottawa, University of Saskatchewan, Auckland University, and Monash University attending via television. Federal Indian law is not a prerequisite, but strongly recommended. (Sp)
LAW	5610	Federal Indian Law	2 or 3 hours. The history of federal Indian policy and its impact on modern Indian problems; the Bureau of Indian Affairs; the federal government-Indian relationship and policy; tribal sovereignty; states' rights; criminal, civil, and taxing jurisdiction in Indian country; rights of individual Indians; tribal self-government; property rights; water rights; and hunting and fishing rights. (F)
LAW	5633	Native American Natural Resources	Prerequisite: admission to College of Law. Covers a variety of issues relating to tribal interests in and jurisdiction over environmental resources. Course coverage includes tribal rights to land; land use and environmental protection in Indian country; economic and natural resource development issues (including grazing, minerals, timber and taxation), water rights, and hunting and fishing rights. (F, Sp)
LAW	5702	Agency and Partnership	Legal principles concerning association in business by agency, partnership, and other unincorporated forms. (F, Sp)
LAW	5703	Antitrust Law	Federal and state antitrust laws approached on the basis of type of conduct, i.e., monopolies, mergers, price control by private business, exclusive dealing contracts, fair trade pricing, agreements not to compete; discrimination in distribution and refusals to deal; and unfair trade practices. (F)

LAW	5720	Corporate Finance	2 or 3 hours. The course will cover advanced topics in corporate law, including valuation, senior securities, successor liability and mergers and acquisitions. (Irreg.)
LAW	5732	Insurance	Life, health, property, and liability insurance, including the nature of insurance, insurance interest, interests of the named insured and others, subrogation, the insured event, exceptions, warranties, representations, concealment, formation of the contract, and waiver and estoppel. (Irreg.)
LAW	5740	Payment Systems	2 to 3 hours. Course will cover the checking system, the credit and debit card system, electronic funds transfer, letters of credit, interest payments, negotiable instruments and the securities trading and settlement system. Substantive law would be Articles 3, 4, 4A, 5 and 8 of the UCC as well as the Expedited Funds Availability Act, parts of the Truth in Lending Act and the Electronic Funds Transfer Act (and implementing regulations.) (F, Sp)
LAW	5750	Secured Transactions	This course will cover Article 9 of the Uniform Commercial Code. Topics covered include the establishment and perfection of security interests pursuant to credit sales contracts, problems of focusing on the interface between Article 9 and federal bankruptcy law, priority disputes among collateral claimants, default, and rights after default. Emphasis will be placed on developing an understanding of and facility with the code's statutory scheme. (F, Sp)
LAW	5753	Federal Securities Regulation	Federal securities laws and the activities and industry they govern; the meaning of "security"; regulation of the issuance, sale, resale, and purchase of securities; disclosure requirements, generated by registration; anti-fraud provisions; and civil liability. (F, Sp)
LAW	5763	Mergers and Acquisitions	Prerequisite: prior or concurrent enrollment in 5433. Provides an understanding of the issues arising in business acquisition (and divestiture) transactions. Coverage is given to theories underlying acquisitions, alternative acquisition techniques and planning considerations that bear on the choice among those techniques. (Sp)
LAW	5810	Capital Punishment and the Judicial Process	2 or 3 hours. Study of the death penalty in the United States, including: the history of capital punishment; constitutional issues mitigating and aggravating evidence in guiding the sentencer's decision to impose; exclusion of jurors; use of psychiatric experts; state post-conviction remedies; federal habeas review; recently-expanded federal death penalty; and international law and capital punishment. (Irreg.)
LAW	5820	Forensic Evidence Seminar	1 to 2 hours. Prerequisite: 5314. A study of technical and legal aspects on the use of forensic science techniques. Specific topics include DNA pathology, ballistics, serology, fingerprint analysis, and various tests for intoxication. Legal issues on the admissibility and limitations of expert testimony is considered. (Sp)
LAW	5830	Criminal Procedure II	2 to 3 hours. Prerequisite: 4223, 5303. Discovery, motion practice, plea bargaining, jeopardy, prosecutorial discretion, speedy trial, sentencing options and procedures; appeals; post conviction remedies, pardon and parole, detainers, and related matters. (Sp)
LAW	5913	American Legal History	Prerequisite: admission to College of Law. The development and characteristics of American legal institutions and basic themes in American law and legal philosophy. (Sp)
LAW	5920	Complex Litigation	2 to 3 hours. Examines the procedure for preparation and trial of mass tort and other complex cases in federal court including: jurisdiction, joinder, intervention, consolidation, transfer, discovery, preclusion, class action, and trial procedures. (Irreg.)
LAW	5932	Jurisprudence	The nature and purpose of law, its relations to civilization and the social order; nature of legal principles; legal philosophies from primitive to modern times. (Irreg.)

LAW	5970	Special Topics/Seminar	1 to 4 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit twelve hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LAW	5980	Research for Master's Thesis	NULL
LAW	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
LAW	6000	Selected Problems in International Law	1 to 4 hours. May be repeated twice with change of content. Involves current legal problems as they relate to international law. (Su)
LAW	6010	English Legal System	1 or 2 hours. This course covers England's contemporary legal system. Topics covered include the courts, the organization of the legal profession, the nature of the practice of law in England, access to civil and criminal justice and alternative dispute resolution. (Su)
LAW	6020	Comparative Law	2 or 3 hours. A comparison of the corresponding features of the American system of law and the systems of law of other nations. (F)
LAW	6030	European Union Law	This course covers the legal status of the European Union and the sources, implementation, and enforcement of community law. Emphasis will be placed on the competition law of the European Union. (Su)
LAW	6040	International Business Transactions	2 or 3 hours. Legal issues in international trade, licensing, and investment; limitations affecting movement of goods and flow of capital; organization, financing, and protection of international business; contract negotiation and dispute resolution and foreign investment. (F)
LAW	6050	International Human Rights	2 to 3 hours. The sources, norms, institutions, and process of international human rights law; the incorporation of human rights law into domestic legal systems, particularly the United States. (Irreg.)
LAW	6060	International Law Foundations	2 to 3 hours. An introduction to the international legal system: its structure, rules, and process; the incorporation of international law into domestic legal system, particularly in the United States; in current issues including dispute resolution, jurisdiction, environmental protection, human rights, and use of force. The course is not international business transactions or comparative law. (Sp)
LAW	6100	Selected Legal Problems	1 to 4 hours. Involved current legal problems. Subject matter and course credit will be included with the enrollment instructions. (F, Sp)
LAW	6113	Children and the Law	Prerequisite: 5214, 5443. Children and their relationship with parents and the state in reference to a child's name, education and health care; neglect; abuse; termination of parental rights; adoption; and new reproductive technologies. (Sp)
LAW	6130	Education Law	2 or 3 hours. A survey of legal issues affecting education, including students' rights, teachers' rights, desegregation, special education, educational finance, and church-state relations. (Irreg.)
LAW	6150	Equal Employment Opportunity	2 to 3 hours. Federal laws prohibiting employment discrimination including Title VII of the Civil Rights Act of 1964 and federal regulations mandating affirmative action by federal contractors. (F, Sp)
LAW	6163	Lawyering in the 21st Century	Prerequisite: admission to College of Law. Advanced course in law and ethics of lawyering, with primary focus on issues at the forefront of the modern legal profession, worldwide, nationally and locally. (Sp)
LAW	6170	Gender Based Discrimination	2 to 3 hours. Problems affecting women in domestic relations, education, employment, social security, criminal justice, credit practices, insurance, and or military service; feminist jurisprudence. (Irreg.)
LAW	6190	Health Law	2 or 3 hours. The legal aspects of medicine; civil liability of medical professionals and health care providers; organization and regulation of the medical profession; uses of medical science in litigation; selected health sciences and public policy issues such as human reproduction, the right to treatment, and mental health problems. (F, Sp)

LAW	6210	Immigration Law	2 to 3 hours. Constitutional, statutory, and regulatory framework for the admission, exclusion, and deportation of non-citizens who seek immigrant and non-immigrant status in the United States; refugee and asylum law and policy, and citizenship acquisition. (F, Sp)
LAW	6272	Workers' Compensation	Historical and current principles of compensation for worker injuries, disease, or death arising out of employment, including coverage and procedures of relevant Oklahoma and federal statutes, types of disabilities and benefits, prerequisite for entitlement to benefits, defense, and rules against third parties. (Irreg.)
LAW	6311	American Indian Law Review	Production of a written note or comment for the Review or other approved activities associated with production of the Review. (F, Sp, Su)
LAW	6313	Child Abuse Clinic	Prerequisite: 5443, 6113. Each student enrolls for an entire academic year for three hours each semester. (F, Sp, Su)
LAW	6320	Directed Legal Research	1 to 2 hours. Legal research and writing under the supervision of a faculty member. The student must write a paper of sufficient quality to be considered for publication in a law review or other publication. A student may enroll in one or two credit hours with supervising faculty member's permission. (F, Sp, Su)
LAW	6321	Competitions	Students who participate on a trial or appellate advocacy competition team sponsored by the College of Law and directly supervised by a faculty member may enroll in this course. (F, Sp)
LAW	6322	Criminal Litigation Skills	Emphasizes Oklahoma criminal law and procedure as a vehicle to teach fundamental lawyering skills, including interviewing, counseling, and negotiation; basic trial techniques. (F, Sp)
LAW	6323	Criminal Defense Clinic	Prerequisites: 5104, 5314, 5323, and legal intern license. Clinical experience providing students the opportunity to represent indigent defendants charged with municipal, misdemeanor and felony offenses in Cleveland and McClain Counties . Students handle every aspect of the defense of a criminal case, including interviewing, investigating, negotiating, litigating motions and conducting the trial. (F, Sp, Su)
LAW	6331	Oklahoma Journal Of Law And Technology	Prerequisite: admission to College of Law. Electronically published law review dedicated to the convergence of law and technology. (F, Sp)
LAW	6350	General Practice II	4 to 5 hours. Additional topics regarding organization and management of legal work in a lecture-workshop format. (F, Sp)
LAW	6360	Interviewing, Counseling and Negotiation	3 to 4 hours. Theoretical and practical aspects of interviewing, counseling and negotiation, including simulation of situations calling for these skills, taught in a lecture-workshop format with a lecture and demonstration on a particular topic each week, followed by small workshops in which students simulate the lawyer's role. (F, Sp)
LAW	6363	Civil Clinic	Prerequisites: 5104, 5314, 5323 and intern license. Student interns, working from an office operated by the Law Center, participate in actual representation of low-income clients in civil trials and transactions. Experience is acquired through court appearances, jury and non-jury trials, interviewing, discovery, drafting of pleadings, negotiation and counseling under the supervision of the clinical legal education staff. Students maintain an active caseload and office hours. (F, Sp, Su)
LAW	6372	Civil Practice Skills	Classroom instruction complements the Civil Clinic course designed to prepare students to assist and represent clients in civil cases and transactions; teaches fundamental lawyering skills, including law office management, interviewing, counseling, negotiation, mediation, fact investigation, discovery procedures, trial preparation, and professional responsibility. (F, Sp, Su)
LAW	6391	Oklahoma Law Review	Prerequisite: Oklahoma Law Review membership. Production of a written note or comment for the Review or other approved activities associated with production of the Review. (F, Sp, Su)
LAW	6400	Selected Legal Problems of Applied Nature	1 to 4 hours. Subject matter and course credit will be announced. (F, Sp)

LAW	6410	Trial Techniques	2 to 3 hours. Prerequisite: 5314. An introduction to basic trial techniques under simulated trial situations. Students will conduct opening statements, direct and cross examination of witnesses, introduce and use exhibits, impeachment, expert examination, jury selection, closing arguments and a final trial. (F, Sp, Su)
LAW	6500	Selected Problems in Agriculture	1 to 4 hours. Selected issues in agricultural law, including agriculture environmental law, agricultural administrative law, agriculture public law, cooperatives. (Irreg.)
LAW	6510	Energy and Natural Resources	2 to 3 hours. Regulation of natural resources capable of energy fuels production; environmental technological and economic impacts of coal, water, oil, gas, uranium, and solar energy sources through exploration, development, production, transportation, and end use; legal context of natural resource conservation, allocation, and distribution. (Irreg.)
LAW	6520	Intellectual Property	2 to 3 hours. The nature of the rights, acquisition and enforcement of, and property and contract interests in patents, trademarks, and copyrights. (F, Sp)
LAW	6523	Environmental Law	Common law and statutory approaches to environmental, economic, and technological impacts on society; jurisprudential underpinnings of environmental law; environmental administrative process and scope of judicial review; quality standards for land, air, and water, including minimal standards for preventing degradation or exhaustion of human and natural environments. (F, Sp)
LAW	6530	Land Use Control	2 to 3 hours. Judicial, statutory, and administrative restrictions on use and development of land; zoning; restrictive covenants, subdivision regulations, land use planning, doctrines of nuisance and eminent domain; utilization of air space and historic preservation. (F, Sp)
LAW	6540	Oil and Gas	3 to 4 hours. Nature of property interests in oil and gas; conveyancing of interests in oil and gas; legal interests created by oil and gas leases; the validity of leases; the habendum, drilling, and rental clauses; assignment of interests of lessor and lessee; rents and royalties; and the conservation of oil and gas. (F, Sp)
LAW	6550	Oil and Gas Contracts	2 to 3 hours. Examination of contracts used in the oil and gas industry for exploration, production and development of oil and gas properties and for investment; the nature of the relationships created by such contracts, the rights and duties of the parties, income tax consequences and governmental regulation of such contracts. (Sp)
LAW	6552	International Petroleum Transactions	This course will study the international oil and gas business, a business that must be uniquely concerned with both public and private international law, as well as domestic law of the business entity's home state, the host government, and oftentimes, a third country. Students will study the sovereign rights to minerals, including disputes that arise between neighboring countries regarding boundary disputes. Students will look at how crude oil is bought and sold on the world market. Students will study the various types of host government contracts used by various countries to assign development rights to private companies, including how such rights are acquired, and study how disputes between a private company and host government are resolved. Students will also look at contracts between private companies engaged in exploration and production operations. (Sp)
LAW	6560	Title Examination and Assurance	2 to 3 hours. A study of conveyancing, with emphasis on the examination of abstracts of title to real property. (F, Sp)

LAW	6570	Real Estate Transactions	2 to 3 hours. The first two-thirds of the course covers the terms and legal issues involved in drafting, executing, and enforcing residential real estate contracts, including obtaining and evaluating title evidence prior to closing and recovery for breach of title guarantees. The last third of the course will introduce certain basic commercial real estate transactions, including processes and issues involved in housing subdivisions, condominiums, shopping centers, and commercial leases. (Irreg.)
LAW	6580	Water Law	2 to 3 hours. The system of water rights; riparian, appropriation, and prescriptive rights; stream, surface, and ground water; transfer and termination of rights; injuries caused by water; development of water supplies; federal-state, interstate, and intrastate conflicts; water pollution control; federal and Indian rights and federal water resource problems. (F, Sp)
LAW	6602	Church State Relations	The Establishment Clause and Free Exercise Clauses; historical and current relationships between government and religious, secular, and anti-religious interests. (Irreg.)
LAW	6630	Communication and Law of Torts Seminar	Tort liability arising from communications, especially mass media and other public communications. This includes communications torts, such as defamation, evasion of privacy, and infringement of the right of publicity; and application to communications of economic torts, negligence and other theories of tort liability. (Irreg.)
LAW	6640	Corporate Bankruptcy and Reorganization	1 to 2 hours. Subjects covered will include plan formulation and confirmation, debt restructuring, post petition financing, and ethical issues. (Irreg.)
LAW	6662	Employment Law Seminar	The law of employment, including personnel practices, employment contracts, employee rights and federal-state regulation of employer-employee relationships. (Irreg.)
LAW	6670	Torts III	2 to 3 hours. Tort remedies for interference with family relations, economic relations, and public rights, misuse of judicial process; economic and business torts, including interference with contractual relations, injurious falsehood, unfair competition, and misappropriation; publicity and privacy. (Irreg.)
LAW	6690	International Law - Common Law Systems Seminar	1 to 2 hours. The practical introduction to the laws and legal systems of "common law" countries, other than the United States (England, Ireland, Canada, Australia, New Zealand, and most other countries that once were part of the British Empire), with emphasis on legal research, to gain experience in the use of foreign legal materials that are relevant to American legal problems, as well as international problems. (Irreg.)
LAW	6700	Selected Legal Problems Seminar	1 to 4 hours. May be repeated twice with change of content. Involves current legal problems. Subject matter and course credit will be included with the enrollment instructions. (F, Sp)
LAW	6712	Products Liability Seminar	Regulation and civil liability of manufacturers and distributors of defective products. (Sp)
LAW	6810	Estate Planning	2 to 3 hours. Prerequisite: 6843. Maximization, tax and non-tax issues relating to the preservation and administration of wealth through use of wills, trusts, future interests, and inter vivos gifts. (Sp)
LAW	6820	Income Taxation of Corporations	3 to 4 hours. Prerequisite: 5463. Advanced study of the federal income tax with emphasis on taxation of the organization, operation, reorganization, and liquidation of corporations and business entities. (Sp)
LAW	6822	Income Taxation of Trusts and Estates	Prerequisite: 5463. Subchapter J of the Internal Revenue Code, involving income taxation of trusts, estates, and beneficiaries. (Irreg.)
LAW	6830	Pensions and Employee Benefit Plans	2 to 3 hours. Planning, establishment, and administration of pension, health care and other employee benefit plans under the tax and labor laws. (Irreg.)
LAW	6832	Partnership Tax	Prerequisite: 5463. Subchapter K of the Internal Revenue Code, involving taxation of partnerships and partners. (F)
LAW	6840	Tax Procedure	2 to 3 hours. Prerequisite: 5463. Federal tax procedure and conflict resolution, including administrative practice, trial and appellate review. (Irreg.)

LAW	6843	Wealth Transfer Taxation	Federal estate, gift, and generation-skipping transfer taxes, applicable to gratuitous transfers. (F)
LDMA	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
LDMA	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
LDMA	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
LDMA	6052	Graduate Lecture/Chamber Recital--Doctor Of Musical Arts Degree	Prerequisite: concurrent enrollment in 6020; permission of adviser and instructor. May not be elected during first enrollment. The preparation and presentation of a public lecture or chamber music recital. Requires the submission of a related written document. (F, Sp, Su)
LING	1203	Language Across Cultures	(Crosslisted with ANTH 1203) Theories of language family origins and their relationship to human migration; types of human languages; linguistic concept of genetic relatedness; writing systems development; non-Western sociolinguistic and usage phenomena; cultural and scientific importance of endangered languages; how languages become endangered; factors involved in preservation. This course may not count for major credit. (Sp) [IV-NW]
LING	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
LING	2303	General Linguistics	(Crosslisted with ANTH 2303) Humanistic and formal study of natural languages: how they are similar to, and different from, one anther in their use of speech sounds, logical structures and mechanisms that integrate events, objects and speakers in spatio-temporal contexts. The relationship between language and culture; language acquisition and language change. (F, Sp) [I-O]
LING	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
LING	3033	Phonetic Description	Prerequisite: LING 2303. Study of the basic principles in forming the phonetic description of human speech. (Sp)
LING	3043	Linguistic Semantics	Prerequisite: 2303. An introduction to basic ideas and concepts in the field of linguistic semantics. Includes discussion of current issues and representative theoretical approaches. (F)
LING	3053	Phonology	Prerequisite: LING 3033. Phonology is the study of sound patterns found in human language. Provides a grounding in phonological theory by examining data from several of the world's languages. Covers the phoneme-allophone distinction, distinctive features, feature re-write rules, and a broad sampling of phonological phenomena. (F)
LING	3133	Phonetic Field Methods	Prerequisite: 3033 or Anthropology 3033. This course covers techniques used to collect phonetic data, methodological concerns, the acoustic basis of speech sounds, how to record speech for linguistic analysis, and both acoustic and articulatory techniques for documenting the phonetic properties of speech. (Irreg.)
LING	3173	Lesser Studied Languages	Prerequisite LING/ANTH 2303. Learning and discussing some of the core properties of a few languages that are not often taught in the language classroom. Develops the students' ability to discuss the properties of languages in a precise and careful way. The language focuses will change; examples may include Celtic languages, Icelandic and Faroese, and the Finnic languages. (F, Sp)

LING	3353	Syntax	Prerequisite: LING 2303. An introduction to the fundamental concepts of Chomskyan syntax. Includes theory of categories and constituents, basic syntactic relations, case theory, and binding theory. (F)
LING	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LING	3813	Sociolinguistics	Prerequisite: LING/ANTH 2303. The study of the many ways human beings speak as a function of their being members of communities and societies. Included are multilingualism, creole languages, social and regional dialects, registers, gender, class, ethnic varieties, and language valuation. Includes an introduction to statistical methods. (F, Sp)
LING	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program and will cover materials not usually presented in regular coursework. (F, Sp)
LING	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
LING	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in his/her field. (F, Sp)
LING	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
LING	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
LING	4023	Second Language Acquisition Theory	(Slashlisted with 5023) Prerequisite: 2303 or four semesters foreign language. Multidisciplinary approach to second language acquisition. Treats child language, interlanguage, universal grammar, input, interaction, output, non-language influences and formal instruction. No student may earn credit for both 4023 and 5023. (F)
LING	4053	Morphology	(Slashlisted with 5053; Crosslisted with ANTH 4053) Prerequisite: 3053 and 3353. Introduces and develops theories and concepts of morphology including word formation, derivation, inflection, non-concatenative morphs, covert categories, prosodic phenomena, morphosyntactic categories and clitics. Data from non-Western languages will be prominent. No student may earn credit for both 4053 and 5053. (Irreg.)
LING	4173	Typology	Prerequisite: LING 3053 and LING 3353. An introduction to the major results of morphosyntactic typology. Focuses on morphological typology (case marking/agreement) and on syntactic typology (the relation between case marking and grammatical relations, word order, and of three major constructions: passives, causatives, and relative clauses). (F, Sp)
LING	4313	Techniques of Historical Linguistics	Prerequisite: 3053 or Anthropology 3053, or permission. Brief survey of the development of historical linguistics, the comparative method, internal reconstruction, types of linguistic change, relationships between linguistic and cultural change, new developments in the field of historical linguistics. No student may earn credit for both 4313 and 5313. (Irreg.)

LING	4330	Topics in Linguistics	(Slashlisted with 5330) 1 to 4 hours. Prerequisite: nine hours of linguistics. May be repeated with change of content; maximum credit nine hours. Topic areas will vary across theoretical and applied areas of linguistics. Some topics that are appropriate include socio-linguistics, psycho-linguistics, language acquisition, advanced syntax, advanced phonology, field phonetics, pragmatics, and comparative readings of twentieth-century theorists. No student may earn credit for both 4330 and 5330 on the same topic. (Irreg.)
LING	4363	Linguistic Field Methods	(Slashlisted with 5363) Prerequisite: 2303, 3053, and 3353. An introduction to all phases of linguistic field techniques, including training in the selection of informants, the use of recording devices, and most important, the actual collection and analysis of linguistic materials. Students may not earn credit for both 4363 and 5363. (Irreg.)
LING	4533	Philosophy of Language	(Crosslisted with PHIL 4533; Slashlisted with 5533) Prerequisite: eight hours or philosophy or permission. Survey of major philosophical views on the nature and workings of language. Topics covered include: meaning and truth, sense and reference, speech acts, and communication. No student may earn credit for both 4533 and 5533. (Irreg.)
LING	4543	Philosophy of Mind	(Crosslisted with PHIL 4543; Slashlisted with 5543) Prerequisite: eight hours of philosophy or permission. Survey of major philosophical views on the nature of the mind. Topics covered may include: the nature and unity of consciousness, the mind-body problem, personal identity, the emotions, actions and intentions, self-knowledge, and other minds. No student may earn credit for both 4543 and 5543. (Irreg.)
LING	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
LING	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LING	4983	Senior Essay	Prerequisite: LING 3053 and 3353 and senior standing. Development of a research paper which relates the linguistics major coursework to general knowledge. (F, Sp) [V]
LING	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or research and field projects. (F, Sp)
LING	5023	Second Language Acquisition Theory	(Slashlisted with 4023) Prerequisite: 2303 or four semesters foreign language. Multidisciplinary approach to second language acquisition. Treats child language, interlanguage, universal grammar, input, interaction, output, non-language influences and formal instruction. No student may earn credit for both 4023 and 5023. (F)
LING	5053	Morphology	(Slashlisted with 4053; Crosslisted with ANTH 5053) Prerequisite: graduate standing. Introduces and develops theories and concepts of morphology including word formation, derivation, inflection, non-concatenative morphs, covert categories, prosodic phenomena, morphosyntactic categories and clitics. Data from non-Western languages will be prominent. No student may earn credit for both 4053 and 5053. (Irreg.)
LING	5143	Symbolic Logic II	(Crosslisted with PHIL 5143) Prerequisite: twelve hours of philosophy. Further study of first order predicate logic: identity, axiomatic development. Various metatheorems; soundness, consistency and completeness. (Sp)

LING	5313	Techniques of Historical Linguistics	Prerequisite: 3053 or Anthropology 3053 or permission. Brief survey of the development of historical linguistics, the comparative method, internal reconstruction, types of linguistic change, relationships between linguistic and cultural change, new developments in the field of historical linguistics. No student may earn credit for both 4313 and 5313. (Irreg.)
LING	5330	Topics in Linguistics	(Slashlisted with 4330) 1 to 4 hours. Prerequisite: graduate standing. May be repeated with change of content; maximum credit twelve hours. Topic areas will vary across theoretical and applied areas of linguistics. Some topics that are appropriate include socio-linguistics, psycho-linguistics, language acquisition, advanced syntax, advanced phonology, field phonetics, pragmatics, and comparative readings of twentieth-century theorists. No student may earn credit for both 4330 and 5330 on the same topic. (Irreg.)
LING	5363	Linguistic Field Methods	(Slashlisted with 4363) Prerequisite: graduate standing or permission of instructor. An introduction to all phases of linguistic field techniques, including training in the selection of informants, the use of recording devices, and most important, the actual collection and analysis of linguistic materials. No student may earn credit for both 4363 and 5363. (Irreg.)
LING	5533	Philosophy of Language	(Crosslisted with PHIL 5533; Slashlisted with 4533) Prerequisite: graduate standing. Survey of major philosophical views on the nature and workings of language. Topics covered include: meaning and truth, sense and reference, speech acts, and communication. No student may earn credit for both 4533 and 5533. (Irreg.)
LING	5543	Philosophy of Mind	(Crosslisted with PHIL 5543; Slashlisted with 4543) Prerequisite: graduate standing. Survey of major philosophical views on the nature of the mind. Topics covered may include: the nature and unity of consciousness, the mind-body problem, personal identity, the emotions, actions and intentions, self-knowledge, and other minds. No student may earn credit for both 4543 and 5543. (Irreg.)
LING	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
LING	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LING	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, nine hours. (F, Sp, Su)
LING	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing, permission of instructor. May be repeated; maximum credit twelve hours. Independent reading on one or more topics under the general direction of a faculty member. (F, Sp)
LING	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
LING	6590	Field Work in American Indian Languages	(Crosslisted with ANTH 6590) 3 to 6 hours. Prerequisite: graduate standing and permission of instructor. Advanced field experience in the recording and analysis of Native American languages, including a discussion of problems in selecting and effectively utilizing informants. (Sp)
LING	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
LING	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)

LING	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
LIS	1013	Acquiring Knowledge in the Digital Age	The general process of defining information needs in selecting appropriate information sources. Intended to make students more knowledgeable consumers of information. Exercises in the use of information resources stressing the full range of sources and services available in libraries and information centers. (F, Sp) [I-O]
LIS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
LIS	2003	Introduction to Information Studies	Explores the definition, impact, and history of information and information transmission. Introduces technology used to create, read, store, retrieve and transmit information. Analyzes societal institutions, techniques, and processes for the creation, distribution and management of information. Assesses the role of the information professions and information systems in culture and society. (F, Sp) [III-SS]
LIS	3003	Object-Oriented Information Systems	Prerequisite: junior standing. Data and information structures; information architecture; information representation; information needs assessment; flow analysis; programming concepts and languages. (Sp)
LIS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LIS	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major or program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
LIS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
LIS	3980	Honors Research	1 to 3 hours. Prerequisite: admission to the Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field of study. (F, Sp, Su)
LIS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
LIS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
LIS	4063	Information and Communication Technology	(Slashlisted with 5063) Prerequisite: junior standing. Introduction to the theory and applications of information and communication technologies including hardware, software, systems, systems analysis and the nature and functionality of networks; social, technical and organizational influences on the use and users of information technology. No student may earn credit for both 4063 and 5063. (F, Sp)

LIS	4143	Government Information	(Slashlisted with LIS 5143) Prerequisite: junior standing. Introduces students to current policy, technology, and social factors that drive government resource and information production, distribution, and access. Topics include transformation of government information; information discovery skill sets, models, and techniques; evaluation of information use and value; and government information issues (e.g. access, authentication, privatization, preservation). No student may earn credit for both 4143 and 5143. (F)
LIS	4223	Information Technology Management	(Slashlisted with 5223) Prerequisite: LIS 4063 or permission of instructor. Fundamentals of planning, designing, and managing information technology solutions; market and trend analysis; planning and assessment techniques and tolls; human factors in technology management. No student may earn credit for both 4223 and 5223. (Sp, Su)
LIS	4233	Introduction to Knowledge Management	Prerequisite: 2003. An introduction to knowledge management (KM) for information and knowledge workers in different communities of practice. Topics include KM theory, KM cycles and models; knowledge capture and codification; Organizational culture technology, tools and strategies for KM, including metrics and knowledge application; current uses and the future of KM. (F)
LIS	4303	Children's Literature	Prerequisite: junior standing. Survey, evaluation and selection of materials for children; interests and needs of various age groups; methods of stimulating reading and listening. Reading of books for children is emphasized. (Correspondence)
LIS	4453	Digital Collections	(Slashlisted with 5453) Prerequisite: junior standing. Introduction to the creation and development of digital collections and to the technical requirements for storage and dissemination of digital materials. Topics will include creation, development, organization, maintenance, and use of digital collections. Students will explore a variety of techniques and technologies for digitizing materials; evaluate the strengths and limitations of current efforts in creating, collecting and organizing digital materials; and explore the different opportunities and challenges of digital libraries, repositories, and archives. No student may earn credit for both 4453 and 5453. (Sp)
LIS	4523	Online Information Retrieval	(Slashlisted with 5523) Prerequisite: junior standing. Structure, content, and application of online databases for education, research, business, and public use. Principles and techniques for the evaluation of online databases and services. Document representation, information need specification and query formulation for online information retrieval. No student may earn credit for both 4523 and 5523. (F)
LIS	4553	Competitive Intelligence	(Slashlisted with LIS 5553) Prerequisite: permission of instructor. An introduction to competitive intelligence in various contexts, appropriate for non-profit and for-profit environments. Topics will include developing and implementing the competitive intelligence process, accessing and validating sources, information gathering, auditing, and decision making with special emphasis on strategies, systems, and ethics in competitive intelligence. No student may earn credit for both 4553 and 5553. (Irreg.)
LIS	4603	Information and Communication Technology	Prerequisite: junior standing. Introduction to the theory and applications of information and communication technologies including hardware, software, systems, systems analysis, and the nature and functionality of networks; creation, storage, and retrieval of digital resources; social technical, and organizational influences on the use and users of information technology. No student may earn credit for both 4603 and 5603. (Irreg.)

LIS	4633	Design and Implementation of Web-based Information Services	(Slashlisted with 5633) Prerequisite: junior standing. Design fundamentals for web-based information services; information services; implementation of storage, access, and distribution systems; knowledge representation methods; metadata and information structures; connectivity infrastructure; characteristics and behavior of networked audiences; systems use and usability. No student may earn credit for both 4633 and 5633. (F)
LIS	4663	Information Studies Capstone	Prerequisite: 2003, 3003, 4003, 4103, and senior standing. Capstone course for the Bachelor of Arts in Information Studies; design and development of an operational prototype information system in a selected organizational setting. Introduces project management terms, techniques, and effect on the success of information technology projects. (F, Sp, Su) [V]
LIS	4683	Database Design for Information Organizations	(Slashlisted with 5683) Prerequisite: junior standing. Introduction to the theory and application of database design including information storage and retrieval, data modeling, record structure, data normalization, data security, relational database models, query language, client-server systems, data warehousing and data mining. The social, technological and organizational needs in database design will be examined. No student may earn credit for both 4683 and 5683. (Sp)
LIS	4733	Knowledge Discovery Through Data Mining	Prerequisite: junior standing or permission. Introduction to data mining and data warehousing fundamentals necessary for knowledge discovery in a wide variety of information settings. Emphasis on analysis and evaluation of data mining tools and techniques, including supervised and unsupervised techniques, decision trees, association rules, neural networks, time series, web mining, text mining, numeric data, and rule-based systems. (Irreg.)
LIS	4823	Internship in Information Studies	Prerequisite: LIS 4063 and LIS 4633, or permission of instructor and adviser. Provides an opportunity for student synthesis of principles and theories acquired in coursework and application of these principles and theories in a working environment. Under professional supervision, the student will complete 135 hours emphasizing general understanding of the specific assignment and completion of a focused project. (F, Sp)
LIS	4920	Directed Research	1 to 3 hours. Prerequisite: LIS 4063 and LIS 4633, or permission of instructor and adviser. May be repeated; maximum credit three hours. Faculty supervised research; requires written report. (Irreg.)
LIS	4940	Directed Project	1 to 3 hours. Prerequisite: LIS 4063 and LIS 4633 and senior standing, or permission of instructor and adviser. May be repeated; maximum credit three hours. Faculty supervised design and implementation of an information project that applies principles and theories acquired in coursework to solution of information problems in practical settings. Requires a project prospectus and written report. (Irreg.)
LIS	4960	Directed Readings	1 to 3 hours. Prerequisite: Junior standing and permission of instructor. May be repeated; maximum credit three hours. Faculty supervised exploration of an area of information studies not covered in regularly offered courses. (Irreg.)
LIS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LIS	4990	Independent Study	1 to 3 hours. Prerequisite: junior standing and permission of instructor. May be repeated; maximum credit nine hours. Examination and discussion of current problems in information studies. (F, Sp, Su)

LIS	5023	Management of Information and Knowledge Organizations	(Crosslisted with KM 5023) Prerequisite: graduate standing and 5033, or concurrent enrollment. Theories, processes, behaviors, and issues that allow knowledge-based institutions to transform themselves into ones that organize and share knowledge in an effective, efficient manner; leadership, motivation and organizational communication; management of knowledge workers, ethical and legal aspects of managing information and knowledge organizations. (F, Sp)
LIS	5033	Information and Knowledge Society	Prerequisite: graduate standing or permission of instructor. The nature of knowledge and information; national and global organizational information infrastructure; the role of information and knowledge professionals in the knowledge society; information policy; economics of information; information industries; legal and ethical considerations in information and knowledge systems. (F, Sp)
LIS	5043	Organization of Information and Knowledge Resources	(Crosslisted with KM 5043) Prerequisite: LIS 5033 or concurrent enrollment. Organization of internal and external sources of information; information services and tools; basic concepts of information storage and retrieval systems; design and structure of information systems; identification and organization of knowledge resources such as expertise, skills and competencies; knowledge organization methods such as classification, cataloguing, taxonomies and metadata; search strategies and information retrieval. (F, Sp)
LIS	5053	Information Users in the Knowledge Society	(Crosslisted with KM 5053) Prerequisite: LIS 5033 or concurrent enrollment. Information use by people in various roles, situations, and contexts, individually and in groups. Information behavior and the influence of learning and cognitive processes; value systems; and situational, psychological, sociological, and political perspectives. Application of study of user information behavior to textual, graphical, and visual representation of knowledge. Includes both theoretical models and practical methodologies for study of uses and for user-centered design of information and knowledge systems and services. (F, Sp)
LIS	5063	Information and Communication Technology	(Slashlisted with 4063) Prerequisite: LIS 5033 or concurrent enrollment. Introduction to the theory and applications of information and communication technologies including hardware, software, systems, systems analysis and the nature and functionality of networks; social, technical and organizational influences on the use and users of information technology. No student may earn credit for both 4063 and 5063. (F, Sp)
LIS	5123	Literature and Methods For Readers' Advisory Services	Prerequisites: 5033 and 5053. Examination of value and role of leisure reading in U.S. public libraries; interview techniques, support processes, and bibliographic resources for providing services to adults and older adolescent readers. (Irreg.)
LIS	5133	Biomedical Bibliography and Reference Materials	Prerequisite: LIS 5033 or permission of instructor. Provides an in-depth study of the organization of medical reference departments; reference sources in the health sciences; and the major textbooks in the basic sciences, clinical sciences, and related specialties. Medical audiovisuals, periodicals, indexes and abstracts are included as is automated searching of medical literature. Basic medical terminology is an integral part of the course and given special consideration. (F)
LIS	5143	Government Information	(Slashlisted with 4143) Prerequisite: LIS 5033 or permission of instructor. Introduces students to current policy, technology, and social factors that drive government resource and information production, distribution, and access. Topics include transformation of government information; information discovery skill sets, models, and techniques; evaluation of information use and value; and government information issues (e.g. access, authentication, privatization, preservation). No student may earn credit for both 4143 and 5143. (F)

LIS	5163	Biomedical Databases	Prerequisite: LIS 5133 or permission of instructor. An in-depth approach to the on-line databases supplied by the National Library of Medicine and to the biomedical databases supplied by commercial companies. Deals with all aspects of searching, including the development of effective policies and procedures. Differences and similarities among the databases are emphasized. (F)
LIS	5173	Multicultural Librarianship	Prerequisite: LIS 5033. Awareness of and sensitivity to multicultural heritages; diverse information needs of multiethnic populations; information needs assessment and analysis; program and service planning. (Sp, even-numbered years)
LIS	5183	Books and Materials for Children	Prerequisite: LIS 5033. Seminar involving in-depth criticism of children's materials; thematic/issues approach to reading guidance; contemporary trends; recent literature; children's information literacy and critical thinking skills; and selection/evaluation. (F)
LIS	5193	Books and Materials for Young Adults	Prerequisite: LIS 5033. In-depth criticism of young adult material; seminar involving thematic/issue approach to reading guidance; contemporary trends; recent literature; young adult's information literacy and critical thinking skills; and selection/evaluation. (Sp)
LIS	5223	Information Technology Management	(Crosslisted with KM 5223, Slashlisted with 4223) Prerequisite: LIS 5033 and LIS 5063 or permission of instructor. Fundamentals of planning, designing, implementing, and managing information technology solutions; market and trend analysis; planning and assessment techniques and tools; human factors in technology management. No student may earn credit for both 4223 and 5223. (Sp, Su)
LIS	5243	Academic Library Administration	Prerequisite: LIS 5023, LIS 5033. Historical, sociopolitical, technological, fiscal and organizational factors affecting academic librarianship. Emphasis on institutional analysis, planning, and evaluation. (F)
LIS	5253	Community Relations and Advocacy	Prerequisite: LIS 5023, LIS 5033. Examination of the communication process by which the library/information center personnel satisfy user needs and provide/transmit information about the program objectives and functions to develop public awareness and support. Involves as audiences: the users, the library/information center staff, general public, governance entities, political representatives, educational and service agencies, and professional organizations. (F)
LIS	5263	Organizational Learning and Learning Organizations	Prerequisite: LIS 5023 and LIS 5033.Theories and models of individual, group, team, and organizational learning; creation and management of learning organization; organizational behavior and organizational culture; group team management; group team, and organizational leadership; conflict and agreement; change management. (Sp)
LIS	5273	Public Library Administration	Prerequisite/Corequisite: LIS 5023 and LIS 5033. Historical, sociopolitical, technological, fiscal and organizational factors affecting public libraries and librarianship. Emphasis on community analysis, planning, and evaluation. (Sp)
LIS	5283	School Library Administration	Prerequisite: LIS 5023 and LIS 5033. History and role of school libraries in the educational program; planning, organizing and administering library programs in the elementary and secondary schools. (Sp)
LIS	5293	Special Library and Information Center Administration	Prerequisite: LIS 5023 and LIS 5033. Historical, sociopolitical, technological, fiscal and organizational factors affecting special librarianship. Emphasis on institutional analysis, planning, and evaluation. (F odd-numbered years)
LIS	5323	The Native American Information Environment	Prerequisite; permission of instructor. Interaction between information and culture in Native American society, with emphasis on information needs, resources, and challenges; research collections, public libraries, tribal libraries and tribal colleges, digital technology, and the internet; in-depth exploration of library, museum, archival, and other information services and resources for Native American peoples. (Su)

LIS	5343	Archival Concepts and Traditions	Prerequisite: LIS 5033. Introduction to the principles and practice of collecting, servicing, and arranging archival holdings. Includes appraisal, acquisition, arrangement and description, preservation, and administration of institutional archives. Attention to issues of preservation, intellectual property, and service in both physical and digital environments. (Sp alternating semesters)
LIS	5403	Cataloging and Classification	Prerequisite: 5033, 5043. Detailed study of principles and practices of cataloging and classification according to current standards. Instruction covers original descriptive cataloging, subject analysis and classification. (alt. F, irreg. Su)
LIS	5413	Indexing and Abstracting	(Crosslisted with KM 5413) Prerequisite: 5033 and 5043. History, principles, techniques and applications of indexing, abstracting, and vocabulary control. Includes file organization and maintenance, information representation and coding, natural language processing, and thesaurus construction. (Irreg.)
LIS	5443	Collection Development and Management	Prerequisite: LIS 5033 and LIS 5043. Examination of the acquisition and evaluation processes used for building and maintaining collections in all formats. Formulation and implementation of collection development policies, identification of user needs, selection methods and tools, storage alternatives, publishing and intellectual freedom, administrative and legal issues including licensing and contract negotiation. (F)
LIS	5453	Digital Collections	(Slashlisted with LIS 4453) Prerequisite: LIS 5033, LIS 5043, LIS 5063. Introduction to the creation and development of digital collections and to the technical requirements for storage and dissemination of digital materials. Topics will include creation, development, organization, maintenance, and use of digital collections. Students will explore a variety of techniques and technologies for digitizing materials; evaluate the strengths and limitations of current efforts in creating, collecting and organizing digital materials; and explore the different opportunities and challenges of digital libraries, repositories, and archives. No student may earn credit for both 4453 and 5453. (Sp)
LIS	5463	Archival Representation and Use	Prerequisite: LIS 5033 and LIS 5043 and LIS 5343, or permission of instructor. Introduction to the principles and practices of collecting, servicing, and arranging archival holdings. Includes elements of appraisal, acquisition, and preservation with significant focus on archival arrangement, description, and administration of institutional archives. (Sp)
LIS	5473	Document and Records Management	(Crosslisted with KM 5473) Prerequisites: 5033, 5043. The systematic capture, acquisition, and processing, storage, and control of documents in all formats, including their management as records throughout the life cycle from creation to final disposition. Introduction to principles, methodologies, administration, tools, and techniques in various settings. (Irreg.)
LIS	5503	Information Literacy and Instruction	Prerequisites: 5033 and 5053. Instructional methods and materials for the acquisition and development of information literacy skills; theories of instruction and current trends in information literacy instruction. (Irreg.)
LIS	5513	Information Sources and Services	Prerequisite: 5033, 5053. Characteristics and use of information sources and systems; policies and procedures for the provision of user-centered service in libraries and other information agencies. Introduction to basic reference tools in both print and electronic formats. (F, Sp, irreg. Su)
LIS	5523	Online Information Retrieval	(Slashlisted with 4523) Prerequisite: LIS 5033 and LIS 5053. Structure, content, and application of online databases for education, research, business, and public use. Principles and techniques for the evaluation of online databases and services. Document representation, information need specification and query formulation for online information retrieval. No student may earn credit for both 4523 and 5523. (F)

LIS	5533	Introduction to Instructional Technology	(Crosslisted with EIPT 5533) Prerequisite: graduate standing or permission of instructor. Examination of theoretical and critical issues regarding educational technologies. Practical application and development of skills utilizing technology tools. (F)
LIS	5553	Competitive Intelligence	(Slashlisted with 4553) Prerequisite: graduate standing, LIS 5033, LIS 5053. An introduction to competitive intelligence in various contexts, appropriate for non-profit and for-profit environments. Topics will include developing and implementing the competitive intelligence process, accessing and validating sources, information gathering, auditing, and decision making with special emphasis on strategies, systems, and ethics in competitive intelligence. No student may earn credit for both 4553 and 5553. (Irreg.)
LIS	5563	Archival Appraisal	Prerequisite: LIS 5033 and LIS 5053. Evaluation and examination of contributions of key figures in development of archival appraisal theory; identification and evaluation of distinct movements in archival appraisal; identification of cultural, political, sociological, and technological movements that can have impact on appraisal methodologies; development of effective appraisal strategies for a variety of communities. (F even-numbered years)
LIS	5603	Information and Communication Technology	(Crosslisted with KM 5603) Prerequisite: 5033. Introduction to the theory and applications of information and communication technologies including hardware, software, systems, systems analysis, and the nature and functionality of networks; creation, storage, and retrieval of digital resources; social, technical, and organizational influences on the use and users of information technology. No student may earn credit for both 4603 and 5603. (Irreg.)
LIS	5633	Design and Implementation of Web-based Information Services	(Slashlisted with 4633) Prerequisite: LIS 5033. Design fundamentals for web-based information services; information services; implementation of storage, access, and distribution systems; knowledge representation methods; metadata and information structures; connectivity infrastructure; characteristics and behavior of networked audiences; systems use and usability. No student may earn credit for both LIS 4633 and LIS 5633. (F)
LIS	5653	Preservation of Information Materials	(Crosslisted with KM 5653) Prerequisite: 5033. Theory and practice of the preservation and conservation of intellectual content and physical artifacts, including paper, microform, and digital records. Emphasis on planning and administering disaster prevention and recovery, preservation, and digitization programs. (Alt. Sp, Irreg. Su)
LIS	5683	Database Design for Information Organizations	(Slashlisted with 4683; Crosslisted with KM 5683) Prerequisite: LIS 5033. Introduction to the theory and application of database design including information storage and retrieval, data modeling, record structure, data normalization, data security, relational database models, query language, client-server systems, data warehousing and data mining. The social, technological and organizational needs in database design will be examined. No student may earn credit for both 4683 and 5683. (Sp)
LIS	5713	Research Methods	Prerequisites: LIS 5033. Methods of investigating library and information problems; evaluating research studies in library and information science; developing original research designs. (F, Sp)
LIS	5733	Evaluation Methods	Prerequisite: LIS 5033. Methods of evaluating library and information center policies, processes and procedures; use of evaluation in planning for continuous quality assessment and improvement. (Sp)
LIS	5823	Internship in Library/Information Centers	Prerequisite: 18 hours of LIS coursework, including one-half of the required courses, permission of the supervising instructor. Provides an opportunity for student synthesis of principles and theories acquired in coursework and application of these principles and theories in an outstanding library/information center. Under professional supervision, the student will complete 135 hours. (F, Sp, Su)

LIS	5920	Directed Research	(Crosslisted with KM 5920) 1 to 3 hours. Prerequisite: LIS/KM 5713, permission of instructor and adviser. May be repeated; maximum credit six hours. Research under faculty supervision; requires a written report. (F, Sp, Su)
LIS	5940	Directed Project	(Crosslisted with KM 5940) 1 to 3 hours. Prerequisite: 24 hours of LIS/KM coursework and permission of instructor and adviser. May be repeated; maximum credit three hours. Design and implementation of a professional project that applies principles and theories acquired in coursework to the solution of professional problems in practical settings. Requires a project prospectus and a written report at conclusion of the project. Conducted under faculty supervision. May not be taken for credit toward the MLIS degree by students electing thesis option. (Irreg.)
LIS	5960	Directed Readings	(Crosslisted with KM 5960) 1 to 3 hours. Prerequisite: 15 hours of LIS/KM coursework and permission of instructor and adviser. May be repeated; maximum credit six hours. Exploration of an area of library and information studies not covered in regularly offered course. (F, Sp, Su)
LIS	5970	Special Topics/Seminar	Prerequisite: 1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg).
LIS	5980	Research for Master's Thesis	(Crosslisted with KM 5980) Prerequisite: permission of instructor. Variable enrollment, two to nine hours; maximum credit six hours. (F, Sp, Su)
LIS	5990	Special Problems	(Crosslisted with KM 5990) 1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit nine hours. Examination and discussion of current problems in librarianship. (Irreg.)
LIS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
LSAL	1803	Introduction to the American Collegiate Experience	Prerequisite: enrollment in an ESL program and permission from CLS adviser. Prepares ESL students academically, socially, and personally for university life in the United States. Course modules are based on common academic subjects, such as psychology, business, science, and art. Topics will include instruction and practice with appropriate discussion techniques, lecture preparation and reading strategies, study skills and task management. (F, Sp, Su)
LSAL	1823	Introduction to Business Communication	Prerequisite: enrollment in an ESL program and permission of CLS adviser. Introduction to appropriate business communication and typical business practices in the U.S., with emphasis on cross-cultural awareness, business writing style and research, ethics and values in communication, and collaboration in the workplace. (F, Sp, Su)
LSAL	2283	Understanding Management	Examines organizational planning, the process of organizational decision making, the early research on leadership that focuses on personal traits, motivation in organizations, communicating in organizations, teamwork in organizations, the principles of organization and organizational control. (F, Sp, Su)
LSAL	2313	Business Ethics	Considers business ethics as applied ethics. Includes a framework for understanding the terms "good" and "right" and explores the basic principles used in the study of ethics. Also explores the various ways in which international business ethics differ from business ethics as practiced in the American economy. (F, Sp, Su)
LSAL	2700	Topics in Administrative Leadership	May be repeated with change of content; maximum credit nine credit hours. Specific course content will be defined each time the course is offered. A problem oriented approach to Administrative Leadership. Reading and research, arranged and directed in consultation with the instructor, in specified areas of Administrative Leadership. (F, Sp, Su)

LSAL	3113	Leadership in Organizations	Prerequisite: junior standing or permission from CLS adviser. The general purpose of this course is to learn about contemporary thinking regarding leadership in organizations and the applications of these insights for growth as a leader. (F, Sp, Su)
LSAL	3133	Conflict Resolution	Prerequisite: junior standing or permission from CLS adviser. A review of several contemporary theories of the nature of conflict and how best to manage it. Students examine the communication process and practice effective communication skills through exercise. (F, Sp, Su)
LSAL	3153	Ethics in Leadership	Prerequisite: junior standing or permission from CLS adviser. Explores various concepts, principles and case studies involved in ethics in the social science, with particular emphasis on business ethics. Students examine core values in light of social conditioning, short-term profiteering, and the need for affiliation. (F, Sp, Su)
LSAL	3173	Goal Setting and Attainment	Prerequisite: junior standing or permission from CLS adviser. Introduces students to the importance of establishing goals and the goal attainment process in business and other settings. These include perspectives of goal attainment in industry as they apply to production and to overcoming challenges. (F, Sp, Su)
LSAL	3333	Motivation in Learning and Leadership	Prerequisite: junior standing or permission from CLS adviser. Introduces learners to several theories on human motivation which can be applied across several contexts, including both learning and leadership. (F, Sp, Su)
LSAL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LSAL	3513	Integrated Marketing Strategies	Prerequisite: junior standing or permission from CLS adviser. Focuses on marketing communications by examining many types of retailers, the basic concepts that apply to all areas of promotion, basic selling techniques, and advertising and sales promotion as important parts of a promotion blend. (F, Sp, Su)
LSAL	3533	Adapting To Changing Marketing Environments	Prerequisite: junior standing or permission from CLS adviser. Focuses on innovative strategy planning that helps businesses survive in increasingly competitive markets. An analysis of the individual consumer as a problem solver who is influenced by psychological variables, social influences, and the purchase situation. Also studies the number, size, location, and buying behavior of various types of organizational customers, and logistics activities and how they provide time and place utility to improve value to the customer. (F, Sp, Su)
LSAL	3553	Global Strategies	Prerequisite: junior standing or permission from CLS adviser. Focuses on marketing and marketing strategies, specifically pricing and the integrative nature of marketing management. (F, Sp, Su)
LSAL	4123	Quality Initiatives in Organizations	Prerequisite: junior standing or permission from CLS adviser. Understanding quality initiatives is the focus of this course. Students will discuss tools that can be used in order to build teams and a good environment in the workplace. (F, Sp, Su)
LSAL	4143	Cultural Diversity in the World	Prerequisite: junior standing or permission from CLS adviser. At the end of this course, the learner will be able to apply an in-depth understanding of cultural diversity to issues in human relations and in achieving true diversity in organizations. Provides learners with a conceptual framework from which to analyze historical and current legal approaches to cultural diversity, with an emphasis on gaining an understanding of how and why affirmative action programs are implemented. (F, Sp, Su)

LSAL	4163	Non-Profit Management	Prerequisite: junior standing or permission from CLS adviser. Provides an overview of nonprofit management, operations, and leadership as well as the problems and environment unique to the various nonprofit entities functioning in society. (F, Sp, Su)
LSAL	4203	Decision-Making, Problem Solving, and Strategic Thinking	Prerequisite: junior standing or permission from CLS adviser. Exploration of decision-making, problem solving and strategic thinking in a variety of organizational settings. Discussion of applied intelligence and the methods/tools utilized to make effective decisions.(F, Sp, Su)
LSAL	4263	Corporate Environmental Strategy	Prerequisite: junior standing or permission from CLS adviser. Examines the growing importance of environmental science and technology for business and industry. Students will gain an appreciation of the dimensions of the natural environment in today's business climate with the goal of determining what issues are of central policy importance as well as career opportunities for those who wish to participate in the development of a sustainable society. (F, Sp, Su)
LSAL	4353	Mediation: History, Theory, and Practice	Prerequisite: junior standing or permission from CLS adviser. The course provides an overview of the history of mediation as well as an introduction to substantive mediation theories and models. The practice of mediation will be introduced by examining its origins in both the court and community-focused movements. Contemporary applications and trends in mediation also will be examined. (F, Sp, Su)
LSAL	4373	Performance Excellence in Personal and Professional Life	Prerequisites: junior standing or permission from CLS adviser. This course will examine the psychological, social, and health related factors that can increase the opportunity for excellence in personal and professional life. Information from psychology, sport psychology, and exercise prescription will identify the variables that play a significant role in the development of performance excellence.(F, Sp, Su)
LSAL	4700	Advanced Topics in Administrative Leadership	Prerequisite: junior standing or permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Investigation into problems of leadership not covered in existing courses, and utilizing an interdisciplinary approach. Will culminate in a written report of investigation. Specific course content will be defined each time the course is offered. Reading and research, arranged and directed in consultation with the instructor, in specified areas of liberal studies. (F, Sp, Su)
LSAL	4920	Internship in Administrative Leadership	1 to 3 hours. Prerequisite: junior standing and permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Field experience in issues related to a student's area of study. Students will gain knowledge through experiential and on-the-job practice. (F, Sp, Su)
LSAL	5113	Theories of Management and Leadership	Prerequisite: graduate standing. This course explores and analyzes the concept of leadership including such topics as leadership theory, changing leadership roles, power, decision-making, empowerment, vision, communication, diversity, and ethics. (F, Sp, Su)
LSAL	5133	Cultures of Organizations	Prerequisite: graduate standing. The course looks at the meaning of organizational culture and its significance for leadership behavior, ways of thinking about organizations and the structure of organizations, the implications for leaders, and other relationships between organizations and aspects of leadership. (F, Sp, Su)
LSAL	5153	Ethics in Leadership	Prerequisites: graduate standing. An interdisciplinary inquiry into the nature of ethics, the relationship between ethics and morals, and the function of ethics in a social context. Major emphasis is on the effect of ethical decision making on successful leadership and the role that ethical behavior plays in the success of organizations. (F, Sp, Su)

LSAL	5173	The Individual and Leadership	Prerequisite: graduate standing. This course explores the social, psychological, and behavioral characteristics of leadership, personal skills that enhance leadership ability, and strategies for dealing with interpersonal problems in organizations. (F, Sp, Su)
LSAL	5203	Leadership Issues in Decision Making	Prerequisite: graduate standing, LSTD 5003, and LSAL 5113; or permission of dean. An interdisciplinary inquiry into the nature and attributes of rational and irrational decision making. Content will include research on how decisions must often be made with incomplete evidence, the use of cognitive psychology in decision making from a human intelligence perspective, and how decisions are made from a social and cultural process. Students will learn leadership decision making from individual, small group, and social environment contexts, as well as values of good decisions and the unintended consequences of poor decisions. (F, Sp, Su)
LSAL	5243	Project Management	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. An interdisciplinary inquiry to simulate as closely as possible the real-world experience of managing a project for a client; the client participates in the grading for the course. Topics include: project planning, project execution, project control, project communication, client relations, performance oriented design, collecting information in the field, current operations analysis, specifications for a proposed solution, devising and evaluating alternatives, and implementation. (F, Sp, Su)
LSAL	5313	Organizational Communications	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. An interdisciplinary inquiry in the role information and knowledge management play in making decisions in organizations, fundamental issues in the management of information, how people in organizations exchange information, and ultimately how effective sharing of information leads to effective problem solving. (F, Sp, Su)
LSAL	5333	Motivation in Work and Leadership	Prerequisite: graduate standing. Exploration of personal and work motivation, including discussion of relevant theories and their application in leadership and the workplace. (F, Sp, Su)
LSAL	5393	Followership	Prerequisite: graduate standing. Introduction to the follower and the dynamics that result from followership in various organizational settings. Topics include theories and definitions of followership, categorization of follower types, and discussion of how followers can be a positive influence against ineffective or bad leadership. (F, Sp, Su)
LSAL	5403	Leadership in History	Prerequisite: graduate standing. Analysis of leadership principles using prominent examples drawn from history to discern patterns and test categories and theoretical generalizations of leadership. Discussions aim to facilitate the understanding of leadership in different historical contexts. Consideration is given to success and failure, the relative importance of personality vs. circumstances, leadership characteristics and styles. (F, Sp, Su)
LSAL	5423	Women in Leadership	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. Exploration of women leaders and their influence on their respective societies, as well as contributions on a broader spectrum. Special attention is focused on how women leaders from different eras became change agents and what particular issues made them transformational leaders. (F, Sp, Su)
LSAL	5443	Religious Leaders for Social Justice	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. Focuses on the characteristics of leaders as individuals, and in particular as individuals of faith for causes pertaining to social justice. Explores individuals from the major faith traditions including Christianity, Judaism, Islam, Buddhism, and Native American religion and investigates the ways in which faith and the particular constellation of life experiences and social situations have inspired leadership for the cause of social justice. (F, Sp, Su)

LSAL	5463	US Military Leadership: Insights and Applications	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. Studies leadership, both uniformed and civilian, in the United States military from 1775 to present within the context of the evolution of American military from a small 18th-century army and wooden ship-and-sail navy to the globe-dominating colossus of the late 20th-century. Includes the impact of technology, maturing military theory, and the changing position of the United States in the world that produced diverse leadership styles which are illustrated in the careers of military leaders such as George Washington, U.S. Grant, Robert E. Lee, David Farragut, John Pershing, Hap Arnold, George C. Marshall, and many others. (F, Sp, Su)
LSAL	5483	National Security Leadership	Prerequisite: graduate standing. Discussion of leadership within the environment of the U.S. national security system. Course addresses the legislation that created the current national security system and examines the structure of the national security community, how it has evolved, and how it operates in practice. (F, Sp, Su)
LSAL	5513	Foundations in Professional Coaching	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. A graduate-level survey course designed to familiarize students with the fundamental principles on which the field of professional coaching is built, to explore the core competencies required for professional coaching, to understand and analyze the methods used to facilitate the coaching process, to develop the basic skills required for effective practice as a professional coach, and to understand the guidelines that govern ethical coaching activities. (F, Sp, Su)
LSAL	5533	Theories of Professional Coaching	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. This course examines the theories upon which the professional coaching practice is based. Special emphasis will be placed on developing a broad understanding of various theoretical approaches and how those theories facilitate client growth. Students will also be introduced to the personality of theorists, the cultural and historical context of their theory building, major themes and ideas of the theories and evidence and research supporting the theoretical approach. Students will also be asked to analyze the theories in the context of their own anticipated practice and potential audiences.(F, Sp, Su)
LSAL	5700	Advanced Topics in Administrative Leadership	Prerequisite: graduate standing. May be repeated with change of content; maximum credit 12 hours. Advanced studies in various administrative leadership topics, offered under stated titles determined each semester by the instructor involved. Intensive research on a topic related to the student's program of study; variable topics. (F, Sp, Su)
LSAL	5920	Internship in Administrative Leadership	2-6 hours. Prerequisite: graduate standing, LSTD 5003, and permission of dean. May be repeated; maximum credit six hours. Field experience directly related to study focus in the Administrative Leadership program. Requirements include some combination of journal, progress reports, written summary of experiences, or academic paper, and a possible comprehensive examination over these materials. (F, Sp, Su)
LSCJ	2283	Introduction to Criminal Justice	Investigation and analysis of the three major components of the criminal justice system: police, courts, and corrections. Topics include the criminal justice system's ability to balance crime control and individual civil liberties, the use of formal and informal decision-making processes, and the effectiveness of criminal justice policies, practices, and programs. (F, Sp, Su)
LSCJ	2700	Topics in Criminal Justice	May be repeated with change of content; maximum credit nine credit hours. Specific course content will be defined each time the course is offered. A problem oriented approach to Criminal Justice. Reading and research, arranged and directed in consultation with the instructor, in specified areas of Criminal Justice. (F, Sp, Su)

LSCJ	3063	Statistics in Criminal Justice	Prerequisite: junior standing or permission from CLS adviser. An introduction to the basics of social statistics, the methods and techniques which sociologists, policy analysts, and other social scientists use to summarize numeric data obtained from censuses, surveys, and experiments. (F, Sp, Su)
LSCJ	3113	Comparative Justice Systems	Prerequisite: junior standing or permission from CLS adviser. Examines and compares the legal and criminal justice systems of different nations. Focuses on historical, political and social factors, and explains their influence on legal institutions and systems of justice. Discusses points of divergence between other societies and the United States in perceived causes of crime and differing approaches to rehabilitation and crime prevention. Countries representing Europe, Africa, Asia and Latin America are included. (F, Sp, Su)
LSCJ	3133	Theories of Criminal Behavior	Prerequisite: junior standing or permission from CLS adviser. An overview of theories of criminal behavior as well as current issues in criminology. Students will be exposed to biological, sociological and psychological theories of crime, as well as opposing viewpoints on important topics in criminology. (F, Sp, Su)
LSCJ	3173	Deviance and Social Control	Prerequisite: junior standing or permission from CLS adviser. Students will be introduced to the sociological study of deviance and social control, with a focus on the social construction of deviant behavior and the relative nature of such definitions through time and across cultures. Current research on selected types of deviance will be reviewed to understand the individual and structural dimension of behavior as well as implications for policy and social control. (F, Sp, Su)
LSCJ	3203	Criminal Justice Administration	Prerequisite: junior standing or permission from CLS adviser. Covers the development, proliferation, institutionalization, and goals of the components of the criminal justice system and their administration. The course will also cover the ethics of managing justice and punishment. (F, Sp, Su)
LSCJ	3223	American Judicial Processes	Prerequisite: junior standing or permission from CLS adviser. Acquaints students of criminal justice with the overall structure of state and federal courts, including jurisdiction, sources of law, civil and criminal legal procedures from initial pleadings through appeal, substantive civil and criminal law, and policy issues about the role of the judiciary in representative government. (F, Sp, Su)
LSCJ	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LSCJ	4123	Introduction to Forensic Science/Criminalistics	Prerequisite: junior standing or permission from CLS adviser. Using the study and application of science to examine the relationship between science disciplines, and the criminal investigative process, students will be presented with theories and principles related to methods in the recognition, collection, preservation and analysis of physical evidence. Actual forensic cases will be presented and discussed throughout the course. (F, Sp, Su)
LSCJ	4143	Drugs and Society	Prerequisite: junior standing or permission from CLS adviser. Examines the impact of drug abuse on contemporary American society. Students learn about drug regulation and legal issues, how drugs affect the brain and shape behavior, and the various categories of drugs and their characteristics. Also focuses on drug abuse prevention, treating drug dependence, and law enforcement programs to address drugs in society. (F, Sp, Su)

LSCJ	4223	School and College Campus Policing	Prerequisites: junior standing or permission from CLS adviser. A review of the role law enforcement plays in improving the safety and security of schools and the best practices for responding and dealing with multiple types of school crises. This course will emphasize successful practices in policing within the education systems of the United States and offer instruction to both police and educators on cooperative approaches to making schools safer. (F, Sp)
LSCJ	4243	Police and Policing	Prerequisite: junior standing or permission from CLS adviser. Provides a historical perspective of policing as well as up-to-date information on policing and the issues that police deal with in a post-9/11 society. The course will provide students with a basic understanding of the CSI effect, the creation of the Department of Homeland Security and developments in community policing. The course also highlights the role of officers in society and within the criminal justice system. (F, Sp, Su)
LSCJ	4263	The American Correctional System	Prerequisite: junior standing or permission from CLS adviser. A survey course covering the development of the field of corrections from its early American roots to the present. Included are discussions of the role and function of jails, traditional and modern correctional facilities, private/contract corrections, and probation and parole. (F, Sp, Su)
LSCJ	4403	Criminal Investigation	Prerequisite: junior standing or permission from CLS adviser. Provides students with the theoretical and practical aspects of criminal investigation. Students develop an analytical and practical understanding of investigative methodology, the collection and preservation of physical evidence and explore current crime solving technology. (F, Sp, Su)
LSCJ	4423	Cyberspace Security	Prerequisite: junior standing or permission from CLS adviser. Provides an in-depth exploration of cyberspace crime and security. An intensive study of the types of crimes committed in cyberspace, a profile of offenders, and current legal issues in cyberspace. Students will explore emerging issues in information assurance and prevention of cyberspace crimes and will examine the proper collection, preservation and examination of digital evidence. (F, Sp, Su)
LSCJ	4443	Juvenile Delinquency	Prerequisite: junior standing or permission from CLS adviser. An overview of juvenile delinquency in the United States, including current issues. Students will read both classic studies on the emergence of the juvenile system and current research on trends in juvenile delinquency. (F, Sp, Su)
LSCJ	4700	Advanced Topics in Criminal Justice	Prerequisite: junior standing or permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Specific course content will be defined each time the course is offered. A problem-oriented approach to criminal justice. Reading and research, arranged and directed in consultation with the instructor in specified areas of criminal justice. (F, Sp, Su)
LSCJ	4920	Internship in Criminal Justice	1 to 3 hours. Prerequisite: junior standing and permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Field experience in issues related to a student's area of study. Students will gain knowledge through experiential and on-the-job practice. (F, Sp, Su)
LSCJ	5063	Research Methods for Criminal Justice	Prerequisite: graduate standing and LSTD 5003; or permission of dean. Introduces students to conducting and evaluating scientific research of the criminal justice system. Research methods overview the basics of research methodologies, with a focus on measurement and data collection. Statistical analysis overviews basic statistical techniques for analysis of criminal justice data, with a focus on both descriptive and inferential statistics. (F, Sp, Su)
LSCJ	5113	Theoretical Foundations of Criminal Justice	Prerequisite: graduate standing. Enhances students' understanding of criminal theory focusing on critical analysis of major theoretical perspectives in a social, historical and political context. (F, Sp, Su)

LSCJ	5133	Criminal Justice Policy Development	Prerequisite: graduate standing. Students will learn how to measure policies against established standards of practice and case law, writing model policies to gain experience in the process, and evaluating policies to see if they actually work. (F, Sp, Su)
LSCJ	5153	Ethical Decision Making in Criminal Justice	Prerequisite: graduate standing. Principles from the major ethical positions charted by Plato, Aristotle, Hume, Mill, Kant, and Rawls. Students will combine these principles with codes of practice and current case law, examine case vignettes and discuss the ethical components of each case. (F, Sp, Su)
LSCJ	5203	Victimology and Restorative Justice	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. A survey of the evolving field of victimology from its preoccupation with the study of the victim as a co-active participant in crime to the reemergence of the victim as the focus of the criminal justice system and public policy. This course will also examine the corollary reemergence of the concept of restorative justice, which seeks to address the needs of victims, offenders, and the community. (F, Sp, Su)
LSCJ	5213	Mediation & Conflict Resolution for Criminal Justice Professionals	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of practical strategies for managing and resolving conflicts in criminal justice professions.(F, Sp, Su)
LSCJ	5223	Community Corrections in the 21st Century	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. Introduction to the topics of probation, parole, and other alternatives to incarceration, collectively referred to as Community Corrections. Emphasis will be placed on the role of research and program evaluation in determining policy/program effectiveness. (F, Sp, Su)
LSCJ	5243	Community Policing	Prerequisite: graduate standing, LSTD 5003, LSCJ 5113, and LSCJ 5133; or permission of dean. An examination of proactive community-oriented policing and problem solving (COPPS) in the context of changes in police departments and communities. Topics include the history of COPPS initiatives, as well as implementation and methods for evaluating program efficacy.(F, Sp, Su)
LSCJ	5253	Juvenile Justice	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. Provides an overview of juvenile delinquency and the juvenile justice system. The course will examine the historical background of juvenile delinquency and will focus on the depth and breadth of the problem, including theoretical causes of delinquency and their association with juvenile crime, the use of juvenile justice statistics and trend data, and the efficacy of intervention and diversion programs. (F, Sp, Su)
LSCJ	5263	Restorative Justice Programs for Drug Offenders	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An exploration of the restorative justice model focusing on how drug courts have implemented key principles of restorative justice programs to deter crime and improve public health. (F, Sp, Su)
LSCJ	5283	Human Trafficking and Prostitution	Prerequisite: graduate standing, LSTD 5003 and LSAL 5113; or permission of dean. This course is an in-depth survey of human trafficking - both labor trafficking and sex trafficking. This course studies human trafficking in select countries around the world, including the United States. The course addresses each country as both a destination and a departure point for victims, as well as how officials of each country respond to victims of human trafficking.(F, Sp, Su)
LSCJ	5303	Correctional Leadership	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. A review of leadership styles, core competencies demonstrated by effective correctional leaders, skills sets needed for each managerial level within corrections, and elements of leadership that effect the development of a collaborate and dynamic workforce.(F, Sp, Su)

LSCJ	5313	Special Populations in Criminal Justice: Race	Prerequisite: graduate standing, LSTD 5003 and LSCJ 5113; or permission of dean. Examines the origins, extent and consequences of racial and ethnic overrepresentation at all stages of contemporary American criminal and juvenile justice systems by utilizing recent research from both race theory and criminological theory. (F, Sp, Su)
LSCJ	5323	Juvenile and Elderly Offenders in Prisons	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of juvenile and elderly prisoners and the concerns these special populations present in corrections management.(F, Sp, Su)
LSCJ	5333	Special Populations in Criminal Justice: Class	Prerequisite: graduate standing, LSTD 5003 and LSCJ 5113; or permission of dean. Examines the origins, extent and consequences of class/social inequity at all stages of the contemporary American criminal and juvenile justice systems by using emergent research from both social inequity theory and criminology. (F, Sp, Su)
LSCJ	5343	Mental Illness and the Criminal Justice System	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of mental illness in the criminal justice system. (F, Sp, Su)
LSCJ	5353	Women and Crime	Prerequisite: graduate standing, LSTD 5003 and LSCJ 5113; or permission of dean. Provides an in-depth examination of women and crime, particularly in the United States, from a sociological perspective, focusing on theoretical explanations, women as offenders, women as victims of crime, and societal responses to female crime. (F, Sp, Su)
LSCJ	5363	Penology	Prerequisite: graduate standing, LSTD 5003 and LSCJ 5113; or permission of dean. An exploration of key issues and emerging themes in scholarship on penology and corrections. Specific attention will be devoted to the United States and the significant correctional issues that it faces including theories of punishment, the history of incarceration, the current state of corrections in the United States, international comparisons in prisons, as well as an investigation of the future of incarceration. (F, Sp, Su)
LSCJ	5383	Collateral Effects of Incarceration	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of the indirect consequences of incarceration. Topics will include the impact of incarceration on the offender's family and community, indirect costs associated with incarceration, psychological harm to offenders caused by imprisonment, and the stresses experienced by correctional employees. (F, Sp, Su)
LSCJ	5403	Drug Enforcement Operations and Management	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. This course will examine how criminal justice professionals administer and manage drug investigations. Administrative topics will include personnel issues, policy development, and budgeting. Operational management topics will include informant management, undercover operations, tactical operations, wire-intercepts, and money laundering investigations.(F, Sp, Su)
LSCJ	5413	Substance Abuse and Crime in the United States	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of substance abuse trends in the United States. Topics include the interrelationship between substance abuse and dependency, substance abuse treatment and the criminal justice system, and the effectiveness of drug policies and programs. (F, Sp, Su)
LSCJ	5423	Global Drug Trafficking, Narco-Terrorism, and United States Drug Policy	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of the global nature of drug supply and demand, organizations involved in drug trafficking and narco-terrorism, and the implementation of US drug policies at the local, state, and federal levels. (F, Sp, Su)
LSCJ	5463	Gangs in the United States	Prerequisite: graduate standing, LSTD 5003 and LSCJ 5113; or permission of dean. Gang formation, risk factors for joining gangs, and the efficacy of different types of prevention, intervention and interdiction policies. The historical backgrounds of gangs, drugs, and violence in America, as well as current issues related to these subjects, will be explored. (F, Sp, Su)

LSCJ	5483	Life Course Criminology	Prerequisite: LSTD 5003 and LSCJ 5113; or permission of dean. The life-course paradigm has emerged as a potentially powerful tool for understanding criminal behavior. This course is designed to provide an in-depth examination of the life-course paradigm and its application to criminal justice policy. (F, Sp, Su)
LSCJ	5513	Studies in Police Leadership	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An exploration of the dynamics of leadership within the law enforcement context, including the history and evolution of police administration, general leadership theories, management best practices, as well as contemporary issues confronting the profession. (F, Sp, Su)
LSCJ	5533	Crime Analysis for Intelligence-Led Policing	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. Introduction to crime analysis and the use of data to intelligently prevent and/or interdict crime.(F, Sp, Su)
LSCJ	5553	Interpersonal Communications for Criminal Justice	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of professional interpersonal communications within the field of Criminal Justice. Topic for the course include effective communication processes, verbal and non-verbal communication, stereotyping, crisis intervention, interviewing, negotiating, stress awareness in communication encounters, conflict resolution, and team and leadership communication.(F, Sp, Su)
LSCJ	5583	Cyber-Forensics	Prerequisite: graduate standing, LSTD 5003, and LSCJ 5113; or permission of dean. An examination of the legal, ethical and technical aspects of cyber-forensics.(F, Sp, Su)
LSCJ	5700	Advanced Topics in Criminal Justice	Prerequisite: graduate standing. May be repeated with change of content; maximum credit 12 hours. Advanced studies in various criminal justice topics, offered under stated titles determined each semester by the instructor involved (F, Sp, Su)
LSCJ	5920	Internship in Criminal Justice	2-6 hours. Prerequisite: graduate standing, LSTD 5003, and permission of dean. May be repeated; maximum credit six hours. Field experience directly related to study focus in the Criminal Justice program. Requirements include some combination of journal, progress reports, written summary of experiences, or academic paper, and a possible comprehensive examination over these materials. (F, Sp, Su)
LSCS	1223	Introduction to Chinese Language I	Prerequisite: Permission from CLS adviser. An introductory course in Chinese language and culture, with a beginner-level emphasis on understanding, reading, writing, and communicating in Mandarin Chinese.(F, Sp) [I-FL]
LSCS	1243	Introduction to Chinese Language II	Prerequisite: LSCS 1223. The second introductory course in Chinese language and culture, with a beginner-level emphasis on understanding, reading, writing, and communicating in Mandarin Chinese. (Sp)
LSCS	2970	Topics in Cultural Studies	1 to 3 hours. May be repeated with change of content; maximum credit six credit hours. Specific course content will be defined each time the course is offered. A problem-oriented approach to cultural studies. May include reading and research, as well as lecture in a specified area of cultural studies. (F, Sp, Su)
LSCS	3113	Introduction to World Cultural Studies	Prerequisite: junior standing. Introductory survey of the basic concepts of and approaches to world cultural studies. Topics include the definition and structure of cultures, cultural diversity and multicultural societies, Eurocentrism and other politicized visions of the world, and cross-cultural communication and exchanges. Dual emphasis upon scholarship and real-world applicability. (F, Sp, Su)
LSCS	3203	Contemporary Chinese Political Thought	Prerequisite: junior standing. Introduces students to contemporary Chinese political thought. Attention will be given to other countries as comparison. Students also will be introduced to major characteristics and issues in Chinese history establishing a framework for understanding aspects of Chinese political culture and traditions. (F, Sp)

LSCS	3223	Cultural Geography of China	Prerequisite: junior standing. Introduces students to the cultural geography of China, though some attention will be given to other countries as comparison. Students will be introduced to major characteristics and issues in Chinese history providing a framework for understanding the aspects of Chinese cultural geography. (F, Sp)
LSCS	3243	Chinese Military	Prerequisite: junior standing or permission from CLS adviser. A comprehensive examination of Chinese military thought, traditions, organizational structure, current capacity and deployment, strategic interests, projected growth, roles in domestic affairs, political influence, and new forms of militarization. This course emphasizes Chinese post-dynastic history and contemporary developments with attention given to Confucian philosophers' views on the use of force in a modern context. (F, Sp)
LSCS	3263	Chinese Culture and Civilization	Prerequisite: junior standing. Studies the major features of the principal existing civilizations in China, as they were originally formed and as they have been altered after the 17th century by the "forces of modernity." This course focuses on the rise of Chinese civilizations, the formation and development of the Chinese empire, the cultural exchanges among East Asian countries and between East Asia and other parts of the world, and the position of East Asian civilizations in the ancient and medieval world. Attempts to define what major traditional features of the civilizations were, and how they intermesh to produce East Asia that has entered the modern world. (F, Sp)
LSCS	3283	Conversational Chinese	Prerequisite: junior standing. Designed for individuals who would like to learn Chinese but have little knowledge or experience of learning a foreign language, and those who need to use the language for practical purposes such as work, travel, holiday, and so on. It consists of three portions: (1) getting started; (2) communicating with Chinese native speakers; (3) working with the Chinese. (F, Sp)
LSCS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LSCS	4700	Advanced Topics in Cultural Studies	Prerequisite: junior standing or permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Specific course content will be defined each time the course is offered. A problem-oriented approach to cultural studies. Reading and research, arranged and directed in consultation with the instructor in specified areas of cultural studies. (F, Sp, Su)
LSCS	4920	Internship in Cultural Studies	1 to 3 hours. Prerequisite: junior standing and permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Field experience in issues related to a student's area of study. Students will gain knowledge through experiential and on-the-job practice. (F, Sp, Su)
LSHA	5113	Strategic Planning and Evaluation in HHSA	Prerequisite: graduate standing. An interdisciplinary inquiry into the concepts of strategic planning and evaluation in the human and health services organizational settings. Study of strategic planning, implementation skills, and the evaluation process. Study of various models and approaches to designing and conducting strategic planning, including specific techniques for conducting environmental scans, swot analysis (strengths, weaknesses, opportunities and threats), strategic issue identification, and strategy formulation. (F, Sp, Su)

LSHA	5133	Cultural, Social and Diversity Issues in HHSA	Prerequisite: graduate standing. An interdisciplinary inquiry into cultural, social and other diversity issues that human and health services professionals will encounter in the process of providing services to their client/patients. Exploration of how one's cultural and social environment impacts one's belief system. Successful delivery of service will depend upon the depth of understanding by personnel with regard to various belief systems. (F, Sp, Su)
LSHA	5153	Ethics in Human and Health Services Administration	Prerequisite: 5003 or permission. An interdisciplinary inquiry into the nature of ethics, especially in the context of multicultural healthcare; the kinds of moral problems within this landscape and how rational thinking can guide ethical thought in ways that address the challenges in healthcare policy and reform. (F, Sp, Su)
LSHA	5313	Cross-Cultural Health Issues in Human and Health Services Administration	Prerequisite: graduate standing, LSTD 5003 and LSHA 5113; or permission of dean. Explores multiple issues in the field of international health using a multidisciplinary perspective while including particular countries as examples. Students are exposed to the perspective that human lives are affected by larger, societal influences that often are beyond our immediate individual control. Explores the ways in which structural level variables influence human health, including economic, historical, cultural, political and psychosocial factors. (F, Sp, Su)
LSHA	5403	Geriatric Issues in Human and Health Services Administration	Prerequisite: graduate standing, LSTD 5003 and LSHA 5113; or permission of dean. Introduces health and developmental issues pertaining to human geriatric populations, provides specific challenge areas for focusing on both problems and potential solutions, and highlights positive, recreational and self-actualizing activities and pursuits available to geriatric populations. (F, Sp, Su)
LSHA	5513	Psychosocial Aspects of Disabilities in HHSA	Prerequisite: graduate standing, LSTD 5003 and LSHA 5113; or permission of dean. Examines the struggles in which persons with disabilities have been engaged and the barriers they have had to overcome, as well as the barriers they continue to face in their quest to obtain the freedoms that persons without disabilities so freely enjoy. The following areas will be examined in some detail: disenfranchisement of persons with disabilities; attitudes toward persons with disabilities, Americans with Disabilities Act (ADA), and other legislative disability rights movement; self concept and self esteem, role of family; and intervention strategies. (F, Sp, Su)
LSHA	5700	Advanced Topics in Human and Health Services Administration	2 to 9 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. Advanced studies in various HHSA topics, offered under stated titles determined each semester by the instructor involved. (F, Sp, Su)
LSHA	5920	Internship in Human and Health Services Administration	2-6 hours. Prerequisite: graduate standing, LSTD 5003, and permission of dean. May be repeated; maximum credit six hours. Field experience directly related to study focus in the HHSA program. Requirements include some combination of journal, progress reports, written summary of experiences, or academic paper, and a possible comprehensive examination over these materials. (F, Sp, Su)
LSLC	2970	Topics in Lifespan Care and Administration	1 to 6 hours. May be repeated with change of content; maximum credit six credit hours. Specific course content will be defined each time the course is offered. A problem-oriented approach in lifespan care and administration. May include reading and research, as well as lecture in a specified area of cultural studies. (F, Sp, Su)
LSLC	3113	Lifespan Development	Prerequisite: junior standing or permission from CLS adviser. Survey of human development from birth to death, drawing from multiple disciplines including biology, psychology, sociology, and medicine. The emphasis is on empirically-derived information about human development that may be of practical use to individuals working directly with others in a service capacity. Particular attention is devoted to issues of physical, cognitive, social, and emotional development at all stages of the lifespan, as well as contextual influences on development. (F, Sp, Su)

LSLC	3133	Lifespan Health	Prerequisite: junior standing or permission from CLS advisor. Lifespan Health will provide students with an introductory survey of the importance and principles of good health over the lifespan. Students will learn how to identify signs of incipient health problems and basic health promotion strategies. Assignments are designed to provide students with practical knowledge and application of health promotion across the lifespan.(F, Sp, Su)
LSLC	3153	Ethical and Legal Issues in Health Care	Prerequisite: junior standing or permission from CLS adviser. Introduction to the ethical and legal issues caregivers and administrators face in providing health services throughout the lifespan. (F, Sp, Su)
LSLC	3173	Human Service Administration I	Prerequisite: junior standing or permission from CLS adviser. Introduction to current theory and best practices in the administration of human services in both non-profit and for-profit settings. Topics include legal issues, effective administrative models, leadership in human services organizations, and management of human resources. (F, Sp, Su)
LSLC	3203	Care of Infant and Child	Prerequisite: junior standing or permission from CLS adviser. Introduction to basic principles of child behavior and development and apply those principles to child care settings. Topics include normative physical, social, emotional, cognitive, and sexual development, as well as risk factors for early intervention and referral to professional services. (F, Sp, Su)
LSLC	3223	Problems of the American Family	Prerequisite: junior standing or permission from CLS adviser. Study of the societal influences that may have adverse effects on family life. Factors covered include poverty, divorce, employment, violence, substance abuse and other stressors. Additional topics include historical perspectives on the changing nature of the American family and evidence-supported strategies for coping with and preventing family stressors. (F, Sp, Su)
LSLC	3273	Management of Infant and Child Care Facilities	Prerequisite: junior standing or permission from CLS adviser. In-depth study of the theory and practice of managing infant and child care facilities. (F, Sp, Su)
LSLC	3313	Issues in Adolescence I	Prerequisite: junior standing or permission from CLS adviser. Investigation of the physical, behavioral, mental, emotional and social changes that accompany growth and development during the adolescent years. (F, Sp, Su)
LSLC	3333	Career and Life Development for Adolescents	Prerequisite: junior standing or permission from CLS adviser. Discussion of current research on career options for adolescents. Specific emphasis is placed on providing practitioners with tools needed to develop plans of action to engage youth and help them choose a career and life course. (F, Sp, Su)
LSLC	3373	Management of Adolescent Residential Care Facilities	Prerequisite: junior standing or permission from CLS adviser. In-depth study of the theory and practice of managing adolescent residential care. (F, Sp, Su)
LSLC	3403	Issues in Geriatrics I	Prerequisite: junior standing or permission from CLS adviser. Introduction to key concepts and current research in geriatrics. Topics include operational definitions and terms used in studying geriatrics, facts and misconceptions associated with aging, and a review of US and international gerontological services and social policies. (F, Sp, Su)
LSLC	3423	Biology of Human Aging	Prerequisite: junior standing or permission from CLS adviser. Introduction of both natural science and social science methods used to study aging in humans and other creatures. Topics will include a synopsis of the demographics of aging in human populations, terms and theories of aging, mechanisms of aging at the cellular level, and a review of how the body ages, system-by-system. (F, Sp, Su)
LSLC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

LSLC	3473	Management of Geriatric Care Facilities	Prerequisite: junior standing or permission from CLS adviser. Introduction to the basic concepts and approaches to management of older patients and their informal care givers designed for staff and directors of service agencies that care for older individuals. Topics include understanding the motivations for care delivery in old age and the array of services available for geriatric care management. (F, Sp, Su)
LSLC	3953	Lifespan Capstone Prospectus	Prerequisite: junior standing and LSTD 3003; or permission from CLS adviser. Preparatory course for capstone experience in Lifespan Care and Administration. Course objectives include a critical evaluation of research issues in Lifespan Development, investigation of practicum opportunities, and development of a practicum case study with a preliminary annotated bibliography. (F, Sp, Su)
LSLC	4063	Issues in Lifespan Research	Prerequisite: junior standing or permission from CLS adviser. Discussion of philosophy of science and scientific method as it relates to research in health and human services. (F, Sp, Su)
LSLC	4193	Human Service Budgeting and Finance	Prerequisite: junior standing or permission from CLS adviser. Introduction to the leadership competencies necessary to formulate, execute, monitor, and evaluate fiscal operations of human services organizations. (F, Sp, Su)
LSLC	4203	Parenting	Prerequisite: junior standing or permission from CLS adviser. Review of theory and research on styles and techniques of effective parenting for children and adolescents, including discussion of how contextual, cultural and individual difference factors impact parenting. Applications to real world contexts including counseling and case management services for children and families are also addressed. (F, Sp, Su)
LSLC	4313	Issues in Adolescence II	Prerequisite: junior standing and LSLC 3313, or permission from CLS adviser. Continuing study of important issues in adolescence, particularly those that can enhance or interfere with healthy physical, emotional, or social development. Topics include substance abuse, aggression, delinquency, gangs, sex, romantic relationships, peer relationships, and peer pressure. (F, Sp, Su)
LSLC	4403	Issues in Geriatrics II	Prerequisite: junior standing and LSLC 3403, or permission from CLS adviser. Continuing study of geriatrics from a biological perspective. Topics include why and how organisms age, what it means to age successfully, and debates over whether and how aging might be slowed, stopped or reversed. (F, Sp, Su)
LSLC	4700	Advanced Topics in Lifespan Care and Administration	Prerequisite: junior standing or permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Specific course content will be defined each time the course is offered. A problem-oriented approach to lifespan care and administration. Reading and research, arranged and directed in consultation with the instructor in specified areas of lifespan care and administration. (F, Sp, Su)
LSLC	4920	Internship in Lifespan Care and Administration	1 to 3 hours. Prerequisite: junior standing and permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Field experience in issues related to a student's area of study. Students will gain knowledge through experiential and on-the-job practice. (F, Sp, Su)
LSLC	4953	Lifespan Practicum and Study-in-Depth	Prerequisite: junior standing, and LSTD 3003 and LSLC 3953; or permission from CLS adviser. The senior capstone course in Lifespan Care and Administration consisting of a field practicum followed by a scholarly paper on a specialized topic/case study within the area of lifespan studies. The required paper shall be of the quality and extent comparable to a senior thesis. The study should reflect the student's competence and achievement in sustained research on a topic within lifespan studies. (F, Sp)
LSMS	5113	The World of a Museum	Prerequisite: graduate standing. Baseline course introducing all aspects of museums and museum careers including history, structure, operations, and theoretical underpinnings. (F, Sp, Su)

LSMS	5133	The History and Architecture of Museums	Prerequisite: graduate standing. The course explores the history of museums with special emphasis on the architectural development and the special facilities requirements of museums; it will look at the physical requirements in terms of museum missions, functions, collections, and operations. (F, Sp, Su)
LSMS	5163	Museum Management and Leadership	Prerequisite: graduate standing. In-depth study of the philosophy, policies, and practices of museum governance, including such topics as ethics, board development, institutional mission and organization. (F, Sp, Su)
LSMS	5173	Museums, Cultures, and Communities	Prerequisite: graduate standing. The course will focus on the complex issues among museums, diverse populations, and other public factors such as public and education programs, fundraising, public relations, marketing, etc. (F, Sp, Su)
LSMS	5183	Collections Management	Prerequisite: graduate standing. This course will consider the place of collections in the life of a museum; how collections mesh with the museum mission; collections policies and stewardship. It will relate theoretical ideas on collection development and maintenance to the actualities of museum situations. (F, Sp, Su)
LSMS	5190	Museum Project	Prerequisite: graduate standing and permission of dean. May be repeated with change of subject; maximum credit four hours. Students will develop a project in their home museum or organization under the direction of an OU faculty member with an on-site supervisor or can come to OU for a project at one of the OU museums or special collections. (F, Sp, Su)
LSMS	5203	Historic Preservation	Prerequisite: graduate standing. Introduction to the field of historic preservation, including identification, documentation, and presentation of historic buildings, sites, and structures. (F, Sp, Su)
LSMS	5223	The House Museum	Prerequisite: graduate standing. Examination of the house as a museum. Topics include identifying historical significance and architecture, conservation and interpretation, and developing community involvement. (F, Sp, Su)
LSMS	5243	The Small Museum	Prerequisite: graduate standing. Introduction to the history and nature of small museums in the United States. Topics include cultural significance, administration, finance, funding, staffing, program/exhibition development, community involvement, and partnership building. (F, Sp, Su)
LSMS	5313	Museum Education	Prerequisite: graduate standing, LSTD 5003 and LSMS 5113; or permission of dean. Introduction to museum education, including object-based learning environments, and theory, an understanding of which fosters the development of effective motivating educational programs in museums. (F, Sp, Su)
LSMS	5333	Introduction to Museum Interpretation	Prerequisite: graduate standing, LSTD 5003 and LSMS 5113; or permission of dean. Introduces students to museum interpretation as a mode of communication intended to highlight information, emphasize the whole, and ultimately provoke curiosity about a topic, with a variety of media, such as exhibits and programs. (F, Sp, Su)
LSMS	5403	Museums and Native Cultures	Prerequisite: graduate standing, LSTD 5003 and LSMS 5113; or permission of dean. Designed for students to understand the representational history of native cultures in museums and the dynamic collaboration between a museum and a culture to accomplish an authentic and respectful presentation today. (F, Sp, Su)
LSMS	5423	Controversy and the World of the Museum	Prerequisite: graduate standing, LSTD 5003 and LSMS 5113; or permission of dean. It is crucial that the museum professionals are acquainted with some of the most controversial exhibitions historically, as well as the ones from the 1990s along with an important discussion of the external legal, political, financial, and social forces that are crucial in influencing the course and the outcome of the examined cases. (F, Sp, Su)

LSMS	5700	Advanced Topics in Museum Studies	2 to 9 hours. Prerequisite: graduate standing, LSTD 5003 and LSMS 5113; or permission of dean. May be repeated with a change of content; maximum credit 12 hours. Topics offered under this course number will include but not be limited to: education and public programs; legislation and museum policies; exhibitions; museum stores, volunteers, and associations. (F, Sp, Su)
LSMS	5920	Internship in Museum Studies	2-6 hours. Prerequisite: graduate standing, LSTD 5003, and permission of dean. May be repeated; maximum credit six hours. Field experience directly related to study focus in the Museum Studies program. Requirements include some combination of journal, progress reports, written summary of experiences, or academic paper, and a possible comprehensive examination over these materials. (F, Sp, Su)
LSPS	5113	Foundations in Prevention Science	Prerequisite: graduate standing. Provides a theoretical and practical basis for exploring the role of primary prevention, examining prevention practice as social action, analyzing prevention systems and development, and evaluating the role of media advocacy and social marketing in effective prevention practice as they relate to substance abuse. (F, Sp, Su)
LSPS	5133	Prevention Across the Lifespan	Prerequisite: graduate standing. Study of lifespan issues related to substance abuse to include theories of human growth and development, brain development, impact of substances on the brain at various stages of development, transition periods, and strategies to address service provision issues. (F, Sp, Su)
LSPS	5173	Program Development Implementation and Evaluation	Prerequisite: graduate standing. Facilitates the development of knowledge and skills essential to understanding and applying concepts, principles, processes and models to plan, design, implement and evaluate substance abuse prevention programs. (F, Sp, Su)
LSPS	5203	Drugs and the Brain	Prerequisite: graduate standing. Examination of the effects of drug use on the brain. Topics include physical and functional aspects of the brain, damage to the brain caused by drugs, and how brain damage appears as behavioral patterns that cause problems for individuals, their families, and society in general. (F, Sp, Su)
LSPS	5700	Advanced Topics in Prevention Science	2 to 9 hours. Prerequisite: graduate standing. May be repeated; maximum credit 12 hours. Advanced studies in various prevention science topics, offered under stated titles determined each semester by the instructor involved. (F, Sp, Su)
LSPS	5920	Internship in Prevention Science	2-6 hours. Prerequisite: graduate standing, LSTD 5003, and permission of dean. May be repeated; maximum credit six hours. Field experience directly related to study focus in the Prevention Science program. Requirements include some combination of journal, progress reports, written summary of experiences, or academic paper, and a possible comprehensive examination over these materials. (F, Sp, Su)
LSTD	1003	Introduction to Interdisciplinary Study	An introductory study of the concepts and practices of interdisciplinary inquiry, writing, critical thinking and problem solving across disciplines, and techniques for solving problems and writing papers from an interdisciplinary perspective. (F, Sp, Su)
LSTD	1053	Mathematics in Liberal Studies	Prerequisite: Norman Campus students only - DMAT 0123 at OU, satisfactory score on the placement test, or satisfactory score on the ACT/SAT. Designed to enhance the student's ability to utilize mathematical tools in their daily lives. Covers such topics as use of statistics, evaluating others' use of statistics, mathematics in finance, and use of exponents and logarithms in scientific calculations. (F, Sp, Su) [I-M]
LSTD	1113	Interdisciplinary Composition I	First in a series of two courses that help prepare students for interdisciplinary work by emphasizing writing and the conventions of academic discourse through natural sciences, social sciences, and humanities. Students will employ a variety of writing strategies, study expository prose models and interpret, critique, summarize and paraphrase test. (F, Sp, Su) [I-ENGL]

LSTD	1133	Interdisciplinary Composition II	Prerequisite: ENGL 1113 or LSTD 1113, or equivalent. This course completes the series of composition courses by emphasizing argument, library research, and style. Through its emphasis on thinking rhetorically, providing evidence for assertions, creative thinking, and writing as a process, this course will prepare students for argument and research-based writing in academic interdisciplinary settings. (F, Sp, Su) [I-ENGL]
LSTD	1153	A History of the United States	A general historical overview of the United States with a particular focus on the role that the humanities played in shaping this country. (F, Sp, Su) [IV-US]
LSTD	1213	Creativity in the Arts	Students will learn about the literary, visual and performance arts by viewing, reading and listening to some of the most famous examples of the arts. Students will also learn about the creative process through the production of their own art. (F, Sp, Su)
LSTD	1313	What in the World are the Social Sciences?	Discusses what comprises the social sciences and how we perform research in the different areas, including addressing ethical questions. (F, Sp, Su) [III-SS]
LSTD	1333	Governing Ourselves	An analysis of the differing ideologies governing autocratic vs. democratic systems of government, the structure of the United States government, and the role of extra-governmental elements such as lobbyists and the pacs on the process of governing. (F, Sp, Su) [III-SS]
LSTD	1513	Introduction to Interdisciplinary Physical Sciences	Emphasis on physics and chemistry, including topics such as the laws of motion, elements of thermodynamics, wave forms and properties, structure of atoms, and the formation of chemical bonds. (F, Sp, Su)
LSTD	2113	Humanistic Tradition: Prehistory through Renaissance	An overview of the humanities from a historical perspective - Prehistory through the Renaissance. Emphasis will be placed on what the humanities mean and why they are important. (F, Sp, Su)
LSTD	2133	The Humanistic Tradition: Renaissance to the Modern World	An overview of the humanities from a historical perspective - Renaissance to present day. Emphasis will be placed on what the humanities mean and why they are important. (F, Sp, Su)
LSTD	2203	Evil Acts, Religious Reasons	Examines the ways in which religious faith has been used to rationalize war, terrorism, ethnic cleansing and other evil acts. Using comparative religious study as a basis for inquiry, students will learn the five warning signs of imminent evil in the name of religion. This is an interdisciplinary course, drawing upon perspectives from religious history, sociology, education and religious philosophy. (F, Sp, Su)
LSTD	2313	The Human Experience: The Role of Culture	A critical discussion of prejudice, discrimination, gender identity and crime and deviance from the perspective of the social sciences. (F, Sp, Su)
LSTD	2323	Human Groups and Distribution of Resources	A study of culture from a social sciences perspective, including investigating topics such as ethnocentrism, cultural relativism and personal identity within the context of being American. (F, Sp, Su)
LSTD	2333	Contemporary Social Issues	An introduction to social issues in modern day society. Beginning with an introduction to differing sociological perspectives, and addresses issues such as the changing demographics in the U.S., gender inequality, the environment, and both utopian and dystopian societies. Students will be expected to review, consider, and write how each of the topics impacts their lives, either directly or indirectly. (F, Sp, Su)
LSTD	2533	Science as a Process	Analysis and criticism of the scientific method, design of experiments and collection and interpretation of data in scientific investigations. (F, Sp, Su) [II-NL]
LSTD	2553	Interdisciplinary Life Sciences	A study of the integration of biological systems at the cellular level. It includes discussions of metabolism, chromosome structure and function and the structure and function of the DNA molecule. (F, Sp, Su)

LSTD	2700	Special Topics in Liberal Studies	May be repeated with change of content; maximum credit nine credit hours. Specific course content will be defined each time the course is offered. A problem oriented approach to interdisciplinary studies. Reading and research, arranged and directed in consultation with the instructor, in specified areas of liberal studies. (F, Sp, Su)
LSTD	3003	Interdisciplinary Inquiry	Prerequisite: junior standing or permission from CLS adviser. Will focus on adult learning theory and development, assessment of prior learning, development of self-directed learning skills, educational and career planning and writing of portfolios and learning contracts. Designed for the returning, adult learner. Will also focus on preparation for academic writing and argumentation. (F, Sp, Su)
LSTD	3113	Special Topics in the Humanities of the Ancient World	Prerequisite: junior standing or permission from CLS adviser. Students will explore a broad variety of cultural themes found concurrently in both western and non-western cultures from Antiquity through the Middle Ages. (F, Sp, Su) [IV-WC]
LSTD	3133	Special Topics in the Humanities of the Modern World	Prerequisite: junior standing or permission from CLS adviser. Students will explore a broad variety of cultural themes found concurrently in both western and non-western cultures from the Renaissance through the Enlightenment and into the Modern World. (F, Sp, Su) [IV-WC]
LSTD	3153	Foundations of Ethics in Liberal Studies	Prerequisite: junior standing or permission from CLS adviser. A foundation for the scholarly research and discussion of ethics. Topics will include historical and philosophical grounding in the consideration of ethics. The course will utilize an interdisciplinary approach to the inquiry of ethics. (F, Sp, Su)
LSTD	3173	Renaissance Art	Prerequisite: junior standing or permission from CLS adviser. A critical discussion of the art of the Italian Renaissance. The focus of this course will be on explicating religious textual narratives and exploring how artists translated these ideas into visual form to create an effective message. The course will deal with painting, sculpture and architecture and will highlight well-known artists. (F, Sp, Su) [IV-AF]
LSTD	3193	Art of the Non-Western World	Prerequisite: junior standing or permission from CLS adviser. Explores a broad variety of cultural themes found in non-western art from the ancient world to the modern world. An introduction to the art of a variety of non-western cultures and examine the role that art history plays in the study of these visual objects. The course consists of four parts: African art; Asian art of India, China and Japan; native American art of North, Meso-America; and South America and the Pacific. (F, Sp, Su) [IV-NW]
LSTD	3323	Sleep and Dreams	Prerequisite: junior standing or permission from CLS adviser. Designed to review the history and current research regarding sleep. Theories of the purpose and significance of dreams will be investigated. (F, Sp, Su)
LSTD	3333	Human Arrangements: Troubled Institutions, Probs. Inequality	Prerequisite: junior standing or permission from CLS adviser. Issues affecting institutions from family through those affecting the national population, including health care, education, the economy, and the interaction of government with all such questions. Problems arising from inequality among groups in the society, including poverty, elderly and young, minority and majority, and gender concerns. (F, Sp, Su)
LSTD	3343	Challenges in a Changing World	Prerequisite: junior standing or permission from CLS adviser. Conformity and deviance in societies. Topics addressed include sexual behavior, drug use and crime and violence. It also looks at social problems expressed on a broader scale, including those associated with increased problems and associated urbanization and the outbreaks of war, terrorism and international conflict arising from inequalities occurring on an international scale. (F, Sp, Su)

LSTD	3353	Women and Consumer Culture	Prerequisite: junior standing or permission from CLS adviser. Analysis of the relationship of women to consumption and consumer culture. At the end of the course, students will be able to take a position and defend it with respect to various controversial arguments or ideas about women's relationship to consumption and consumer culture. (F, Sp, Su)
LSTD	3363	Ethics in Social Sciences	Prerequisite: junior standing or permission from CLS adviser. Concepts, principles and case studies involved in ethics in the social sciences, with a particular emphasis on business ethics. Students will examine core values in light of social conditioning, short-term profiteering and the need for affiliation. (F, Sp, Su)
LSTD	3373	American Public Intellectuals	Prerequisite: junior standing or permission from CLS adviser. Examines the unique and diverse styles of four important Americans from four different eras in order to determine the impact these individuals had on society and posterity. (F, Sp, Su)
LSTD	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LSTD	3513	The Dynamic Universe	Prerequisite: junior standing or permission from CLS adviser. Select topics including the Big Bang, formation of matter and its association into stars and planets, plate tectonics and the physics and chemistry of the atmosphere. (F, Sp, Su)
LSTD	3533	Ecology and Evolution	Prerequisite: junior standing or permission from CLS adviser. A study of the interactions of genetic change in organisms with environmental stress, and contributions of these interactions to evolution. (F, Sp, Su)
LSTD	3553	Physics for Poets...Fundamentals of Physics	Prerequisite: junior standing or permission from CLS adviser. Introduces non-science students to the conceptual development and philosophical implications of some aspects of physics with a minimum amount of mathematics. The topics covered in this course include motion, energy conservation laws, electricity, optics, atoms, the nucleus, special relativity, and elementary particles. A solid foundation in high school algebra is required for entry into this course. (F, Sp, Su)
LSTD	3573	Chemistry for Changing Times	Prerequisite: junior standing or permission from CLS adviser. An overview of chemistry, with fundamentals and organic processes explained. The course investigates chemicals found in everyday life and on the earth with the aim of understanding how chemical processes are at work, both in the environment around us and in energy, air, water, biochemistry, drugs, poisons and chemicals. It is ideal for the generalist and the interdisciplinary student, although it also provides excellent material for specialists. (F, Sp, Su)
LSTD	3953	Study-in-Depth Prospectus	Prerequisite: junior standing and LSTD 3003; or permission from CLS adviser. This course helps prepare the student for the senior capstone study in depth paper. Content will focus on upper-division level writing, research and argumentation. (F, Sp, Su)
LSTD	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major. The topics will cover materials not usually presented in the regular courses. (Irreg.)
LSTD	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)

LSTD	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project under the guidance of a professor in the student's field. (Irreg.)
LSTD	4213	A Critical Review of the Bible as a Literary Work	Prerequisite: junior standing or permission from CLS adviser. Examines the Bible as a work of literature, approaching it without concern for the doctrines of any particular religion. The aim of the course is to make students biblically familiar with both the Old and New Testaments. (F, Sp, Su)
LSTD	4233	Personal and Family Narratives	Prerequisite: junior standing or permission from CLS adviser. Offers students ways of exploring their own or their family's past with larger cultural and historical contexts. (F, Sp, Su)
LSTD	4243	Road Trip of the Mind	Prerequisite: junior standing or permission from CLS adviser. Various points of view and mindsets in the global community with an end to developing writing skills, enhancing creative problem-solving abilities, improving an understanding of cultural diversity and conflict resolution, and enhancing awareness of how values, ethical positions, perspectives manifest themselves and how they evolve over time. (F, Sp, Su)
LSTD	4253	Culture and Science	Prerequisite: junior standing or permission from CLS adviser. The history of the relations between science and culture in the last two centuries. Students will learn more about the methods and procedures of science, and the way science has been perceived and misperceived in the modern world. (F, Sp, Su)
LSTD	4273	Jazz and the Global Community	Prerequisite: junior standing or permission from CLS adviser. A course about jazz, its social history, and its relationship to world cultures and the international community. Although jazz is no longer the most popular music in the United States, its history and the issues surrounding its nature stand at the heart of a diverse America that has borrowed cultures and traditions all over the world. (F, Sp, Su)
LSTD	4283	Socrates and Society	Prerequisite: junior standing or permission from CLS adviser. Students gain an understanding of the thought of Socrates (through Plato), especially about the nature of self and society. Learn how Socrates approached problem solving and how to develop these skills. Relates the wisdom of this historical figure to the emerging and often perplexing problems of the present age. (F, Sp, Su)
LSTD	4293	Art and Medicine	Prerequisite: junior standing or permission from CLS adviser. Students will investigate their own personal attitudes toward medical, health, and disease with visual imagery they encounter. Students will also develop their powers of observation and attention to detail in order to appreciate nuances of meaning, perception, and interpretation. Students should gain a greater sense of empathy and ability to appreciate the viewpoints of others through consideration of art forms and the artists who created them. (F, Sp, Su)
LSTD	4313	Homeland/Global Security and Justice	Prerequisite: junior standing or permission from CLS adviser. Designed to help the student understand how governments deal with the problem of securing the homeland. Examines what terrorism is, and how America has traditionally dealt with homeland security, and how that perspective is evolving. Once we understand what terrorism is, the focus of the course will be on how law enforcement and the courts have taken on the challenge of providing global security while ensuring justice. (F, Sp, Su)
LSTD	4503	Stars: Science and Myth	Prerequisite: junior standing or permission from CLS adviser. A study the entire life cycle of stars through a descriptive point of view. The cultural impact of stars, shaping mythology and ritual, will also be examined. (F, Sp, Su)
LSTD	4533	Grasslands of the Great American Prairie	Prerequisite: junior standing or permission from CLS adviser. The evolution of grasslands and their co-evolution with grazing animals. Explores the ecology and geography of grasslands, especially the prairie and great plains of North America. The course provides a primer on ecology, environmental science, and evolution using grasses and grasslands as examples. (F, Sp, Su)

LSTD	4543	Satellite Imagery	Prerequisite: junior standing or permission from CLS adviser. Fundamentals of satellite imagery, as well as how to process data. Students will learn basics of spectral processing and the ideas behind the conversion of spectral digital information into color-keyed information sets. (F, Sp, Su)
LSTD	4563	Weather and Climate	Prerequisite: junior standing or permission from CLS adviser. An introduction to energy balance, temperature, atmospheric moisture, cloud formation, static stability, precipitation mechanisms, winds, mid-latitude and severe storms, weather forecasting and climate. The course is designed for students who are not scientists. (F, Sp, Su)
LSTD	4593	The Role of Genetic Engineering: Past, Present and Future	Prerequisite: junior standing or permission from CLS adviser. Examines the role of gene manipulation in the past, present, and future. It will begin with descriptions of genes, evolution and fitness, and will conclude by exploring the scientific and political future of genetic engineering. (F, Sp, Su)
LSTD	4700	Advanced Topics in Liberal Studies	Prerequisite: junior standing or permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Specific course content will be defined each time the course is offered. A problem-oriented approach to interdisciplinary studies. Reading and research, arranged and directed in consultation with the instructor in specified areas of liberal studies. (F, Sp, Su)
LSTD	4920	Internship in Liberal Studies	1 to 3 hours. Prerequisite: junior standing and permission from CLS adviser. May be repeated with change of content; maximum credit nine hours. Field experience in issues related to a student's area of study. Students will gain knowledge through experiential and on-the-job practice. (F, Sp, Su)
LSTD	4930	Feaver-MacMinn Seminar	2 to 3 hours. Prerequisite: permission of department based on competitive application. May be repeated; maximum credit 9 hours. Interdisciplinary examination of human values in disciplines such as humanistic psychology, philosophy, and ethics. (Sp)
LSTD	4953	Study-in-Depth: CLS Capstone Course	Prerequisite: junior standing, LSTD 3003, and LSTD 3953; or permission from CLS adviser. A scholarly paper on a specialized topic, or an artistic or literary creation of the quality and extent comparable to a senior thesis. The study should reflect the student's originality, competence and achievement in sustained research or creative endeavor involving a specific or limited field in some depth. (F, Sp, Su) [V]
LSTD	4954	Study-in-Depth: CLS Capstone Course	Prerequisite: junior standing, LSTD 3003, and LSTD 3953; or permission from CLS adviser. A scholarly paper on a specialized topic or an artistic or literary creation of the quality and extent comparable to a senior thesis. The study should reflect the student's originality, competence and achievement in sustained research or creative endeavor involving a specific or limited field in some depth. (F, Sp, Su) [V]
LSTD	4960	Directed Readings	1 to 4 hours. Prerequisite: junior standing and permission from CLS adviser and instructor. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
LSTD	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: junior standing or permission from CLS adviser. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LSTD	4990	Independent Study	1 to 3 hours. Prerequisite: Junior standing and permission of CLS adviser and instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

LSTD	5003	Introduction to Graduate Interdisciplinary Studies	Prerequisite: graduate standing. Intensive seminar providing orientation to advanced interdisciplinary study, appreciation for standards of performance and scholarship appropriate to graduate study, development of skills necessary for success in academic research and writing in a graduate interdisciplinary program. (F, Sp, Su)
LSTD	5013	Interdisciplinary Foundations	Prerequisite: graduate standing. Selected readings designed to reinforce the interdisciplinary approach to graduate studies and to introduce the concept of paradigms as an organizing principle for understanding and interpreting information. (F, Sp, Su)
LSTD	5043	Research Methods in Interdisciplinary Studies	Prerequisite: graduate standing and LSTD 5003; or permission of dean. Theories and techniques of research designed to prepare MLS students to carry out individual research on a topic within an interdisciplinary program of study. (F, Sp, Su)
LSTD	5083	Qualitative Research Methods in Interdisciplinary Studies	Prerequisite: graduate standing and LSTD 5003; or permission of dean. An inquiry designed to acquaint students with qualitative research methods in interdisciplinary study. By the end of the course, the student will be familiar with the most common methods and issues qualitative research. Students will learn how to design a study; how to recognize and address ethical issues; and how to analyze qualitative data. (F, Sp, Su)
LSTD	5213	Interdisciplinary Study in the Humanities	Prerequisite: graduate standing and LSTD 5003; or permission of dean. May be repeated twice with change of content; maximum credit nine hours. Individual study in the humanities arranged in consultation with faculty. May include reading assignments, projects, field experiences or other activities appropriate to goals of study program. Faculty arrange appropriate method of reporting and evaluation for each student. (F, Sp,Su)
LSTD	5313	Interdisciplinary Study in the Social Sciences	Prerequisite: graduate standing and LSTD 5003; or permission of dean. May be repeated twice with change of content; maximum credit nine hours. Individual study in the social sciences arranged in consultation with faculty. May include reading assignments, projects, field experiences, or other activities appropriate to goals of study program. Faculty arrange appropriate method of reporting and evaluation for each student. (F, Sp, Su)
LSTD	5413	Interdisciplinary Study in Natural Sciences	Prerequisite: graduate standing and LSTD 5003; or permission of dean. May be repeated twice with change of content; maximum credit nine hours. Individual study in the natural sciences arranged in consultation with faculty. May include reading assignments, projects, field experiences, or other activities appropriate to goals of study program. Faculty arrange appropriate method of reporting and evaluation for each student. (F, Sp, Su)
LSTD	5700	Advanced Topics in Interdisciplinary Studies	Prerequisite: graduate standing. Intensive research on a topic related to the student's program of study; variable topics. (F, Sp, Su)
LSTD	5920	Internship in Liberal Studies	2 to 6 hours. Prerequisite: graduate standing, LSTD 5003, and permission of dean. May be repeated; maximum credit six hours. 450 hours of field experience directly related to study focus in the MALS program. Requirements include journal, reports, written summary, and comprehensive examination over these materials. (F, Sp, Su)
LSTD	5930	Feaver-MacMinn Seminar	(Slashlisted with 4930) 2 to 3 hours. Prerequisite: graduate standing and permission of department based on competitive application. May be repeated with change of content; maximum credit nine hours. Interdisciplinary examination of human values in disciplines such as humanistic psychology, philosophy, and ethics. No student may earn credit for both 4930 and 5930. (Sp)

LSTD	5940	Research Project in Liberal Studies	2 to 9 hours. Prerequisite: graduate standing, LSTD 5003, LSTD 5013, and completion of first concentration core class; or permission of dean. May be repeated; maximum credit six hours. Development of creative or applied research project related to MALS study focus. The final form will vary according to topic and purpose of the project but must include a written component. Comprehensive examination over the research project is required. (F, Sp, Su)
LSTD	5960	Directed Readings in Interdisciplinary Studies	2 to 9 hours. Prerequisite: graduate standing, LSTD 5003, and completion of first concentration core course; or permission of dean. May be repeated with change of content; maximum credit 9 hours. In-depth study of literature on a topic related to the student's program of study; variable content. (F, Sp, Su)
LSTD	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing, LSTD 5003, and completion of first concentration core course; or permission of dean. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LSTD	5980	Research for Master's Thesis	Prerequisite: graduate standing, LSTD 5003, LSTD 5013, and completion of first concentration core course; or permission of dean. May be repeated; maximum credit six hours. Research and writing of a thesis for completion of CLS graduate degrees. (F, Sp, Su)
LSTD	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing, LSTD 5003, and completion of first concentration core course; or permission of dean. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
LTRS	1103	America's Constitution 1: The Legacy of the Founding	Introductory, freshman-level survey of American constitutional history, including the place of the Constitution in law, politics, and culture over its first hundred years. Introduces students to theories of constitutional government and constitutional interpretation and their evolution between the Revolutionary era and Reconstruction. Particular attention is paid to the relationship between constitutional law and broader developments and debates in American society. (F, Sp) [IV-WC]
LTRS	1113	Introduction to Letters	Introduction to Letters major, OU's interdisciplinary humanities degree which provides a traditional liberal arts education. Modeled around a "Great-Books" approach that there is a canon of texts that has transcendent value because certain works are able to speak to the human condition across time and space. The curriculum is distinct through its insistence on combining history, philosophy, and literature as ways of asking the same fundamental questions through the record of actual human experience. A sequence of topics address perennial human concerns: reason and passion, love, death, work, God, freedom, time, and so on. (F, Sp) [IV-WC]
LTRS	1203	America's Constitution II: The Modern Constitution	Introductory, freshman-level survey of American constitutional history, including the place of the Constitution in law, politics, and culture, from Reconstruction to the present. Introduces students to the fundamental changes that have shaped the Constitution since the Civil War: the 14th amendment, the application of the Bill of Rights to the states, the Civil Rights movement, the triumph of privacy, and the rise of originalist ideologies. (Sp)
LTRS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
LTRS	2103	Introduction to Constitutional Studies	Provides a broad introduction to the theory and history of constitutional governance. Includes the classical roots of constitutional thought, the contribution of the English common law tradition, the origins and structure of the U.S. Constitution, along with a sense of the constitutional basis of contemporary political controversies. (F, Sp) [IV-WC]

LTRS	2970	Special Topics	Prerequisite: none. May be repeated with change of content; maximum credit six hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
	3023	Classical Italy and Umbria	Prerequisite: 45 hours and permission of instructor; priority enrollment will be given to those students participating in the Perugia program. An introductory survey of the evolution of Italy from the pre-Roman Italic and non-Italic peoples and civilizations through the Roman era, papal rule, the Renaissance, Spanish and French domination, and ultimate unification into a modern country. Because of the tremendous influence of ancient Rome on Italy, more time will be spent on the Roman era than any other. Course consists of internet research on selected and chronological topics followed by essays and class discussion using internet technologies. (Su) [IV-WC]
LTRS	3113	The Examined Life I: Antiquity	Prerequisite: junior standing or permission of instructor. Survey of the great books of Greece and Rome, with emphasis on understanding the impact of classical texts on modern day thought. Can be applied to the Letters major's requirement in history, literature, or philosophy. (F) [IV-WC]
LTRS	3123	The Examined Life II: Middle Ages and Renaissance	Prerequisite: junior standing or permission of instructor. Survey of the great books of the Middle Ages and Renaissance, with emphasis on the impact of these texts on modern thought. Can be applied toward the Letters major's requirement in history, literature, or philosophy. (Sp) IV-WC]
LTRS	3133	Examined Life III: Enlightnmnt	Prerequisite: junior standing or permission of instructor. Survey of the great books of The Enlightenment, with emphasis on understanding the impact of these texts on modern thought. Can be applied toward the Letters Major's requirement in history, literature, or philosophy. (F) [IV-WC]
LTRS	3143	Examined Life IV: Modern Acad	Prerequisite: junior standing or permission of instructor. Survey of 19th and 20th century thought, with emphasis on intellectual movements that have influenced the development of modern higher education. Can be applied toward the Letters major's requirement in history, literature, or philosophy. (Sp) [IV-WC]
LTRS	3203	Revenge Tragedy, Ancient and Modern	Prerequisite: ENGL 1213 or EXPO 1213. Focuses on the revenge tragedy, a genre of entertainment that has enjoyed widespread popularity from its inception in Classical Antiquity up to the present day in commercial film. Investigates the origins of the revenge tragedy in Seneca's Medea, Thomas Kyd's Spanish Tragedy, and Shakespeare's Hamlet, and explores the ways that modern horror, action, and mobster films adopt and adapt conventions from these seminal works. (F, Sp) [IV-WC]
LTRS	3213	Shakespeare and Classical Mythology	Prerequisite: English 1213 or Expository Writing 1213. Classical myth constitutes the single most important body of material that Shakespeare drew on in constructing his plays and poetry, and this course examines its significance to Shakespeare's writing. Whether used for comic, ironic, or tragic effect, Shakespeare's many allusions to Classical myth introduce us to words, images, and moral and aesthetic questions that significantly widen our perspective on his work. (F, Sp) [IV-WC]
LTRS	3303	Origins of Rights in Early America	Prerequisite: ENGL 1213 or EXPO 1213. Explores the historical, rather than the philosophical, origins of ideas of individual and group rights in the European settlement of the New World. (F) [IV-WC]
LTRS	3313	Secret Societies in American Culture	Prerequisite: English 1213 or Expository Writing 1213. Examines secret societies in American history, from the Revolution through the twentieth century, including the Freemasons, Odd Fellows, Ku Klux Klan, and collegiate secret societies that could claim the membership of millions. (F)

LTRS	3353	Interpreting the American Founding	Prerequisite: ENGL 1213 or EXPO 1213. Examines the various ways that scholars have interpreted the Founding over the past two hundred years. It is a study, then, of the historiographic interpretations of the events of the American Founding era rather than a study of the events and historical figures themselves. (F) [IV-WC]
LTRS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
LTRS	3510	Topics in Letters	Prerequisite: Junior standing. May be repeated with change of content; maximum credit nine hours. Discussion of selected interdisciplinary topics in letters. (Irreg.)
LTRS	3603	Debating Constitutional Controversies	Prerequisite: English 1213 or Expository Writing 1213. This course transforms the classroom into a courtroom. Students become lawyers and judges, arguing and deciding cases that hinge on our most important Constitutional controversies. Working in teams, students grapple with these contentious issues in the context of the Constitution, the common law, and legal theory. (F, Sp)
LTRS	3903	First Freedoms	Prerequisite: ENGL 1213 or equivalent. Examines the fundamental freedoms guaranteed by the First Amendment to the United States Constitution: the freedom of speech, freedom to exercise religion, and freedom from government establishment of religion. Primary focus is on major Supreme Court cases interpreting those first freedoms, historical and methodological debates informing those interpretations, and the application of the First Amendment's guarantees to modern society, mass media, and information sharing technologies. (F, Sp)
LTRS	3923	Oklahoma and the U.S. Constitution	Prerequisite: English 1213 or equivalent. Views the story of American constitutionalism across the twentieth century through the lens of cases concerning Oklahoma. Takes advantage of the proximity of the institutions and even sometimes the individuals involved in these cases to foster primary research by undergraduates. The course ends with a unit on contemporary issues, ranging from establishment to federalism, which seem likely to garner national attention and adjudication. (F, Sp)
LTRS	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
LTRS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
LTRS	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
LTRS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
LTRS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

LTRS	4503	Letters Capstone Course	Prerequisite: senior standing in major. May be repeated with change of content; maximum credit six hours. Students will write a senior paper on a topic chosen in consultation with the instructor. Papers will demonstrate students' abilities to synthesize material drawn from among two or more of the areas included in the Letters program. (F, Sp) [V]
LTRS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
LTRS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LTRS	4990	Independent Study	Prerequisite: junior standing or permission of instructor or department. May be repeated; Maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
LTRS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
LTRS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
LTRS	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit six hours. Reading and research arranged and directed in consultation with the instructor, in specified areas of classical civilization and culture. (F, Sp, Su)
LTRS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
M S	1011	Military Conditioning	A physical conditioning course using exercises developed for use by the US Army and classroom instruction. This is a progressive program of exercise that promotes muscular strength and endurance, cardio-respiratory endurance, flexibility, and a healthy body fat content. Classroom instruction includes nutrition and the aspects of physical fitness in accordance with military service. A written mid-term and final exam is required for completion of the course. (F, Sp, Su)
M S	1013	Fundamentals of Leadership	Provides an overview of leadership fundamentals such as problem solving, effective oral and written communication, and providing direction through effective counseling. Students will study the seven army values, ethical decision making, and apply what they have learned using pre-determined case studies. Students will explore the dimensions of leadership attributes, skills, and actions through practical, hands-on, and interactive exercises. Students will develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. (Su)
M S	1033	Survival Skills	This course teaches basic outdoor survival skills in a blended lecture/lab setting. Principles of survival are reinforced with hands-on practice in proven techniques that will enable one to survive in austere environments and conditions. After completing this course students will be better prepared to survive natural disasters and emergencies using found and improvised items, and will have the knowledge of how to mitigate hardships caused by disasters through advance planning. Topics include field expedient first aid, nutrition and unconventional foods, constructing shelters, land navigation, signaling, negotiating obstacles, clothing and equipment selection, and disaster preparedness. (F, Sp, Su)

M S	1113	Introduction to Leadership I	Introduction to the organization of the US Army and the ROTC program. Overview of leadership principles, problem solving, military fitness, and effective communication. Introduces small unit tactics, map reading, land navigation, and the principles of officership. Laboratory (F)
M S	1213	Adaptive Leadership and Professional Competence	Prerequisite: MS 1113 or department permission. Introduces students to the personal challenges and competencies that are critical for adaptive leadership. Students learn the basics of the communications process and the importance for leaders to develop the essential skills to effectively communicate in the Army. Students will examine the Army Profession and what it means to be a professional in the U.S. Army. Laboratory. (Sp)
M S	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
M S	2233	Foundations of Leadership - Compression	Prerequisite: MS 1113 and 1213, or permission of department. Develops knowledge, understanding and skill in leadership and management techniques. Instruction focuses on how the leader functions in planning, organizing, controlling and evaluating organizational effectiveness. Detailed instruction is given in land navigation and small unit tactics. This class combines the course content of 2323 and 2423. Laboratory (Sp)
M S	2323	Foundations of Leadership I	Prerequisite: M S 1113 and M S 1213; or permission of the department. Examines the challenges of leading tactical teams in the complex Contemporary Operating Environment. Highlights dimensions of terrain analysis, patrolling, and operation orders. Further study of the theoretical basis of the Army leadership framework. Covers troop leading procedures, Army problem solving, land navigation, squad organization, fundamentals of the offense and defense, and battle drills. Laboratory (F)
M S	2423	Foundations of Leadership II	Prerequisite: M S 2323, or permission of department. Develops knowledge, understanding and skill in land navigation, military operations, leadership and basic tactics. Instruction focuses on applying leadership and management theory to the area of organization effectiveness. Laboratory (Sp)
M S	2512	Basic Leadership Laboratory	Consists of Basic Camp at Fort Knox, KY for six weeks. Combines content of 1112, 1212, 1223, 2223, 2313, and 2413. Laboratory (Su)
M S	2610	Introduction to Military History	Prerequisite: M S 1112 and M S 1212 or M S 1223. 1 to 3 hours. May be repeated; maximum credit three hours. Exposure to the tenets of military history study. Students will attend four class meetings to grasp the fundamental precepts and will prepare a paper on each book assigned. (F, Sp)
M S	3011	Military Conditioning	Prerequisite: junior standing. A physical conditioning course using exercises developed for use by the US Army and classroom instruction. This is a progressive program of exercise that promotes muscular strength and endurance, cardio-respiratory endurance, flexibility, and a healthy body fat content. Classroom instruction includes nutrition and the aspects of physical fitness in accordance with military service. A written mid-term and final exam is required for completion of the course. (F, Sp, Su)
M S	3123	Adaptive Team Leadership	Prerequisite: M S 2423. Uses increasingly intense situational leadership challenges to build skill in leading tactical operations. Exercises focus on platoon level tactics in combat, stability, and support operations. Students conduct military briefings and develop proficiency in preparing orders, decision making, and building effective teams. Laboratory (F)
M S	3223	Applied Team Leadership	Prerequisite: M S 3123. Theory, methods and principles for understanding leadership and behavior in groups. Analysis of the leader's role in directing and coordinating the efforts of individuals and small units in the execution of offensive and defensive tactical missions, to include communication systems, internal defense/development and the military team; intelligence gathering, and the role of the various branches of the Army. Laboratory (Sp)

M S	3313	Advanced Leadership Laboratory	Prerequisite: 3213. Consists of Advanced Camp at Fort Lewis, WA for five weeks. Students are evaluated on their knowledge and implementation of Army leadership principles and skills, Army field craft, and garrison operations. Practical, hands-on application of material taught in 3113 and 3213. Laboratory (Su)
M S	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
M S	3610	Historical Military Leadership	1 to 3 hours. Prerequisite: 2610 or permission of department chair. May be repeated; maximum credit three hours. Students will examine the personalities of selected military leaders through several sources. The studies will encompass the early career and continue to the culmination. Field trip to one of the nearby battlefields will be included. (F, Sp)
M S	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
M S	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
M S	4011	Supervising Military Conditioning	Prerequisite: senior standing. A physical conditioning course using exercises developed for use by the US Army. This is a progressive program of exercise that promotes muscular strength and endurance, cardio-respiratory endurance, flexibility, and a healthy body fat content. Students will develop a physical fitness plan in accordance with Army regulation and cadre support. Students will supervise the execution and evaluation of physical fitness. Classroom instruction includes nutrition and the aspects of physical fitness in accordance with military service. A written mid-term and final exam is required for completion of the course. (F, Sp, Su)
M S	4123	Adaptive Leadership	Prerequisite: M S 3123 and M S 3223. Develops proficiency in planning, executing, and assessing complex operations, functioning as a member of a staff, and providing leadership-performance feedback to subordinates. Students are given situational opportunities to assess risk, make sound ethical decisions, and provide coaching and mentoring to fellow students. Students analyze and evaluate the leadership values, attributes, skills, and actions of others while simultaneously considering their own leadership skills. Attention is given to preparation for success as future officers and the development of leadership abilities. Laboratory (F)
M S	4222	Senior Seminar in Advanced Leadership	Prerequisite: 4212. Deals with the analysis and case studies of the great military leaders - primarily of the modern era, such as Frederick the Great, Napoleon, Ulysses S. Grant, etc. who have exercised outstanding leadership in combat. Focuses on leadership and application of the principles of war at the strategic, operational and tactical levels. Laboratory (Sp)
M S	4223	Mission Command and the Company Grade Officer	Prerequisite: M S 4123. Introduces students to the challenges of mission command and gaining an understanding of the Army Profession. Students learn the basics of what mission command is and how it is used in Army operations. Students will examine the Army Profession and what it means to be a professional in the U.S. Army. (Sp)

M S	4510	Seminar in Military Leadership	1 to 3 hours. Prerequisite: junior standing and permission of department. May be repeated with change of content; maximum credit nine hours. Students will learn various theories of leadership and organizational culture and gain practical experience in the application of those theories within a peer leadership setting. Additionally, the course may include elements of military history, social theory, ethics, and military law. (Irreg.)
M S	4543	The American Military Experience	Prerequisite: 3113, 3213. Develops knowledge, understanding and a sense of historical-mindedness in future Army officers. Instruction focuses on the need to apply the lessons of history in the examination and treatment of contemporary military problems with which the Army is confronted A mandatory staff ride to one of several Oklahoma battlefields is included. (Sp)
M S	4610	Comparative Military History	1 to 3 hours. Prerequisite: 3610 or permission of department chair. May be repeated; maximum credit three hours. Students will examine events leading to national and world crisis. Focus points will be socio-economic as well as goals and personalities of political and military leaders. (F, Sp)
M S	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MATH	0113	Elementary Algebra	Prerequisite: completion of placement test. For students who score in the lowest bracket on the placement test. A review of beginning algebra including polynomial arithmetic, solving equations, graphing, inequalities, and the quadratic equation. Not acceptable for degree credit at the University of Oklahoma. (F, Sp, Su)
MATH	0115	Fundamental Algebra	Prerequisite: placement test. Combines the course content of Math 0113 and 0123. A review of beginning algebra including polynomial arithmetic, solving equations, graphing, inequalities, rational expressions, exponents and radicals, imaginary and complex numbers, quadratic equations, systems of linear equations. Not acceptable for degree credit at the University of Oklahoma. (F, Sp, Su)
MATH	0123	Intermediate Algebra	Prerequisite: 0113 at OU, or satisfactory score on the placement test, or satisfactory score on the ACT/SAT. Properties of real numbers, equations and inequalities, algebra of rational expressions, exponents and radicals, introduction to quadratic equations, functions and graphs, systems of linear equations. Not acceptable for degree credit at the University of Oklahoma. (F, Sp, Su)
MATH	0999	Remedial Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote remedial transfer credit for which there is no OU equivalent course.
MATH	1473	Mathematics for Critical Thinking	Prerequisite: "C" or better in DMAT 0123 at OU, or satisfactory score on the placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. A study of the mathematics needed for the critical evaluation of quantitative information and arguments including logic, critical appraisal of graphs and tables; use of simple mathematical models and an introduction to elementary statistics. (F, Sp, Su) [I-M]
MATH	1503	College Algebra	Prerequisite: "C" or better in DMAT 0123 at OU, or satisfactory score on the placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Review of basic algebraic skills such as multiplying and factoring polynomials, rational expressions, linear equations and inequalities, exponents and radicals, absolute values. Other topics include the concept, notation, and algebra of functions, functions of linear, polynomial, rational, exponential, and logarithmic type, systems of equations. A student may not receive credit for this course and 1643. (F, Sp, Su) [I-M]

MATH	1523	Precalculus and Trigonometry	Prerequisite: 1503 at OU, or satisfactory score on the placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Review of function concepts. Topics covered include properties of functions, exponential and logarithmic functions, trigonometric functions and their inverses by unit circle and triangle approaches, trigonometric equations and identities, simple conic sections, polar coordinates, Demoivre's theorem, discrete algebra, induction, limits and continuity. (F, Sp, Su) [I-M]
MATH	1643	Precalculus for Business, Life, and Social Sciences	Prerequisite: "C" or better in DMAT 0123 at OU, or satisfactory score on the placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Review of basic algebra skills. Topics covered include linear functions, exponential and logarithmic functions, systems of linear equations and inequalities, matrices and operations on matrices, linear programming, introductory trigonometry, elementary probability and statistics. A student may not receive credit for this course and 1503. (F, Sp, Su) [I-M]
MATH	1743	Calculus I for Business, Life and Social Sciences	Prerequisite: 1523 or 1643 at OU, or satisfactory score on the placement test, or, for incoming freshmen direct form high school, satisfactory score on the ACT/SAT. Topics in differentiation and integration of polynomial, exponential and logarithmic functions. Applications to the business, life and social sciences. A student may not receive credit for this course and 1823. (F, Sp, Su) [I-M]
MATH	1823	Calculus and Analytic Geometry I	Prerequisite: 1523 at OU, or satisfactory score on the placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Topics covered include equations of straight lines; conic sections; functions, limits and continuity; differentiation; maximum-minimum theory and curve sketching. A student may not receive credit for this course and 1743. (F, Sp, Su) [I-M]
MATH	1914	Differential and Integral Calculus I	Prerequisite: satisfactory score on the placement test or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Duplicates three hours of 1823 and one hour of 2423. Limits and continuity, differentiation, applications of differentiation to optimization and curve sketching, integration, the fundamental theorem of calculus, the substitution rule, applications of integration to computation of areas. (F, Sp, Su) [I-M]
MATH	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MATH	2123	Calculus II for Business, Life and Social Sciences	Prerequisite: 1743. Differentiation and integration of exponential and logarithmic functions; simple differential equations; partial derivatives; double integrals, probability. Applications to the business, life and social sciences. A student may not receive credit for this course and 2423. (F, Sp, Su) [I-M]
MATH	2213	Mathematical Systems	Prerequisite: plane geometry, intermediate algebra, enrollment in an appropriate elementary teachers' program. A systematic analysis of arithmetic and a presentation of intuitive algebra and geometry. Not open to students in the University College. (F, Sp, Su)
MATH	2223	Data Analysis and Geometric Systems	Prerequisite: 0123 at OU or satisfactory score on math placement test and admission to 0802A, 0808A, or 0823A degree programs. Algebra and the structure of number systems, functional relationships, informal geometry. Course is not open to students in University College. (F, Sp)
MATH	2423	Calculus and Analytic Geometry II	Prerequisite: 1823. Integration and its applications; the calculus of transcendental functions; techniques of integration; and the introduction to differential equations. A student may not receive credit for this course and 2123. (F, Sp, Su) [I-M]
MATH	2433	Calculus and Analytic Geometry III	Prerequisite: 2423. Polar coordinates, parametric equations, sequences, infinite series, vector analysis. (F, Sp, Su)

MATH 2443	Calculus and Analytic Geometry IV	Prerequisite: 2433. Vector calculus; functions of several variables; partial derivatives; gradients, extreme values and differentials of multivariate functions; multiple integrals; line and surface integrals. (F, Sp, Su)
MATH 2513	Discrete Mathematical Structures	Prerequisite: MATH 2423 or MATH 2924 or concurrent enrollment. A course for math majors or prospective math majors. Provides an introduction to discrete concepts such as finite sets and structures, and their properties and applications. Also exposes students to the basic procedures and styles of mathematical proof. Topics include basic set theory, functions, integers, symbolic logic, predicate calculus, induction, counting techniques, graphs and trees. Other topics from combinatorics, probability, relations, Boolean algebras or automata theory may be covered as time permits. (F, Sp, Su)
MATH 2924	Differential and Integral Calculus II	Prerequisite: 1914 with a grade of C or better. Duplicates two hours of 2423 and two hours of 2433. Further applications of integration, the natural logarithmic and exponential functions, indeterminate forms, techniques of integration, improper integrals, parametric curves and polar coordinates, infinite sequences and series. (F, Sp, Su)
MATH 2934	Differential and Integral Calculus III	Prerequisite: 2924 with grade of C or better. Duplicates one hour of 2433 and three hours of 2443. Vectors and vector functions, functions of several variables, partial differentiation and gradients, multiple integration, line and surface integrals, Green-Stokes-Gauss theorems. (F, Sp,Su)
MATH 3113	Introduction to Ordinary Differential Equations	Prerequisite: MATH 2423 or MATH 2924. Duplicates two hours of 3413. First order ordinary differential equations, linear differential equations with constant coefficients, two-by-two linear systems, Laplace transformations, phase planes and stability. (F, Sp, Su)
MATH 3333	Linear Algebra I	Prerequisite: MATH 2433 or MATH 2934 or permission of instructor. Systems of linear equations, determinants, finite dimensional vector spaces, linear transformations and matrices, characteristic values and vectors. (F, Sp, Su)
MATH 3401	Numerical Methods With Matlab	Prerequisite: 3413 or concurrent enrollment. Programming with MATLAB. Numerical solution of nonlinear equations. Matrices and linear algebraic equations, regression, interpolation, splines. Numerical integration. Numerical solution of systems of ordinary differential equations. Numerical solution of partial differential equation. Laboratory (F, Sp)
MATH 3413	Physical Mathematics I	Prerequisite: MATH 2443 or MATH 2934 or concurrent enrollment. Complex numbers and functions. Fourier series, solution methods for ordinary differential equations and partial differential equations, Laplace transforms, series solutions, Legendre's equation. Duplicates two hours of 3113. (F)
MATH 3423	Physical Mathematics II	Prerequisite: MATH 2443 or MATH 2934, MATH 3413. The Fourier transform and applications, a survey of complex variable theory, linear and nonlinear coordinate transformations, tensors, elements of the calculus of variations. (F, Sp)
MATH 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MATH 3613	Modern Geometry	Prerequisite: MATH 1743 or MATH 1823 or MATH 1914. An introduction to geometry including axiomatics, finite geometry, convexity, and classical Euclidean and non-Euclidean geometry. (F, Sp)
MATH 3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)

MATH	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MATH	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. Overall grade point average of 2.50 or better. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
MATH	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MATH	4073	Numerical Analysis I	Prerequisite: 3113 or 3413. Solution of linear and nonlinear equations, approximation of functions, numerical integration and differentiation, introduction to analysis of convergence and errors, pitfalls in automatic computation, one-step methods in the solutions of ordinary differential equations. (F)
MATH	4093	Applied Numerical Methods	Prerequisite: 2443, 3113 or 3413, 3333 or 4373, or permission of the instructor. Numerical treatment of ordinary differential equations, numerical linear algebra and applications, basic numerical methods for partial differential equations. No student may earn credit for both 4093 and 5093. (Alt. Sp.)
MATH	4103	Introduction to Functions of a Complex Variable	Prerequisite: 3113. Complex analytic functions, conformal mappings, complex integrals. Taylor and Laurent series, integration by the method of residues, complex analytic functions and potential theory. (Sp)
MATH	4113	Topics in Applied Mathematics	(Slashlisted with 5113) Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours. Algebraic coding theory, linear finite state workings, numerical analysis of differential equations, asymptotic analysis, game theory or other subjects. No student may earn credit for both 4113 and 5113. (Irreg.)
MATH	4123	Fourier Transforms	(Slashlisted with 5123) Prerequisite: MATH 2443, MATH 3113 or MATH 3413, MATH 3333, or permission of the instructor. Fourier series, classical Fourier transform, discrete Fourier transform, distributions and Fourier transforms. Sampling and Shannon's Theorem. No student may earn credit for both 4123 and 5123. (F)
MATH	4163	Introduction to Partial Differential Equations	Prerequisite: 2443, 3113 or 3413. Physical models, classification of equations, Fourier series and boundary value problems, integral transforms, the method of characteristics. (F, Sp, Su)
MATH	4193	Introductory Mathematical Modeling	Prerequisite: 3113 or 3413, 3333, 4733 or 4753, or permission of instructor. Mathematics models are formulated for problems arising in various areas where mathematics is applied. Techniques are developed for analyzing the problem and testing validity of proposed model. (F)
MATH	4232	Specialized Topics and Methods--a Teachers' Course	Prerequisite: 2433. Selected specialized topics and methods relevant to the secondary school mathematics curriculum. Content will vary, but will include problem solving, use of computers in teaching secondary school mathematics, specialized methods for teaching algebra and geometry, teaching probability and statistics at the secondary level, or other appropriate content and methods not covered in EDMA 4242. For major credit only for those in teacher certification programs. (F)
MATH	4313	Introduction to Number Theory	Prerequisite: 2513 and 3333 or permission of instructor. Topics include factorization and prime numbers, congruence, quadratic residues and reciprocity, continued fractions and approximations, Diophantine equations, arithmetic functions, and selected applications. (Irreg.)

MATH	4323	Introduction to Abstract Algebra I	Prerequisite: MATH 3333 and MATH 2513, or permission of instructor. Concepts from set theory; the system of natural numbers, extension from the natural numbers to the integers; semigroups and groups; rings, integral domain and fields. (F, Sp)
MATH	4333	Introduction to Abstract Algebra II	Prerequisite: 4323. Extensions of rings and fields, elementary factorization theory; groups with operators; modules and ideals; lattices. (Sp)
MATH	4373	Abstract Linear Algebra	(Slashlisted with 5373) Prerequisite: 3333. Vector spaces over arbitrary fields, bases, dimension, linear transformations and matrices, similarity and its canonical forms (rational, Jordan), spectral theorem and diagonalization of quadratic forms. No student may earn credit for both 4373 or 5373. (F, Sp)
MATH	4383	Applied Modern Algebra	(Slashlisted with 5383) Prerequisite: 3333. Topics from the theory of error correcting codes, including Shannon's theorem, finite fields, families of linear codes such as Hamming, Golay, BCH, and Reed-Solomon codes. Other topics such as Goppa codes, group codes, and cryptography as time permits. No student may earn credit for both 4383 and 5383. (Sp)
MATH	4413	Intermediate Ordinary Differential Equations	Prerequisite: 3113 or 3413; 3333. Duplicates one hour of 4323. Topics selected from: linear systems of equations, integral equations, stability theory, existence and uniqueness criteria, perturbation theory, dynamical systems, boundary-value problems, numerical methods. (Irreg.)
MATH	4433	Introduction to Analysis I	Prerequisite: 2433 and 2513 or permission of instructor. Review of real number system. Sequences of real numbers. Topology of the real line. Continuity and differentiation of functions of a single variable. (F, Sp, Su)
MATH	4443	Introduction to Analysis II	(Slashlisted with 5443) Prerequisite: 4433. Integration of functions of a single variable. Series of real numbers. Series of functions. Differentiation of functions of more than one variable. No student may earn credit for both 4443 and 5443. (Sp)
MATH	4513	Senior Mathematics Seminar	Prerequisite: MATH 2443 or MATH 2934; MATH 2513; MATH 3113 or MATH 3413; MATH 3333; and senior standing. Capstone course which synthesizes ideas from different areas of mathematics with emphasis on current topics of interest. The course will involve student presentations, written projects and problem solving. (F, Sp) [V]
MATH	4623	Convexity Theory I	(Slashlisted with 5623) Prerequisite: 2513 and 3333, or permission of instructor. An introduction to the theory of convex sets. Topics include basic definitions and properties, separating and supporting hyperplanes, and combinatorial theorems of Caratheodory, Radon and Helly. No student may earn credit for both 4623 and 5623. (F)
MATH	4643	Topics in Geometry and Combinatorics	Prerequisite: 3333. May be repeated with permission of instructor; maximum credit six hours. Topics may include convexity (convex sets, combinatorial theorems in finite dimensional Euclidean space), graph theory, finite geometries, foundations of geometry. (F, Sp)
MATH	4653	Introduction To Differential Geometry I	(Slashlisted with 5653) Prerequisite: 2433 and 3333, or permission of instructor. Elementary theory of curves and surfaces in three-dimensional Euclidean space, differentiable manifolds, Riemannian geometry of two dimensions, Gauss Theorem Egregium. No student may earn credit for both 4653 and 5653. (F)
MATH	4663	Introduction to Differential Geometry II	(Slashlisted with 5663) Prerequisite: 4653 or 5653. Intermediate theory of surfaces, covariant differentiation, geodesics, Gauss-Bonnet Theorem. Further topics may include: rigidity theorems, minimal surfaces, the Hopf-Rinow Theorem, the Hadamard Theorem, index of vector fields. No student may earn credit for both 4663 and 5663. (Sp)
MATH	4673	Graph Theory I	(Slashlisted with 5673) Prerequisite: 2513 or permission of instructor. An introduction to the theory of graphs. Topics include basic definitions, cutpoints, blocks, trees, connectivity and Menger's theorem. No student may earn credit for both 4673 and 5673. (F)

MATH	4733	Mathematical Theory of Probability	Prerequisite: MATH 2443 or MATH 2934 or concurrent enrollment. Probability spaces, counting techniques, random variables, moments, special distributions, limit theorems. (F)
MATH	4743	Introduction to Mathematical Statistics	(Slashlisted with 5743) Prerequisite: 4733. Mathematical development of basic concepts in statistics: estimation, hypothesis testing, sampling from normal and other populations, regression, goodness-of-fit. No student may earn credit for both 4743 and 5743. (Sp)
MATH	4753	Applied Statistical Methods	Prerequisite: MATH 2123 or MATH 2423 or MATH 2924 or permission of instructor. Estimation, hypothesis testing, analysis of variance, regression and correlation, goodness-of-fit, other topics as time permits. Emphasis on applications of statistical methods. (F, Sp, Su)
MATH	4773	Applied Regression Analysis	(Slashlisted with 5773) Prerequisite: 3333, 4733 or 4753 or any statistical probability course at an equivalent level. The general regression problem of fitting an equation involving a single dependent variable and several independent variables, estimation and tests of regression parameters, residual analysis, selecting the "best" regression equation. No student may earn credit for both 4773 and 5773. (Alt. F)
MATH	4793	Advanced Applied Statistics	(Slashlisted with 5793) Prerequisite: 4743 or 4753 or equivalent. Survey of advanced applied statistical methods other than applied regression, including exploratory data analysis, analysis of multivariate data (principal components: analysis, multiple analysis of variance, cluster analysis, etc.), and introduction to non-parametric methods. No student may earn credit for both 4793 and 5793. (Alt. F)
MATH	4803	Topics in Mathematics	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit nine hours. Topics may include any area of mathematics; these will be substantial and fundamental subjects not offered in regular courses. (F, Sp, Su)
MATH	4853	Introduction to Topology	Prerequisite: MATH 2433 or MATH 2924; and MATH 2513; or permission of instructor. Metric spaces and topological spaces, continuity, connectedness, compactness and related topics. (Sp)
MATH	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MATH	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MATH	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied, permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Sp)
MATH	5093	Applied Numerical Methods	Prerequisite: 2443, 3113 or 3413, 3333 or 4373, or permission of the instructor. Numerical treatment of ordinary differential equations, numerical linear algebra and applications, basic numerical methods for partial differential equations. No student may earn credit for both 4093 and 5093. (Alt. Sp.)
MATH	5103	Mathematical Models	Prerequisite: permission of instructor or admission to the M.S. program. May be repeated with change of content; maximum credit six hours. Mathematical models are formulated for problems arising in various areas in which mathematics has been applied. In each case, techniques are developed for analyzing the resulting mathematical problem, and this analysis is used to test the validity of the model. (Sp)

MATH	5113	Topics in Applied Mathematics	(Slashlisted with 4113) Prerequisite: permission of instructor. May be repeated with change of content; maximum credit fifteen hours. Algebraic coding theory, linear finite state workings, numerical analysis of differential equations, asymptotic analysis, game theory or other subjects. No student may earn credit for both 4113 and 5113. (Irreg.)
MATH	5123	Fourier Transforms	(Slashlisted with 4123) Prerequisite: MATH 2443, MATH 3113 or MATH 3413, MATH 3333, or permission of the instructor. Fourier series, classical Fourier transform, discrete Fourier transform, distributions and Fourier transforms. Sampling and Shannon's Theorem. No student may earn credit for both 4123 and 5123. (F)
MATH	5163	Partial Differential Equations	Prerequisite: 4163 or permission of instructor. First order equations, Cauchy problem for higher order equations, second order equations with constant coefficients, linear hyperbolic equations. (Sp)
MATH	5173	Advanced Numerical Analysis I	Prerequisite: 4433, 4443 or permission of instructor. Topics may include: error analysis of numerical methods for optimization and initial value problems, numerical approximation of aspects of control problems. (Alt. F)
MATH	5183	Advanced Numerical Analysis II	Prerequisite: 4433, 4443 or permission of instructor. Topics may include: analysis of spline approximations as a basis of the finite element method, error analysis for finite element approximation of elliptic and parabolic boundary value problems. (Alt. Sp)
MATH	5253	Introduction to Mathematics Pedagogy Research	Prerequisite: Graduate standing in mathematics or permission of the instructor. This course is intended for students who will be consumers of mathematics education research as well as those who will be producers of this research. The course offers an overview of the mathematics pedagogy research process and a detailed survey of selected aspects of this process. Particular topics including reviewing existing mathematics teaching research literature, designing research studies, gathering research data, analyzing research data, and reporting pedagogical research. (F)
MATH	5263	Issues and Problems in Mathematics Pedagogy	Prerequisite: Graduate standing in mathematics of permission of the instructor. This course considers current issues and perennial problems in undergraduate mathematics teaching. Potential topics include, but are not limited to, use of technology in mathematics instruction, use of group work and other instructional strategies actively engaging students in Mathematics learning, the nature of mathematics learning, research-based practices in teaching undergraduate mathematics, issues of gender and diversity in undergraduate mathematics, the nature of the undergraduate mathematics curriculum. (Sp)
MATH	5303	Topics in Group Theory	Prerequisite: 4323 or permission of instructor. May be repeated with change of content; Maximum credit 15 hours. Topics may include permutation groups, invariant subgroups, prime power groups, abelian groups, generators and relations, free groups, solvable and nilpotent groups, semi-direct products and extensions, automorphism groups, reflection groups, coxeter groups, crystallographic groups, matrix groups and representation group actions. (Irreg.)
MATH	5333	Topics in Number Theory	Prerequisite: at least one mathematics course numbered above 3000, other than 4232. May be repeated with change of content; maximum credit nine hours. Topics may include congruencies, arithmetic functions, quadratic reciprocity, continued fractions, diophantine equations, primality testing, factorization methods, cryptography, quadratic forms and quadratic fields, computational number theory, additive number theory, coding theory, p-adic numbers. (Irreg.)
MATH	5353	Abstract Algebra I	Prerequisite: 4323, permission of instructor. Groups, Sylow theorems, group actions, group presentations. Rings, ideals, polynomial rings, unique factorization. Fields, algebraic and transcendental extensions. (F)

MATH 5363	Abstract Algebra II	Prerequisite: 5353. Galois theory, solvability. Modules over a principal ideal domain. Noetherian ideal theory. Group representations, semisimple rings. Classical groups. (Sp)
MATH 5373	Abstract Linear Algebra	(Slashlisted with 4373) Prerequisite: 3333. Vector spaces over arbitrary fields, bases, dimension, linear transformations and matrices, similarity and its canonical forms (rational, Jordan), spectral theorem and diagonalization of quadratic forms. No student may earn credit for both 4373 and 5373. (F, Sp)
MATH 5383	Applied Modern Algebra	(Slashlisted with 4383) Prerequisite: 3333. Topics from the theory of error correcting codes, including Shannon's theorem, finite fields, families of linear codes such as Hamming, Golay, BCH, and Reed-Solomon codes. Other topics such as Goppa codes, group codes, and cryptography as time permits. No student may earn credit for both 4383 and 5383. Duplicates one hour of 4323. (Sp)
MATH 5403	Calculus of Variations	Prerequisite: 4433 or 3423 or 4163. Linear spaces, global and local theories of optimization, necessary conditions for relative extrema of integrals. (Irreg.)
MATH 5423	Complex Analysis I	Prerequisite: 4433. The complex numbers, topologies of the extended plane and related sphere, elementary functions, power series, properties of general holomorphic functions. The integral of a complex-valued function over an oriented rectifiable curve, the classical theorems on integrals, Taylor and Laurent expansions, analytic continuation, introduction to Riemann surfaces. (Alt. F)
MATH 5433	Complex Analysis II	Prerequisite: 5423. Selected topics from classical and modern function theory such as geometric theory, univalent functions, Hardy spaces and Nevanlinna theory. (Alt. Sp)
MATH 5443	Introduction To Analysis II	(Slashlisted with 4443) Prerequisite: 4433. Integration of functions of a single variable. Series of real numbers. Series of functions. Differentiation of functions of more than one variable. No student may earn credit for both 4443 and 5443. (Sp)
MATH 5453	Real Analysis I	Prerequisite: 4433 or permission of instructor. Lebesgue measure and integration theory, absolutely continuous functions, metric spaces. (F)
MATH 5463	Real Analysis II	Prerequisite: 5453. General measure and integration theory, Banach spaces, topics from related areas. (Sp)
MATH 5483	Wavelets	Prerequisite: 3113 or 3413 and 3333. Fourier analysis on a finite cyclic group, the group of integers, and the real line. The matching pursuit algorithm. The Poisson summation formula and sampling. Multi-resolution analysis, various wavelet constructions (including those of Daubechies and Meyer) and filter banks. An introduction to the MATLAB wavelet toolbox. (F)
MATH 5623	Convexity Theory I	(Slashlisted with 4623) Prerequisite: 3333, 2513 or permission of instructor. An introduction to the theory of convex sets. Topics include basic definitions and properties, separating and supporting hyperplanes, and combinatorial theorems of Caratheodory, Radon and Helly. No student may earn credit for both 4623 and 5623. (F)
MATH 5633	Convexity Theory II	Prerequisite: 5623 or permission of instructor. A continuation of the study of convex sets. Topics include Helly-type theorems, the Blaschke selection theorem, alternate characterizations of convex sets, convex polytopes and Eveler's formula. (Sp)
MATH 5653	Introduction To Differential Geometry I	(Slashlisted with 4653) Prerequisite: 2433 and 3333, or permission of instructor. Elementary theory of curves and surfaces in three-dimensional Euclidean space, differentiable manifolds, Riemannian geometry of two dimensions, Gauss Theorem Egregium. No student may earn credit for both 4653 and 5653. (F)

MATH 5663	Introduction to Differential Geometry II	(Slashlisted with 4663) Prerequisite: 4653 or 5653. Intermediate theory of surfaces, covariant differentiation, geodesics, Gauss-Bonnet Theorem. Further topics may include: rigidity theorems, minimal surfaces, the Hopf-Rinow Theorem, the Hadamard Theorem, index of vector fields. No student may earn credit for both 4663 and 5663. (Sp)
MATH 5673	Graph Theory I	(Slashlisted with 4673) Prerequisite: 2513 or permission of instructor. An introduction to the theory of graphs. Topics include basic definitions, cutpoints, blocks, trees, connectivity and Menger's theorem. No student may earn credit for both 4673 and 5673. (F)
MATH 5683	Graph Theory II	Prerequisite: 5673 or permission of instructor. A continuation of the study of graphs. Topics include partitions, Eulerian and Hamiltonian graphs, planarity and colorability. (Sp)
MATH 5693	Topics in Geometry and Combinatorics I	Prerequisite: permission of instructor. May be repeated with permission of instructor; maximum credit 12 hours. Topics may include convexity, combinatorial geometry, graph theory, or Riemannian geometry. (F, Sp, Su)
MATH 5743	Introduction to Mathematical Statistics	(Slashlisted with 4743) Prerequisite: 4733. Mathematical development of basic concepts in statistics: estimation, hypothesis testing, sampling from normal and other populations; regression, goodness of fit. No student may earn credit for both 4743 and 5743. (Sp)
MATH 5763	Introduction to Stochastic Processes	Prerequisite: 4733 or permission of instructor. Stochastic processes in discrete time including random walks, recurrent events, Markov chains and branching processes. Processes in continuous time including linear and nonlinear birth-death processes and diffusions. Applications taken from economics, engineering, operations research. (Irreg.)
MATH 5773	Applied Regression Analysis	(Slashlisted with 4773) Prerequisite: 3333, 4733 or 4753 or any statistical probability course at an equivalent level. The general regression problem of fitting an equation involving a single dependent variable and several independent variables, estimation and tests of regression parameters, residual analysis, selecting the "best" regression equation. No student may earn credit for both 4773 and 5773. (Alt. F)
MATH 5783	Topics in Mathematical Statistics	Prerequisite: 4743. May be repeated with change of content; maximum credit 15 hours. Topics may include stochastic processes, linear models, non-parametric methods, experimental design, sequential analysis, decision theory, etc. (Irreg.)
MATH 5793	Advanced Applied Statistics	(Slashlisted with 4793) Prerequisite: 4743 or 4753 or equivalent. Survey of advanced applied statistical methods other than applied regression, including exploratory data analysis, analysis of multivariate data (principal components: analysis, multiple analysis of variance, cluster analysis, etc.), and introduction to non-parametric methods. No student may earn credit for both 4793 and 5793. (Alt. F)
MATH 5803	Topics in Mathematics	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit fifteen hours. Topics may include any area of mathematics; these will be substantial and fundamental subjects not offered in regular courses. (F, Sp, Su)
MATH 5853	Topology I	Prerequisite: 2433 and 2513. Set theory, separation axioms, connectedness, compactness, continuity, metric spaces, nets and sequences. (F)
MATH 5863	Topology II	Prerequisite: 5853. Metrization, product and quotient spaces, function spaces, dimension theory, Hilbert spaces, homotopy, simplicial complexes, continua. (Sp)
MATH 5900	Graduate Mathematics Readings	1 to 3 hours. Prerequisite: six-hour mathematics sequence at the 5000+ level. May be repeated with change of content; maximum credit fifteen hours. Special background readings in advanced mathematical topics as preparation for later dissertation work. (F, Sp, Su)
MATH 5910	Seminar--Analysis	1 to 2 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 12 hours. (F, Sp)

MATH	5920	Seminar--Algebra and Theory of Numbers	1 to 2 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 12 hours. (F, Sp)
MATH	5930	Seminar--Geometry and Topology	1 to 2 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 12 hours. (F, Sp)
MATH	5940	Seminar--Applied Mathematics and Statistics	1 to 2 hours. May be repeated with change of content; maximum credit 12 hours. (F, Sp)
MATH	5950	Seminar-Undergraduate Mathematics Curriculum & Pedagogy	1 to 2 hours. May be repeated with change of content; maximum credit 12 hours. This seminar will explore the current research literature on undergraduate mathematics curriculum and pedagogy. (F, Sp)
MATH	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MATH	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MATH	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp)
MATH	5990	Special Problems in Mathematics	1 to 2 hours. An option for all candidates for the master's degree who do not present theses. (F, Sp, Su)
MATH	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MATH	6333	Lie Theory I	Prerequisites: 5363 and 5863 or permission of the instructor. Basic properties of Lie algebras, nilpotent and solvable Lie algebras, semi-simple Lie algebras, root systems and classification theorems. (Irreg.)
MATH	6343	Lie Theory II	Prerequisite: 6333 or permission of the instructor. Representation theory of semi-simple Lie algebras, Lie groups, connections between Lie groups and Lie algebras, structure theory and representation theory of compact Lie groups. (Irreg.)
MATH	6373	Commutative Algebra	Prerequisite: 4323, 4333, 5333 or permission of instructor. Commutative rings and their modelus, ideals, prime ideals, Noetherian modules and rings, localization, principal and factorial rings, discrete valuation domains, Dedekind domains, integral ring extensions, dimension theory, tensor products, flat modules, the homofunctor, injective and projective modules, regular rings, Cohen-Macauley rings. (Irreg.)
MATH	6383	Algebraic Geometry	Prerequisite: 6373. Hilbert's Nullstellensatz, the correspondence between ideals and algebraic sets, Zariski topology, irreducible algebraic sets, ringed spaces, morphisms, affine varieties, algebraic varieties, regular maps, sub-varieties and products, bi-rational equivalence, local rings and tangent spaces, differentials, non-singular points. (Irreg.)
MATH	6393	Topics in Algebra	Prerequisite: 5353 or permission of instructor. May be repeated with change of content; maximum credit 15 hours. Topics of modern research interest in algebra. (Irreg.)
MATH	6443	Topics in Differential Equations	Prerequisite: permission of instructor. May be repeated with change of content; maximum credit 15 hours. Topics include, but are not limited to, dynamical systems, nonlinear boundary value problems, parameter identification theory, wave theory, nonlinear functional analysis. (F, Sp)
MATH	6473	Functional Analysis I	Prerequisite: 5463 or permission of instructor. Vector spaces with topology or norm, dual space, theorems on linear operators, spectral theory in Hilbert space, spectral decomposition of operators, convex sets and weak topologies, fixed point theorems. (Alt. F)
MATH	6483	Functional Analysis II	Prerequisite: 6473. Banach algebras and harmonic analysis, representations of symmetric rings, unitary representations of a group, rings of operators in Hilbert space, decomposition of ring operators. Introduction to the theory of distributions. (Alt. Sp)

MATH	6493	Topics in Analysis	Prerequisite: 5453 or permission of instructor. May be repeated with change of course content; maximum credit 15 hours. Topics of modern research interest in analysis. (F, Sp)
MATH	6673	Differential Geometry I	Prerequisite: 5853 or permission of instructor. Multilinear algebra, differential manifolds, exterior differential forms, affine connections, Riemannian manifolds. (F)
MATH	6683	Differential Geometry II	Prerequisite: 6673. Riemannian manifolds, theory of connections, bundles with classical groups as structure groups, curvature and Betti numbers, complex manifolds. (Sp)
MATH	6693	Topics in Geometry and Combinatorics II	Prerequisite: permission of instructor. May be repeated with permission of instructor; maximum credit 12 hours. Topics may include convexity, combinatorial geometry, graph theory, linear topological spaces, metric geometry, differential geometry or Riemannian geometry. (F, Sp)
MATH	6813	Algebraic Topology I	Prerequisite: 5863. Introduction to homology theory of spaces, fundamental group and covering spaces, higher homotopy groups, CW-complexes and cellular homology, Whitehead and Hurewicz theorems, Eilenberg-Steenrod axioms. (F)
MATH	6823	Algebraic Topology II	Prerequisite: 6813. Topics in cohomology and homology theory, universal coefficient theorems, orientation and duality on manifolds. Further topics may include: obstruction theory, cohomology operations, fibre bundles and characteristic classes, theory of sheaves, Eilenberg-MacLane spaces and Postnikov systems, spectral sequences. (Sp)
MATH	6833	Topics in Topology I	Prerequisite: 5863. May be repeated with permission of instructor; maximum credit 15 hours. Topics may include algebraic topology, combinatorial topology, linear topological spaces, dimension theory, metrization, continua, decomposition spaces, topology of flat spaces. (F, Sp)
MATH	6843	Topics in Topology II	Prerequisite: 6833. May be repeated with permission of instructor; maximum credit 15 hours. Topics may include algebraic topology, combinatorial topology, linear topological spaces, dimension theory, metrization, continua, decomposition spaces, topology of flat spaces. (F, Sp)
MATH	6910	Seminar--Analysis	1 to 2 hours. Prerequisite: permission of the instructor. May be repeated with change of content; maximum credit 15 hours. (F, Sp)
MATH	6920	Seminar--Algebra	1 to 2 hours. Prerequisite: permission of the instructor. May be repeated with change of content; maximum credit 12 hours. (F, Sp)
MATH	6930	Seminar--Geometry and Topology	1 to 2 hours. Prerequisite: permission of the instructor. May be repeated with change of content; maximum credit 12 hours. (F, Sp)
MATH	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
MATH	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MATH	6980	Research for Doctoral Dissertation	(F, Sp, Su)
MATH	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MBIO	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

MBIO	2815	Introduction to Microbiology	Prerequisite: one course in college chemistry. Introduction to microorganisms as biological entities. Survey of the roles of microorganisms in the ecosystem. Application of microorganisms to industrial and environmental problems. Discussion of microorganisms as causes of human disease and response of hosts to microbial invasion. This course does not count for major credit in Microbiology or Botany. Laboratory (F, Sp, Su) [II-LAB]
MBIO	2970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MBIO	3113	Cell Biology	(Crosslisted with BOT and BIOL 3113) Prerequisite: Botany 1114, or Biology 1134, or Biology 1114 and 1121, or Biology 1124; and Chemistry 3053. Introduction to the cell as a unit of life. A chemical and physical comparison of procaryotic and eucaryotic cells to include a discussion of cell metabolism, types of metabolic regulation and an analysis of ultrastructure. Emphasis will be placed on the dynamic changes in metabolism and ultrastructure which occur during the life of a cell. (F, Sp)
MBIO	3283	Introduction to Genomics	(Crosslisted with PBIO 3283) Prerequisite: PBIO 1114, or BIOL 1114, or BIOL 1134, or one course in Organic Chemistry (CHEM 3053 or CHEM 3153 or CHEM 3064 or CHEM 3164). Provides the most updated knowledge on prokaryotic and eukaryotic genomics including the biochemical, molecular and cellular structure of the genome as well as the current molecular and bioinformatics technologies existing when analyzing complex genomes and gene function. Through lectures and presentation of scientific literature, specific examples will be presented to highlight each aspect of the course. (F)
MBIO	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MBIO	3673	Practical Bioinformatics	(Crosslisted with PBIO 3673) Prerequisite: MBIO 2815, or MBIO 3813, or PBIO 1114, or BIOL 1005, or BIOL 1114, or equivalent introductory biology course, and junior standing, or instructor permission. Study of the use of computers to analyze and interpret various types of biological data. Topics covered will include accessing genomics databases, aligning DNA and protein sequences, searching genomic databases for similar sequences, analyzing protein structure, and building molecular phylogenies. Classes will emphasize group work and in-class computer exercises in a highly interactive environment. (Sp)
MBIO	3812	Fundamentals of Microbiology Laboratory	Prerequisite: credit or concurrent enrollment in 3813. Fundamental microbiological methods: aseptic technique, culture methods, microscopy, metabolic and physiological tests, bacterial isolation and identification, environmental microbiology. Laboratory (F, Sp, Su)
MBIO	3813	Fundamentals of Microbiology	Prerequisite: BIOL 1005 or BIOL 1134 or PBIO 1114 or BIOL 1114, and CHEM 3013 or CHEM 3053 or CHEM 3064. Cell structure and phylogeny of bacteria, archaea, and eukaryotic microorganisms; growth, metabolism and ecological roles; symbiotic relationships; gene expression, genetic exchange, genomics. (F, Sp, Su)
MBIO	3932	Instrumental Methods in Biology	(Crosslisted with PBIO 3932) Prerequisite: one of the following: Plant Biology 4115 or MBIO 2815 or MBIO 3813 or Biology 2124 or one course in biochemistry; and Physics 2414. Principles of analytical measurements; common categories of instruments; advantages and disadvantages of each method; examples are chosen from medical technology, environmental technology, biochemistry, physiology, etc. (F)

MBIO	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
MBIO	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. (F, Sp, Su)
MBIO	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
MBIO	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MBIO	4064	Advanced Light Microscopy	(Crosslisted with PBIO 4064; Slashlisted with 5064) Prerequisite: permission of instructor and junior standing. Corequisite: Lab section. Focuses on theory and techniques in light microscopy, covering principles including confocal laser scanning microscopy, multiple photon imaging, FLIM/FCS, FRET, fluorescence microscopy, phase contrast, DIC, 3D rendering, and other advanced optical technologies. Also includes a lab section where students will learn to use advanced epifluorescence and confocal microscopes. Students are required to complete an independent microscopy research project that they will work on in the lab section and present at the end of the course. No student may earn credit for both 4064 and 5064. (F)
MBIO	4263	Cell Biology Laboratory	(Crosslisted with PBIO 4263) Prerequisite: MBIO 3812 and 3813, or two courses in Plant Biology, and completion of or concurrent enrollment in MBIO/Plant Biology/Biology 3113. Gives students experience with modern techniques used in the study of cells. The techniques covered will allow exploration of cell biology at the level of tissues, single cells, subcellular components, and molecules. (F)
MBIO	4313	Biotechnology Applications	Prerequisite: PBIO/BIOL 3113, or PBIO/BIOL 3333, or PBIO/BIOL/MBIO 4843, or PBIO/MBIO 4873, or CHEM 3653, or permission of instructor. Intended for students who possess a working knowledge of molecular biology, this course will focus on developing familiarity with methods used in biotechnology to address pressing societal challenges. Students will put into practice central methods of biotechnology, gaining practical skills for use in future careers in laboratory science, particularly methods relevant to pharmaceutical production, agricultural improvement, bio-fuel production, and medical and forensic diagnostics, among others. (Sp)
MBIO	4723	Biocatalysis and Bioremediation	(Slashlisted with 5723) Prerequisites: MBIO 3813 and one semester of Organic Chemistry (CHEM 3053) or Biochemistry (CHEM 3653), or permission of instructor. Introduces the role of microorganisms in the biocatalysis and bioremediation of relevant pollutants. Focuses on bioremediation strategies, the physiology of aerobes vs. anaerobes, biocatalysis and genetics of biodegradation pathways, and methods for monitoring in situ biodegradation. No student may earn credit for both 4723 and 5723. (Sp)
MBIO	4733	Microbial Genetics	(Slashlisted with 5733) Prerequisite: MBIO/PBIO/BIOL 4843, or permission of instructor. Microbial genetics underlies important topics such as antibiotic resistance, genetic engineering, drug development, and many biotechnological advances. Explores the interesting world of microbial genetics by discussing molecular genetic methods and related aspects of bacterial and archaeal biology. Examples will include both traditional and recently developed microbial model systems. No student may earn credit for both 4733 and 5733. (Sp)

MBIO	4810	Special Topics	(Slashlisted with 5810) 1 to 3 hours. Prerequisite: two courses in Microbiology and permission of instructor. May be repeated with change of content; maximum credit three hours per semester, nine hours total. Topics will include newly developing areas of the discipline. Taught at an upper-division level based on previous course background. No student may earn credit for both 4810 and 5810 for the same course content. (Irreg.)
MBIO	4813	Ecology and Pathogenic Microbiology Lab	Prerequisite: 3812 and 3813 or equivalent. Course incorporates laboratory approaches and techniques for the study, characterization and manipulation of individual microorganisms and microbial communities involved in pathogenesis and environmental processes. Contemporary molecular techniques including PCR, recombinant DNA, DNA/RNA analysis; immuno-biological analysis will encompass a large part of this laboratory course. Students will also become acquainted with approaches to discover the mechanisms micro-organisms use to establish their ecological niche in both pathogenic and environmental settings. Laboratory (Sp)
MBIO	4823	Pathogenic Microbiology and Infectious Disease	Prerequisite: MBIO 3812 and MBIO 3813. Introduces the basic methods for pathogenic microbiology and infectious disease epidemiology. Topics covered include definitions and nomenclature, outbreak investigations, disease surveillance, case-studies, laboratory diagnosis, immunology, molecular epidemiology, dynamics of transmission, and vaccine effectiveness. Emerging pathogens, their effects on society and the health care services will also be addressed. (F)
MBIO	4833	Basic Immunology	Prerequisite: one semester of organic chemistry, and an introductory biology course, plus one of the following: 3813 and 3812, Zoology 2124, 3113, 3204, 3333 or biochemistry or graduate standing and permission. Fundamentals of immunochemistry, cellular immunology, immunogenetics and clinical immunology. (Sp)
MBIO	4843	Introduction to Molecular Biology	(Crosslisted with BOT and ZOO 4843; Slashlisted with 5843) Prerequisite: 3812 and 3813, or Botany 1114, or Zoology 1114, or Zoology 1124, or Biology 1134, and one course in organic chemistry. Introduction to the characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of microbial genetics transformation, transduction and conjugation; and emphasis on molecular immunology and genetic engineering/recombinant DNA technology. No student may earn credit for both 4843 and 5843. (F, Sp)
MBIO	4853	Physiology of Microorganisms	Prerequisite: MBIO 3813, MBIO 3812 and a course in organic chemistry, or graduate standing. Diversity, metabolism, energetics and physiology of microorganisms. (Sp)
MBIO	4864	Geomicrobiology	(Crosslisted with GEOL 4864; Slashlisted with 5864) Prerequisite: 3813 or permission of instructor. Life below the earth's surface. Bacterial degradation of pollutants. Petroleum microbiology. Role of microorganisms in geochemical cycling of carbon, sulfur, and metals. No student may earn credit for both 4864 and 5864. (F) [II-NL]
MBIO	4873	Microbial Physiology and Molecular Biology Laboratory	(Crosslisted with PBIO 4873) Prerequisite: junior standing or permission of instructor. Current techniques to explore molecular aspects of gene expression and regulation. Experiments include: plasmid and phage propagation, nucleic acid purification, DNA and protein manipulation, and gene analysis. (F, Sp) [II-LAB]

MBIO	4883	Water Microbiology Laboratory	Prerequisite: MBIO 3812 and MBIO 3813. Focuses on the causes and prevention of waterborne microbial diseases and the use of microorganisms to improve water quality. Topics will include: waterborne diseases, methods to detect waterborne pathogens, epidemiology, indicator organisms, water quality standards, treatment of drinking water and sewage, and groundwater contamination. The laboratory will provide training in disinfection, waste treatment, and the standard methods used to detect microbial contamination. (F)
MBIO	4893	Capstone in Microbiology	Prerequisite: three hours of calculus; 3813, 3812 and corequisite or prerequisite 4843. Combines laboratory research experiences, primarily in the areas of microbial diversity, physiology, and genetics, with an introduction to how research in microbiology is carried out. Laboratory (F, Sp) [V]
MBIO	4903	Topics in Virology	(Slashlisted with 5903) Prerequisite: Chemistry 3653 or MBIO 4843 or permission of instructor. Aspects related to selected RNA viruses, such as HIV/AIDS and polio virus, will be studied and discussed. Topics will include the molecular structure of RNA viruses, the mechanisms of viral assembly and replication, viral disease pathogenosis, host responses to viral infections, vaccine development, anti-viral and RNA interference (RNAi) therapeutics. No student may earn credit for both 4903 and 5903 on the same topic. (F)
MBIO	4950	Senior Thesis - Capstone	1 to 6 hours. Prerequisite: 3813 and permission of instructor. May be repeated for credit; maximum credit six hours. A minimum total of six hours is required. This is a capstone course allowing students to carry out individual research projects under a faculty mentor. Students will present research results orally in a poster session, and by writing a senior thesis. Honors research credit may substitute for some or all of the senior thesis credit hours. (F, Sp, Su) [V]
MBIO	4953	BioWriting	(Slashlisted with 5953; Crosslisted with BIOL/PBIO 4953) Prerequisite: permission of instructor. This course provides students engaged in research with the information and skills needed to effectively communicate as professional biologists. Students will learn to report the results of their own research in the format of a journal article, conference-style presentation, and poster. No student may earn credit for both 4953 and 5953. (Irreg.)
MBIO	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MBIO	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MBIO	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
MBIO	5064	Advanced Light Microscopy	(Crosslisted with PBIO 5064; slashlisted with 4064) Prerequisite: permission of instructor and graduate standing. Corequisite: Lab section. Focuses on theory and techniques in light microscopy covering principles including confocal laser scanning microscopy, multiple photon imaging, FLIM/FCS, FRET, fluorescence microscopy, phase contrast, DIC, 3D rendering, and other advanced optical technologies. Also includes a lab section where students will learn to use advanced epifluorescence and confocal microscopes. Students are required to complete an independent microscopy research project that they will work on in the lab section and present at the end of the course. No student may earn credit for both 4064 and 5064. (F)

MBIO	5364	Transmission Electron Microscopy	(Crosslisted with BOT and ZOO 5364) Prerequisite: permission. Introduction to the theory of transmission electron microscopy and practical instruction in specimen preparation, ultramicrotomy, instrument operation, photography and quantitative methods. Laboratory (F)
MBIO	5374	Scanning Electron Microscopy	(Crosslisted with BOT and ZOO 5374) Prerequisite: basic chemistry; basic physics; demonstrated need; permission of instructor. Principles of scanning electron microscopy combined with training in the operation of the SEM and ancillary equipment. Students will be certified in the operation of all equipment. Sample preparation on a variety of samples and darkroom procedures will be performed. Independent project with oral report and poster required. Laboratory
MBIO	5453	Advanced Ecology and Evolutionary Biology	(Crosslisted with BOT and ZOO 5453) Prerequisite: general ecology. Required for students in the ecology and evolutionary biology doctoral program. An introduction to current research opportunities and research programs in ecology and evolutionary biology at the University of Oklahoma. Specific topics and lecturers will vary from week to week to give students a broad overview of ongoing research projects. (F)
MBIO	5471	Seminar in Ecology and Evolutionary Biology	(Crosslisted with BOT and ZOO 5471) Prerequisite: graduate standing. Two semesters of enrollment are required for students in the ecology and evolutionary biology doctoral program. An intensive, student-based seminar in which students present both proposals and ongoing progress reports on doctoral level research projects in ecology and evolutionary biology. (F, Sp)
MBIO	5620	Investigations in Microbiology	1 to 6 hours. Prerequisite: 15 hours of microbiology or permission of instructor. May be repeated with change of subject matter; nine hours for a Masters student and twelve hours for a Ph.D. student. Maximum of six hours allowed with one professor, unless approved by Department Chair by petition. Fields of study: environmental microbiology, immunology, industrial microbiology, medical microbiology, medical mycology, microbial ecology, microbial genetics, microbial physiology, ultra-structural morphology, virology and molecular biology. (F, Sp, Su)
MBIO	5723	Biocatalysis and Bioremediation	(Slashlisted with 4723) Prerequisite: graduate standing and MBIO 3813 and one semester of Organic Chemistry (CHEM 3053) or Biochemistry (CHEM 3653), or permission of instructor. Introduces the role of microorganisms in the biocatalysis and bioremediation of relevant pollutants. Focuses on bioremediation strategies, the physiology of aerobes vs. anaerobes, biocatalysis and genetics of biodegradation pathways, and methods for monitoring in situ biodegradation. No student may earn credit for both 4723 and 5723. (Sp)
MBIO	5733	Microbial Genetics	(Slashlisted with 4733) Prerequisite: graduate standing and MBIO/PBIO/BIOL 4843 or 5843, or permission of instructor. Microbial genetics underlies important topics such as antibiotic resistance, genetic engineering, drug development, and many biotechnological advances. Explores the interesting world of microbial genetics by discussing molecular genetic methods and related aspects of bacterial and archaeal biology. Examples will include both traditional and recently developed microbial model systems. No student may earn credit for both 4733 and 5733. (Sp)
MBIO	5810	Special Topics	(Slashlisted with 4810) 1 to 3 hours. Prerequisite: two courses in microbiology, graduate standing and permission. 1 to 3 hours. May be repeated with change of content; maximum credit three hours per semester, nine hours total. Topics will include newly developing areas of the discipline. Taught at an upper-division level based on previous course background. No student may earn credit for both 4810 and 5810 for the same content. (Irreg.)
MBIO	5833	Industrial and Applied Microbiology	Prerequisite: 4843 and 4853 and one semester of calculus. The application of fundamental principles of microbiology to industrial fermentations and processing, food manufacture and preservation and environmental quality and sanitation. (F odd-numbered years)

MBIO	5843	Introduction to Molecular Biology	(Crosslisted with BOT and ZOO 5843; Slashlisted with 4843) Prerequisite: 3812 and 3813, or Botany 1114, or Zoology 1114, or Zoology 1124, or Biology 1134, and one course in organic chemistry. Introduction to the characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of microbial genetics transformation, transduction and conjugation; and emphasis on molecular immunology and genetic engineering/recombinant DNA technology. No student may earn credit for both 4843 and 5843. (F, Sp)
MBIO	5864	Geomicrobiology	(Crosslisted with GEOL 5864; Slashlisted with 4864) Prerequisite: 3813 or permission of instructor. Life below the earth's surface. Bacterial degradation of pollutants. Petroleum microbiology. Role of microorganisms in geochemical cycling of carbon, sulfur, and metals. No student may earn credit for both 4864 and 5864. (F)
MBIO	5883	Advanced Molecular Biology	(Crosslisted with PBIO 5883) Prerequisite: graduate standing and MBIO/Plant Biology/Biology 4843 or 5843; or Chemistry 3653; or permission of instructor. The study of molecular biology in real-life research laboratories, focusing on the thought and practice behind molecular biology. Scientific literature will be used as a source of information to highlight the practical concerns for students working in molecular biology laboratories. (Sp)
MBIO	5903	Topics in Virology	(Slashlisted with 4903) Prerequisite: graduate standing and CHEM 3653 or MBIO 4843 or permission of instructor. Aspects related to selected RNA viruses, such HIV/AIDS and polio virus, will be studied and discussed. Topics will include the molecular structure of RNA viruses, the mechanisms of viral assembly and replication, viral disease pathogenosis, host responses to viral infections, vaccine development, anti-viral and RNA interference (RNAi) therapeutics. No student may earn credit for both 4903 and 5903 on the same topic. (F)
MBIO	5953	BioWriting	(Slashlisted with 4953; Crosslisted with BIOL/PBIO 5953) Prerequisite: permission of instructor. This course provides students engaged in research with the information and skills needed to effectively communicate as professional biologists. Students will learn to report the results of their own research in the format of a journal article, conference-style presentation, and poster. Graduate students have additional assignments beyond those completed by undergraduates. No student may earn credit for both 4953 and 5953. (Irreg.)
MBIO	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MBIO	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MBIO	5971	Seminar in Microbiology	Prerequisite: graduate standing, permission of instructor. Required of all graduate students in microbiology. May be repeated; maximum credit two hours for the master's degree, three hours for the doctor's degree. Topics are selected from various areas of microbiology, and each student is called upon for discussion or formal presentations. No laboratory. (F, Sp)
MBIO	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)

MBIO	5990	Special Studies in Microbiology	1 to 3 hours. Prerequisite: 15 hours of microbiology, permission of instructor. May be repeated; Maximum credit of six hours with one professor, unless approved by Department Chair by petition. The student selects an area in which the student desires to read intensively, selects a staff member who is an authority in that field, and together they plan a program for investigation of the literature. (F, Sp, Su)
MBIO	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MBIO	6003	Ecological Modeling	(Crosslisted with BOT and ZOO 6003) Prerequisite: one computer course, one course in ecology, or permission of instructor. Trains students to use modeling tools in their research and to gain greater ability to understand, appreciate, and criticize modeling work. Students will learn general procedure and principles with case studies of successful models in ecology and participate in course projects to gain hands-on experience in model development. (Irreg.)
MBIO	6813	Advanced Bacterial Metabolism	Prerequisite: 3813 and 3812, plus six hours of microbiology, biochemistry, organic chemistry or permission. Recent advances in bacterial metabolism will be covered with emphasis on unusual bacterial pathways and on the biotransformations of environmentally significant materials. (Sp odd-numbered years)
MBIO	6873	Microbial Ecology	Prerequisite: 3813 and 3812 plus two courses in microbiology, or 3813 and 3812 plus one microbiology course and one ecology course; biochemistry; calculus; or permission. Advanced treatment of the development and interactions of microbial communities with their living and abiotic environment. Emphasis placed on experimental approaches and on the quantitative concepts of the subject matter. Topics include a kinetic evaluation of microbial activities, global carbon cycling, biodegradation of environmentally significant materials and techniques used in the study of microbial ecology. (F even-numbered years)
MBIO	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
MBIO	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MBIO	6980	Research for Doctoral Dissertation	2 to 16 Hours. (F, Sp, Su)
MBIO	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
METR	1014	Introduction to Weather and Climate	For non-science majors. A descriptive study of both short-term and long-term atmospheric phenomena, evenly divided between: (1) the structure and processes in the atmosphere that affect our every-day weather; and (2) climate and causes of climate change. This course does not count for major credit in the School of Meteorology. Laboratory (F, Sp) [II-LAB]
METR	1034	Native Science and Earth Systems of North America	(Crosslisted with GEOL 1034) Examines Earth systems of North America using both indigenous and Western perspectives, and an Earth science approach. This team-taught course will utilize a combination of geology, geography, meteorology, and Native American sciences, as expressed through the use of art. (Sp) [II-LAB]

METR	1111	Orientation to Professional Meteorology	Prerequisite: Mathematics 1503 or higher. Required of all Meteorology majors during their first year of residence. Introduction to the School of Meteorology and its curriculum, faculty and staff. Presentations from different professional meteorologists introduce career options, challenges and opportunities in meteorology. (F)
METR	1313	Introduction to Programming for Meteorology	Prerequisite: Math 1523 or equivalent, or concurrent enrollment. Introduction to the design and implementation of computer programs using the Python programming language. Emphasis on working with simple data sets. (F, Sp, Su)
METR	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
METR	2011	Introduction to Meteorology I Laboratory	Prerequisite: Grade of C or better in Math 1823 or 1914; corequisite: METR 2013, Math 2423 or 2924 and Physics 2514 or 1205. Reinforces the theoretical concepts provided in the counterpart lecture course Meteorology 2013, which introduces students to important phenomena and physical processes that occur in the earth's atmosphere. Through a series of laboratory exercises, students will learn the basic concepts and tools that are used to study atmospheric problems. Special emphasis will be placed on developing information technology and computational skills. The laboratory exercises target the topics covered in the lecture component. (F, Sp) [II-LAB]
METR	2013	Introduction to Meteorology I	Prerequisite: Grade of C or better in Math 1823 or 1914; corequisite: METR 2011, Math 2423 or 2924, Physics 2514 or 1205. Introduces students to important phenomena and physical processes that occur in earth's atmosphere, as well as to the basic concepts and instruments used to study atmospheric problems. Focuses on atmospheric radiation, thermodynamics, moisture, stability, clouds, and precipitation. (F, Sp) [II-NL]
METR	2021	Introduction to Meteorology II Laboratory	Prerequisite: Grade of C or better in METR 2011 or 2014, 2013, MATH 2423 or 2924, and PHYS 2514 or 1205; corequisite: METR 2023, MATH 2433 or 2934, and PHYS 2524 or 1215. Reinforces the theoretical concepts provided in the counterpart lecture course Meteorology 2023, which introduces students to important phenomena and physical processes that occur in the earth's atmosphere. Through a series of laboratory exercises, students will learn the basic concepts and tools that are used to study atmospheric problems. Special emphasis will be placed on developing information technology and computational skills. The laboratory exercises target the topics covered in the lecture component. (Sp, Su)
METR	2023	Introduction to Meteorology II	Prerequisite: Grade of C or better in METR 2013, 2011 or 2014, MATH 2423 or 2924, and PHYS 2514 or 1205; corequisite: METR 2021, MATH 2433 or 2934, and PHYS 2524 or 1215. Introduces students to important phenomena and physical processes that occur in earth's atmosphere. Students will learn the basic concepts and instruments used to study atmospoheric problems. Part II of the introduction to meteorology sequence focuses on atmospheric dynamics, wind systems of different origin and scale, and thunderstorms. It also addresses boundary layer meteorology, air pollution, forecasting and climate change. (Sp, Su)
METR	2603	Severe and Unusual Weather	Provide non-majors and majors a detailed descriptive account of the physical processes important in the formation of various severe and unusual weather phenomena including: thunderstorms, tornadoes, hail storms, lightning, hurricanes, midlatitude snowstorms, lake effect snows, atmospheric optical effects, and global climate change. This course does not count for major credit in the School of Meteorology. (Irreg.) [II-NL]

METR 2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
METR 3113	Atmospheric Dynamics I: Intro to Atmospheric Kinematics/Dynamics	Prerequisite: Grade of C or better in METR 2023 and 2021, MATH 2433, 2443 or 2934, PHYS 1215 or 2524, and METR 1313 or CS 1313 or CS 1323. Characterization of the atmosphere mathematically, the study of forces acting upon it, and approximations used. Topics include Newton's laws of motion; energy, equilibrium and stability; coordinate systems and forces; the equations of motion and simple force balances; and mass and energy conservation. (F)
METR 3123	Atmospheric Dynamics II: Theory of Atmospheric Flows	Prerequisite: Grade of C or better in 3113, 3213, and MATH 3113 or 3413. Continuation of the study of atmospheric dynamics and kinematics begun in Dynamics I. Topics include: natural coordinates, geostrophic wind, inertial flow, cyclostrophic flow, gradient wind, thermal wind, kinematics and dynamics of circulation and vorticity, viscosity, and stress; turbulence, structure, and dynamics of the atmospheric boundary line. (Sp)
METR 3213	Physical Meteorology I: Thermodynamics	Prerequisite: grade of C or better in METR 2023 and 2021, MATH 2433, 2443 or 2934, PHYS 1215 or 2524, and METR 1313 or CS 1313 or CS 1323. This course introduces the physical processes associated with atmospheric composition, basic radiation and energy concepts, the equation of state, the zeroth, first and second law of thermodynamics for dry and moist atmospheres, thermodynamic diagrams, statics, and atmospheric stability. (F)
METR 3223	Physical Meteorology II: Cloud Physics, Atmos Electricity/Optics	Prerequisite: Grade of C or better in 3113, 3213, Mathematics 3113 or 3413. Cloud and precipitation processes including the role of aerosols in cloud droplet and ice nucleation, growth of cloud particles into rain, snow, and hail by diffusion, coalescence, and cloud aggregation; the Clausius-Clapeyron equation; application of cloud physics in cloud electrification and optical phenomena in the atmosphere; concepts of weather radar. (Sp)
METR 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
METR 3613	Meteorological Measurement Systems	Prerequisite: Grade of C or better in METR 2023 and 2021, MATH 2433, 2443 or 2934, PHYS 1215 or 2524, and METR 1313 or CS 1313 or CS 1323. Introduces the physical principles of meteorological instruments, discusses static and dynamic sensor performance, and explores the concepts of meteorological instruments, and to identify sensor limitations and major error sources. Furthermore, basic procedures of data analysis will be discussed. Laboratory (F)
METR 3890	Meteorology Internship	Meteorology Internship. Prerequisite: 1111 Or Permission Of Instructor. This Course Provides A Mechanism For Students To Receive Credit For Their Internship Experiences With The National Weather Service, Tv Stations, The Private Sector Or Any Other Kind Of Agency Or Institution Which Provides Internship Opportunities For Meteorology Majors. (F, Sp, Su)
METR 3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
METR 3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Projects covered vary. Deals with concepts not usually presented in regular coursework. (Irreg.)

METR 3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
METR 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
METR 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
METR 4133	Atmospheric Dynamics III: Mid-Latitude Synoptic-Scale Dynamics	Prerequisite: Grade of C or better in 3123 and 3223. Concepts from kinematics, dynamics and thermodynamics used to characterize synoptic-scale atmosphere, emphasis on quasi-geo strophic and baroclinic instability theory as basis for understanding extra-tropical weather systems including cyclones, fronts and jets. Linear theory is used to describe a variety of atmospheric waves and their role in synoptic-scale meteorology. (F)
METR 4233	Physical Meteorology III: Radiation and Climate	Prerequisite: Grade of C or better in 3123 and 3223. Fundamental principles of radiation; absorption and emission of radiation; solar and terrestrial radiation; radiative transfer and heating rates; surface and global energy balances; atmospheric general circulation; natural climate variations; greenhouse climate change; stratospheric ozone depletion. (F)
METR 4313	Statistical Meteorology	Prerequisite: grade of C or better in Mathematics 2423 of 2924, Computer Science 1313 or 1323, or permission of instructor. Offers specialized topics in statistical meteorology such as the role of probability and statistics in decision making, interplay between experimental design and the physics of an underlying problem, sampling techniques, graphical presentation of data and model building. Emphasis will be placed on computational aspects for meteorological data. No student may earn credit for both 4313 and 5313. (F)
METR 4323	Weather Simulation With Computers	Prerequisite: METR 1313. The basics principles of computer programming for simulating and predicting fluid motion with computers. Applications range from idealized baroclinic instability to idealized tornado vortices. The FORTRAN and Python programming languages will be used. Prior programming experience is required, but not necessarily with these languages. (Irreg.)
METR 4330	Information Technology Skills for Meteorology	(Slashlisted with 5330) Prerequisite: grade of C or better in CS 1313 or permission of instructor. May be repeated; maximum credit three hours. The use of computers and networks to process the information of meteorology. Workstation skills, computer operating systems, programming languages, the internet, computer graphics, analysis and display of meteorological data. No student may credit for both 4330 and 5330. (Irreg.)
METR 4343	Introduction to Earth System Dynamics	Prerequisite: Junior standing in a science or engineering major or by permission of instructor. Making use of simple numerical models this course introduces the use of concepts from systems dynamics to better describe and understand the Earth System. Systems dynamics topics will include Lovelock's daisy world, simple radiation budget climate models, the global carbon cycle, flocking of birds and other animals, and the synchronization of the emergence of seven-year locusts, all from a holistic systems perspective. The STELLA systems modeling software will be used throughout the course and students will develop a model of a natural system. (F)
METR 4393	Automated Analysis of Spatial Grids	Prerequisite: MATH 3333 and an introductory programming course or permission of instructor. This course provides students with a foundation in topics of digital image processing and data mining as applied to geospatial datasets. By the end of this course, students will be able to devise and implement automated techniques to extract information from spatial grids such as radar or satellite weather images. No student may earn credit for both 4393 and 5393. (Irreg.)

METR 4424	Synoptic Meteorology Laboratory	Prerequisite: Grade of C or better in 3123 and 3223. This course is a lecture/laboratory course designed to provide students a physical understanding of atmospheric principles. Students are challenged to explain theoretical concepts and to demonstrate a mastery in understanding various physical processes including the theory and practice of weather analysis and forecasting, surface and upper air analysis, fronts and wave cyclones, satellite meteorology, sounding analysis, thermodynamic diagram, cross sections, forecasting, NMC models, MOS, radar meteorology, and severe weather. Communications skills are emphasized. (F)
METR 4433	Mesoscale Meteorology	Prerequisite: Grade of C or better in 4133, 4424. Structure and dynamics of convective and mesoscale phenomena including: mesoscale convective systems, severe thunderstorms, tornadoes, low-level jets, mountain waves and hurricanes. Discussion of the general behavior, characteristics, and dynamics of the formation and development of these phenomena, and the types of weather and hazards they produce. (Sp)
METR 4443	Introduction to Tropical Meteorology	Prerequisite: senior standing or permission of instructor. Introduces students to the weather and climate of the tropics. Material presented will include an overview of tropical weather, basic physics of air-sea interaction and the attendant effects on tropical weather. The El Nino phenomenon has perhaps the greatest effect on day-to-day tropical weather even though it is considered a climate variation. Thus, the understanding of the physics and effects of El Nino and global warming allows students to enhance their ability to forecast both tropical and mid-latitude weather events. No student may earn credit for both 4443 and 5443. (Irreg.)
METR 4453	Hazardous Weather Detection and Prediction	Prerequisite: Mathematics 1823, 2423, 2433, 2443 and 3113 or 3413, and Physics 1205 or 2514, 1215 or 2524, or permission of instructor. Designed to acquaint non-meteorology majors - especially electrical engineering, electrical and computer engineering, computer science, math and hydrology graduate and senior undergraduate students - with the dynamics of hazardous weather (emphasis on deep convective storms) as well as its detection and numerical prediction. Although no knowledge of meteorology is required, all prerequisites must be satisfied. (Irreg.)
METR 4491	Weather Briefing	(Slashlisted with 5491) Prerequisite: Grade of C or better in 3113, 3213. Students prepare and present daily weather briefing. The briefing should demonstrate ability to synthesize current weather information on all scales, prepare a forecast and communicate this clearly and succinctly to an audience. Can be repeated for credit up to four hours. No student may earn credit for both 4491 and 5491. (F, Sp)
METR 4513	Applied Climatology and Meteorology	Prerequisite: grade of C or better in 3213, 4233, and English 3153, or permission of instructor. Class broadens the perspective of students to the use of weather and climate information in agriculture, transportation, public safety, public health, and other areas of society. No student may earn credit for both 4513 and 5513. (Sp)
METR 4533	Earth's Past Climate (Crosslisted with GEOL 4533; Slashlisted with 5533)	(Crosslisted with GEOL 4533; Slashlisted with 5533) Prerequisite: senior or graduate standing, or permission of instructor. Explores earth's climate system, controls on climate change, and evolution of climate history through geologic time as deciphered from climate proxies. No student may earn credit for both 4533 and 5533. (F)

METR 4543	Global Climate Change	(Slashlisted with 5543) Prerequisite: One of the following: METR 1014, METR 2013, METR 2603, METR 2903, CEES 1112, GEOG 1114, GEOG 1203, GEOG 3023, GEOL 1034, GEOL 1104, GEOL 1114, GEOL 2014, or permission or instructor. Have you ever asked yourself one of the following questions? What factors determine the earth's climate? How do human activities contribute to climate change and how do they compare to natural influences? How are temperatures and precipitation on earth changing? Has there been a change in extreme events like heat waves, droughts, floods and hurricanes? Is the current climate change unusual compared to earlier changes in the earth's history? No student may earn credit for both 4543 and 5543. (Sp)
METR 4553	Climate and Renewable Energy	Prerequisite: Mathematics 1503. Examines the science and technical aspects of solar, wind, hydro, and biomass power systems. Targets students interested in environmental science. Emphasis is on the key role of climate in determining where each of these systems is most likely to provide feasible alternatives to energy generated by fossil fuels. No student may earn credit for both 4553 and 5553. (Sp)
METR 4603	Micrometeorological Measurements	(Slashlisted with 5603) Prerequisites: grade of C or better in 3613, 3213, 3113, and Math 3113 or 3413. Introduction into micrometeorological research topics with strong emphasis on instrumentation. Provides hands-on experience in micrometeorological instrumentation, data acquisition and analysis. The structure of the atmospheric boundary layer and the influence of vegetation and buildings on small-scale meteorological conditions are studied. Theoretical concepts are verified against observations from a micrometeorological tower. No student may earn credit for both 4603 and 5603. (Irreg.)
METR 4613	Satellite Meteorology	Prerequisite: Grade of C or better in 3123, 3223, or permission of instructor. Survey of satellite meteorology and climatology. History of meteorological satellites, radiation, orbital mechanics, satellite systems and data processing, basic image interpretation, cloud-drift winds, precipitation, temperature soundings, tropical cyclone, mesoscale, and synoptic-scale analysis and forecasting, cloud, water vapor and precipitation climatology, radiation budget. No student may earn credit for both 4613 and 5613. Laboratory (Irreg.)
METR 4624	Radar Meteorology	Prerequisite: Grade of C or better in 3223, 3613, Mathematics 3413 or 3113. Develops quantitative relationships between physical characteristics of targets illuminated by a pulse of electromagnetic energy and the quantities measured by weather radar. Capabilities and limitations of radar designs are studied relative to meteorological applications. Doppler principles, including interpretation of data, are provided. Polarimetric and phased array radar are introduced. Experience is gained in hands-on exercises with weather radars and computer based labs. (Sp)
METR 4633	Hydrometeorology	Prerequisite: Grade of C or better in 3123, 3223 or permission of instructor. Interdisciplinary emphasis on mesoscale precipitation processes, applications of new hydrometeorological observing systems, and on the interactions between meteorology and hydrology during flood events. (Irreg.)
METR 4643	Physics of Planetary Atmospheres	(Slashlisted with 5643) Prerequisite: Grade of C or better in 3113, 3213, Physics 2524, Mathematics 3113 or permission of instructor. This course will provide an integrated overview of planetary sciences, emphasizing planetary formation and evolution, the atmospheres of the planets, and atmosphere/surface interactions. The interrelationships among different systems will be emphasized. The goal is to provide insight on how we decipher details of distant planets, and the differences ad similarities among the planets of our solar system. No student may earn credit for both 4643 and 5643. (Irreg.)

METR	4653	Air Pollution Meteorology and Modeling	(Slashlisted with 5653) Prerequisite: grade of C or better in 3113, 3213. Presents an overview of atmospheric dispersion problems and relevant weather systems with an emphasis on processes in the atmospheric boundary layer. Basic concepts and theories of turbulent transport and mixing are introduced and different dispersion theories and modeling approaches are discussed. No student may earn credit for both 4653 and 5653. (Irreg.)
METR	4663	Radar Engineering	(Crosslisted with ECE 4663; Slashlisted with 5663) Prerequisite: grade of C or better in Electrical and Computer Engineering 3613, or permission. Introduction to radar system designs and applications with emphasis on weather radar. Radar system architecture and their functionalities and limitations of subsystems are discussed. Theories of radar detection and estimation in a noisy and cluttered environment; existing technologies and advanced techniques to improve radar performance. No student may earn credit in both 4663 and 5663. (F)
METR	4713	Private Sector Meteorology	Prerequisite: senior standing in Meteorology. An overview of private sector meteorology in the United States. Designed to build background knowledge, foster the use of higher-order analytical skills, and further develop communication and presentation skills. The course includes lectures, directed readings, visiting local private sector companies, interviews with practicing meteorologists, and the development of a portfolio about a private sector meteorological company. Students gain experience in applying their meteorological knowledge to a practical problem as might be encountered in professional practice. No student may earn credit for both 4713 and 5713. (Irreg.)
METR	4803	Selected Topics in Meteorology	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit 12 hours. Topics may include aspects of atmospheric dynamics and severe-storm forecasting, experimental design, economic meteorology, weather modification, climate, radiation, aviation weather, etc. (Irreg.)
METR	4911	Senior Seminar (Capstone)	Prerequisite: Grade of C or better in 3123, 3223. With 4922, satisfies Capstone course requirement. The instructor will guide senior meteorology majors through planning of a research project. Interdisciplinary topics are encouraged and library work will be required. Students will be paired with regular or adjunct faculty mentors. Senior doctoral students may serve as mentors with permission from the instructor. The result of 4911 will be a mini-proposal which will serve as a guide for the senior research project. In addition, the instructor may present professional skills useful during job search, early employment, and graduate school application and attendance. Note that METR 4922 should be taken following this course. (F, Sp) [V]
METR	4913	Senior Seminar	Prerequisite: grade of C or better in 3113 and 3223. Satisfies the capstone course requirement. The instructor will guide senior meteorology majors on a research project. Interdisciplinary topics will be encouraged and library work is required. Students will complete written and oral presentations of a senior thesis. (F, Sp) [V]
METR	4922	Senior Seminar II (Capstone)	Prerequisite: Grade of C or better in 3123, 3223, 4911. with 4911, satisfies the Capstone course requirement. The instructor will guide students as they follow the research plan established in the mini-proposal completed in METR 4911. Library work will continue to be required with development of research methodology and analysis of results. Students will continue to work with faculty (senior doctoral student) mentors. The culmination of the two-course Capstone sequence will be a written and oral presentation of the senior thesis. The skills learned in Capstone I and II will be useful whether the student is employed in academia, government, or the private sector. (F, Sp) [V]

METR 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
METR 4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
METR 4990	Special Problems in Meteorology	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of subject matter. (F, Sp, Su)
METR 5004	Fundamentals of Atmospheric Science	Prerequisite: graduate standing in a meteorology, physical science, or engineering program, MATH 3113 or MATH 3413 or permission of instructor. Provides a rigorous survey of the fundamental concepts in the atmospheric sciences relevant to weather, climate and atmospheric chemistry. The course is designed to provide sufficient background knowledge so that the students will be prepared to successfully undertake more specialized graduate coursework in meteorology. Graduate students in fields closely related to meteorology, such as radar engineering and hydrology, will also benefit from knowledge of these concepts. (F)
METR 5103	Boundary Layer Meteorology	Prerequisite: 3113, Mathematics 3113. Transfer processes near the earth's surface, turbulence, the planetary boundary layer, air mass modification, fog formation, pollutant transport.
METR 5113	Advanced Atmospheric Dynamics I	Prerequisite: Mathematics 4163 or permission of instructor. Basic fluid dynamics, equations of motion, vorticity dynamics, scale analysis, shallow water equations, linear wave dynamics, gravity waves, Rossby waves, quasi-geostrophic motions. (F)
METR 5123	Advanced Atmospheric Dynamics II	Prerequisite: 5113 or permission of instructor. Shallow water theory in a rotating reference frame, waves and instabilities, thermal convection and chaos, internal waves, anelastic approximation, baroclinic instability, symmetric instability and frontogenesis, general circulation of the atmosphere.
METR 5223	Atmospheric Radiation	Prerequisite: 3213, Mathematics 3113, or permission of instructor. Theory of radiative transfer, spectra of gaseous molecules, use of band models for radiative calculations, interaction of solar radiation with atmospheres, infrared radiative transfer in atmospheres, radiative cooling and heating, scattering, climate and radiation, remote sensing. (Sp)
METR 5233	Cloud and Precipitation Physics	Prerequisite: 3223, Mathematics 3113. Development of thermodynamical relationships and generalized Clausius-Clapeyron equation, phase diagrams, atmospheric aerosols, review of hydrodynamics of flow past particles, collision and coalescence efficiency, theory of nucleation, precipitation growth, observations with radar, electrical state of the atmosphere. (F)
METR 5243	Atmospheric Electrodynamics	Prerequisite: permission of instructor. Global electrical circuit, fair-weather electricity, storm electrification, charging mechanisms, electrical discharges, lightning, thunder, instrumentation and observing systems, meteorological applications.
METR 5303	Objective Analysis	Prerequisite: 4133, Mathematics 3113, Engineering 3723, or equivalent. Introduction to techniques used in objective analysis of meteorological data; polynomial fitting; method of successive corrections; weighting functions; statistical methods; optimum interpolation; filter design; four-dimensional data assimilation. (F)
METR 5313	Statistical Meteorology	Prerequisite: graduate standing or permission of instructor. Offers specialized topics in statistical meteorology such as the role of probability and statistics in decision making, interplay between experimental design and the physics of an underlying problem, sampling techniques, graphical presentation of data and model building. Emphasis will be placed on computational aspects for meteorological data. No student may earn credit for both 4313 and 5313. (F)

METR 5323	Time Series Analysis I	Prerequisite: Mathematics 4733 or 4753, computer programming. Data collected from geophysical phenomena are considered as stochastic processes. The resulting time series are decomposed into autovariance spectra using Fourier, autocovariance and autoregressive methods. The spectra are interpreted from the viewpoint of estimation theory. Applications and practical aspects of these methods are examined. (Irreg.)
METR 5330	Information Technology Skills for Meteorology	(Slashlisted with 4330) Prerequisite: Grade of C or better in Computer Science 1313 or permission of instructor. May be repeated; maximum credit three hours. The use of computers and networks to process the information of meteorology. Workstation skills, computer operating systems, programming languages, the Internet, computer graphics, analysis and display of meteorological data. No student may earn credit for both 4330 and 5330. (Irreg.)
METR 5343	Introduction to Earth System Dynamics	(Crosslisted with GIS 5343) (Slashlisted with 4343) Prerequisite: MATH 3113 and PHYS 2524 with a grade of C or better, or permission of instructor. Making use of simple numerical models this course introduces the use of concepts from systems dynamics to better describe and understand the Earth System. Systems dynamics topics will include Lovelock's daisy world, simple radiation budget climate models, the global carbon cycle, flocking of birds and other animals, and the synchronization of the emergence of seven-year locusts, all from a holistic systems perspective. The STELLA systems modeling software will be used throughout the course and students will develop a model of a natural system. No student may earn credit for both 4343 and 5343. (F)
METR 5344	Computational Fluid Dynamics I	Prerequisite: 3113 or Engineering 3223; Engineering 3723; Mathematics 3123; permission of instructor. Application of fine difference, spectral, and semi-Lagrangian methods to multidimensional Newtonian fluid flow problems, including well-posedness, consistency, stability, convergence, accuracy, boundary conditions, conservation, grid systems, and filtering. In addition, code development practices and the use of high-performance vector and parallel supercomputers will be addressed.
METR 5353	Parameterization Schemes for Numerical Weather Prediction	Prerequisite: graduate standing or permission of instructor. This course provides a thorough overview of the sub-grid scale physical process parameterization schemes used in numerical models and how these schemes influence numerical forecasts of the weather. Various well-known parameterization schemes for mesoscale and cloud-scale models are reviewed and studied. (Irreg.)
METR 5363	Regression Analysis	Prerequisite: 4303 or Mathematics 4753, Computer Science 1313 or 1323, or permission of instructor. An in-depth overview of linear and non-linear regression techniques with applications to meteorological data analysis. Topics include linear regression, examination of residuals, confidence intervals, bias estimation, serial correlation issues, polynomial regression, transformation of the response variable, stepwise regression methods, multicollinearity problems, ridge regression, logistic regression and robust/resistant regression techniques. (Irreg.)
METR 5373	Resampling/Permutation Statistics	Prerequisite: 4303 or Mathematics 4753 and Computer Science 1313 or 1323, or permission of instructor. This course is designed to illustrate how to extract additional information from a data set. With the advent of high-speed, inexpensive computers, tools are now readily available to researchers for just this purpose. These tools will be introduced, described and put to use by the students during this course. Topics include an introduction to the s-plus statistical package, random samples and probability, standard errors and estimated standard errors, bootstrap estimate of standard error, the parametric bootstrap, bootstrap failure, resampling applied regression models, the jackknife, confidence intervals, permutation tests, hypothesis testing, cross-validation, adaptive estimation and assessing errors. (Irreg.)

METR 5383	Spatial Multivariate Methods	Prerequisite: 4303 or Mathematics 4753, Computer Science 1313 or 1323, Mathematics 3333, or permission of instructor. Will examine multivariate statistical methods used in the geophysical sciences for spatial analysis of data. Details of statistical theory, methodological issues, applications and programming will be explored. After a review of scalar, vector and matrix algebra, matrix transformation, scaling procedures, and similarity will be studied. Exploratory analysis with empirical orthogonal functions, principal components, singular value decomposition and factor analysis to be examined in detail with emphasis on truncation rules, graphical, orthogonal, and oblique analytic rotation. Additional topics will include procrustes analysis, canonical correlation analysis, multifield singular value decomposition, and cluster analysis. (Irreg.)
METR 5393	Automated Analysis of Spatial Grids	Prerequisite: graduate standing, MATH 3333 and an introductory programming course or permission of instructor. This course provides students with a foundation in topics of digital image processing and data mining as applied to geospatial datasets. By the end of this course, students will be able to devise and implement automated techniques to extract information from spatial grids such as radar or satellite weather images. No student may earn credit for both 4393 and 5393. (Irreg.)
METR 5413	Advanced Synoptic Meteorology	Prerequisite: 4133, 4424, 5113 or permission of instructor. Theory and application of quasi-geostrophic dynamics, Q-vectors and isentropic potential vorticity, diagnostic studies of mid-latitude synoptic-scale systems, mesoscale structure of precipitation, structure and dynamics of fronts and jets. (Sp)
METR 5443	Introduction to Tropical Meteorology	Prerequisite: graduate standing or permission of instructor. Introduces students to the weather and climate of the tropics. Material presented will include an overview of tropical weather, basic physics of air-sea interaction and the attendant effects on tropical weather. The El Nino phenomenon has perhaps the greatest effect on day-to-day tropical weather even though it is considered a climate variation. Thus, the understanding of the physics and effects of El Nino and global warming allows students to enhance their ability to forecast both tropical and mid-latitude weather events. No student may earn credit for both 4443 and 5443. (Irreg.)
METR 5453	Advanced Tropical Meteorology	Prerequisite: 5443 or permission of instructor. Designed to provide comprehensive observational, dynamical and modeling material on the global tropical atmosphere, but with special emphasis on the Atlantic and east Pacific hurricane basin. (F)
METR 5483	Atmospheric Circulations	Prerequisite: Mathematics 4163 and graduate standing, or permission of instructor. Kinematics and diagnostic dynamics of observed atmospheric circulations from the global to convective scales. This overview course is intended for graduate students who do not have a strong background in meteorology, and includes topics such as: quasi- and semi-geostrophic framework, frontogenesis, cyclogenesis, jets, symmetric instability, dynamics of convective storms, thermally driven circulations, ENSO, MJO, easterly waves, and hurricanes. (Irreg.)
METR 5491	Weather Briefing	(Slashlisted with 4491) Prerequisite: graduate standing, permission of instructor. Can be repeated for credit; maximum credit four hours. Students prepare and present daily weather briefing. The briefing should demonstrate ability to synthesize current weather information on all scales, prepare a forecast and communicate this clearly and succinctly to an audience. No student may earn credit for both 4491 and 5491. (F, Sp)
METR 5503	Climate Dynamics	Prerequisite: 5113. Survey of past climates; climate variability; heat and water budgets of the atmosphere, oceans and land surfaces; the general circulation; climate modeling.

METR 5513	Applied Climatology and Meteorology	Prerequisite: graduate standing or permission of instructor. Broadens the perspective of students to the use of weather and climate information in agriculture, transportation, public safety, public health, and other areas of society. No student may earn credit for both 4513 and 5513. (Sp)
METR 5523	Advanced Mathematical Methods in Science and Engineering	(Crosslisted with CH E 5523) Prerequisite: Mathematics 2443 and Chemical Engineering 3113. Scale and vector field theory. Ordinary and partial differential equations. Matrix algebra. Complex analysis. (F)
METR 5533	Earth's Past Climate (Crosslisted with GEOL 5533; Slashlisted with 4533)	(Crosslisted with GEOL 5533; Slashlisted with 4533). Prerequisite: senior or graduate standing, or permission of instructor. Explores earth's climate system, controls on climate change, and evolution of climate history through geologic time as deciphered from climate proxies. No student may earn credit for both 4533 and 5533. (F)
METR 5543	Global Climate Change	(Slashlisted with 4543) Prerequisite: permission of instructor. The Intergovernmental Panel on Climate Change (IPCC) assesses the scientific, technical and socio-economic information relevant for the understanding of the risk of human-induced climate change. The World Meteorological Organization and the United Nations Environment Programme established it. Since 1990, the IPCC has released four major sets of reports. The main activity of the IPCC is to provide at regular intervals Assessment Reports of the state of knowledge on climate change. The latest one is "Climate Change 2007", the IPCC Fourth Assessment Report. The Fifth Assessment Report is due out in the Spring of 2013 and we have the preliminary versions of AR5 available for this class. These will serve as the guide for this class. The class will involve short lectures followed by roundtable discussions of the reading assignments on the topics listed under the syllabus. No student may earn credit for both 4543 and 5543. (Sp)
METR 5553	Climate and Renewable Energy	Prerequisite: Mathematics 1503. Examines the science and technical aspects of solar, wind, hydro, and biomass power systems. Targets students interested in environmental science. Emphasis is on the key role of climate in determining where each of these systems is most likely to provide feasible alternatives to energy generated by fossil fuels. No student may earn credit for both 4553 and 5553. (Sp)
METR 5603	Micrometeorological Measurements	(Slashlisted with 4603) Prerequisite: Mathematics 3113 or permission of instructor. Performance of measurement systems used to obtain meteorological observations. Includes systems for synoptic observations and special purpose systems for micro-meteorology, air pollution, etc. Effect of static, dynamic, sampling, round-off, and truncation error on data quality; comparison of analog and digital recording techniques. Laboratory (Irreg.)
METR 5613	Satellite Meteorology	Prerequisite: graduate standing or permission of instructor. Survey of satellite meteorology and climatology. History of meteorological satellites, radiation, orbital mechanics, satellite systems and data processing, basic image interpretation, cloud-drift winds, precipitation, temperature soundings, tropical cyclone, mesoscale, and synoptic-scale analysis and forecasting, cloud, water vapor and precipitation climatology, radiation budget. No student may earn credit for both 4613 and 5613. Laboratory (Irreg.)
METR 5643	Physics of Planetary Atmospheres	(Slashlisted with 4643) Prerequisite: C or better in 3113 and 3213, Physics2524, Mathematics 3113, or permission of instructor. This course will provide an integrated overview of planetary sciences, emphasizing planetary formation and evolution, the atmospheres of the planets, and atmosphere/surface interactions. The interrelationships among different systems will be emphasized. The goal is to provide insight on how we decipher details of distant planets, and the differences and similarities among the planets of our solar system. No student may earn credit for both 4643 and 5643. (Irreg.)

METR 5653	Air Pollution Meteorology and Modeling	(Slashlisted with 4653) Prerequisite: Grade of C or better in 3113 and 3213. Presents an overview of atmospheric dispersion problems and relevant weather systems with an emphasis on processes in the atmospheric boundary layer. Basic concepts and theories of turbulent transport and mixing are introduced and different dispersion theories and modeling approaches are discussed. No student may earn credit for both 4653 and 5653. (Irreg.)
METR 5663	Radar Engineering	(Crosslisted with ECE 5663; Slashlisted with 4663) Prerequisite: grade of C or better in Electrical and Computer Engineering 3613, or permission. Introduction to radar system designs and applications with emphasis on weather radar. Radar system architecture and their functionalities and limitations of subsystems are discussed. Theories of radar detection and estimation in a noisy and cluttered environment; existing technologies and advanced techniques to improve radar performance. No student may earn credit in both 4663 and 5663. (F)
METR 5673	Weather Radar Theory and Practice	(Crosslisted with ECE 5673) Prerequisite: grade of C or better in Mathematics 3113 and Physics 2524 or permission. This course provides an introduction to electromagnetic waves and propagation through the atmosphere, radar design trade-offs, antennas, transmitters, and coherent receivers. Analysis of radar signals as noise-corrupted stochastic processes, with emphasis on digital signal processing for Doppler spectrum and moment estimation. Implementation of processing algorithms using actual Doppler radar data. (F)
METR 5683	Weather Radar Applications	(Crosslisted with ECE 5683) Prerequisite: Graduate standing in Meteorology or Engineering, or permission of instructor. Interpretation of meteorological structures using weather radar. Introduces scatter from hydrometeors and refractive index variations. Presentation of quantitative precipitation estimation methods based on the radar reflectivity factor, attenuation, and dual-polarization observations. Also includes the fundamental concepts of clear-air echoes and the estimation of winds under non-precipitation conditions. (Sp)
METR 5713	Private Sector Meteorology	Prerequisite: graduate standing in Meteorology. An overview of private sector meteorology in the United States. Designed to build background knowledge, foster the use of higher-order analytical skills, and further develop communication and presentation skills. The course includes lectures, directed readings, visiting local private sector companies, interviews with practicing meteorologists, and the development of a portfolio about a private sector meteorological company. Students gain experience in applying their meteorological knowledge to a practical problem as might be encountered in professional practice. No student may earn credit for both 4713 and 5713. (Irreg.)
METR 5803	Topics in Applied Meteorology	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit 12 hours. Application of meteorological concepts and information to current environmental and meteorological problems on any scale.
METR 5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
METR 5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
METR 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

METR	5990	Independent Study	1 to 4 hours. Prerequisite: graduate standing, permission of instructor. May be repeated with change of subject matter; maximum credit eight hours for master's degree students. Individual research problems in meteorology, climatology, hydrometeorology, and other areas of the atmospheric and earth sciences. (Irreg.)
METR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
METR	6103	Turbulence	Prerequisite: 5113, Mathematics 3113, 3123 or equivalents. Introduction to the evolution, structure and effects of turbulent flow. Learn to use a variety of theoretical and practical tools of discovery and analysis.
METR	6223	Convective Clouds and Storms	Prerequisite: 5113 or equivalent. Anelastic and Boussinesq equations; Benard convection; plume models; parameterization of cloud microphysics; three-dimensional models; Doppler radar analysis; observations of severe thunderstorms and tornadoes. (Irreg.)
METR	6233	Advanced Cloud Physics	Prerequisite: 5233 and graduate standing, or permission of instructor. The focus is on a very specific aspect of cloud and precipitation physics: the development of various parameterizations of cloud and precipitation microphysical processes and when possible the exploration of the basic theories necessary for their development. (F)
METR	6313	Advanced Data Assimilation Methods: Ensemble Kalman Filter Techniques and Applications	Prerequisite: graduate standing or permission of instructor. Introduction to ensemble Kalman data assimilation techniques (EnKF). Students learn the most popular EnKF techniques through lectures and hands-on project assignments, and also develop skill in scientific thinking and synthesis, written and oral communication and programming throughout the course. (Irreg.)
METR	6333	Numerical Weather Prediction	Prerequisite: 5344 or permission of instructor. Development of accurate, reliable and efficient numerical models for the prediction of weather of all types and scales. Models currently in operation at weather centers in the U.S. and internationally will be analyzed. Students will develop their own code for some simple models to gain hands-on experience. (Sp)
METR	6344	Computational Fluid Dynamics II	Prerequisite: 5113, 5344, permission of instructor. Treatment of advanced numerical techniques and boundary conditions for solving the multi-dimensional unsteady Euler and Navier-Stokes equations. Topics include interpolation and finite volume, Godunov, Roe, positive definite, and flux-corrected/monotone differencing schemes. The formulation and application of adjoint codes for optimization and sensitivity analysis are also examined.
METR	6413	Topics in Advanced Mesoscale Meteorology	Prerequisite: 5113. Research topics in the areas of cyclogenesis, frontogenesis and mesoscale systems. Topics include "IPV thinking" and its application to cyclogenesis; trapped gravity currents and Kelvin waves; the dryline; rainbands in extratropical cyclones; air-sea instability; topographically induced eddies; generalization of the frontogenetical function.
METR	6613	Weather Radar Polarimetry	(Crosslisted with ECE 6613) Prerequisite: graduate standing. Provides fundamentals and principles of weather radar polarimetry through understanding wave scattering and propagation in geophysical media subject to turbulent mixing and filled with hydrometeors and other objects. The relations between polarimetric radar observables and physical parameters will be established. The methods and algorithms for retrieving cloud and precipitation microphysics for weather quantification and forecast will be introduced. (F)
METR	6803	Advanced Selected Topics in Meteorology	Prerequisite: at least 12 hours of graduate work in meteorology or equivalent, permission of instructor. May be repeated with change of subject matter; maximum credit 12 hours. Topics are drawn from areas of atmospheric physics and dynamics of severe storm forecasting, experimental design, eco-meteorology, weather modification or engineering meteorology. (Irreg.)

METR	6902	Professional Perspectives in Meteorology	Prerequisite: Graduate standing. This is a course presented in discussion format to develop the professional preparation of Ph.D. students. Course topics include: professional ethics; career planning; publishing papers, writing successful proposals, succeeding in academia; professional societies and national laboratories; dealing with the press and politicians, leadership and other aspects of the profession. (Irreg.)
METR	6950	Research for Doctoral Dissertation prior to the General Exam	2 to 16 hours. Prerequisite: graduate standing in Meteorology. May be repeated up to 14 times (2 credit hours per semester); 30 credit hours maximum. Applicable for research hours for pre general exam PhD students. (F, Sp, Su)
METR	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
METR	6970	Seminar	1 to 3 hours. Prerequisite: graduate standing and permission. May be repeated with change of subject matter; maximum credit four hours for master's degree, or 10 hours for doctor's degree. (F, Sp)
METR	6980	Research for Doctoral Dissertation	(F, Sp, Su)
METR	6990	Special Problems	1 to 4 hours. Prerequisite: graduate standing, permission of instructor. May be repeated with change of subject matter; maximum credit 12 hours for doctoral students. Individual research problems in meteorology and related areas conducted under faculty supervision. (F, Sp, Su)
MGT	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MGT	2013	Introduction to Management	A survey course covering the fundamental processes of management in terms of planning, organizing, leading and controlling in an organization. This course will not count for credit toward any Price College of Business major. (F, Sp)
MGT	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
MGT	3013	Principles of Organization and Management	Prerequisite: junior standing. An introductory course presenting the basic concepts and practices of management, both private and public. Historical development of management; basic definitions and philosophy; fundamental managerial functions, including planning, organizing, staffing, directing, and controlling; a survey approach to quantification in organizational life; current trends in management; possible future developments in organization and administration. (F, Sp, Su)
MGT	3123	Supervision Skills	Prerequisite: student must be approved for degree candidacy by Price College, or permission. Designed to introduce basic managerial skills required to build personal effectiveness and effective working relationships with employees. Through a variety of teaching methods, students will learn "real world" skills in various types of communication including coaching, motivation, goal setting, and performance feedback. (F, Sp)
MGT	3133	Leadership	Prerequisite: MGT 3013; FIN 3303, L S 3323, MKT 3013 or concurrent enrollment; must be approved for degree candidacy by Price College. This course is designed to expose students to a variety of leadership perspectives and practices in order to enhance individual development and effectiveness as a leader. Focus will be on a repertoire of practical and theoretical leadership principles. This course will offer opportunities for students to improve their leadership skills through exercises and simulations. (F, Sp)

MGT	3153	Organizational Management of Professional Sport	Prerequisite: Student must be approved for degree candidacy by Price College. Study of the management principles of both collegiate and professional athletics. This class will cover the management of every major department of a collegiate athletic department and of a professional sport team. Guest speakers from the industry as well as field trips to witness the operation of a sporting event are a vital part of this class. (F, Sp, Su)
MGT	3163	Licensing and Intellectual Property Management in Sports	Prerequisite: student must be approved for degree candidacy by Price College, MGT 3013 or permission. Provides students with an introductory view into the world of collegiate licensing. This information will be extremely useful in application for all areas within athletics, where an understanding of the principles of intellectual property-specifically trademark law and licensing-will assist in understanding of the happenings within a department or professional organization. (F, Sp)
MGT	3173	Sports Logistics	Prerequisite: student must be approved for degree candidacy by Price College, MGT 3013 or permission. Principles in sports logistics. Instruction emphasizes intercollegiate athletics and deals with practical application. Provides an understanding of all phases of intercollegiate sports logistics. Opportunities for hands-on learning will be provided and guest speakers will be included. (F, Sp)
MGT	3183	What Makes A Team Work	Prerequisite: MGT 3013 and student must be approved for degree candidacy by Price College. Designed to provide students with an opportunity to explore and examine all factors relevant to functioning within a team. This is a course about both principles and applications. A unique focus on the collegiate student athlete experience will serve as a foundational element for the team concepts introduced and taught. (F)
MGT	3193	Sports Marketing and Management	Prerequisite: MGT 3013 and student must be approved for degree candidacy by Price College. This is an introduction to Sports Marketing Management designed to expose students to the concepts of collegiate sports marketing while giving a real world, behind the scenes exposure to managing a major college athletics department through the marketing side of the industry. This course will explore the real world issues in sports marketing and give the student the play-by-play with how the Oklahoma Athletics Marketing Department operates to achieve it's goals. (F, Sp)
MGT	3363	Organizational Behavior	Prerequisite: student must be approved for degree candidacy by Price College, MGT 3013, or permission. Covers the structure of organizations and the dynamics of behavior within organizations. Included are such topics as job design, perception, communication, decision making, motivation, groups, leadership, and organizational change and effectiveness. (F, Sp, Su)
MGT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MGT	3513	Human Resource Management Practice	Prerequisite: student must be approved for degree candidacy by Price College, MGT 3013 or permission. A survey course that focuses on developing students' understanding of human resource issues and the practical application of methods for solving these issues. Topics covered include job analysis, recruitment, interviewing, selection, performance appraisal, training, compensation, and equal employment opportunity. Issues are reviewed within the context of historical and current social, labor market, legal and global economic conditions influencing practice. (F, Sp, Su)

MGT	3700	Management Internship for Credit	1 to 3 hours. Prerequisite: student must be approved for degree candidacy by Price College; permission showing approval from the designated faculty or advisor overseeing internships for credit; MGT 3013. The internship experience will provide students with the opportunity to work in positions related to their field of study and to gain valuable professional experience while enhancing their academic career. An internship normally covers one academic semester and may be either paid or unpaid. (F, Sp, Su)
MGT	3710	Topics in Management	1 to 3 hours. Prerequisite: student must be approved for degree candidacy in Price College of Business. May be repeated; maximum credit nine hours. Permits students to study topics in management not included in standard course offerings. Subject of course will vary. (F, Sp, Su)
MGT	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to study materials not usually presented in regular courses. (F, Sp, Su)
MGT	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MGT	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MGT	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MGT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MGT	4123	Labor Management Relations	Prerequisite: student must be approved for degree candidacy by Price college, all 3000-level Business core courses, MGT 3513 or permission. Survey of history and theory of trade union, labor law, factors in the labor market, contract negotiations and administration. Identification and definition of the role of management, unions and government in the industrial relations process. (F, Sp)
MGT	4153	Current Issues in Human Resource Management	Prerequisite: student must be approved for degree candidacy by Price College; completion of 3000-level Business core; MGT 3513 or permission. An in-depth coverage of selected human resource issues. Issues covered include human resource costing, equal employment opportunity, recruiting, interviewing, selection, training and development, and performance appraisal. Focus is on the application of research results to problems and opportunities presently confronting human resource practices. (Sp)
MGT	4173	Sports Management Practicum	Prerequisite: MGT 3013, MGT 3153, LS 3323 and FIN 3303, MKT 3013. The course is designed to allow students to both gain conceptual knowledge of project management and to conduct a semester length project for a professional or intercollegiate sports organization. (F, Sp)
MGT	4183	Negotiation	Prerequisite: Business major and junior standing. This course explores the principles behind effective negotiation and mediation while helping students develop and refine their own unique styles. Students will learn negotiation strategies in a non-threatening classroom context. The readings and lectures will provide students with a framework for analyzing negotiations and tools and concepts useful in negotiating more effectively. (F, Sp)

MGT	4323	Cross-Cultural Issues Of Managerial Behavior	Prerequisite: student must be approved for degree candidacy by Price College; completion of 3000-level Business core; B AD 3513, or permission. Introduces students to the work values and behaviors of individuals in countries around the world. Some of the topics covered in the cross-cultural comparisons discussed in this will include: approaches to motivation, communication decision-making and negotiation. Particular emphasis will be placed on the developed and developing regions of the world that are important participants in today's global economy. (F, Sp)
MGT	4373	Compensation Issues in Management	Prerequisite: 3513. Designed to help future managers understand and use human resource compensation systems. Students will be exposed to theories from labor economics and psychology that guide modern compensation systems. Compensation practices covered include job analysis, relevant legislation design, limited financial resources. (F, Sp)
MGT	4710	Special Problems in Management	1 to 3 hours. Prerequisite: junior standing and permission. May be repeated with change of subject matter; up to six hours with 18-hour major and three hours with 15-hour major. (F, Sp, Su)
MGT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MGT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MGT	4973	International Human Resource Management	Prerequisite: student must be approved for degree candidacy by Price College; completion of 3000-level Business core or permission. Aspects of managing people in the global workplace. Caters to students aspiring to become either global managers who work for multi-national corporations located in different countries or managers who work for diversified enterprises with plants and branches in different locations. Covers global HR issues arising in relation to the management of workforces functioning in cross-cultural operating contexts. (F, Sp, Su)
MGT	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MGT	5113	Organizational Behavior and Administration	Prerequisite: graduate standing and permission of the Director of CBA Graduate Programs. Explores the factors that affect human behavior in organizational settings by examining the impact of alternative administrative practices on organizational effectiveness and member satisfaction. Topics include: perception, motivation, communication, decision-making, groups, leadership and organizational development. (Sp)
MGT	5323	Business Government and Society	Prerequisite: Permission of instructor. An examination of business in society and the interaction of business with the economic, ethical, global, political-legal, social and technological environments. The course also addresses emerging issues which are likely to affect the conduct of business in the future. (Irreg.)
MGT	5702	Organizational Behavior	Prerequisite: graduate standing. Concepts and theories of organizational behavior and human resources management for MBA's. (Irreg.)
MGT	5712	Negotiation and Leadership	Prerequisite: graduate standing. Theoretical understanding and skill development necessary for effective negotiations and leadership in organizational settings. (Irreg.)

MGT	5732	Consulting Skills	Prerequisite: graduate standing and 5702. This is the first of a two-course sequence examining organizational consulting (the other being 5743). The course has two principal goals. First, it is designed to introduce students to the skills needed to be effective at consulting as either an external management consultant or as an employee working inside a company. In particular, students will be introduced to the basics of management consulting (internal and external), including understanding the phases of the consulting cycle, tailoring consulting approaches to various situations, and conducting meetings and working in teams with clients. Second, it seeks to introduce students to consulting as an industry and a potential career choice. The course is designed to provide a framework for understanding the art and science of providing management counsel to client organization in the public and private sector. (Irreg.)
MGT	5742	Consulting Practicum	Prerequisite: graduate standing and 5732. This is the second of a two-course sequence examining organizational consulting (the other is 5732). This course is designed to give students applied consulting project experience while providing a valuable service to the business community. Students will work in teams of two to five on significant business projects under the guidance of the course instructor. Consulting projects may originate from large corporations, non-profit and government agencies, small businesses, entrepreneurs, and may include projects derived from students former, current, or future employers. The course is designed to help students develop and practice the skills needed to be effective at consulting as either an external management consultant or as an employee working inside a company. (Irreg.)
MGT	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MGT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MGT	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. The only passing grade given is the neutral grade of S. (F, Sp, Su)
MGT	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MGT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MGT	6213	Seminar in Strategic Management	Prerequisite: graduate standing and permission of director CBA graduate programs. Reviews the major theories, concepts and frames of reference regarding strategic management. (Irreg.)
MGT	6253	Seminar in Organizational Theory	Prerequisite: graduate standing. A consideration of major topics in organization structure and macroorganization theory. Emphasis will be given to applications in a wide variety of organizational and administrative contexts. (F, Sp)
MGT	6273	Seminar in Organizational Behavior	(Crosslisted with MKT 6273) Prerequisite: graduate standing and admission to the PhD program in the Price College of Business. Addresses personal and interpersonal issues in marketing and management. Application of social science theory to explain the behavior of organization members. (F, Sp)
MGT	6293	Seminar in Strategic Management	(Crosslisted with MKT 6293) Prerequisite: graduate standing and permission of director CBA graduate programs. Reviews the major theories, concepts, and frames of reference regarding strategic management. (Irreg.)

MGT	6503	Development of Management Thought	Prerequisite: graduate standing and permission. A history of the significant contributions to management theory and practice includes management concepts as they developed in light of the economic, social and political environment of management. (F)
MGT	6960	Readings in Selected Fields of Management	1 to 4 hours. Prerequisite: 12 hours of management, graduate standing and permission. Guided reading in selected fields of management theory and application, conducted on a conference basis by staff. Scope of reading and credit to be arranged on entry into course. The only passing grade in this course is the neutral grade of S. (F, Sp, Su)
MGT	6963	Seminar in Human Resources Management	Prerequisite: graduate standing and permission of instructor. Introduces doctoral-level students to major areas within the field of human resources management (HRM). Students will review and critique the literature in these selected areas and develop ideas for future research that further our understanding of HRM issues in organizations. The topics and readings covered in this course are not exhaustive, but are representative of HRM research. (Irreg.)
MGT	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MGT	6973	Seminar	Prerequisite: graduate standing and permission. May be repeated with change of topic; maximum credit 12 hours. A seminar for graduate students with topics to be announced each time course is offered. (F, Su)
MGT	6980	Research for Doctoral Dissertation	Research for Doctoral Dissertation. (F, Sp, Su)
MGT	6983	Research Methods and Design	Prerequisite: graduate standing and permission of instructor. Survey of research design and methods issues. Designed to introduce the Ph.D. student to the broad range of issues from the idea creation to publishing. Topics include theory, models, designs, data, measurement, data collection, analysis, theory development to academic writing and ethical issues. (Irreg.)
MGT	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MIS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MIS	2113	Computer-Based Information Systems	Prerequisite: undergraduate major in Business, B AD 1001. Covers theory and practice for design and use of computer-based information systems in organizations. Project work includes using a relational database and designing a personal web page. Students demonstrate their ability to use a personal computer for word-processing, spreadsheet, database, and presentation applications by passing a competency exam. (F, Sp, Su)
MIS	2970	Special Topics/Seminar	1 to 6 hours. May be repeated with change of content; maximum credit six hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MIS	3013	Introduction to Programming	Prerequisite: 2113 and junior standing. Introduce the basic principles of programming and design. Topics covered are language syntax, algorithm, development, logic structures, arrays and math function. (F, Sp)

MIS	3033	Non-Procedural Programming Languages	Prerequisite: student must be approved for degree candidacy by Price College, MIS 2013 or MIS 3013; and MIS 3353 or concurrent enrollment. May be repeated once with change of topic; maximum credit six hours. Various emerging programming languages and tools relevant to MIS applications. The basic syntax, code construction, and Object-oriented programming concepts and the business use of programming languages will be covered. Possible languages could include Visual Basic in the .Net framework, Java, and C#. (F, Sp)
MIS	3213	Business Data Analysis	Prerequisite: student must have been approved for degree candidacy by Price College. This course will cover the use of end user computing tools such as spreadsheets to analyze various business problems. Examples will come from application areas of business including finance, accounting, marketing and management. The course will introduce fundamental principles of business analysis and computer programming to develop solutions. (F, Sp)
MIS	3223	Financial Data Modeling	Prerequisite: student must have been approved for degree candidacy by Price College; FIN 3303 or concurrent enrollment, or permission. Covers the use of MS Excel as an end-user computing tool to analyze financial models. Much of course deals with Visual Basic for applications and Excel macros, so student should expect a heavy dose of computer programming. Students may not receive credit for both 3213 and 3223. (F, Sp)
MIS	3353	Accounting Information Systems/Databases	(Crosslisted with ACCT 3353) Prerequisite: Student must be approved for degree candidacy by Price College, or permission. A study of the structure, flow and use of financial and non-financial data in computer-based environments with a heavy emphasis on ensuring data integrity. Conceptual data modeling using business rules, normalization, structured query language (SQL), and physical database design and data administration. Course includes cross-functional team project with phased deliverables. (F, Sp)
MIS	3363	Information Systems Infrastructure	Prerequisite: 2113. Study of information system architecture including networks, processors, clients, operating systems, middleware, database management systems, information warehouses, groupware, EDI, DSS, systems management, interoperability, benchmarking, security, and disaster protection. The focus in to enable the student to understand, design, and analyze current and proposed information technology configurations. (F, Sp)
MIS	3373	Systems Analysis and Design Theory	Prerequisite: 3353 or permission. A study of the structure and application of tools, technologies, and models for analyzing, designing, and evaluating information systems. Topics include: case tools, structured analysis, I/O design, rapid application development, simulation models, prototyping, human factors, alternatives, cost/benefit analysis, recommendations for a new system, implementation and post-evaluation. (F, Sp)
MIS	3383	Electronic Business	Prerequisite: Student must be approved for degree candidacy by Price College or permission. The application of information technology in enabling business processes (e.g., supply chain management and customer relationship management) across business enterprises. The course will cover applicable business domains as well as enabling technological infrastructures and functional software technologies. (F, Sp)
MIS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MIS	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to study materials not usually presented in regular courses. (F, Sp)

MIS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MIS	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
MIS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MIS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MIS	4363	Business Infrastructure and Cyber Security	(Crosslisted with B AD 4363 and HCB 4363) Prerequisites: junior standing, senior standing; MIS 2113; MGT 3013; MKT 3013; LS 3323; FIN 3303. Focuses on the foundation concepts necessary to gain an understanding of the industry, data communications and telecommunications networks and cyber security concepts. Key topic areas of the course are: OSI and Internet network models, Standards & Protocols, Business Infrastructure Design (LAN, WLAN, Backbone Networks, WAN, Connection to the Internet), Cyber Security Concepts, Basic technical and managerial aspects of business infrastructure, Practitioners concerns and perspectives. (F, Sp)
MIS	4433	Project Management	Prerequisite: FIN 3303; MGT 3013; MKT 3013 and LS 3323. Presents the technical, managerial and organizational concepts and tactics associated with managing software development and/or acquisition projects. A project management software tool will be introduced and used at a very basic level. (Irreg.)
MIS	4443	Advanced Database Management	Prerequisite: 3353. Advanced topics in database design and management such as data administration, security, multi-user access, file organization, and backup and recovery procedures. (F, Sp)
MIS	4453	Technology Management	Prerequisite: student must be approved for degree candidacy by Price College, all 3000-level Business core courses, or be upper-division student in the College of Engineering. This course examines current issues and approaches to the management of technology. Using case studies, assigned readings and class discussions, students will examine the complexity of issues involved in the management of technology. An underlying theme of this course is that the successful management of technology rest on understanding of a number of issues, including the nature of competition, the interaction of new technologies with existing technologies, the evolution of markets and the processes through which organizations generate and absorb technological innovations. (F, Sp)
MIS	4663	MIS Field Project	Prerequisite: MIS 3033 or concurrent enrollment in MIS 3033, MIS 3373 or concurrent enrollment in MIS 3373. Involves a field project for a client-business firm or other organization. Students will work closely with their client; perform an analysis, provide design alternatives, evaluate alternatives, develop and demonstrate a working model (prototype) of a part of the system, prepare a recommendation, and make a formal presentation to their client. (F, Sp)
MIS	4702	Mobile Application Development	Prerequisite: MIS 3013; MGT 3013; MKT 3013; LS 3323; FIN 3303. Students will learn elements of good interface design for mobile devices, get an overall view of mobile app development, and build their own basic mobile app. (F, Sp)
MIS	4710	Topics in Management Information Systems	1 to 3 hours. Prerequisite: 2113, 3013 or 3033, or permission. May be repeated once with change of topic; maximum credit six hours. Topics may include any MIS related area; offered at the request of a faculty member with division approval. (Irreg.)

MIS	4722	Information Security	(Slashlisted with 5722) Prerequisite: MIS 3013; MGT 3013; MKT 3013; LS 3323; FIN 3303. The course covers the essentials of information security using a hands-on approach. Students will learn how computer security breaches occur and apply concepts learned in an isolated lab environment. No student may earn credit for both 4722 and 5722. (F, Sp)
MIS	4960	Directed Readings in Management Information Systems	1 to 3 hours. Prerequisite: 2113, 3013 or 3033, or permission. May be repeated once with change of topic; maximum credit six hours. Topics in the management of information systems. (F, Sp, Su)
MIS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MIS	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MIS	5013	Introduction to Programming	Prerequisite: graduate standing. The Visual Basic programming language is used to teach business computer programming using a visual programming approach. It includes fundamental programming principles for event-driven programming. No student may earn credit for both 3013 and 5013. (F, Sp)
MIS	5303	E-Business Architectures	Prerequisite: MIS 5602. A study of the basic concepts of telecommunications and distribution processing and their applications to e-business. Focus is on managerial issues related to telecommunications. (Irreg.)
MIS	5423	Expert Systems/Artificial Intelligence	Prerequisite: 5003 or B AD 5153. A study of the use of expert systems and artificial intelligence. Topics include what-if analysis, knowledge engineering, artificial intelligence models, and management science models. Students design, build and evaluate actual expert systems and write a paper. No student may earn credit for both 4423 and 5423. (Irreg.)
MIS	5602	Management Information Systems	Prerequisite: graduate standing. This course examines the role of information technology, and its management, in supporting an organization's (internally- and externally-focused) operations and strategies. Particular attention is given to issues associated with the funding and building of business and technology architectures to enable efficient, effective, and adaptable operational, tactical and strategic actions. (Irreg.)
MIS	5603	Advanced Database Management	Prerequisite: 5003, 5113. Covers the principles of design, use, and management of database technology including data warehouses from a manager's perspective. Involves a number of exercises using a multi-user relational database management system and associated tools to address typical business problems. (F)
MIS	5612	Database Design and Administration	Prerequisite: graduate standing. This course is concerned with the design and governance of organizational data and its use. In this module, students will learn about the roles of database designers and administrators. Along the way, students will learn about the modeling techniques used by database designers to develop organizational databases and the standard language used to interface with databases. (Irreg.)
MIS	5622	Systems Analysis and Design	Prerequisite: graduate standing and 5612. System analysis and design is concerned with bringing all of a system's components together: data, software, hardware, people, procedures, etc. The student will learn about the roles of systems analysts during systems development. In particular, this course focuses on the analysis, design, implementation, and maintenance of information systems. Along the way, students will learn about the tools, techniques, and methodologies used by analysts to develop information systems in organizations. (Irreg.)

MIS	5632	Technology and Innovation Management	Prerequisite: graduate standing and 5602. Examines current issues and approaches to the management of technological innovation. Using case studies, assigned readings and class discussions, students will examine the complexity of issues involved in the management of technological innovation. An underlying theme of this course is that the successful management of technological innovation rests on an understanding of a number of issues, including the nature of competition, the interaction of new technologies with existing technologies, the evolution of markets and the processes through which organizations generate and absorb technological innovations. (Irreg.)
MIS	5642	Information Technology Management	Prerequisite: MIS 5602 or 5622, and graduate standing. Examines current issues and approaches to the management of information technology. Using case studies, assigned readings and class discussions, students will examine the complexity of issues involved in the management of IT. The underlying theme of this course is that it is deeply intertwined with every aspect of organizations and that effective management of IT requires a deep understanding of the internal and external aspects of organizations. The course will draw upon concepts in strategy, organization behavior and management to address issues in the effective management of IT. (Irreg.)
MIS	5652	Knowledge Management in Organizations	Prerequisite: graduate standing. Study of knowledge management from a variety of perspectives -- historical, social, technical, managerial. Review of problems, opportunities, and events providing the impetus for focus on knowledge management. Explores various technologies that support knowledge management. Consideration of the social implications of knowledge management. However, our focus will be on the three critical elements in knowledge management-people, processes, and technology. Explores practices entailed in developing a knowledge infrastructure, valuing knowledge assets, managing the interaction of knowledge and people, leveraging teams, knowledge across organizations, managing people to facilitate effective knowledge sharing and use. (Irreg.)
MIS	5662	Project Management	Prerequisite: MIS 5602 or MIS 5622 and graduate standing. Focus on managing projects, including their implementation within an organization. A project is a complex, non-routine, one-time effort limited by time, budget, resources, and performance specifications designed to meet customer needs. The characteristics make project management a particularly challenging management task. Project management concepts apply to many other types of organizational activities, e.g., managing task forces and committees. Planning, organizing, staffing and controlling projects require traditional management skills, an understanding of quality assurance techniques, and an appreciation of the unique challenges of managing projects. (Irreg.)
MIS	5672	IT-Enabled Business Processes	Prerequisite: graduate standing and 5602. Covers the business strategies and the technologies associated with the B2B space and the crucial role served by business processes in enabling business-to-business interaction. At the end of the course the students should understand the key issues and trends regarding B2B and business process strategies; As a consequence, the students should be able to contribute to the resolution of associated strategic and tactical decisions and to learn more about these issues on their own. (Irreg.)
MIS	5682	Business Data Analysis	Prerequisite: graduate standing. Surveys analysis tools available in Excel relevant to business decision-making. The objective of the course is to be aware and comfortable with analytical techniques used for knowledge discovery, and to understand the power and potential of these tools in business settings. Also examines illustrations and applications across different functional areas. (Irreg.)

MIS	5692	E-Business Architecture (ERP)	Prerequisite: MIS 5602 or MIS 5622 and graduate standing in Price College of Business. Introduces students to enterprise systems and provides an overview of the managerial and technical issues in planning, designing, implementing, and extending enterprise system and technologies. Focus of the course is managerial with some technical content and several hand-on exercises involving enterprise software from the industry leader SAP. (Irreg.)
MIS	5712	Advanced Financial Data Modeling	Prerequisite: graduate standing, MIS 5602 and FIN 5312 or permission of instructor. An MIS course designed for students wishing to develop models in finance. Much of the course will involve developing and writing computer programs for spreadsheets. Develop models for financial planning, financial statement modeling, stock portfolio analysis and financial options using Excel VBA. (Sp)
MIS	5722	Information Security	(Slashlisted with 4722) Prerequisite: Graduate Standing. The course covers the essentials of information security using a hands-on approach. Students will learn how computer security breaches occur and apply concepts learned in an isolated lab environment. No student may earn credit for both 4722 and 5722. (F)
MIS	5732	Management of Business Intelligence	Prerequisite: graduate standing, MIS 5602 and MIS 5612, or permission of instructor. This course will adopt a managerial perspective to recognizing the role of Business Intelligence and provide practical hands-on experience. Course sessions will help students understand how organizations could develop strategies to discover patterns in data and use this to compete in the global marketplace. (Sp)
MIS	5742	Data Science and Analytics	Prerequisite: graduate standing, MIS 5602 and MIS 5612, or permission of instructor. Students will compare and experience data science tools along with the newer tools and methods of analytics, with the goal of becoming knowledgeable in both sets of tools. (Sp)
MIS	5772	Principles of Data Warehousing	Prerequisite: graduate standing and 5612. Covers the fundamentals of developing and using a data warehouse. Students will learn to develop requirements, create a dimensional model and generate population and maintenance plans for a warehouse. Students will also learn to manipulate the data in the warehouse for update, maintenance and data extraction. The tools students will use are SQL and SAS. May also include demonstrations by various industry partners of other major warehouse products. (Irreg.)
MIS	5782	Advanced Database Management	Prerequisite: graduate standing and 5612. Builds on concepts--related to database design and systems analysis--learned in the respective introductory MIS courses. Initially, the focus is on providing a deeper understanding of the relational database model. Later, the focus shifts to integrating relational databases with the web. A central experiential element includes the design and development of web-enabled databases. Various tools such as HTML, SQL, and ASP (based on VBScript) will be reviewed and hands-on experience will be provided. Some exposure to ASP.net and XML will also be included. Students must have a basic understanding of course database concepts including ERDS and Database design. Basic knowledge of SQL and HTML is helpful for understanding the concepts. (Irreg.)
MIS	5792	Systems Architecture and Design	Prerequisite: graduate standing and 5622. Simulation of the real-world experience of a computer-based information system creation project. Students work as teams to deepen and refine their skills by undertaking a field project. The project is in an actual organization to carry out the analysis and design project specified by the client. Clients are functional managers or information systems personnel with responsibility for the problem area. Students are expected to demonstrate a high level of professional performance, appearance, demeanor, and courtesy when working with clients. (Irreg.)

MIS	5950	Special Topics	1 to 3 hours. Prerequisite: 5003, 5113. May be repeated with change of content; maximum credit twelve hours. A study of current research and practice in information technology. (Irreg.)
MIS	5960	Directed Readings	Prerequisite: graduate standing. 1 to 3 hours. May be repeated with change of topic; maximum credit six hours. Topics in management information systems. (Irreg.)
MIS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MIS	5973	Topics in Information Systems	Prerequisite: 5003. May be repeated with change of content; maximum credit twelve hours. A study of current research and practice in information technology. (Irreg.)
MIS	5980	Research for Master's Thesis	Prerequisite: MIS 5622 and instructor permission, graduate standing. Variable enrollment, two to nine hours; maximum credit applicable toward degree, three hours. Acquaints students with the research process. Students propose research project, and then conduct the research including but not limited to, performing a literature review, collecting and analyzing data, and writing the thesis prior to the end of the semester. (F, Sp)
MIS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MIS	5993	System Design and Implementation	Prerequisite: MIS 5612 and MIS 5622 and permission. Course has several diverse and sometimes apparently conflicting objectives: (1) reinforce, integrate and apply the knowledge and skills covered in the MIS curriculum, (2) develop additional skills needed for the analysis and design of an actual computer-based system with a client, and (3) deliver a useful project to the client. (Irreg.)
MIS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MIS	6713	Cognition and Decision Making in Management Information Systems	Prerequisite: graduate standing. May be repeated; maximum credit nine hours. Ph.D. seminar addressing issues of cognition and decision making in information technology enabled settings. The course focuses on these issues in an organizational setting and considers cognition and decision making at the individual, group, and organizational levels. Topics may include: fundamental theories of cognition and decision making; technology support and influence on decision making and cognition; mechanisms to coordinate cognition across individuals, groups and organizations. (Irreg.)
MIS	6733	Governance and Control	Prerequisite: PhD program, Price College of Business. Examines theories and empirical research regarding the governance and control (G&C) in organizations, with special attention to the role of technology in G&C equations. The assigned readings sample the arena of governance and control and should provide students with the range of topics that are informed and influenced by the arena as well as exposure to the state-of-the-art in theory and empirics of governance and control. (Irreg.)
MIS	6743	Computer-Mediated Communication and Decision Making	Prerequisite: graduate standing. Examines theories and research on how communication and decision making are increasingly being mediated through information technologies. Behaviors by individuals, within groups, and within and across organizations will be studied. (Su)

MIS	6753	The Science and Analytics of Human-Technology Interactions	Prerequisite: Graduate Standing. Attention will be focused on research relating to interactions between Humans and Information Technology (IT) artifacts, to identify facets that make these interactions productive and enjoyable. The course goals will be to get familiar on the theory foundations that help the science of HTI, become skilled in the use of data analytics tools, and complete a limited research study. Class discussions will span a broad range of topics that include among others, the science of human-technology interactions, visualization of data, designs of visual displays, support for employee's learning of IT, and gamification of HTI interactions. (F)
MIS	6960	Directed Readings in MIS	1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated as needed by Ph.D. students; maximum credit twelve hours. A study of current research and practice in information technology. (F, Sp, Su)
MIS	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MIS	6973	Seminar in Management Information Systems	Prerequisite: graduate standing. Covers topics from current research in information systems. May be repeated three time with change of content. (Irreg.)
MIS	6980	Research for Doctoral Dissertation	1 to 3 hours. Prerequisite: permission of instructor. Research for doctoral dissertation. (F, Sp, Su)
MIS	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MIT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MIT	5303	E-Business Architectures	Prerequisite: MIT 5602. A study of the basic concepts of telecommunications and distribution processing and their applications to e-business. Focus is on managerial issues related to telecommunications. (Irreg.)
MIT	5602	Management Information Systems	Prerequisite: graduate standing. This course examines the role of information technology, and its management, in supporting an organization's (internally- and externally-focused) operations and strategies. Particular attention is given to issues associated with the funding and building of business and technology architectures to enable efficient, effective, and adaptable operational, tactical and strategic actions. (Irreg.)
MIT	5612	Database Design and Administration	Prerequisite: graduate standing. This course is concerned with the design and governance of organizational data and its use. In this module, students will learn about the roles of database designers and administrators. Along the way, students will learn about the modeling techniques used by database designers to develop organizational databases and the standard language used to interface with databases. (Irreg.)
MIT	5622	Systems Analysis and Design	Prerequisite: graduate standing and MIT 5612. System analysis and design is concerned with bringing all of a system's components together: data, software, hardware, people, procedures, etc. The student will learn about the roles of systems analysts during systems development. In particular, this course focuses on the analysis, design, implementation, and maintenance of information systems. Along the way, students will learn about the tools, techniques, and methodologies used by analysts to develop information systems in organizations. (Irreg.)

MIT	5632	Technology and Innovation Management	Prerequisite: graduate standing and MIT 5602. Examines current issues and approaches to the management of technological innovation. Using case studies, assigned readings and class discussions, students will examine the complexity of issues involved in the management of technological innovation. An underlying theme of this course is that the successful management of technological innovation rests on an understanding of a number of issues, including the nature of competition, the interaction of new technologies with existing technologies, the evolution of markets and the processes through which organizations generate and absorb technological innovations. (Irreg.)
MIT	5642	Information Technology Management	Prerequisite: MIT 5602 or 5622, and graduate standing. Examines current issues and approaches to the management of information technology. Using case studies, assigned readings and class discussions, students will examine the complexity of issues involved in the management of IT. The underlying theme of this course is that it is deeply intertwined with every aspect of organizations and that effective management of IT requires a deep understanding of the internal and external aspects of organizations. The course will draw upon concepts in strategy, organization behavior and management to address issues in the effective management of IT. (Irreg.)
MIT	5652	Knowledge Management in Organizations	Prerequisite: graduate standing. Study of knowledge management from a variety of perspectives -- historical, social, technical, managerial. Review of problems, opportunities, and events providing the impetus for focus on knowledge management. Explores various technologies that support knowledge management. Consideration of the social implications of knowledge management. However, our focus will be on the three critical elements in knowledge management-people, processes, and technology. Explores practices entailed in developing a knowledge infrastructure, valuing knowledge assets, managing the interaction of knowledge and people, leveraging teams, knowledge across organizations, managing people to facilitate effective knowledge sharing and use. (Irreg.)
MIT	5662	Project Management	Prerequisite: MIT 5602 or MIT 5622 and graduate standing. Focus on managing projects, including their implementation within an organization. A project is a complex, non-routine, one-time effort limited by time, budget, resources, and performance specifications designed to meet customer needs. The characteristics make project management a particularly challenging management task. Project management concepts apply to many other types of organizational activities, e.g., managing task forces and committees. Planning, organizing, staffing and controlling projects require traditional management skills, an understanding of quality assurance techniques, and an appreciation of the unique challenges of managing projects. (Irreg.)
MIT	5672	IT-Enabled Business Processes	Prerequisite: graduate standing and MIT 5602. Covers the business strategies and the technologies associated with the B2B space and the crucial role served by business processes in enabling business-to-business interaction. At the end of the course the students should understand the key issues and trends regarding B2B and business process strategies; As a consequence, the students should be able to contribute to the resolution of associated strategic and tactical decisions and to learn more about these issues on their own. (Irreg.)
MIT	5682	Business Data Analysis	Prerequisite: graduate standing. Surveys analysis tools available in Excel relevant to business decision-making. The objective of the course is to be aware and comfortable with analytical techniques used for knowledge discovery, and to understand the power and potential of these tools in business settings. Also examines illustrations and applications across different functional areas. (Irreg.)

MIT	5692	E-Business Architecture (ERP)	Prerequisite: MIT 5602 or 5622 and graduate standing in Price College of Business. Introduces students to enterprise systems and provides an overview of the managerial and technical issues in planning, designing, implementing, and extending enterprise system and technologies. Focus of the course is managerial with some technical content and several hand-on exercises involving enterprise software from the industry leader SAP. (Irreg.)
MIT	5702	Social Analytics	Prerequisite: MIS 5682 or instructor permission. Introduce students to analytic and visualization techniques required for processing social and social media data. (Sp)
MIT	5712	Advanced Financial Data Modeling	Prerequisite: graduate standing, MIT 5602 and FIN 5312 or permission of instructor. An MIS course designed for students wishing to develop models in finance. Much of the course will involve developing and writing computer programs for spreadsheets. Develop models for financial planning, financial statement modeling, stock portfolio analysis and financial options using Excel VBA. (Sp)
MIT	5732	Management of Business Intelligence	Prerequisite: graduate standing, MIT 5602 and MIT 5612, or permission of instructor. This course will adopt a managerial perspective to recognizing the role of Business Intelligence and provide practical hands-on experience. Course sessions will help students understand how organizations could develop strategies to discover patterns in data and use this to compete in the global marketplace. (Sp)
MIT	5742	Data Science and Analytics	Prerequisite: graduate standing, MIT 5602 and MIT 5612, or permission of instructor. Students will compare and experience data science tools along with the newer tools and methods of analytics, with the goal of becoming knowledgeable in both sets of tools. (Sp)
MIT	5772	Principles of Data Warehousing	Prerequisite: graduate standing and MIT 5612. Covers the fundamentals of developing and using a data warehouse. Students will learn to develop requirements, create a dimensional model and generate population and maintenance plans for a warehouse. Students will also learn to manipulate the data in the warehouse for update, maintenance and data extraction. The tools students will use are SQL and SAS. May also include demonstrations by various industry partners of other major warehouse products. (Irreg.)
MIT	5782	Advanced Database Management	Prerequisite: graduate standing and MIT 5612. Builds on concepts--related to database design and systems analysis--learned in the respective introductory MIS courses. Initially, the focus is on providing a deeper understanding of the relational database model. Later, the focus shifts to integrating relational databases with the web. A central experiential element includes the design and development of web-enabled databases. Various tools such as HTML, SQL, and ASP (based on VBScript) will be reviewed and hands-on experience will be provided. Some exposure to ASP.net and XML will also be included. Students must have a basic understanding of course database concepts including ERDS and Database design. Basic knowledge of SQL and HTML is helpful for understanding the concepts. (Irreg.)
MIT	5792	Systems Architecture & Design	Prerequisite: graduate standing and MIT 5622. Simulation of the real-world experience of a computer-based information system creation project. Students work as teams to deepen and refine their skills by undertaking a field project. The project is in an actual organization to carry out the analysis and design project specified by the client. Clients are functional managers or information systems personnel with responsibility for the problem area. Students are expected to demonstrate a high level of professional performance, appearance, demeanor, and courtesy when working with clients. (Irreg.)
MIT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

MIT	5993	System Design and Implementation	Prerequisite: MIT 5612 and MIT 5622 and permission. Course has several diverse and sometimes apparently conflicting objectives: (1) reinforce, integrate and apply the knowledge and skills covered in the MIS curriculum, (2) develop additional skills needed for the analysis and design of an actual computer-based system with a client, and (3) deliver a useful project to the client. (Irreg.)
MIT	6713	Cognition and Decision Making in Management Information Systems	Prerequisite: graduate standing. May be repeated; maximum credit nine hours. Ph.D. seminar addressing issues of cognition and decision making in information technology enabled settings. The course focuses on these issues in an organizational setting and considers cognition and decision making at the individual, group, and organizational levels. Topics may include: fundamental theories of cognition and decision making; technology support and influence on decision making and cognition; mechanisms to coordinate cognition across individuals, groups and organizations. (Irreg.)
MIT	6733	Governance and Control	Prerequisite: PhD program, Price College of Business. Examines theories and empirical research regarding the governance and control (G&C) in organizations, with special attention to the role of technology in G&C equations. The assigned readings sample the arena of governance and control and should provide students with the range of topics that are informed and influenced by the arena as well as exposure to the state-of-the-art in theory and empirics of governance and control. (Irreg.)
MIT	6743	Computer-Mediated Communication and Decision Making	Prerequisite: graduate standing. Examines theories and research on how communication and decision making are increasingly being mediated through information technologies. Behaviors by individuals, within groups, and within and across organizations will be studied. (Su)
MIT	6753	The Science and Analytics of Human-Technology Interactions	Prerequisite: Graduate Standing. Attention will be focused on research relating to interactions between Humans and Information Technology (IT) artifacts, to identify facets that make these interactions productive and enjoyable. The course goals will be to get familiar on the theory foundations that help the science of HTI, become skilled in the use of data analytics tools, and complete a limited research study. Class discussions will span a broad range of topics that include among others, the science of human-technology interactions, visualization of data, designs of visual displays, support for employee's learning of IT, and gamification of HTI interactions. (F)
MIT	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MKT	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MKT	2013	Introduction to Marketing	Prerequisite: sophomore standing. This course for non-Business majors explores real-world business marketing trends, principles, terminologies and issues. Not open to Business majors and may not count toward degree requirements for the BBA degree. (F, Sp)
MKT	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
MKT	3013	Principles of Marketing	Prerequisite: Economics 1113, 1123, Accounting 2113, 2123, junior standing. Focuses on the relationship between the firm and its customers and the other members of the channel of distribution. Introduces students to: the marketing function of an organization; the environmental factors influencing marketing decisions; the discovery of market opportunities; the development of marketing strategy; and the development of marketing programs. (F, Sp, Su)

MKT	3053	Marketing Research	Prerequisite: Student must be approved for degree candidacy in the Price College of Business, 3013 or concurrent enrollment. This course provides students with an understanding or the role of marketing research in organizations and how marketing research is implemented. Students will learn the value of primary and secondary data, become familiar with methods for data collection and analysis, and understand how research errors can be reduced or avoided. The course is designed to further students' professional development by enhancing their ability to work in teams and effectively communicate facts and opinions to solve business problems. This course assumes an understanding of basic statistics and spreadsheets. (F, Sp)
MKT	3223	Logistics Management	(Crosslisted with SCM 3223) Prerequisite: Student must be approved for degree candidacy by Price College, 3013 or concurrent enrollment. The physical supply and distribution function in business management, including channel selection, transportation, facility location and materials management; concentrates on the analytical and managerial methods necessary for the development and control of an integrated logistics system. (F, Sp)
MKT	3313	Electronic Marketing	Prerequisite: Student must be approved for degree candidacy by Price College, 3013. Addresses how businesses use the internet and other computer technologies as marketing tools. The emphasis is on understanding the unique opportunities and challenges associated with electronic marketing in order to better implement a firm's overall marketing strategy. (Irreg.)
MKT	3323	Purchasing and Buyer Behavior	(Crosslisted with SCM 3323) Prerequisite: 3013 and declared Marketing major or Supply Chain Management major. Consumer and organizational buying processes are examined. Individual and organizational decision-making frameworks, information technology, and the external environment are studied in the context of forming marketing strategies and tactics. Topics include make or buy decision making; supplier development and outsourcing; supplier evaluation, selection, and management; buyer-seller relationships; purchasing capital goods and services; international and electronic commerce; information processing; social and economic influences; preference formation and change; and image creation and positioning. (F, Sp)
MKT	3333	Special Topics in Consumer and Industrial Buyer Behavior	Prerequisite: 3013, 3023. May not be repeated. Special topics in marketing. Content will vary and may be of an applied nature.
MKT	3343	Retailing Management	(Crosslisted with FRAN 3343) Prerequisite: Student must be approved for degree candidacy by Price College, MKT 3013. An analytical approach to the management of retail institutions. Addresses strategic and operating level decision making related to delivery of products and services to consumers, focusing on each of the four dimensions of the marketing mix. Includes modules on electronic commerce and ethical responsibility. (F, Sp)
MKT	3413	New Product Development	Prerequisite: Student must be approved for degree candidacy by Price College; ENT 3113, MKT 3013, MKT 3053; MGT 3013. Focuses on the development of ideas for new or established organizations, creating an environment conducive to innovation, recognizing business opportunities, assessing the market, customer and competitor situation. The development of these ideas leads to a feasibility analysis. Examines the development of a sales and distribution structure (including franchising, distributorship, and licensing and alliances), understanding segmentation, targeting, and niching. (F, Sp)

MKT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MKT	3513	Social Media Marketing	Prerequisite: MKT 3013. The breadth and strengths of social media our ever-growing, resulting in fundamental shifts in the way marketers communicate and interact with consumers. Particularly, the Internet and its related technologies enable social media to have influence far beyond the traditional consumer communities. This course provides the practical knowledge and insights required to establish objectives and strategies, properly select the social media platforms to engage consumers, and monitor and measure the results of these efforts. (F, Sp)
MKT	3613	Healthcare Marketing and Administration	(Crosslisted with HCB 3613) Prerequisite for Business Majors: Business Candidacy & MKT 3013 Prerequisite for Non-business Majors: MKT 2013 or 3013. Healthcare organizations must be prepared to shift their strategies in order to meet the increasing demands in this dynamic market. The purpose of this course is to apply the systems of marketing and administration to the problems of health care organizations and provide an insight to the business problems healthcare organizations are likely to encounter. (F, Sp)
MKT	3623	Competitive and Economic Environment of Healthcare	(Crosslisted with HCB 3623) Prerequisite for Business Majors: Business Candidacy, MKT/HCB 3613. Prerequisite for Non-business Majors: ECON 1123 and MKT/HCB 3613. A wide range of new governmental regulatory interventions in the healthcare arena and changes to the economic environment are directly linked to uncertainty in the structure of health insurance; the contractual arrangements and relationships that exist between patients, doctors, and hospitals. This course explores these issues in detail and presents case studies that will guide the student to a better understanding of healthcare economics. Not open to Marketing majors. (F, Sp)
MKT	3713	Fundamentals of Franchising	(Crosslisted with FRAN 3713) Prerequisite: Business Candidacy and 3000 level core or concurrent enrollment. Provides a fundamental understanding of the franchising business model to showcase its unique differential advantages over alternative conventional systems of distribution. In particular, the course will focus on introducing students to operational issues, information flows, financial considerations and relationship processes involved in franchising. (F, Sp)
MKT	3723	Integrated Franchising Communications	(Crosslisted with FRAN 3723) Prerequisite: Business Candidacy, 3000 level core or concurrent enrollment & FRAN/MKT 3713 or concurrent enrollment. It examines how franchisor-created communications and sales promotions can best be combined with franchisee-created social media programs to present a consistent image across the franchise system. Combinations of media vehicles and messages are explored to present an effective communication strategy. (F, Sp)
MKT	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MKT	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MKT	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

MKT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MKT	4123	Negotiation and Selling	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses. Addresses the field sales effort of the firm with emphasis on tactical analysis. It examines professional selling as the negotiation process that provides the link between firm and customer with a focus on both the oral and written communication involved. The thrust of the course is application and the view is first line and tactical. (F, Sp)
MKT	4133	Special Topics in Selling and Sales Management	Prerequisite: 3013, 3023. May not be repeated. Special topics in marketing. Content will vary and may be of an applied nature. (Irreg.)
MKT	4153	Integrated Marketing Communications	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses, and 3053. Examines the promotional element of the marketing mix. It focuses on the management of promotional programs with emphasis on the interaction and coordination of advertising, professional selling, and sales promotions. The course will provide a mix of academic strategies, marketing tools, and hands-on promotional planning. (F, Sp)
MKT	4303	International Advertising	(Crosslisted with JMC 4303) Prerequisite: 3013. May be repeated once with change of subject matter; maximum credit six hours. Designed to provide basic understanding of advertising and culture that applies to advertising in non-American locations. (Irreg.)
MKT	4333	Marketing Strategy and Policy	Prerequisite: Student must be approved for degree candidacy by Price college, all 3000-level Business core courses, 3053. Should be taken in the student's last semester. Major topics addresses are strategic marketing, product management, pricing management and marketing ethics. (F, Sp)
MKT	4343	Special Topics in Marketing Strategy and Policy	Prerequisite: 3013, 3023, 3323, 4153. May not be repeated. Special topics in marketing. Content will vary and may be of applied nature.
MKT	4523	International Marketing	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses. Study of marketing concepts and their international marketing implications, dealing with international market structure, framework for multinational marketing, strategic guidelines for global marketing strategies, pricing, promotion, product and distribution strategies for international markets. Special assignments include case studies, country analysis, article reviews and a term paper on topic of special interest related to international marketing. (F, Sp)
MKT	4613	Ethical and Regulatory Issues in Healthcare	(Crosslisted with HCB 4613) Prerequisite for Business Majors: Business Candidacy, 3000-level core courses and HCB/MKT 3613. Prerequisite for Non-business Majors: HCB/MKT 3613 and LS 3323. The Healthcare Industry continues to undergo enormous changes with new laws, regulations and policies, fresh innovations and the increasingly higher expectations of the healthcare consumer. With this in mind, it is a necessary requirement to develop a process of creating a strong ethical climate within a healthcare organization. This course explores the complex moral, ethical and legal issues that continue to arise within the healthcare profession. Not open to Marketing majors. (F, Sp)
MKT	4713	Policies and Strategies in Franchising	(Crosslisted with FRAN 4713) Prerequisite: Business Candidacy, 3000 level core & FRAN/MKT 3713. Emphasizes the process of business decision-making within the setting of a contractual channel of distribution with specific focus on the unique context of a franchising enterprise. Students will be exposed to developing skills in synthesizing diverse knowledge areas in order to arrive at holistic, coherent and responsible strategic decisions. (F, Sp)
MKT	4800	Current Issues in Marketing	1 to 3 hours. Prerequisite: permission of department and instructor. May not be repeated. An advanced seminar dealing with contemporary issues in marketing. Content will vary with the instructor. May not be repeated.

MKT	4900	Marketing Reading	1 to 3 hours. Prerequisite: advanced standing and permission. May be repeated; maximum credit six hours. Provides an opportunity for the student to study materials not usually presented in regular courses. (F, Sp, Su)
MKT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MKT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MKT	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MKT	5402	Marketing Management	Prerequisite: graduate standing. Covers marketing concepts of use to MBAs. Topics include the use of management information systems, pricing, product offerings, promotion, distribution and consumer behavior, as well as marketing segmentation and strategic marketing. (F, Sp)
MKT	5412	Marketing Research	Prerequisite: 5402 and graduate standing in the Price College. Provides students with the pragmatic, managerial insights into the market research process and techniques from the both the "practitioner" and "user" perspectives. (F)
MKT	5422	Brand/Product Management	Prerequisites: 5402 and graduate standing in Price College. Brands are often among the organization's most valuable assets. Strongly held brand beliefs are often very stable and difficult for competitors to emulate. The key questions addressed by this class include 1) brand equity and how it is built, 2) brand equity measurement, 3) organizational growth through brand equity strategies. (F)
MKT	5432	Sales and Brand Management	Prerequisite: 5402 and Graduate standing in Price College. Advanced study of sales and brand management. Sales management subjects covered include: sales force management, building gross and net dollar volume, market coverage and penetration, effective selling skills, client relationships, effective negotiation skills. Brand management topics include: strategic and analytical planning, commercial and retail sectors, product and service introductions, building brand equity and value, mass and new media advertising, building market share and net profits. (Su)
MKT	5960	Readings in Selected Fields of Marketing	1 to 4 hours. Prerequisite: graduate standing and permission. May be repeated; maximum credit eight hours. Guided reading in selected fields of marketing; conferences with staff. Scope of reading and credit to be arranged on entry into course. The only passing grade given in this course is the neutral grade of S. (F, Sp, Su)
MKT	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MKT	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MKT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

MKT	6243	Applied Univariate Statistics	(Crosslisted with B AD 6243) Prerequisite: Ph.D. standing or permission of instructor; permission (Director, Price College of Business Graduate Programs). Probability, algebra of expectations, random sampling, sampling distributions, point and interval estimation, tests of hypotheses, parametric and nonparametric, sampling methods, survey design, general linear model, computer applications, statistical analysis system. (F)
MKT	6253	Applied Multivariate Statistics	(Crosslisted with B AD 6253) Prerequisite: 6243 or permission of instructor; permission (Director, Price College of Business Graduate Programs). Multivariate data analysis with computer applications-introduction, survey, and computer applications-factor analysis, multidimensional scaling, cluster analysis, regression, analysis of variance, canonical analysis, discrimination analysis. (Sp)
MKT	6273	Seminar in Organizational Behavior	(Crosslisted with MGT 6273) Prerequisite: graduate standing and admission to the PhD program in the Price College of Business. Addresses personal and interpersonal issues in marketing and management. Application of social science theory to explain the behavior of organization members. (Irreg.)
MKT	6283	Marketing Theory and Thought	Prerequisite: graduate standing and permission (Director, Price College of Business Graduate Programs). Reviews the major theoretical perspectives in marketing. Particular emphasis is placed on understanding and appreciating the historical development of marketing theory and thought. (F, Sp)
MKT	6293	Strategic Marketing and Management	(Crosslisted with MGT 6293) Prerequisite: graduate standing and permission (Director, Price College of Business Graduate Programs). Reviews the major theories, concepts and frames of reference regarding strategic marketing and management. (Irreg.)
MKT	6393	Current Issues in Marketing	Prerequisite: graduate standing and permission (Director, Price College of Business Graduate Programs). Addresses leading theoretical and research issues that are currently prominent in the marketing discipline. The specific content will be structured according to the particular interests and expertise of the marketing professor teaching the course.
MKT	6773	Marketing Models	Prerequisite: graduate standing and admission to the Price College Ph.D. program. Advanced doctoral seminar in quantitative research in marketing. Selected topics from theoretical and empirical research streams in marketing, econometrics, and industrial organization will be covered. Students will develop an appreciation for what it takes to build and analyze a quantitative model as well as an understanding of the contribution such modeling has made to marketing thought. (Irreg.)
MKT	6960	Directed Readings in Marketing	1 to 4 hours. Prerequisite: graduate standing; permission of instructor, permission (Director, Price College of Business Graduate Programs). May be repeated as needed by Ph.D. students. Special reading programs are designed to enable graduate students (1) to extend their study to fields of marketing that are not covered in other courses and/or (2) to provide an opportunity for more extensive or intensive study of subjects covered in other courses. (F, Sp, Su)
MKT	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MKT	6980	Research for Doctoral Dissertation	(F, Sp, Su)
MKT	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

MLLL	1013	Introduction to the French and Francophone World	Introduces a number of influential motifs in French and Francophone cultural history. Intended to help students formulate fundamental questions useful in further study of French, European, and world cultures. Includes analysis of historical, social, philosophical, artistic, and practical modes of expression, not only in the history of France itself, but also in Francophone Africa, North America, and the Caribbean. From the French Revolution to the dynamics of contemporary immigration, from French regional identities to fashion, gastronomy, and film, the course leads students to the discovery of a variety of significant forms of French and Francophone cultural expression. (F) IV-WC.
MLLL	1393	Italian Cultural Literacy	Introduces students studying abroad in the OU in Arezzo semester program to important aspects of Italian culture. Throughout the semester, students will gain an ability to engage with Italian cultural phenomena and interact with native Italian speakers. They will acquire the basics of Italian, not only to get oriented and travel in Italy, but also to understand various cultural differences that pass through spoken language. No previous knowledge of Italian is required. The cultural part of the course will be taught in English. (F)
MLLL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MLLL	2003	Introduction to World Literature	Introduction to idea and practice of comparative literature study. Focus will be on a particular body of literature (e.g., Italian post-WWII fiction, French-Canadian poetry of the nineteenth century, etc.) as shaped by other cultures and literature. Texts will be in original language and translation. (Irreg.) [IV-WC]
MLLL	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
MLLL	3000	Literature in Translation	May be repeated with change of subject matter; maximum credit nine hours. Appreciation and analysis of poetry, novel, prose, drama, or film translated into English. (F, Su)
MLLL	3043	Mythology and Folklore	Prerequisite: junior standing or permission. Readings in folktales and myths from cultures around the world, with a focus on narrative structures and the role of the storyteller. Involves weekly reading and weekly writing assignments and a semester-long research project published on the internet. (No previous web publishing experience is required). (F, Sp) [IV-WC]
MLLL	3063	Survey of Jewish Literature from Antiquity to the Present	Prerequisite: junior standing. Provides a survey of Jewish literature from the Hebrew Bible to contemporary American literature, presented as a journey in which stops will be made at important places, covering all significant periods, genres and prominent writers. (F) [IV-WC]
MLLL	3073	The Hebrew Bible as Literature	Prerequisite: junior standing. The Hebrew Bible is the best selling book in America every single year. We will explore its greatness by reading various Biblical texts such as a great novella, the Joseph story; the greatest religious conversion narrative, Ruth; the poetry of Psalms, and the rise of David from shepherd to king, as well as other favorites to be determined by class participants. The course will explore issues such as what is literature; what is the Hebrew Bible; what does it mean to read the Bile from a literary perspective; what are the literary genres used to write the Bible, both prose an poetry, and what were the norms according to which these texts were written. Special attention will be given to close reading and textual analysis. (Sp) [IV-WC]

MLLL	3113	Business Chinese	Prerequisite: 2113 or permission. Designed for students interested in, but with no or limited skill or knowledge of, Mandarin Chinese. Basically conversational, focusing on oral communicative skill of the language, with limited introduction to and learning of Chinese characters. Vocabulary will include terminology, common expressions, and structures used in business settings. (F, Sp)
MLLL	3123	Russian Culture and Civilization	Considers the historical and cultural heritage of Russia through a study of its geography, history, religion, language, literature and the fine arts. Allows students to appreciate the global perspectives and cultural diversity. [IV-WC]
MLLL	3133	Soviet and Post-Soviet Cinema	Prerequisite: junior standing. Familiarizes students with the history of film in the Soviet Union , from the silent movies of its beginnings to its manifestation at the present time. No previous knowledge of the Russian language is required. Russian social and political issues explored through film. (F, Su) [IV-WC]
MLLL	3143	Dostoevsky and His Age	Prerequisite: junior standing. Examination of the life and literary works of Fyodor Dostoevsky, with special attention to the role the writer played in Russian and Western intellectual history. Reading assignments will include Crime and Punishment, The Brothers Karamazov, and several shorter works, all in English translation. (Irreg.) [IV-WC]
MLLL	3153	Russian Literature Through Film	Prerequisite: junior standing. Students analyze classic Russian literary texts and the films that they have inspired. This course focuses on the problem of cinematic adaptation. No previous knowledge of the Russian Language is required. (F, Su) [IV-WC]
MLLL	3163	Chekhov	Prerequisite: junior standing or permission. An introduction to Anton Chekhov's work in translation. Both short stories and plays will be read, studying their narrative structure, plot devices, character development, themes, and other elements, while placing Chekhov's work in its historical, cultural, and political context. Excerpts of various screen adaptations of his plays will also be viewed. (F) [IV-WC]
MLLL	3173	Nabokov	Prerequisite: junior standing or permission. An introduction to Vladimir Nabokov's work in English, including works translated from Russian as well as texts originally written in English. Focus will be on Nabokov's Novels; although, some short stories and poems will be included. The main methodology will center on applying the techniques of close textual analysis, while placing Nabokov's work in its historical, cultural, and political context. (F) [IV-WC]
MLLL	3183	Tolstoy: Writer, Thinker, Social Critic	Prerequisite: junior standing or permission of instructor. Introduction to Leo Tolstoy's work in translation. Traces Tolstoy's development as a writer of short stories, novels, and works of non-fiction. The writer's biography and significant aspects of nineteenth-century Russian society will inform discussions of Tolstoy's works, placing them in a broader context. In addition, students will explore Tolstoy's evolving religious, philosophical, and social ideas, as well as his legacy in Russia and throughout the world. (Irreg.) [IV-WC]
MLLL	3193	Trauma, Memory, and Narrative	Prerequisite: junior standing. Ways in which traumatic historical events have been depicted in works of literature, art, and historical texts, and their commemoration in museum displays and in public ritual. While the focus is on the history of the Soviet Union and Eastern Europe, students will be encouraged to consider equivalent examples from other areas of the globe. (Irreg.) [IV-WC]
MLLL	3213	Japanese Theatre and Performance	Prerequisite: junior standing. A survey of performance traditions in Japan ranging from rituals to dance and theatre, from ancient to contemporary. Explores the role of theatre in society and the relation between performance style and daily behavior. (F) [IV-NW]

MLLL	3223	Japan Through Film and Literature	Prerequisite: junior standing. Introduces Japanese post-war society and culture with emphasis on 1945 to the present, as reflected in film and literature. Students will examine essential issues, including class, family, gender, work, education, and minorities, paying attention to the struggles between traditional cultural values and modern society. (Irreg.) [IV-NW]
MLLL	3233	Japanese Literature since 1945	Prerequisite: junior standing. A survey of post-war Japanese literature from 1945 to present. Using the historical events as background, students will examine social, political and cultural issues reflected in literary work, as well as literary theory. Topics will include experiences and memories of war and the atomic bombing, Japanese literature in the 1960's, women writers and postmodern writers in the 1980's. Visual materials (films) are also introduced in relation to the topics of the course. All readings are in English. (Sp) [IV-NW]
MLLL	3303	The World of Dante	Prerequisite: Junior standing and English 1213. In this course students will engage in a close reading of a fundamental text in the western literary tradition: Dante Alighieri's Divine Comedy. The course will also consider one of Dante's minor works, the Vita Nuova, as well as the modern critical readings of Dante's writing and thought. In lectures, special attention will be paid to the historical, political, literary and intellectual context of Dante's poetry and thought. Students will also be asked to contribute to the classroom atmosphere by responding to questions and participating in discussions. (Irreg.) [IV-WC]
MLLL	3313	Introduction to Italian Literature and Culture	Prerequisite: English 1213 or EXPO 1213. Interdisciplinary approach to literature, culture, and history of the Italian peninsula, from the Middle Ages to the present day. Through major works of literature, political science, the visual arts, music, and cinema, students will set Italy's variegated literary and cultural expressions in their social and historical contexts. (F) [IV-WC]
MLLL	3373	Italian Cinema	Prerequisite: junior standing and English 1213. The aim of this course is to develop interpretive skills relevant to the study of Italian cinema by examining some of its most significant films. More specifically, we will analyze the ways in which Italian society is portrayed and typified in Italian cinema. We will cover the major film movements and periods, from "cinema muto" to Neorealism, from "commedia all`Italiana" to the Italian horror genre and to the most recent works made by contemporary directors. (Irreg.) [IV-AF]
MLLL	3413	Arabic Literature and Culture	Prerequisite: junior standing. A survey of Arabic literature tradition and cultural history from the 4th century to the present. Covers themes and genres of the cultural heritage of Arabic-Islamic civilization, continuities and discontinuities between the classical and modern period, and background political and social changes. (F) [IV-NW]
MLLL	3423	Western Visions of the East/12th-21st Century	Prerequisite: junior standing. This course examines Western European representations of the Middle East, North Africa, and Asia from the Middle Ages to today. The aim is to consider how western culture constructs the Oriental Other in poetry, prose, drama, and film. Edward Said's "Orientalism" will serve as the critical foundation for the course. (F) [IV-WC]
MLLL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

MLLL	3453	The World of the Arabian Nights	(Crosslisted with IAS 3453) Prerequisite: junior standing. Explores the most famous literary product of the Arabo-Islamic civilization. Examines the work's structural narrative techniques, characters, settings and themes as well as the various aspects of its cultural and social milieu. In addition, the course examines the Western perception of the Orient from the 18th century to today, and the reception of the work in the Medieval period and in the present Arab world. (Irreg.) [IV-NW]
MLLL	3463	Arab Culture & Society through Modern Fiction (Crosslisted with International & Area Studies 3463)	Prerequisite: junior standing. This course introduces a broad range of themes and issues of modern Arabic culture and society, such as religion, family, gender, identity, emigration, colonialism, resistance, nationalism, freedom of expression, corruption, and war. (Sp) [IV-NWC]
MLLL	3523	Survey of Russian Literature to 1917 in Translation	Prerequisite: junior standing. Reading, analysis and discussion of key works of Russian 19th century literature, including the major novels, plays, and poetry selections in English translation. This course does not satisfy the third semester Arts and Sciences language requirement. (F) [IV-WC]
MLLL	3533	Survey of Russian Literature from 1917 in Translation	Prerequisite: junior standing or permission of instructor. Representative works of Soviet and post-Soviet literature are read and discussed. Selections of prose and poetry chosen from among symbolists, acmeists, futurists, populists, modernists, and post-modernists. This course does not satisfy the third semester Arts and Sciences language requirement. (Irreg.) [IV-WC]
MLLL	3543	The Petersburg Myth and Text/The City in Russian Culture	Prerequisite: junior standing. The role and significance of the city of St. Petersburg in Russian culture by examining its literary image and myth. All readings and discussions in English. (Irreg.) [IV-WC]
MLLL	3573	Arthurian Legend and Literature	(Crosslisted with ENGL 3573) Examination of the legend of King Arthur in European literature. Concentrate first on the historical Arthur, followed by major portion of semester on the medieval and modern literary texts concerning Arthur and the Round Table. All texts will be read in English translation. [IV-WC]
MLLL	3623	Pre-Modern Japanese Literature and Culture	Prerequisite: junior standing. A survey of Japanese literature from ancient time to the Meiji restoration. Covers prominent works of poetry and prose in English translation. Students are introduced to traditional genres, themes, rhetorical device and aesthetics, as well as socio-historical context of literary production. (Irreg.) [IV-NW]
MLLL	3633	Modern Japanese Literature and Culture	Prerequisite: junior standing. A survey of Japanese literature from the Meiji restoration (1868) onward, with attention to social, political, and cultural issues as well as literary theory. Topics will include Japan's "westernization," "naturalism," proletarian literature movements, early post-war literature, and the "third new generation writers." (Sp) [IV-NW]
MLLL	3753	Modern Chinese Literature and Culture	Prerequisite: junior standing. Students will read Chinese literary texts in English translation and learn about the historical, political, social, and cultural contexts in which they were produced. (Sp) [IV-NW]
MLLL	3763	Chinese Cinema	Prerequisite: junior standing. Chinese films covering a wide range of historical periods and subjects will be viewed. The films screened in this class will be studied as reflections of their respective social, as well as the filmmakers' comments on and interventions of such realities. Cinematic concepts, techniques, and film theories, will be studied. (Sp) [IV-NWC]
MLLL	3823	German Culture and Thought	Prerequisite: junior standing. Introduces major themes in German cultural history and analytical tools students can bring to the further study of German and/or other European literatures and cultures in translation. Specific topics may vary. (F) [IV-WC]

MLLL	3843	20th-Century European Culture and Identity	Prerequisite: junior standing. Offers and overview of twentieth-century European culture and identity. Students are made aware of a culture and people different from the United States. In an attempt to understand what makes Europe a unique entity, we will examine how political, social, and economic forces and events in Europe relate to cultural ideas and artistic productions. (F) [IV-WC]
MLLL	3853	The Rise of Romanticism	Prerequisite: Honors' standing. Study of the rise of Romanticism by reading European literary, theoretical, and philosophical texts with emphasis on material from particular Romantic movements. Education, changing relationships and gender will be given consideration. (Irreg.) [IV-WC]
MLLL	3943	German Cinema	Prerequisite: junior standing. This course will provide an overview of German cinema throughout the 20th century, with a focus on the cinematic representation of national identity and gender identity in Germany . We will examine the impact of shifting political structures on film production throughout German history, as well as influential theories of German national cinema. (F) [IV-WC]
MLLL	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp)
MLLL	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MLLL	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the Honors candidate to work on a special project in the student's field. (F, Sp)
MLLL	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MLLL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MLLL	4003	Movements in World Literature	(Crosslisted with ENGL 4003) Prerequisite: junior standing. May be repeated with change of subject matter; maximum credit nine hours. Focuses on texts within a literary movement (literature other than canonical American or British). Also attention to critical and theoretical questions about concepts such as genre, nation, national building, national identity, etc. (Irreg.) [IV-WC]
MLLL	4063	Early Literary Criticism	(Slashlisted with 5063) Prerequisite: junior standing and English 1213. Establishes a solid critical foundation of aesthetics that will enable graduate and advanced undergraduate students to deal with fundamental ideas; aesthetic and social. Emphasis on rhetoric and discourse during the second part of the semester will also enable all students to write strategically and develop effective communication skills. No student may earn credit for both 4063 and 5063. (F)
MLLL	4113	Luso-Brazilian Civilization	Prerequisite: minimum of 30 hours earned. Taught in English. An introduction to Luso-Brazilian cultural history and literatures through a series of readings and films. The course begins with the poetry of Luis de Camões and the discovery of Brazil, and ends with the impact of European immigrants in the 20th century on the literature and music of Brazil. (Sp) [IV-WC]
MLLL	4173	Introduction to Francophone Literatures in Translation	Prerequisite: senior standing. Examines the literary, social, and political issues forefronted by the Francophone literatures of West Africa, the Caribbean, and Polynesian Islands, Maghreb (chiefly Algeria, Tunisia, Morocco), and Quebec. (Sp) [IV-NW]

MLLL	4183	Contemporary Japanese Drama	Prerequisite: junior standing. A survey of major contemporary Japanese plays and playwrights and the theatrical groups that supported and disseminated them from 1945 to the present. Special emphasis will be placed on the changing social-cultural context of the postwar theater. (Irreg.)
MLLL	4443	Exploring Music in Literature: Poetry and Drama of Lorca	Prerequisite: junior standing. Explores the relationships that exist between music and literature in Lorca, including Spanish folksong, Flamenco as a socio-cultural phenomenon, focusing on ethnic identity, and contemporary orchestral compositions. (Irreg.) [IV-WC]
MLLL	4453	Introduction to Chinese Language and Linguistics	Prerequisite: Chinese 1115, Chinese 1225, Chinese 2113, and Chinese 2223, or Linguistics/Anthropology 2303 and Linguistics/Anthropology 3033. Introduces the fundamentals of Chinese phonology, morphology, syntax, semantics, and the writing system. Includes a brief introduction to the historical evolution of Chinese language and the interaction of the language with culture and society. Upon completion, provides 1) acquisition of a basic understanding of the structure of Chinese language and its social-cultural meanings, 2) ability to discuss the various issues related to Chinese language, and 3) ability to write critically and at length on certain aspects of Chinese language. The lectures will be delivered in English. (F)
MLLL	4663	Gender/Cross-Cultural Issues in Eastern European Women's Writing	Prerequisite: junior standing. Exploration of gender issues in cultures in flux and ideologies in turmoil through lectures, discussions, film screenings, journal writing, and small group work. Texts, both written and visual, are examined within literary, historical and sociological contexts. (Sp) [IV-WC]
MLLL	4753	Language, Culture and Cognition	Prerequisite: junior standing. Cognitive science holds that the human mind is inherently embodied and abstract concepts are largely metaphorical. This course will introduce the cognitive view of metaphor and how it plays a critical role in language and cognition in the cultural context. Also pursues a cross-linguistic and cross-cultural perspective on the study of languages as a window into cognition and culture. (Irreg.)
MLLL	4813	Techniques of Teaching a Foreign Language	Prerequisite: four semesters of a foreign language or admission to the foreign language education major. Provides participants with practical experience in the teaching of foreign languages and introduces key issues in the teaching of foreign languages. Also introduces issues in teaching methodology and key issues in classroom language acquisition research. No student may earn credit for both 4813 and 5813. (F, Sp)
MLLL	4823	Foreign Language in the Elementary School	Prerequisite: 4813; both courses may be taken concurrently. Special problems associated with teaching foreign languages in the elementary school; FLES and FLEX programs, immersion programs, content-based instruction; communicative teaching.
MLLL	4950	Special Topics in World Literature Today	1 to 3 hours. Prerequisite: English 1213 and permission of instructor. May be repeated with change of content; maximum credit six hours. In-depth study of selected contemporary international writers/jurors who visit campus as part of the Neustadt and/or Puterbaugh symposiums for world literature today. (Irreg.)
MLLL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MLLL	4970	Seminar	1 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit six hours. Varied topics in literature in English translation. (Irreg.)
MLLL	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

MLLL	4993	Epics of India: Ramayana and Mahabarata	Prerequisite: junior standing. Reading of the two great epics of India. Special attention will be paid to narrative structure and the role of the storyteller. The course involves extensive weekly reading along with weekly writing assignments and a semester-long research project which students will publish on the internet (no previous web publishing experience is required. (Sp) [IV-NW]
MLLL	5063	Early Literary Criticism	(Slashlisted with 4063) Prerequisite: graduate standing. Establishes a solid critical foundation of aesthetics that will enable graduate and advanced undergraduate students to deal with fundamental ideas; aesthetic and social. Emphasis on rhetoric and discourse during the second part of the semester will also enable all students to write strategically and develop effective communication skills. No student may earn credit for both 4063 and 5063. (F)
MLLL	5073	Contemporary Literary Criticism	An introduction to contemporary linguistic, psychoanalytic and sociological literary theory and criticism. Readings and discussions will include questions of methodology and will demonstrate how these methods can be applied to particular texts. (Sp)
MLLL	5173	Introduction to Francophone Literatures in Translation	Prerequisite: graduate standing. Examines the literary, social, and political issues fore-fronted by the Francophone literatures of West Africa, the Caribbean, and Polynesian Islands, Maghreb (chiefly Algeria, Tunisia, Morocco), and Quebec. (Sp)
MLLL	5813	Techniques of Teaching a Foreign Language	Prerequisite: graduate standing. Provides participants with practical experience in the teaching of foreign languages and introduces key issues in the teaching of foreign languages. Also introduces issues in teaching methodology and key issues in classroom language acquisition research. No student may earn credit for both 4813 and 5813. (F, Sp)
MLLL	5910	Problems in Research	2 to 4 hours. Prerequisite: permission of instructor. May be repeated with change of content; maximum credit fours hours. An individual course of intensive research with the area and problem to be determined by the student and directing instructor. (Irreg.)
MLLL	5920	Field Research in Foreign Language Education	1 to 3 hours. Prerequisite: 5833. Classroom oriented field research on the use of various methods of teaching foreign language in the classroom. Possible topics include aspects of language acquisition, evaluation, proficiency, communicative methods in foreign language education. (F, Sp, Su)
MLLL	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MLLL	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MLLL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MRS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MRS	3023	Exploring Medieval and Renaissance Studies	Prerequisite: junior standing or above, or permission of instructor. Provides an overview of the history, literature, art, and music of the Middle Ages and Renaissance, including hands-on work with medieval manuscripts and early printed books. This course will be taught by a series of faculty lecturing in their area of expertise, coordinated by a faculty member who will be present at every class and will serve as instructor of record. (Irreg.)

MRS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MRS	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
MRS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MRS	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MRS	3990	Independent Study	Prerequisite: junior standing or above and permission of instructor. May be repeated; maximum credit six hours. Independent study on a topic in medieval and/or Renaissance studies. (F, Sp)
MRS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MRS	4903	Seminar in Medieval and Renaissance Culture	Prerequisite: junior standing or above, or permission of instructor. May be repeated once with change of content; maximum credit six hours. Specialized study in selected topics in medieval and Renaissance culture. This course may be taught by an individual faculty member or by a series of faculty lecturing in their area of expertise, coordinated by a faculty member who will be present at every class and will serve as instructor of record. (Irreg.)
MRS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MRS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MRS	4990	Independent Study	Prerequisite: junior standing or above and permission of instructor. May be repeated; maximum credit six hours. Independent study on a topic in medieval and/or Renaissance studies. (F, Sp)
MRS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MTHR	1102	Tap Foundations	Introduction to the basic concepts of tap dance. Students learn step development, basic rhythms, and the rudiments of placement, balance, and weight change. (F, Sp)
MTHR	1112	Tap I	(Crosslisted with DANC 1112) Prerequisite: 1212 and permission of instructor. May be repeated; maximum credit four hours. A beginner class emphasizing tap fundamentals and terminology that includes weight change, proper placement and simple step patterns. The course concentrates on basic rhythms, counting, ear training and clarity of sound. (F, Sp)
MTHR	1402	Jazz Foundations	Introduction to the basic concepts of jazz movement. Students learn basic motor skills used in musical theatre and focus on the rudiments of placement, alignment, flexibility, and assimilation. (F, Sp)

MTHR 1442 Jazz I	(Crosslisted with DANC 1442) Prerequisite: 1212 and permission of instructor. May be repeated; maximum credit four hours. A beginner class that provides the student with a comprehensive understanding of the technical fundamentals of jazz dance including basic rhythms, vocabulary and skills. Focus is aimed towards proper placement, strength and flexibility development. (F, Sp)
MTHR 1501 Music Theory Notation	Prerequisite: admission to Musical Theatre program. Lecture/discussion class to enhance the ability to read music and attain a general understanding of the theory of music, including treble and bass clefs, major and minor scales, diatonic intervals and chords. A rhythmic component is added to attain mastery of simple and compound meters. (F)
MTHR 1502 Studio Voice I	Prerequisite: majors only. May be repeated; maximum credit six hours. Establishing basic vocal technique for musical theatre singing, including vocal exercises and breathing technique. Application of technique through the study of beginning level Broadway up-tempos and ballads as well as English art song and American folk song. (F, Sp)
MTHR 1551 Sight Reading and Theory	Prerequisite: admission to Musical Theatre program. Lab practice of theory, rhythm and pitch recognition, including the ability to perform diatonic intervals, ascending/descending, as well as simple/compound rhythms in both division and subdivision. (Sp)
MTHR 1999 Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MTHR 2101 Performance Practicum	Prerequisite: permission of instructor. May be repeated; maximum credit four hours. Study and practice in rehearsal and performance as a cast member in musical theatre productions including cabaret work of the freshman/sophomore level. (F, Sp)
MTHR 2112 Tap II	(Crosslisted with DANC 2112) Prerequisite: 1112 and permission of instructor. May be repeated; maximum credit four hours. An advanced beginner class that maintains focus on proper placement and clarity of sound while introducing more complicated rhythms, step patterns and vocabulary. Counting and ear training continues as the student hones assimilation skills. Focus is placed on tap dynamics including accenting, shading and movement quality. A variety of styles will be introduced. (F, Sp)
MTHR 2122 Auditions	Prerequisite: permission of instructor. An introduction to musical theatre performance through the practice of auditioning. Study involves an overview of song form, style, and composers. Assignments include casting notices, resume format and research tools. Emphasis is placed on assembling a portfolio of song cuttings. (Sp)
MTHR 2442 Jazz II	(Crosslisted with DANC 2442) Prerequisite: 1442 or permission of instructor. May be repeated; maximum credit four hours. This advanced beginner class expands on the techniques learned in Jazz I with focus on cleanly executed technique, well connected movement quality, dynamics and increased strength and flexibility. A variety of jazz styles will be introduced. (F, Sp)
MTHR 2502 Studio Voice II	Prerequisite: majors only; MTHR 1502. May be repeated; maximum credit six hours. Continuing practice of vocal technique for musical theatre singing; includes developing range, flexibility and tone color. Application of technique through the study of intermediate level Broadway up-tempos and ballads, as well as Italian art song and European operetta. (F, Sp)
MTHR 2552 Singing for the Stage	Prerequisite: permission of instructor. Class is designed for non-majors only. May be repeated; maximum credit eight hours. Vocal technique for musical theatre singing, including technical exercises and application through the study of songs. (F, Sp)

MTHR 3112	Tap III	(Crosslisted with DANC 3112) Prerequisite: 2112 or permission of instructor. May be repeated; maximum credit six hours. An intermediate class with focus placed on refinement of technical and assimilation skills while dramatically increasing tap vocabulary. Students focus on tap dynamics, performance quality, style variety and movement coordination while learning longer and more complicated step patterns. Tap improvisation is introduced. (Irreg.)
MTHR 3132	Repertoire	Prerequisite: 2121 or permission of instructor. Investigation of Broadway and Hollywood songwriting during the first half of the 20th Century. Performance material will consist of songs appropriate for the student's vocal range. Study includes critical listening to period recordings. (F)
MTHR 3142	Song Study I	Prerequisite: 2122 or permission of instructor. Development of musical theatre performance technique through the study of solo song. Study includes exploring aspects of interpretation and expression to support the vocal, physical and mental aspects of performing. Emphasis is placed on integrating singing and acting skills. (F)
MTHR 3143	History of American Musical Theatre	Prerequisite: English 1213. Surveys history of the American musical theatre from its beginnings in the late 19th century to the present. (F, Sp) [IV-AF]
MTHR 3152	Song Study II	Prerequisite: 3142. Expand analytical and performance skills through extended song forms. Study includes breath, body and visualization techniques to continue integrating vocal, physical and mental aspects of performing. (Sp)
MTHR 3162	Repertoire	Prerequisite:3152 or permission of instructor. Investigation of Broadway and Hollywood songwriting during the first half of the 20th Century. Performance material will consist of songs appropriate for the student's vocal range. Study includes critical listening to period recordings. (F)
MTHR 3172	Roles	Prerequisite: 3162 or permission of instructor. Exploration of musical theatre leading roles from the second half of the 20th Century. Performance material will consist of songs appropriate for the student's vocal and physical range. Study includes viewing performances of artists from the Broadway stage. (Sp)
MTHR 3182	Musical Scenes I	Prerequisite: 3152 or permission of instructor. Application of musical theatre performance technique utilizing scenes from the Broadway stage. Study includes using show research and script analysis to develop characterization. Emphasis is placed on creating unified performance both dramatically and musically. (F)
MTHR 3192	Musical Scenes II	Prerequisite: 3182. Application of musical theatre performance skills using contemporary scenes from the Broadway stage. Study includes larger scene-song forms including one-acts or new-works from the musical theatre. (Sp)
MTHR 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MTHR 3442	Jazz III	(Crosslisted with DANC 3442) Prerequisite: 2442 or permission of instructor. May be repeated; maximum credit four hours. An intermediate class that moves at a heightened pace, this level expands on the techniques learned in Jazz II. Additional focus is placed on style variety, assimilation skills, and more advanced movement coordination and rhythms. (Irreg.)
MTHR 3502	Studio Voice III	Prerequisite: 2502. May be repeated; maximum credit four hours. Broadening development of vocal technique for musical theatre singing; includes learning to blend the vocal registers for healthy tone production. Application of technique through the study of advanced level Broadway up-tempos and ballads, as well as German art song and American operetta. (F, Sp)

MTHR 3960	Honors Reading	Prerequisite: admission to Honors program and permission of instructor. Consists of either reading topics or independent study designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp)
MTHR 3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MTHR 3980	Honors Research	Prerequisite: admission to Honors program and permission of instructor. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
MTHR 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MTHR 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MTHR 4101	Advanced Performance Practicum	Prerequisite: junior or senior standing and permission of instructor. May be repeated; maximum credit four hours. Study and practice in rehearsal and performance as a cast member in musical theatre productions, including mainstage or cabaret/revue participation during the junior and senior years. (F, Sp)
MTHR 4112	Tap IV	(Crosslisted with DANC 4112) Prerequisite: 3112 or permission of instructor. May be repeated; maximum credit four hours. This advanced class furthers the tap dancer's vocabulary, refines technical skills, greatly increases assimilation ability and furthers the study of tap improvisation. (Irreg.)
MTHR 4172	Theatre Dance Styles I	Prerequisite: 2112 and 2442, and senior standing, or permission of instructor. A practical and historical study of the Broadway dance styles. The main focus is in the jazz idiom; however, strong ballet, jazz, and tap skills are required. Emphasis is placed on technique, performance quality and auditioning skills. (F)
MTHR 4173	Coaching	Prerequisite: senior standing and permission of instructor. Advanced techniques of musical theatre performance through individual coaching. Study includes developing a song notebook appropriate to one's type for professional auditions and assignments related to working in the Broadway profession. Emphasis is placed on presenting a variety of musical and dramatic styles. (F)
MTHR 4182	Theatre Dance Styles II	Prerequisite: 4172. This course is a continuing study of Broadway dance styles. Strong skills in jazz, ballet, and tap are required. Emphasis placed on techniques, performance quality and auditioning skills. (Sp)
MTHR 4183	Capstone Experience	Prerequisite: senior standing and permission of instructor. Requires written documentation in appropriate format. Senior year project which demonstrates mastery of skills and knowledge in musical theatre, selected under advisement and guided by appropriate faculty. (F, Sp) [V]
MTHR 4190	Special Studies	1 to 4 hours. Prerequisite: junior standing, major in musical theatre, and permission of instructor. May be repeated with change of content; maximum credit six hours. Varying individual or small group topics or projects in the study and practice of musical theatre not covered in regularly scheduled courses. (Irreg.)
MTHR 4252	Advanced Tap	Prerequisite: 4112 or permission of instructor. May be repeated; maximum credit eight hours. Class conducted at a professional level. Step breakdown will be minimized and students will be asked to create their own choreography and work heavily in improvisation. (F, Sp)

MTHR	4442	Jazz IV	(Crosslisted with DANC 4442) Prerequisite: permission of instructor. May be repeated; maximum credit four hours. An advanced class emphasizing strong technique and assimilation skills as well as the ability to adapt to any jazz style. Continued focus is placed on flexibility, strength, dynamics, and solid performance quality. (Irreg.)
MTHR	4452	Advanced Jazz	Prerequisite: 4442 or permission of instructor. May be repeated; maximum credit eight hours. Class conducted at a professional level. Superior flexibility, strength, dynamics and advanced technique are expected. (F, Sp)
MTHR	4502	Studio Voice IV	Prerequisite: 3502. May be repeated; maximum credit four hours. Furthering development of vocal technique for musical theatre singing; includes practical application of technical skills and knowledge. Application of technique through the study of classics and contemporary Broadway up-tempos and ballads as well as French art song and American art song. (F, Sp)
MTHR	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MTHR	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MTHR	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MTHR	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUED	1730	Field Experience for 1732	Corequisite: 1732. Students will complete ten hours of guided group field experience in public school classrooms. These observations will take place during course hours. Students not attending during these times must schedule a separate observation time with the field teacher. (F)
MUED	1732	Introduction to Music Education	Prerequisite: any music major; corequisite: MUED 1730. An overview of school music teaching. Designed to enable students to make early career choices. Students will observe music teaching in schools, develop a philosophy of music education, study psychological foundations as applied to music teaching, and become familiar with the total school music curriculum and its place in the school program. (F)
MUED	1740	Field Experience for 1742	Corequisite: 1742. Students will complete ten hours of guided group field experience in a public school classroom. These observations and micro teaching sessions will take place during course hours. Students not attending during these times must schedule a separate observation/teaching time with the field teacher. (Sp)
MUED	1742	Introduction to Teaching Techniques in Music	Prerequisite: majors only, MUED 1732; corequisite: MUED 1740. Second part of two-semester course sequence in music education. Sequential process of musical development, skills, content, methods, techniques and materials in the following areas: singing voice, classroom listening, sight reading, movement, and music series books. (Sp)
MUED	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUED	2240	Field Experience for Mute 2242	Prerequisite: sophomore standing in music; corequisite for music education majors only: 2242. Students will complete ten hours of observation and guided teaching in a middle school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the instrumental music education office for field experience. (F)

MUED 2250	Field Experience for Mute 2252	Prerequisite: MUTE 2242; corequisite for music education majors only: MUTE 2252. Students will complete ten hours of observation and guided teaching in a high school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the instrumental music education office for field experience. (Sp)
MUED 2733	Music in Early Childhood Education	Music instruction-learning in the early childhood years; an application of Piaget's principles of learning and development to music curricula in the preschool education of children. (F, Sp)
MUED 2743	Music for Classroom Teachers	Prerequisite: MUNM 2742. Open only to elementary education majors. Not open for credit to students in the School of Music. An introduction to effective methods, techniques and materials for teaching music to children in the elementary grades. (F, Sp)
MUED 3043	Media and Technologies of Music Instruction	Current technologies used by music instructors in public schools: MIDI theory and applications; sequencing and composition software; sound reinforcement and recording techniques; video production; elementary graphic design and desktop publishing. (Sp)
MUED 3160	Field Experience for 3162	Corequisite: 3162. Students will complete ten hours of observation and guided teaching in a beginning string classroom. Fieldwork will take place in addition to course hours and must be scheduled through the instrumental music education office for field placement. (F, Sp)
MUED 3162	Beginning Instruments Lab I	Prerequisite: majors only, MUTE 2252, corequisite: MUTE 3160. Part of a two-semester sequence intended to equip instrumental music education students with basic performance and diagnostic techniques applicable to brass, woodwind, string, and percussion instruments for beginning-level students. (F)
MUED 3170	Field Experience for 3172	Corequisite: 3172. Students will complete ten hours of observation and guided teaching in a beginning band classroom. Fieldwork will take place in addition to course hours and must be scheduled through the instrumental music education office for field placement. (F, Sp)
MUED 3172	Beginning Instruments Lab II	Beginning Instruments Lab II. Prerequisite: majors only, MUED 3162, corequisite: MUED 3170. Second Of A Two-Semester Sequence Intended To Equip Instrumental Music Education Students With Basic Performance And Diagnostic Techniques Applicable To Brass, Woodwind, Strings, And Percussion Instruments For Beginning-Level Students. (Sp)
MUED 3260	Field Experience for MUTE 3262	Prerequisite: junior standing in Music; co-requisite for Music Education Majors only: 3262. Students will complete ten hours of observation and guided teaching in a middle school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the vocal music education office for field placement. (Irreg.)
MUED 3270	Field Experience for MUTE 3272	Prerequisite: MUTE 3262; co-requisite for Music Education Majors only: 3272. Students will complete ten hours of observation and guided teaching in a High School classroom. Field work will take place in addition to course hours and must be scheduled through the vocal music education office for field placement. (Irreg.)
MUED 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

MUED	3720	Field Experience for 3723	Corequisite: 3723. Students will complete ten hours of guided group field experience in an elementary public school classrooms. These observations will take place during course hours. Students not attending during these times must schedule a separate observation time with the field teacher. Additionally, students will complete five hours of field experience outside of class time. These placements must be coordinated through the instrumental music education office for field placement. (Sp)
MUED	3723	Teaching Vocal Music, K-3	Prerequisite: Music Theory 2622. Psychological foundations, teaching techniques and materials for vocal music instruction in kindergarten through grade three. Teaching techniques used in the Kodaly, Orff and other contemporary approaches will be examined. (Sp)
MUED	3730	Field Experience for 3733	Corequisite: 3733. Students will complete 15-20 hours of group and independent teaching in a middle school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the vocal/general music education office for field placement. (Irreg.)
MUED	3733	Teaching Vocal/General Music, 4-8	Prerequisite: 3723. Sequential process of music development, skills, content, methods, techniques and materials suited to students in grades 4-8. Special attention given to the boys' changing voices. (F)
MUED	3740	Field Experience for 3743	Corequisite: 3743. Students will complete 15-20 hours of group and independent teaching in a high school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the choral music education office for field placement. (Irreg.)
MUED	3743	Teaching Choral Music, 9-12	Prerequisite: 3733. Organization and management of choirs, repertoire appropriate to JHS/SHS choirs, rehearsal techniques, programming considerations, use of audio equipment, field experiences. (F, Sp)
MUED	3750	Field Experience for 3752	Corequisite: 3752. Students will complete twelve to thirteen hours of independent teaching in a middle school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the instrumental music education office for field placement. (F)
MUED	3752	Teaching Instrumental Music, 4-8	Prerequisite: junior standing in music. Materials and methods for teaching instrumental music in grades 4-8. Study on the selection of students, literature appropriate to ensemble and grade, rehearsal procedures, teaching strategies, psychological learning theory underlying teaching strategies, and evaluation of student learning. (F)
MUED	3760	Field Experience for 3762	Corequisite: 3762. Students will complete twelve to thirteen hours of independent teaching in a high school classroom. Fieldwork will take place in addition to course hours and must be scheduled through the instrumental music education office for field placement. (Sp)
MUED	3762	Teaching Instrumental Music, 9-12	Prerequisite: 3752. Administrative procedures and methods for teaching instrumental music in grades 9-12. Study of literature appropriate to ensemble and grade, score preparation, teaching style, problems related to contests, festivals, trips, scheduling, and measurements and evaluation of student learning. (Sp)
MUED	3773	Teaching Multicultural Music	Prerequisite: junior standing in music education. Designed for the music education major as an introduction to teaching the musical art forms of diverse groups and cultures within the United States and throughout the world. Building on basic principles of contemporary learning theory, this course develops knowledge and understanding of global musical art forms through active multi-sensory teaching approaches. (Sp)
MUED	3782	Internship in Piano Teaching	Prerequisite or corequisite: 3783. Teaching of children from preschool through high school in groups and private lessons under faculty supervision. (F, Sp)
MUED	3783	Piano Pedagogy	Prerequisite: eight hours of piano or organ, permission. Required for piano majors and elective for other fields. Basic study of concepts necessary for successful private and class piano teaching at the elementary level. Student teaching required. (Alt. F)

MUED	3792	Internship in Piano Teaching	Prerequisite or corequisite: 3782 and 3783. Continuation of teaching skills begun in 3782. Teaching of children from preschool through high school in groups and private lessons under faculty supervision. (F, Sp)
MUED	3793	Piano Pedagogy	Prerequisite: 3783. Required for piano majors and elective for other fields. Continuation of skills begun in 3783. Basic study of concepts necessary for successful private and class piano teaching at the intermediate level. Student teaching required. (Alt. Sp)
MUED	3823	Teaching General Music PreK-2	Prerequisite: MUED 1732; majors only. Psychological foundations, teaching techniques and materials for vocal music instruction in pre-kindergarten through grade 2. Teaching techniques used in the Kodaly, Orff and other contemporary approaches will be examined. (F)
MUED	3833	Teaching Vocal/General Music 3-5	Prerequisite: MUED 1732; majors only. Sequential process of music development, skills, content, methods, techniques and materials suited to students in grades 3-5. (Sp)
MUED	3843	Teaching Vocal/General Music 6-8	Prerequisite: MUED 1732; Majors only. Sequential process of music development, skills, content, methods, techniques and materials suited to students in grades 6-8. Special attention given to the boys' changing voices. (Sp)
MUED	3853	Teaching Choral Music Grades 9-12	Prerequisite: MUED 1732; majors only. Organization and management of choirs, repertoire appropriate to JHS/SHS choirs, rehearsal techniques, programming considerations, use of audio equipment, field experiences. (F)
MUED	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
MUED	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MUED	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MUED	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MUED	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MUED	4042	Capstone Seminar	Prerequisite: concurrent enrollment in 4050 and 4060. The development of a teaching portfolio including a reflection log of teaching activities, written evaluations of video and audio episodes, and a summary of teaching successes and areas to be improved. (F, Sp) [V]
MUED	4050	Teaching Experiences in the Elementary School	Prerequisite: formal admission to student teaching; corequisite: 4042. Laboratory activities in music classes in elementary schools under competent direction and supervision: orientation, observation, and classroom teaching experiences supported by seminars and conferences focusing on the problems of teaching. Prospective teachers receive instruction, aid, and constructive supervision in classroom management, evaluation of pupil behavior, methods of teaching, selection of teaching materials, and school-home-community relations. (F, Sp)
MUED	4060	Teaching Experiences in the Secondary School	Prerequisite: formal admission to student teaching; corequisite: 4042. Correlation of theory and instructional practices in music classes in secondary schools; supervised observation, teaching, classroom management, and evaluation; acquaintance with the administration of a secondary school and the school program; selection and use of appropriate instructional materials; conferences with supervisors. (F, Sp)

MUED 4752	Marching Band Techniques	Prerequisite: junior standing in music education. Organization of the marching band and its instrumentation, selecting and adapting music, marching fundamentals, marching styles and trends, planning and charting half-time shows, parade routines, auxiliary units and drum major signals. (Sp)
MUED 4762	String Pedagogy	Prerequisite: majors only; MUTE 2252 or MUTE 3252; junior standing. String teaching techniques in large and small group settings. Emphasis is on familiarizing students with teaching strategies for string classes in public schools. (Sp)
MUED 4892	Vocal Pedagogy & Diction for the Classroom Teacher	Prerequisite: junior standing and majors only. Study of vocal teaching techniques including anatomy of vocal tract, physiological process and acoustical properties. Repertory for high school students. (F)
MUED 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MUED 4970	Undergraduate Seminar	1 to 3 hours. Prerequisite: permission of department. May be repeated; maximum credit nine hours. In-depth study of topics of interest as appropriate to the field of study. Subjects such as Music in the Two-Year College, The Aesthetic Dimensions of Music Education; The Teaching of Ethnic Music; The Psychology of Music; and the like, are illustrative of the topics that may be pursued. (Irreg.)
MUED 4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUED 5212	Research in Music Education	Prerequisite: graduate standing in music or music education or permission. Methods of analytical-historical research in music and historical, philosophical, descriptive and experimental research in music education. (F, Alt. Su)
MUED 5522	Voice Pedagogy I	Prerequisite: graduate standing or permission. An introduction to methods of instruction in vocal pedagogy. An in-depth study of voice building and hygiene, psychological factors in singing, physiology of the vocal tract, acoustic principles of speech and singing, and vocal materials. Examined through discussion, lecture, demonstration, micro-teaching, and outside reading. (Irreg.)
MUED 5553	Kodaly Concept I	Kodaly Concept I. Prerequisite: Graduate Standing. The Philosophy, Methodology And Techniques Of Teaching The Kodaly Concept In Music Education In Levels K - 1. (F)
MUED 5562	Solfege I	Solfege I. Kodaly Techniques Applied To The Practice And Skills Of Sight Singing, Ear Training And Dictation. Sight Singing Of Unison, Homophonic And Polyphonic Examples From The Classical Music Literature. Study Of Selected Books In The Kodaly Choral Method. (Sp)
MUED 5563	Kodaly Concept II	Prerequisite: 5553. The philosophy, methodology and techniques of teaching the Kodaly Concept of music education in levels 2-3. (Irreg.)
MUED 5572	Solfege II	Prerequisite: 5562. Advanced Kodaly techniques applied to the practice and skills of sight singing, ear training and dictation. Sight singing examples will involve modulation, chromaticism and modes. (Su)
MUED 5573	Kodaly Concept III	Prerequisite: 5563. The philosophy, methodology and techniques of teaching the Kodaly concept of music education in levels 4-6.
MUED 5582	Folk Song Research	Prerequisite: 5553. Study of musical culture in America through analysis of melodic and rhythmic structures, forms and categories of American folk songs as source material for teaching the Kodaly Concept. (Irreg.)
MUED 5612	Piano Pedagogy I	Prerequisite: graduate standing or permission. Methods, materials, curriculum building and philosophical bases for teaching piano at the college and university levels with focus on group instruction. Student teaching required. (F)

MUED 5622	Piano Pedagogy II	Prerequisite: graduate standing or permission. Methods, materials, curriculum building and philosophical bases for teaching piano at the elementary and intermediate levels. Student teaching required. (Sp)
MUED 5642	Internship in Piano Teaching	Prerequisite: graduate standing. Teaching of children's classes, college classes, adult students or private lessons under faculty supervision. Designed to give the student experience in areas where none exists. (F, Sp, Su)
MUED 5652	Master's Workshop in Piano Pedagogy	Prerequisite: graduate standing and permission. A public workshop for piano teachers concentrating on teaching techniques and materials. The workshop must be at least three hours in length. Terminal degree requirement in lieu of recital. (F, Sp)
MUED 5662	Teaching Intermediate and Advanced Piano	Prerequisite: graduate standing or permission. Methods, materials and curriculum building for teaching piano students at the intermediate through advanced levels. Focus will be on developing piano teaching techniques for high school and college-age students, studying repertoire that is appropriate for these students, and exploring performance practice suitable for pianists at the intermediate and advanced levels. (Alt. Sp)
MUED 5960	Directed Readings	1 to 3 hours. Prerequisite: 18 hours of music, permission of the director of the school. May be repeated; maximum credit six hours. Individual topics in music education. (F, Sp, Su)
MUED 5970	Seminar in Music Education	1 to 6 hours. Prerequisite: twelve hours of music education, graduate standing, or permission. May be repeated with change of subject matter; maximum graduate credit twelve hours. (F, Sp, Su)
MUED 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
MUED 5990	Special Studies in Music Education	1 to 3 hours. Prerequisite: permission of the director of the school. May be repeated with change of subject matter; maximum credit six hours. Individual study and research in the field of music education. (F, Sp, Su)
MUED 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUED 6012	Philosophical Foundations of Music Education	Prerequisite: graduate standing in music or music education. Students will study the writings of Mursell, Leonhard, Reimer, Elliott, and others. Students will debate the theories these authors propose and prepare written papers applying aspects of these theories to music education practice in today's schools. (Irreg.)
MUED 6022	Psychological Foundations of Music Education	Prerequisite: graduate standing in music or music education. Philosophies, theories, principles and concepts of learning and their implications to the teaching and learning processes in music education. The basic orientations of Associationist and Field theories will be investigated and the current status of learning theory applied to music education will be evaluated. Specific theories are those of Ausubel, Gagne, Guilford, Piaget, and Skinner and applications by Bruner, Gordon and Mursell. (Sp)
MUED 6032	Sociological Foundations of Music Education	Prerequisite: graduate standing in Music or Music Education. Students will read works by Adorno, Becker, Blumer, Dewey, Mead, Vygotsky, and others. Students will debate the issues and theories these authors propose and will prepare written papers applying aspects of these theories to music education practice in today's schools. (Irreg.)
MUED 6042	Historical Foundations of Music Education	Prerequisite: graduate standing in Music or Music Education. Includes readings from works by Birge, Britton, Chase, Heller, Keene, Mark, and others that outline the development of music instruction in American schools. Students will debate the issues presented by these authors and prepare written papers on various historical movements and methodologies. (Irreg.)
MUED 6212	Measurement and Evaluation in Music Education	Prerequisite: graduate standing in music or music education. Techniques and methods of measuring and evaluating musical behavior in cognitive, affective and psychomotor domains. (Sp)

MUED	6222	Qualitative Research in Music Education	Prerequisite: graduate standing in music or music education. Required for the Music Education Ph.D. curriculum. Course assignments review qualitative research techniques applied to problems in music education. Students will study questionnaire development, interview formats, case study reporting, triangulation methods, and oral history methodologies. (Irreg.)
MUED	6242	Quantitative Research in Music Education	Prerequisite: graduate standing in music or music education. Required for the Music Education Ph.D. curriculum. Course assignments review empirical research techniques applied to problems in music education. Students study research design, population sampling, statistical formulae for analyzing data, and advanced statistical techniques such as factor analysis and regression analyses. (Irreg.)
MUED	6442	Current Trends in Music Education	Prerequisite: graduate standing in music or music education, permission. Identification and evaluation of current trends in music teaching. Individual projects expected. (Alt. F)
MUED	6652	Doctoral Workshop in Piano Pedagogy	Prerequisite: doctoral standing and permission. A public workshop for piano teachers concentrating on teaching techniques and materials. The workshop must be a least five hours in length. Terminal degree requirement in lieu of recital. (F, Sp, Su)
MUED	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
MUED	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MUED	6980	Research for Doctoral Dissertation	(F, Sp, Su)
MUED	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUHI	1312	Music In Culture	Music In Culture. Required Of All Music Majors; Nonmusic Majors Admitted By Permission. A Study Of Music In Its Cultural Context, Exploring The Inter-Relationship Of Music To Such Aspects As Everyday Life, Worship And Belief, Migration, Dance, Memory, Politics, And Identity. Techniques Of Aural Perception Are Stressed For The Improvement Of Basic Listening Skills.
MUHI	2313	Ancient Times To 1700	Ancient Times To 1700. Prerequisite: 1312. A Study Of The Development Of Music From Its Inception To The Late Baroque Era Conducted Through Lectures, Readings, Listening And Analysis. (F) [IV-WC]
MUHI	2323	Late Baroque Through Romantic Period	Late Baroque Through Romantic Period. Prerequisite: 1312. A Study Of The Development Of Music In The Eighteenth And Nineteenth Centuries Conducted Through Lectures, Readings, Listening And Analysis. (Sp) [IV-WC]
MUHI	3333	Post-Romantic Period To The Present	Post-Romantic Period To The Present. Prerequisite: 1312. A Study Of The Development Of Music From The Post-Romantic Era To The Present Day Conducted Through Lectures, Readings, Listening And Analysis. (F) [IV-WC]
MUHI	4970	Undergraduate Seminar	Undergraduate Seminar. 1 To 3 Hours. Prerequisite: Permission Of Department. In-Depth Study Of Topics Of Interest As Appropriate To The Field Of Study. Subjects Such As The Style, Aesthetics And Influence Of A Particular Composer, I.E., Beethoven, Berio, Brahms; The Social/Cultural Foundations Of A Particular Musical Era Or Period; Notational Systems And The Like, Are Illustrative Of The Topics That May Be Pursued. (Sp)

MUHI	5323	History Of Opera	The History Of Opera. Prerequisite: Graduate Standing Or Per- Mission; 2313, 2323, 3333 Or Equivalent. Changes Of Content, Style And Form In Dramatic Music As Related To Social, Economic And Political Change In The Past 350 Years Of Western Civilization. (Irreg.)
MUHI	5353	History Of The Symphony	History Of The Symphony. Prerequisite: Graduate Standing Or Per- Mission; 2313, 2323, 3333 Or Equivalent. The Development Of Symphonic Form With Detailed Attention To Outstanding Examples Of Literature From The Various Periods. (Irreg.)
MUHI	5373	History Of American Music	History Of American Music. Prerequisite: Graduate Standing Or Permission; 2313, 2323, 3333 Or Equivalent. Music In The United States From Its Beginnings To The Present. (Irreg.)
MUHI	5523	Music In The Renaissance: Style, Theory And Performance	Music In The Renaissance: Style, Theory And Performance. Pre- Requisite: Graduate Standing; 2313 Or Equivalent. An Integrated Course That Correlates Vocal And Instrumental Renaissance Music By The Major Composers With The Major Writers Of The Time On Music Theory, Acoustics, Philosophy, Esthetics, History And Performance. (Irreg.)
MUHI	5543	The Baroque Era	The Baroque Era. Prerequisite: Graduate Standing Or Permission; 2313, 2323, 3333 Or Equivalent. A Detailed Study Of Music From Monteverdi Through J. S. Bach. (Irreg.)
MUHI	5563	Music In The Classical Period	Music In The Classical Period. Prerequisite: Graduate Standing Or Permission; 2313, 2323, 3333 Or Equivalent. A Detailed Study Of Music From Around 1730 To Beethoven. (Irreg.)
MUHI	5573	The Romantic Era	The Romantic Era. Prerequisite: Graduate Standing Or Permission; 2313, 2323, 3333 Or Equivalent. A Detailed Study Of Music Of The Romantic Era, Principally 1800 To 1900. (Irreg.)
MUHI	5593	Twentieth-Century Music	Twentieth-Century Music. Prerequisite: Graduate Standing Or Per- Mission; 2313, 2323, 3333 Or Equivalent. A Detailed Study Of Con- Temporary Styles And Composers. (Alt. Sp)
MUHI	5653	History Of Chamber Music	History Of Chamber Music. Prerequisite: Graduate Standing Or Permission; 2313, 2323, 3333 Or Equivalent. A Study Of Music For Chamber Ensembles. (Irreg.)
MUHI	5960	Directed Readings	Directed Readings. 1 To 3 Hours. Prerequisite: Eighteen Hours Of Music, Permission Of The Director Of The School. May Be Repeated; Maximum Credit Six Hours. Individual Topics In Music History And Literature. (F, Sp, Su)
MUHI	5970	Seminar In Music History	Seminar In Music History. 1 To 4 Hours. Prerequisite: Thirty Hours Of Music Or Permission. May Be Repeated With Change Of Subject Matter; Maximum Graduate Credit Twelve Hours. (F, Sp, Su)
MUHI	5980	Research For Master's Thesis	Research For Master's Thesis. Variable Enrollment, Two To Nine Hours; Maximum Credit Applicable Toward Degree, Four Hours. Music Television Emphasis Also Requires The Production Of A Half-Hour Broadcast-Quality Television Program As Part Of Thesis Research. (F, Sp, Su)
MUHI	5990	Special Studies In Music History	Special Studies In Music History. 1 To 3 Hours. Prerequisite: Thirty Hours Of Music, Permission Of The Director Of The School. May Be Repeated With Change Of Subject Matter; Maximum Graduate Credit Six Hours. Individual Study, Research And Analysis. (F, Sp, Su)
MULI	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MULI	2970	Special Topics in Music Literature	Majors only. 1 to 3 hours. May be repeated with change of subject matter; maximum credit nine hours. Content changes each semester. Study of newly developed, experimental or inter-disciplinary topics in music literature. (Irreg.)

MULI	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MULI	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MULI	4453	Organ Literature	Prerequisites: Junior standing; majors only. A general survey of organ literature, composers, performers, builders and instruments from the Baroque period through modern times. The course goal is for students to be able to identify style characteristics of periods in general and composers in particular, as well as trends in organ building and how those trends influenced composers and performers. (Irreg.)
MULI	4523	Keyboard Literature	Prerequisite: Music History 2313, 2323, 3333, or permission. (Alt. F)
MULI	4533	Keyboard Literature	Prerequisite: Music History 2313, 2323, 3333, or permission. (Alt. Sp)
MULI	4543	Introduction to Vocal Literature	Prerequisite: junior standing in music. Provides an introduction to art song literature for the solo voice. Repertoire in Italian, German, French, English, Spanish, and Russian will be included. The main emphasis will be on songs for the solo voice; some examples from opera, oratorio, and vocal chamber music will also be discussed. (Irreg.)
MULI	4612	Harp Orchestral Literature	Prerequisite: majors only, junior standing. This course is designed to prepare the harp student for orchestral auditions. Classes will consist of learning a book of standard orchestral audition excerpts, studying scores, and listening to audition excerpts. (Irreg.)
MULI	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MULI	4970	Undergraduate Seminar	1 to 3 hours. Prerequisite: permission of department. In-depth study of topics of interest as appropriate to the field of study. May be repeated; maximum credit nine hours. Subjects such as The Art Song since 1950; The Symphonic Music of Charles Ives; Songs of the American Revolution; Music of the American Theatre; The String Quartets of Haydn; and the like, are illustrative of topics that may be offered. (F, Sp)
MULI	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MULI	5433	Studies in Piano Literature II	Prerequisite: graduate standing or permission of instructor. A detailed study of compositional styles, idioms and trends in music written for the piano during the Romantic period to the present. Topics will vary. Possible areas of study include the Character Piece of the 19th Century, Influence of Liszt on 20th-Century Piano Music, Piano Works of Debussy and Ravel, American Experimentalism in 20th-Century Piano Music, and European Avante Garde Piano Music. (Irreg.)
MULI	5453	Organ Literature I: Renaissance and Baroque	Prerequisite: graduate standing, for majors only. A study of organ literature from its origins to 1750 through analysis, readings, listening, and lectures. Students will examine the relationships between the music and the organs of the time. Emphasis will also be placed on the role of organ music in the surrounding culture, both musical and social. (Irreg.)

MULI	5463	Organ Literature II: 1750-1900	Prerequisites: graduate standing, for majors only. A study of organ literature from 1750 to 1900 through analysis, readings, listening, and lectures. Students will examine the relationships between the music and the organs of the time. Emphasis will also be placed on the role of organ music in the surrounding culture, both musical and social. (Irreg.)
MULI	5473	Organ Literature III: 1900-Present	Prerequisite: graduate standing, for majors only. A study of organ literature from 1900 to the present through analysis, readings, listening, and lectures. Students will examine the relationships between the music and the organs of the time. Emphasis will also be placed on the role of organ music in the surrounding culture, both musical and social. (Irreg.)
MULI	5483	Hymnody	Prerequisite: graduate standing or permission. A historical survey of the development of Christian hymnody from the early/Byzantine period through current times. Includes lectures and analysis of texts, tunes and other primary source material. Hymns will be studied in their historical and social context. Students will also examine the role of hymns in western art music. (F, Sp)
MULI	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MULI	5970	Seminar in Music Literature	1 to 4 hours. Prerequisite: 30 hours of music, graduate standing or permission. May be repeated with change of subject matter; maximum graduate credit 12 hours. (F, Sp)
MULI	5990	Special Studies	Prerequisite: graduate standing; permission of the director of the school. May be repeated with change of subject matter; maximum credit six hours. Individual study and research in the field of music literature. (F, Sp, Su)
MULI	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUNM	1022	Beginning Instrument/Voice Class I	For non-music majors with no experience in the instrument/voice only. May be repeated for credit; maximum credit eight hours. Class instruction in basic performance/musicianship skills. This course does not count for major credit in the School of Music. (F, Sp)
MUNM	1032	Beginning Instrument/Voice Class II	Prerequisite: 1022 or permission. For non-music majors with limited instrumental/vocal experience only. May be repeated for credit; maximum credit eight hours. Class instruction in basic performance/musicianship skills. This course does not count for major credit in the School of Music. (F, Sp)
MUNM	1100	Freshman and/or Sophomore Piano, Violin, Etc., for Nonmusic Majors	1 to 2 hours. Prerequisite: permission of instructor. Enrollment is subject to faculty availability and will not be accepted until the first day of classes. Private instruction in the development of instrumental or vocal performance skills and musicianship. This course does not count for major credit in the School of Music. (F, Sp, Su)
MUNM	1113	The Understanding of Music	Open to non-music majors. A course in music appreciation covering all of the important fields of music, with opportunity for the students to listen to recordings and to attend concerts. This course does not count for major credit in the School of Music. (F, Sp, Su) [IV-AF]
MUNM	1143	American Popular Music	A study of the evolution of popular music found in America from the early minstrel shows of the nineteenth century through the current trends of today. Students will be expected to listen to and identify music from a variety of musical styles. The social and historical contexts in which this music was performed and composed will also be examined as part of the course. (F, Sp) [IV-AF]
MUNM	1743	Experiencing Music	Designed as an introduction to the varied strands of folk music in America. Involves examination of the historical, cultural and social implications of American folk songs; performance and analysis of folk songs as musical art forms; and the link between folk songs and large-scale contemporary musical compositions. This course does not count for major credit in the School of Music. (F, Sp) [IV-AF]

MUNM 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUNM 2313	History of Jazz	Open to non-music majors. Detailed and specific study of jazz as a major musical art form. Studies the logical musical developments of jazz pointing out the important elements comprising the individual styles as they have evolved. Evolution and cultural ties are made through representative masterworks by master performers. Critical listening and evaluation are a major element. No prior knowledge of terms or techniques is necessary. This course does not count for major credit in the School of Music. (F, Sp, Su) [IV-AF]
MUNM 2413	Music in Film	A "grand tour" of the esthetics and dramatic techniques of film music since 1895. Excerpts from commercial "silent era" and "sound era" films will be viewed and studied as examples of film music development and the composer's art. (Irreg.) [IV-AF]
MUNM 2513	Music in the Rock Era: Heavy Metal	This course covers the globally popular yet often socially and critically maligned rock music genre of heavy metal from its inception in the late 1960s to the present day. We will cover musical characteristics associated with the style, investigate its fan culture, social impact, and meaning, and explore its interaction with the music industry. Related musical styles will be discussed to give additional points of reference. Previous knowledge of music and the heavy metal genre is not required. The development of critical thinking and listening skills is an important element of this class. (Sp, Su)
MUNM 2970	Special Topics in Music	Open to non-music majors. 1 to 3 hours. May be repeated with change of subject matter; content changes each semester. Study of newly developed, experimental or inter-disciplinary topics in music. This course does not count for major credit in the School of Music.
MUNM 3022	Intermediate Instrument/Voice Class I	Prerequisite: 1032 or permission. For non-music majors only. May be repeated for credit; maximum credit eight hours. Class instruction in intermediate-level instrument/voice performance/musicianship. This course does not count for major credit in the School of Music. (F, Sp)
MUNM 3100	Junior and/or Senior Piano, Violin, etc., for Nonmusic Majors	1 to 2 hours. Prerequisite: permission of instructor. Enrollment is subject to faculty availability and will not be accepted until the first day of classes. Private instruction in the development of instrumental or vocal skills and musicianship. This course does not count for major credit in the School of Music. (F, Sp, Su)
MUNM 3113	World Music	Prerequisite: junior standing. Study of music and human culture focusing on tribal, folk, popular and oriental (non-Western) music. Several representative societies will be explored in depth. Field study, music-making projects, and analysis of live performances of ethnic music are included. This course does not count for major credit in the School of Music. (F, Sp, Su) [IV-NW]
MUNM 3123	Introduction to the Art Song	Prerequisite: junior standing. Designed to introduce students to the various traditions that have informed the literature of the western art song from antiquity to the present. Emphasis will be placed on understanding musical and poetic forms as well as the general cultural climates that gave birth to song repertories. This course does not count for major credit in the School of Music. (Irreg.) [IV-AF]
MUNM 3213	Native American Music	Prerequisite: junior standing. Study of Native American music of the North American continental United States (with special emphasis on music of the Plains tribes). Field study, instrument building, analytical essays of live performances and a high level of aural classroom experience will be included. This course does not count for major credit in the School of Music. [IV-NW]

MUNM 3313	African Repercussions	Prerequisite: junior standing. Open to non-music majors. Study of music culture focusing on the African impact. Several areas of influence explored in depth include African traditional music, Afro Pop, Reggae and Caribbean fusion, American black gospel, rhythm and blues, and jazz. Written analyses on recorded and live music are part of course requirements as well as exams based on classroom lectures and performances. This course does not count for major credit in the School of Music. (F, Sp) [IV-NW]
MUNM 3413	Music of the Pacific Rim	Prerequisite: junior standing. Open to non-music majors. Music cultures of the Pacific Rim including Japan, Southeast Asia, Indonesia, Pacific Islands and Australia. Cultural context and aesthetic elements of the music will be examined. Western music terminology will serve as a point of departure as a new music vocabulary and mindset are developed and used as part of written reports and class discussions. This course does not count for major credit in the School of Music. (F, Sp) [IV-NW]
MUNM 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MUNM 3513	Music of South Asia	Prerequisite: junior standing. Focuses on music cultures of South Asia with particular emphasis on the Indian subcontinent. Examines the musical qualities and cultural meaning of Northern (Hindustani) and Southern (Karnatak) classical styles as well as regional folk, popular (film), temple music, and devotional music. (F, Sp) [IV-NW]
MUNM 3613	Middle Eastern Music	Prerequisite: junior standing. A study of the musical systems observed in the larger Arab world and parts of the Mediterranean. Explores overarching concepts of melody and rhythm in Middle Eastern music, namely the maqam and iqa', and their manifestation in various musical cultures of the East Arab world, North Africa, Turkey, and the Balkans. Topics will include gender and music-making in the Middle East; star-system and ethno-pop in Egypt; music and the intersection of Islamic, Judaic, and Christian religions; and, musical cross-influences in Greece, Turkey and the Balkans. Includes various pedagogical approaches such as class listening and musical analysis, reading and critical discussion, as well as video, live demonstrations, and workshops. This course does not count for major credit in the School of Music. (F, Sp) [IV-NW]
MUNM 3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
MUNM 3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MUNM 3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MUNM 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MUNM 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

MUNM	4210	Special Topics in Music	1 to 3 hours. Prerequisite: 1113. May be repeated with change of topic; maximum credit six hours. Special topics in music and music history requiring writing projects and listening activity. Topics typically will treat periods of musical history, style, and related topics. This course does not count for major credit in the School of Music. (F, Sp, Su)
MUNM	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MUNM	4970	Undergraduate Seminar	Open to non-music majors. 1 to 3 hours. Prerequisite: 1113 or permission of instructor. May be repeated with change of subject matter; content changes each semester. Study of newly developed, experimental or inter-disciplinary topics in music. This course does not count for major credit in the School of Music. (Irreg.)
MUNM	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUNM	5100	Graduate Piano, Violin, etc for Nonmusic Majors	1 to 2 hours. Prerequisite: graduate standing and permission; four semesters of previous study in the instrument or voice. Enrollment is subject to faculty availability and will not be accepted until the first day of classes. Private instruction in the development of instrumental or vocal skills and musicianship. This course does not count for major credit in the School of Music. (F, Sp, Su)
MUNM	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MUNM	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MUNM	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUNM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUS	2970	Special Topics in Music	1 to 3 hours. May be repeated with change of subject matter; content changes each semester. Study of newly developed, experimental, or inter-disciplinary topics in music.
MUS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MUS	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Consists of either reading topics or independent study designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)

MUS	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated with change of subject; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MUS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MUS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MUS	4023	Senior Capstone - BA Degree	Prerequisites: majors only; MUTH 2622; and permission. Research and reading leading to a senior capstone paper in consultation with individual faculty. (F, Sp) [V]
MUS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MUS	4970	Undergraduate Seminar	1 to 3 hours. Prerequisite: permission of department. May be repeated; maximum credit six hours. In-depth study of topics of interest. Subjects such as The Aesthetics of Music; Musical Criticism; Music in American Culture; Music of the American Indians; The Band as a Cultural Phenomenon; and the like, are illustrative of the topics that may be pursued. (Irreg.)
MUS	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUS	5112	Bibliography and Research in Music	Prerequisite: graduate standing in music or music education. General and music bibliography; development of research skills in music. (F)
MUS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
MUS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
MUS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUS	6880	Doctor of Musical arts Project	2 to 8 hours. Prerequisite: admission to DMA degree program; permission of adviser and instructor. Research and/or creative endeavor leading to the completion of the final written project for the degree Doctor of Musical Arts. (F, Sp, Su)
MUS	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
MUS	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)

MUS	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUSC	1003	Music and American Democracy	Music often functions to unite a people or a society. Given that the American people and society change with each passing generation and given that their guaranteed liberties seldom unite them in a wholly cohesive chorus, the ways music has been used to reinforce ideals, advance causes, shape social norms and satisfy diverse constituencies offers a rich story. For the most part, American government has played a slight role in the unfolding of American music, although there have been fascinating exceptions to this rule. A situation of minimal government policy allows for the marketplace of ideas to determine what is composed, performed, taught and cherished. Within this marketplace, fissures have frequently emerged dividing advocates of one or another approach allowing for vigorous debates. This course affords students an opportunity first to study these disputes as matters of historical record and then engage with these debates as they manifest themselves today. (F) [IV-WC]
MUSC	1312	Music in Culture	Required of all music majors; nonmusic majors admitted by permission. A study of music in its cultural context, exploring the inter-relationship of music to such aspects as everyday life, worship and belief, migration, dance, memory, politics, and identity. Techniques of aural perception are stressed for the improvement of basic listening skills. (Sp) [IV-AF]
MUSC	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUSC	2313	Ancient Times to 1700	Prerequisite: 1312. A study of the development of music from its inception to the late Baroque era conducted through lectures, readings, listening and analysis. (F) [IV-WC]
MUSC	2323	Late Baroque Through Romantic Period	Prerequisite: 1312. A study of the development of music in the eighteenth and nineteenth centuries conducted through lectures, readings, listening and analysis. (Sp) [IV-WC]
MUSC	3333	Post-Romantic Period to the Present	Prerequisite: 1312. A study of the development of music from the Post-Romantic era to the present day conducted through lectures, readings, listening and analysis. (F) [IV-WC]
MUSC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MUSC	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
MUSC	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MUSC	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
MUSC	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

MUSC 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MUSC 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MUSC 4970	Undergraduate Seminar	1 to 3 hours. Prerequisite: permission of department. May be repeated with change of content; maximum credit nine hours. In-depth study of topics of interest as appropriate to the field of study. Subjects such as the style, aesthetics, and influence of a particular composer, i.e., Beethoven, Berlioz, Brahms; the social/cultural foundations of a particular musical era or period; notational systems; and the like, are illustrative of the topics that may be pursued. (Sp)
MUSC 4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUSC 5100	Music History Graduate Review I	0 to 1 hour. Prerequisite: majors only. Designed to provide remediation to graduate students who did not pass the preliminary exam in early music history. In order to register for graduate musicology seminars, students must either have passed the preliminary exam or have passed this review course. This class is held during the first eight weeks of the semester. The Medieval, Renaissance, and Baroque eras are studied. (F, Sp)
MUSC 5200	Music History Graduate Review II	0 to 1 hour. Prerequisite: majors only. Designed to provide remediation to graduate students who did not pass the preliminary exam in early music history. In order to register for graduate musicology seminars, students must either have passed the preliminary exam or have passed the review course. This class is held during the last eight weeks of the semester. Classical, Romantic, and 20th century periods are studied. (F, Sp)
MUSC 5323	History of Opera	Prerequisite: graduate standing or permission; 2313, 2323, 3333, or equivalent. Changes of content, style and form in dramatic music as related to social, economic and political change in the past 350 years of western civilization. (Irreg.)
MUSC 5353	History of the Symphony	Prerequisite: graduate standing or permission; 2313, 2323, 3333, or equivalent. The development of symphonic form with detailed attention to outstanding examples of literature from the various periods. (Irreg.)
MUSC 5363	History of the Concerto	Prerequisite: Graduate standing or permission of the department. The development of concerto form with detailed attention to outstanding examples of literature from the various periods. (Irreg.)
MUSC 5373	History of American Music	Prerequisite: graduate standing or permission; 2313, 2323, 3333, or equivalent. Music in the United States from its beginnings to the present. (Irreg.)
MUSC 5413	World Music	Prerequisite: Graduate standing or permission of the department. A study of world music from a cultural area approach, including musical expressions from Asia, Africa, Latin America and Native America. (Irreg.)
MUSC 5423	Native American Music	Prerequisite: Graduate standing or permission of the department. A study of Native American music in its cultural context, including musical expression from the eastern woodlands, plains, southwest, and northwest coast areas. (Irreg.)
MUSC 5433	Ethnomusicology	Prerequisite: Graduate standing or permission of the department. A study of world music from an issue and concepts orientation, including illustrative musical expressions from a variety of world areas. (Irreg.)

MUSC 5513	Music in the Middle Ages	Prerequisite: graduate standing. Majors only. A detailed survey of music from Hildegard of Bingen through Guillaume de Machaut. Explores a wide variety of medieval musical repertories, including major sacred and vernacular musical genres. Through detailed study of primary and secondary materials, we will examine musical structures as well as the historical contexts within which they were produced. (Irreg.)
MUSC 5523	Music in the Renaissance: Style, Theory and Performance	Prerequisite: graduate standing; 2313 or equivalent. An integrated course that correlates vocal and instrumental Renaissance music by the major composers with the major writers of the time on musical theory, acoustics, philosophy, esthetics, history and performance. (Irreg.)
MUSC 5543	The Baroque Era	Prerequisite: graduate standing or permission; 2313, 2323, 3333, or equivalent. A detailed study of music from Monteverdi through J.S. Bach. (Irreg.)
MUSC 5563	Music in the Classical Period	Prerequisite: graduate standing or permission; 2313, 2323, 3333, or equivalent. A detailed study of music from around 1730 to Beethoven. (Irreg.)
MUSC 5573	The Romantic Era	Prerequisite: graduate standing or permission; 2313, 2323, 3333, or equivalent. A detailed study of music of the romantic era, principally 1800 to 1900. (Irreg.)
MUSC 5583	Music from 1900-1945	Prerequisite: Graduate standing or permission of the department. A study of European and American classical music during this period. (Irreg.)
MUSC 5593	Music from 1945 to the Present	Prerequisite: graduate standing or permission of department. A study of European and American classical music during this time period. (Irreg.)
MUSC 5653	History of Chamber Music	Prerequisite: graduate standing or permission; 2313, 2323, 3333 or equivalent. A study of music for chamber ensembles. (Irreg.)
MUSC 5793	Outre Music	Prerequisite: Graduate standing or permission of the department. A survey of diverse musical repertories which can be viewed as outlandish, improbable, or subversive at some point in time and in some particular place toward reaching a better understanding of how fringe culture shapes itself through music and interacts with the mainstream. (Irreg.)
MUSC 5960	Directed Readings	1 to 3 hours. Prerequisite: 18 hours of music, permission of the director of the school. May be repeated; maximum credit six hours. Individual topics in music history and literature. (F, Sp, Su)
MUSC 5970	Seminar in Music History	1 to 4 hours. Prerequisite: 30 hours of music or permission. May be repeated with change of subject matter; maximum graduate credit 12 hours. (F, Sp, Su)
MUSC 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. Music television emphasis also requires the production of a half-hour broadcast-quality television program as part of thesis research. (F, Sp, Su)
MUSC 5990	Special Studies in Music History	1 to 3 hours. Prerequisite: 30 hours of music, permission of the director of the school. May be repeated with change of subject matter; maximum graduate credit six hours. Individual study, research and analysis. (F, Sp, Su)
MUSC 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUTE 1000	Freshman/Transfer Music Orientation	Prerequisite: majors only. To help ensure that music students are aware of the varied and numerous performance opportunities, and to encourage educated listening skills and habits. (F, Sp)
MUTE 1010	Recital Attendance	0 hours credit. Performance laboratory for all undergraduate music majors. (F, Sp)
MUTE 1120	Jazz Ensemble	0 to 1 hour. Prerequisite: permission by audition. May be repeated for credit; maximum credit eight hours. Preparation and performance of music written in a variety of jazz styles. (F, Sp)
MUTE 1130	University Band	0 to 1 hour. Performance in University bands. (F, Sp, Su)
MUTE 1140	University Orchestra	0 to 1 hour. Prerequisite: permission by audition. May be repeated for credit; maximum credit eight hours. Performance in University orchestra. (F, Sp, Su)

MUTE 1160 University Chorale	0 to 1 hour. Prerequisite: permission; membership determined by audition. May be repeated for credit; maximum credit eight hours. An ensemble of high caliber; approximately 24 singers. Rehearsal and performance of choral and choral-orchestral masterworks drawn mostly from the baroque through twentieth-century style periods. Several performances each semester. (F, Sp, Occas. Su)
MUTE 1170 University Singers	0 to 1 hour. Prerequisite: audition. Open to both music majors and nonmusic majors. May be repeated for credit; maximum credit six hours. Performance of a cappella and accompanied music of various periods and styles. One to two performances per semester. (F, Sp, Su)
MUTE 1180 Singing Sooners	0 to 1 hour. May be repeated for credit; maximum credit six hours. Non-audition; hearing for vocal placement within ensemble. Wide variety of styles from popular to major choral works, combining with other choirs. (F, Sp)
MUTE 1190 Opera/Music Theatre	0 to 2 hours. Prerequisite: permission of instructor by audition. May be repeated for credit; maximum credit sixteen hours. Consists of rehearsals and performances of opera, musicals and other forms of music theatre. (F, Sp)
MUTE 1211 Brass Instrument Class	Prerequisite: permission. May be repeated with change of instrument or subject matter; maximum credit four hours. Basic concepts of playing and teaching percussion instruments. Laboratory (F, Sp)
MUTE 1221 Percussion Instrument Class	Prerequisite: permission. May be repeated with change of instrument or subject matter; maximum credit four hours. Basic concepts of playing and teaching percussion instruments. Laboratory (F, Sp)
MUTE 1231 Woodwind Instrument Class	Prerequisite: permission. May be repeated with change of instrument or subject matter; maximum credit four hours. Basic concepts of playing and teaching woodwind instruments. Laboratory (F, Sp)
MUTE 1251 Stringed Instrument Class	Prerequisite: permission. May be repeated with change of instrument or subject matter; maximum credit four hours. Laboratory (F, Sp)
MUTE 1261 Group Voice	Open to music majors whose emphasis is not in voice. May be repeated; maximum credit two hours. Development of basic skills, techniques and repertoire for the singer. (F, Sp)
MUTE 1270 Choral Union	0-1 hour. May be repeated; maximum credit 8 hours. The OU Choral Union will perform major choral literature and combine with the OU Choirs and instrumental ensembles to perform large choral masterworks. Membership is open through audition to all students in any degree program at OU. Two events per semester, does not fulfill large ensemble credit for music majors. (F, Sp)
MUTE 1280 Opera Chorus	0-1 hours. May be repeated; maximum credit 8 hours. The OU Opera Chorus is a 24-member performing ensemble. This select ensemble will perform one fully staged opera production. Membership is open through audition to all students in any degree program at OU. Music majors must participate in both Choral Union and Opera Chorus each semester to fulfill large ensemble credit for undergraduates and graduates. (F, Sp)
MUTE 1282 Italian Lyric Diction	Prerequisite: majors only. Italian Lyric Diction provides an introduction to the principles of pronunciation of the Italian language in speech and singing. Student will use the International Phonetic Alphabet as a symbolic medium. Frequent performance and coaching of poetic readings, songs, arias, and recitative in class will provide students an opportunity to develop accurate and expressive communication. (F)
MUTE 1290 Women's Chorus	0-1 hours. May be repeated; maximum credit 8 hours. This ensemble is dedicated to the study and performance of music for the female voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to female students in any degree program at OU. Fulfills large ensemble credit for undergraduate and graduate music majors. (F, Sp)

MUTE	1292	English Lyric Diction	Prerequisite: majors only. English Lyric Diction provides an introduction to the principles of pronunciation of the English language in speech and singing. American, Mid-Atlantic, General Southern and British dialects will be addressed. Students will use the international Phonetic Alphabet as a symbolic medium. Frequent performance and coaching of poetic readings, songs, arias and recitative in class will provide students an opportunity to develop accurate and expressive communication. (Sp.)
MUTE	1310	Men's Glee Club	0-1 hours. May be repeated; maximum credit 5 hours. This ensemble is dedicated to the study and performance of music for the male voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to male students in any degree program at OU. (F, Sp)
MUTE	1311	Group Piano I	Prerequisite: permission. Development of functional piano skills for the non-keyboard music major. Emphasis on keyboard theory and technique, sight reading, solo/ensemble repertoire and creative activities (harmonization, improvisation). Laboratory (F, Sp)
MUTE	1321	Group Piano II	Prerequisite: 1311 and permission. Continued development of the skills begun in 1311. Laboratory (F, Sp)
MUTE	1332	Functional Piano Skills I	Prerequisite: piano major, piano emphasis, permission. Experience in sight reading, playing by ear, modulation, open score reading, transposition and improvisation at the keyboard. (F)
MUTE	1342	Functional Piano Skills II	Prerequisite: 1332 or permission. Experience in sight reading, playing by ear, modulation, open score reading, transposition and improvisation at the keyboard.
MUTE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUTE	2020	Composition Forum	Prerequisite: composition majors; corequisite: Composition 2010 or 2020. Required of all composition majors. Meets weekly throughout the semester as an official laboratory to discuss compositional techniques and review student compositions. (F, Sp, Su)
MUTE	2232	Organ Improvisation Seminar	Prerequisites: majors only; MUTH 1522 and MUTH 1622. The goal of the course is to help students develop basic skills in improvisation, including the development of a greater sense of harmonic direction, the exploration of simple forms and counterpoint, and the improvisation of melodic phrases. (F, Sp)
MUTE	2242	Bme Instrumental Conducting I	Prerequisite: sophomore standing in music. Development of skills and knowledge in instrumental conducting, rehearsal techniques and instrumental repertoire. (F)
MUTE	2252	Bme Instrumental Conducting II	Prerequisite: 2242. Continued development of skills and knowledge in instrumental conducting, rehearsal skills, and instrumental repertoire. (Sp)
MUTE	2271	Chamber Music	Prerequisite: permission. May be repeated; maximum credit four hours. Study and performance of chamber music literature for various combinations of instruments. (F, Sp, Su)
MUTE	2280	Studio Ensemble	0 to 1 hour. May be repeated for credit. Performance experience in an ensemble of similar instruments. (F, Sp)
MUTE	2282	French Lyric Diction	Prerequisite: majors only. French Lyric Diction provides an introduction to the principles of pronunciation of the French language in speech and singing. Student will use the International Phonetic Alphabet as a symbolic medium. Frequent performance and coaching of poetic readings, songs, arias, and recitative in class will provide students an opportunity to develop accurate and expressive communication. (F)

MUTE 2292	German Lyric Diction	Prerequisite: majors only. German Lyric Diction provides an introduction to the principles of pronunciation of the German language in speech and singing. Student will use the International Phonetic Alphabet as a symbolic medium. Frequent performance and coaching of poetic readings, songs, arias, and recitative in class will provide students an opportunity to develop accurate and expressive communication. (Sp)
MUTE 2311	Group Piano III	Prerequisite: 1321 and permission. Continued development of the skills begun in 1321. Laboratory (F, Sp)
MUTE 2321	Group Piano IV	Prerequisite: 2311 and permission. Continued development of the skills begun in 2311. Special emphasis on sight reading, accompanying and instrumental and vocal-choral score reading. Laboratory (F, Sp)
MUTE 2411	Organ Technology Lab	Prerequisite: Majors only. May be repeated; maximum credit 4 hours. This course must be completed four times (for a total of four credit hours) as a prerequisite to MUTE 4411. Provides a practical and hands-on component to Organ Technology majors. Covers basic and fundamental areas of knowledge and experience any organ technician is expected to master. For students who already have experience in certain areas, their course of study may be altered to address areas of relative weakness or provide advanced experience. Laboratory (F, Sp)
MUTE 2970	Special Topics in Music Technique	Majors only. 1 to 3 hours. May be repeated with change of subject matter; content changes each semester. Study of newly developed, experimental or inter-disciplinary topics in music technique
MUTE 3110	Studio Accompanying for Piano Majors	0 to 1 hour. Prerequisite: majors only; PIAN 2020 or PIAN 2010. May be repeated; max credit 4 hours. Required of piano majors during junior and senior years. Two hours per week of assigned accompanying in vocal and/or instrumental teaching studios. Laboratory (F, Sp)
MUTE 3120	Jazz Ensemble	0 to 1 hour. Admission by audition. May be repeated for credit. Preparation and performance of music written in a variety of jazz styles.
MUTE 3130	University Band	0 to 1 hour. Prerequisite: MUTE 1130. May be repeated for credit; maximum credit eight hours. Performance in University bands. (F, Sp)
MUTE 3140	University Orchestra	0 to 1 hour. Prerequisite: permission by audition. May be repeated for credit; maximum credit eight hours. Performance in University orchestra. (F, Sp)
MUTE 3160	University Chorale	0 to 1 hour. Prerequisite: audition. May be repeated for credit. An ensemble of high caliber; approximately forty singers. Rehearsal and performance of choral and choral-orchestral masterworks drawn mostly from the baroque through twentieth-century style periods. Several performances each semester. (F, Sp)
MUTE 3170	University Singers	0 to 1 hour. Prerequisite: audition. Open to both music majors and nonmusic majors. May be repeated for credit; maximum credit six hours. Performance of a capella and accompanied music of various periods and styles. One to two performances per semester. (F, Sp, Su)
MUTE 3180	Singing Sooners	0 to 1 hour. May be repeated for credit; maximum credit six hours. Non-audition; hearing for vocal placement within ensemble. Wide variety of styles from popular to major choral works, combining with other choirs. (F, Sp)
MUTE 3190	Opera/Music Theatre	0 to 2 hours. Prerequisite: permission by audition. May be repeated for credit; maximum credit sixteen hours. Consists of rehearsals and performances of opera, musicals and other forms of music theatre. (F, Sp)
MUTE 3242	Instrumental Conducting I	Prerequisite: junior standing in music. Development of skills and knowledge in instrumental conducting, rehearsal techniques and instrumental repertoire. (F)
MUTE 3252	Instrumental Conducting II	Prerequisite: 3242. Continued development of skills and knowledge in instrumental conducting, rehearsal skills and instrumental repertoire. (Sp)
MUTE 3262	Choral Conducting I	Prerequisite: junior standing in the School of Music. Development of skills and knowledge in choral conducting, rehearsal techniques and choral repertoire. (F)

MUTE 3270	Choral Union	0-1 hour. Prerequisite: junior standing. May be repeated; maximum credit 5 hours. The OU Choral Union will perform major choral literature and combine with the OU Choirs and instrumental ensembles to perform large choral masterworks. Membership is open through audition to all students in any degree program at OU. Two events per semester, does not fulfill large ensemble credit for music majors. (F, Sp)
MUTE 3272	Choral Conducting II	Prerequisite: 3262. Continued development of skills and knowledge in choral conducting, rehearsal techniques and choral repertoire. (Sp)
MUTE 3280	Opera Chorus	0-1 hours. May be repeated; maximum credit 6 hours. The OU Opera Chorus is a 24-member performing ensemble. Ensemble performs one fully staged opera production. Membership is open through audition to all students in any degree program at OU. Music majors must participate in both Choral Union and Opera Chorus each semester to fulfill large ensemble credit for undergraduates and graduates. (F, Sp)
MUTE 3290	Women's Chorus	0-1 hours. May be repeated; maximum credit 6 hours. Ensemble dedicated to the study and performance of music for the female voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to female students in any degree program at OU. Fulfills large ensemble credit for undergraduate and graduate music majors. (F, Sp)
MUTE 3310	Men's Glee Club	0-1 hours. Prerequisite: junior standing. May be repeated; maximum credit 5 hours. This ensemble is dedicated to the study and performance of music for the male voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to male students in any degree program at OU. (F, Sp)
MUTE 3342	Jazz Improvisation	Prerequisite: junior standing. May be repeated; maximum credit 8 hours. Development of improvising skills in the jazz idiom. Designed as a hands-on laboratory course for students of various skill levels to improve personal abilities. (F, Sp, Su)
MUTE 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MUTE 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MUTE 4020	Composition Forum	Prerequisite: junior standing and composition majors; corequisite: Composition 4010 or 4020. Required of all composition majors. Meets weekly throughout the semester as an official laboratory to discuss compositional techniques and review student compositions. (F, Sp, Su)
MUTE 4232	Organ Improvisation Seminar	Prerequisites: majors only; MUTH 2522 and MUTH 2622. The goal of the course is to help students develop basic skills in improvisation, including the development of a greater sense of harmonic direction, the exploration of simple forms and counterpoint, and the improvisation of melodic phrases. (F, Sp)
MUTE 4252	Music in Worship	Prerequisite: junior standing. Presents both a brief history of hymnody within worship, as well as an overview of the role of music within various denominations, both within the United States and throughout the world. (F)
MUTE 4262	Church Music Practicum	Prerequisite: junior standing. Provides students with practical skills and information pertinent to the church music profession. (Irreg.)
MUTE 4271	Chamber Music	Prerequisite: permission. May be repeated; maximum credit four hours. Study and performance of chamber music literature for various combinations of instruments. (F, Sp)

MUTE	4280	Studio Ensemble	0 to 1 hour. Prerequisite: 2280. May be repeated for credit. Performance experience in an ensemble of similar instruments. (F, Sp)
MUTE	4290	Opera Production	(Slashlisted with 5290) 1 to 3 hours. Prerequisite: junior standing in music. May be repeated; maximum credit 12 hours. A musical, dramatic, and technical theater practicum for students cast in solo and chorus roles in major opera productions. The purpose of the course and productions is to provide appropriate training and performance opportunities for each participant. No student may earn credit for both 4290 and 5290. (Irreg.)
MUTE	4310	Vocal Coaching	0 to 2 hours credit. Prerequisite: junior or senior standing and instructors permission. May be repeated three times; maximum credit eight hours. Course is designed as a supplement to weekly voice lessons with sessions that focus primarily on diction, style and interpretation issues within a students repertoire. (F, Sp)
MUTE	4382	Acting for Opera I	(Slashlisted with 5382) Prerequisite: majors only, junior standing. Acting for Opera develops basic acting and interpretive skills for opera performance, including characterization, interaction, movement and improvisation. Music and text will be explored from the perspective of dramatic structure. The creative integration of the physical, emotional, and mental tasks of acting are emphasized. No student may earn credit for both 4382 and 5382. (F)
MUTE	4392	Acting for Opera II	(Slashlisted with 5392) Prerequisite: majors only, junior standing. An in-depth study of scenes selected from 18th - 20th century operatic repertoire, culminating in a performance at the end of the semester. Scenes will be assigned, coached, and rehearsed in class. The focus of the class is the development of the individual student's skills, with an emphasis on process and techniques. No student may earn credit for both 4392 and 5392. (Sp)
MUTE	4411	Organ Technology Lab	Prerequisite: completion of MUTE 2411 for four semesters, and permission of instructor. May be repeated; maximum credit four hours. Combined with MUTE 2411, MUTE 4411 provides an eight-semester course of study of practical and hands-on experience for Organ Technology majors. Students may not enroll in MUTE 4411 without the completion of four semesters of MUTE 2411. Covers basic and fundamental areas of knowledge and experience any organ technician is expected to master. For students who already have experience in certain areas, their course of study may be altered to address areas of relative weakness or provide advanced experience. Laboratory (F, Sp)
MUTE	4423	History and Fundamentals of Pipe Organ Construction and Design	Prerequisite: junior standing; majors only or permission of instructor. Historical and interactive study of the pipe organ, from the earliest historical examples to the latest developments in contemporary instruments. Covers a broad field of information that applies directly to the instrument itself, including topics such as: basic components of the pipe organ, various types of key action, physics of pipe speech, pipe-making, acoustics, console design and the development of tuning standards. Includes a lab-type component in which the class will explore various instruments in situ to experience the various principles in application, as well as learning the basics of tuning and maintenance. (F, Sp)
MUTE	4453	Organ Construction & Design I	Prerequisites: Majors only; MUTE 4423. Primarily intended for students pursuing an Organ Technology course of study, but is also applicable to undergraduate students in Organ Performance who desire an advanced understanding of the design and construction of the pipe organ. The course content is modeled after the syllabus published by the American Institute of Organ builders pertaining to the fundament of knowledge required to pass the examination for admission as a Colleague of the organization. This two-semester course will traverse the vast majority of the topics contained in the AIO examination. A comprehensive study of a large amount of technical and artistic knowledge. (Irreg.)

MUTE 4463	Organ Construction and Design II	Prerequisite: Majors only; MUTE 4423 and MUTE 4453. Primarily intended for students pursuing an Organ Technology course of study, but is also applicable to undergraduate students in Organ Performance who desire an advanced understanding of the design and construction of the pipe organ. The course content is modeled after the syllabus published by the American Institute of Organ builders pertaining to the fundament of knowledge required to pass the examination for admission as a Colleague of the organization. This two-semester course will traverse the vast majority of the topics contained in the AIO examination. A comprehensive study of a large amount of technical and artistic knowledge. (Alt. F)
MUTE 4512	Woodwind Professional Development	Prerequisite: majors only, junior standing. Designed to maximize student potential to think, work, and thrive in all facets of a professional musical career. The ultimate goal of the class is provide students with strategies, concepts, and knowledge on not only how to get a job in the music industry, but to keep it. The course is taught by each professor of the woodwind faculty, allowing a wide range of topics to be covered as well as granting students access to the broadest scope of professional experience possible. (Irreg.)
MUTE 4970	Undergraduate Seminar	Majors only. 1 to 3 hours. May be repeated with change of subject matter; content changes each semester. In-depth look at areas dealing with technique, technology and applied instruction in a class or group setting. Study of newly developed, experimental or inter-disciplinary topics in music technique.
MUTE 5110	Collegium Musicum	0 to 1 hour. Prerequisite: permission of instructor. May be repeated for credit; maximum credit four hours. Performance of instrumental and vocal music from all periods and repertoires, and problems related thereto. (F, Sp)
MUTE 5120	Jazz Ensemble	0 to 1 hour. Prerequisite: graduate standing and permission. May be repeated for credit; maximum credit four hours. Admission by audition. Preparation and performance of music written in a variety of jazz styles. (F, Sp)
MUTE 5130	University Band	University Band. 0 To 1 Hour. Prerequisite: Permission Of Instructor, Determined By Audition. May Be Repeated For Credit. Number Of Credits Applicable To Degree Programs Varies, But In No Case May Exceed Four Hours. Study And Performance Of Concert Literature For The Wind Band To Include Score Analysis And Study Of The Aspects Of Program Planning And Performance Practices. (F, Sp, Su)
MUTE 5132	Organ Improvisation Seminar	Prerequisites: majors only; graduate standing. The goal of the course is to help students develop basic skills in improvisation, including the development of a greater sense of harmonic direction, the exploration of simple forms and counterpoint, and the improvisation of melodic phrases. (F, Sp)
MUTE 5140	University Orchestra	0 to 1 hour. Prerequisite: permission of instructor; determined by audition. May be repeated for credit. Number of credits applicable to degree programs varies, but in no case may exceed four hours. Study and performance of orchestral literature for the string orchestra and full symphony orchestra to include score analysis and study of the aspects of program planning and performance practices. (F, Sp)
MUTE 5160	University Chorale	Prerequisite: graduate standing, permission; membership determined by audition. May be repeated for credit. An ensemble of high caliber; approximately 40 singers. Rehearsal and performance of choral and choral-orchestral masterworks drawn mostly from the baroque through twentieth-century style periods. Several performances each semester. (F, Sp, Su)
MUTE 5170	University Singers	0 to 1 hour. Prerequisite: graduate standing and permission of instructor; determined by audition. Open to both music and nonmusic majors. May be repeated for credit. Performance of a cappella and accompanied music of various periods and styles. One to two performances per semester. (F, Sp, Su)

MUTE 5180 Singing Sooners	0 to 1 hour. Prerequisite: graduate standing. May be repeated for credit; maximum credit nine hours. Non-audition; hearing for vocal placement within ensemble. Wide variety of styles from popular to major choral works, combining with other choirs. (F, Sp)
MUTE 5190 Opera/Music Theatre	0 to 2 hours. Prerequisite: permission of instructor by audition. May be repeated for credit; maximum credit eight hours. Consists of rehearsals and performances of opera, musicals and other forms of music theatre. (F, Sp, Su)
MUTE 5271 Chamber Music	Prerequisite: Graduate standing, permission. May be repeated with change of subject matter. Survey of chamber music through participation in ensemble groups. Preparation and public performance of selected chamber music works. (F, Sp)
MUTE 5280 Studio Ensemble	0 to 1 hour. Prerequisite: graduate standing. May be repeated for credit. Performance experience in an ensemble of similar instruments. (F, Sp)
MUTE 5290 Opera Production	(Slashlisted with 4290) 1 to 3 hours. Prerequisite: junior standing in music. May be repeated; maximum credit 12 hours. A musical, dramatic, and technical theater practicum for students cast in solo and chorus roles in major opera productions. The purpose of the course and productions is to provide appropriate training and performance opportunities for each participant. No student may earn credit for both 4290 and 5290. (Irreg.)
MUTE 5300 Opera Chorus	0-1 hours. Prerequisite: graduate standing. May be repeated; maximum credit 8 hours. The OU Opera Chorus is a 24-member performing ensemble. This select ensemble will perform one fully staged opera production. Membership is open through audition to all students in any degree program at OU. Music majors must participate in both Choral Union and Opera Chorus each semester to fulfill large ensemble credit for undergraduates and graduates. (F, Sp)
MUTE 5310 Men's Glee Club	Prerequisite: graduate standing. 0-1 hours. May be repeated; maximum credit 5 hours. This ensemble is dedicated to the study and performance of music for the male voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to male voices in any degree program at OU. (F, Sp)
MUTE 5320 Women's Chorus	Prerequisite: graduate standing. 0-1 hours. May be repeated; maximum credit 8 hours. This ensemble is dedicated to the study and performance of music for the female voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to female voices in any degree program at OU. Fulfills large ensemble credit for undergraduate and graduate music majors. (F, Sp)
MUTE 5342 Jazz Improvisation	Development of improvising skills in the jazz idiom for graduate students. Designed as a hands-on laboratory course for students of various skill levels to improve personal abilities. (F, Sp)
MUTE 5382 Acting for Opera I	(Slashlisted with 4382) Prerequisite: graduate standing. Acting for Opera develops basic acting and interpretive skills for opera performance, including characterization, interaction, movement and improvisation. Music and text will be explored from the perspective of dramatic structure. The creative integration of the physical, emotional, and mental tasks of acting are emphasized. No student may earn credit for both 4382 and 5382. (F)
MUTE 5390 Women's Chorus	0-1 hours. Prerequisite: graduate standing. May be repeated; maximum credit 8 hours. This ensemble is dedicated to the study and performance of music for the female voice. Annual performances include the Fall and Spring concerts, Christmas at OU, and the President's Concert. Membership is open through audition to female students in any degree program at OU. Fulfills large ensemble credit for undergraduate and graduate music majors. (F, Sp)

MUTE	5392	Acting for Opera II	(Slashlisted with 4392) Prerequisite: graduate standing. An in-depth study of scenes selected from 18th-20th century operatic repertoire, culminating in a performance at the end of the semester. Scenes will be assigned, coached, and rehearsed in class. The focus of the class is the development of the individual student's skills, with an emphasis on process and techniques. No student may earn credit for both 4392 and 5392. (Sp)
MUTE	5413	Church Music Practicum	Prerequisite: graduate standing or permission. This course provides students with practical skills and information pertinent to the church-music profession. The scope of study will include, but is not limited to, service playing, accompanying choral works, console conducting, and interpersonal skills related to the workplace environment. The students will also develop a list of historical and current resources that will contribute to their knowledge of music's place within the church. (F, Sp)
MUTE	5423	History and Fundamentals of Pipe Organ Construction and Design	Prerequisite: graduate standing or permission. Historical and interactive study of the pipe organ, from the earliest historical examples to the latest developments in contemporary instruments. Covers a broad field of information that applies directly to the instrument itself, including topics such as: basic components of the pipe organ, various types of key action, physics of pipe speech, pipemaking, acoustics, console design and the development of tuning standards. Includes a lab-type component in which the class will explore various instruments in situ to experience the various principles in application as well as learning the basics of tuning and maintenance. (F, Sp)
MUTE	5453	Organ Construction and Design I	Prerequisite: graduate standing and MUTE 5423. Includes a brief review of material covered in "Fundamentals of the Pipe Organ." Course content is modeled after the published syllabus of the American Institute of Organbuilders and the knowledge required to pass the examination for admission as a Colleague of the organization. A comprehensive study of a large amount of technical and artistic knowledge of organ building. Primarily intended for students pursuing an Organ Technology course of study, but also applicable to graduate students in Organ Performance who desire an advanced understanding of the design and construction of the pipe organ. The first course of a two-semester sequence designed to traverse the majority of topics contained in the AIO examination. (F)
MUTE	5463	Organ Construction and Design II	Prerequisite: graduate standing, and MUTE 5423 and MUTE 5453. A continuation of the content begun in MUTE 5453. Course content is modeled after the published syllabus of the American Institute of Organbuilders and the knowledge required to pass the examination for admission as a Colleague of the organization. Continues the progression of the technical and artistic knowledge of organ building. Intensive study of a large amount of technical and artistic knowledge of organ building. Primarily intended for students pursuing an Organ Technology course of study, but also applicable to graduate students in Organ Performance who desire an advanced understanding of the design and construction of the pipe organ. The second course of a two-semester sequence designed to traverse the majority of topics contained in the AIO examination. (Sp)
MUTE	5512	Choral Conducting	Prerequisite: 3262; graduate standing; permission of instructor. May be repeated; maximum credit six hours. Development of conducting gestures, rehearsal procedures and stylistic interpretation in an ensemble setting. Content coordinated with 6152. Repertoire ranges from medieval chant to avant garde works with nonconventional notation. (F, Sp, Su)
MUTE	5522	Instrumental Conducting	Instrumental Conducting: Prerequisite: 3252; Graduate Standing; Permission Of Instructor. May Be Repeated; Maximum Credit Six Hours. Development Of Baton Technique, Error Detection Skills, Rehearsal Procedures And Interpretive Skills. Conducting Of Band Or Orchestral Works From Various Style Periods. (F)

MUTE	5532	Instrumental Score Studies	Instrumental Score Studies. Prerequisite: 3252; graduate standing or permission. May be repeated with change of content. Critical performance analysis of selected instrumental masterworks from various style periods. Development of an understanding of proper style and interpretation based on musical research.
MUTE	5712	Seminar in Music Television Production	Prerequisite: permission of instructor. Study of techniques and problems in working as producer employing professionals in music television. Topics to include funding; scripting; music recording; coaching rehearsals and performances; hiring the production crew for lighting, video or film, audio, designers and builders of costumes, and sets for dramatization, etc. Format involves directed reading and supervised participation in real television production.
MUTE	5722	Seminar in Music Television Post-Production	Prerequisite: permission of instructor. Study of techniques and problems in working as producer employing professionals in music television post-production. Topics to include television editing (online and off-line), use of time code, titling, preparation for broadcast, video cassette distribution, copyright, writing study guides, and philosophy of publication through television. Format involves directed reading and direct participation in music television post-production.
MUTE	5970	Seminar in Music Technique	1 to 3 hours. Prerequisite: graduate standing in music and permission. May be repeated with change of subject matter; maximum credit applicable toward degree, six hours. In-depth study of topics of interest in music performance. (Sp)
MUTE	5990	Special Studies in Conducting	1 to 3 hours. Prerequisite: 5512 or 5522, graduate standing, permission of director of the school. May be repeated with change of subject matter; maximum graduate credit six hours. Advanced individual study of conducting problems and score analysis. (Sp, Su)
MUTE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUTE	6132	Organ Improvisation Seminar	Prerequisites: majors only; graduate standing. The goal of the course is to help students develop basic skills in improvisation, including the development of a greater sense of harmonic direction, the exploration of simple forms and counterpoint, and the improvisation of melodic phrases. (F, Sp)
MUTE	6152	Choral Score Studies	Prerequisite: 3252; graduate standing; permission of instructor. May be repeated; eight hours credit applicable to DMA degree. Critical performance analysis of selected masterworks from medieval chant to avant garde works of the twentieth century. Development of an understanding of proper style and interpretation based on musical research. (F, Sp, Su)
MUTE	6162	Instrumental Score Studies	Prerequisite: 5532, graduate standing, and permission of instructor. May be repeated; maximum credit eight hours applicable to DMA degree. Development of knowledge of broad base of repertoire combined with in-depth analysis of specific works. (F, Sp)
MUTE	6210	Collegium Musicum	0 to 1 hour. Prerequisite: permission. Performance of instrumental and vocal music from all periods and repertoires, and problems related thereto. (F, Sp)
MUTE	6252	Choral Conducting	Prerequisite: 5512; graduate standing; permission of instructor. May be repeated; eight hours credit applicable to DMA degree. Refinement of conducting, rehearsal and interpretive skills. Emphasis on musical nuance in choral style and interpretation. (F, Sp, Occas. Su)
MUTE	6262	Instrumental Conducting	Prerequisite: 5522, graduate standing, and permission of instructor. May be repeated; maximum credit eight hours applicable to DMA degree. Development of advanced conducting techniques and rehearsal skills. Exploration of relationships between structural analysis and performance. Podium time in ensemble situations. (F, Sp)

MUTH 1511	Musical Structures I	Prerequisite: knowledge of music fundamentals, written and aural, or concurrent enrollment in 0601. Study of the basic materials of music as a necessary preparation for the study of music theory. These factors will be approached through written, aural, oral, sensitivity, keyboard and analysis drills. (F, Sp)
MUTH 1522	Musical Structures II	Prerequisite: 1511. An overview of the common practice periods through writing, analysis, aural perception and keyboard. (F, Sp)
MUTH 1611	Aural Skills I	Prerequisite: knowledge of music fundamentals, written and aural, or concurrent enrollment in 0601. Study of simple melodic and rhythmic patterns, isolated and in the context of literature, to the end of aural perception and vocal reading of same. Laboratory (F, Sp)
MUTH 1622	Aural Skills II	Prerequisite: 1611. Continuation of 1611. Laboratory (F, Sp)
MUTH 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUTH 2512	Musical Structures III	Prerequisite: 1522. A study of the traditional harmonic practices of the eighteenth and nineteenth centuries through writing, analysis, aural perception and keyboard. (F, Sp) [IV-AF]
MUTH 2522	Musical Structures IV	Prerequisite: 2512. A study of late nineteenth-century harmonic practices and twentieth-century idioms through writing, analysis, aural perception and keyboard. (F, Sp)
MUTH 2612	Aural Skills III	Prerequisite: 1622. Study of moderately difficult rhythms and melodies in the context of illustrative eighteenth- and nineteenth-century styles - aural perception, vocal reading and analysis. Laboratory (F)
MUTH 2622	Aural Skills IV	Prerequisite: 2612. Study of rhythms and melodies as used by late nineteenth- and twentieth-century composers - aural perception, vocal reading and analysis. Laboratory (Sp)
MUTH 2970	Special Topics in Music Theory	Majors only. 1 to 3 hours. May be repeated with change of subject matter; content changes each semester. Study of newly developed, experimental or inter-disciplinary topics in music theory.
MUTH 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
MUTH 3512	Musical Structures V	Prerequisite: 2522. A study of the late nineteenth- and twentieth-century harmonic practices. Development of theoretical analysis skills in twentieth-century music. (F, Sp)
MUTH 3763	Counterpoint	Prerequisite: 2522. A study of eighteenth-century counterpoint. First semester, two parts with analysis and original writing. (F)
MUTH 3783	Forms and Analysis	Prerequisite: 2522. A study of the structure of homophonic forms, followed by the standard polyphonic and homophonic forms of eighteenth-, nineteenth-, and twentieth-century music. (Sp)
MUTH 3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
MUTH 3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
MUTH 3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)

MUTH 3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
MUTH 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MUTH 4853	Orchestration	Prerequisite: Majors only; MUTH 3512 or concurrent enrollment in MUTH 3512. A study of the characteristics of the instruments of the orchestra and their uses in combination, including historical background of orchestral style. (F)
MUTH 4863	Advanced Orchestration	Prerequisite: 4853 or permission of instructor. May be repeated; maximum credit six hours. Continuation of the study of the characteristics of the instruments of the orchestra and their uses in combination covering advanced techniques and practices, including historical background or orchestral style, including the twentieth century. (Sp)
MUTH 4922	Instrumental Arranging	Prerequisite: 12 hours of music theory. Arranging instrumental music for all combinations of instruments and groupings. (Sp)
MUTH 4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MUTH 4970	Senior Seminar	1 to 3 hours. Prerequisite: 3763 and 3783. May be repeated once with change of topic; maximum credit six hours. Not open to graduate students. Intended to permit study in-depth of such areas as the style of a particular composer or the writing of a particular theorist such as Hindemith, Schenker, Persichetti and others. (F, Sp, Su)
MUTH 4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUTH 5812	Practicum in Music Theory I	Prerequisite: 12 hours of music theory. The study of nineteenth-century chromatic harmony and the relationship of musical content to musical form. (F, Alt. Su)
MUTH 5813	Introduction to Schenkerian Analysis	Prerequisite: graduate standing and permission of the graduate music office. Develop basic skills in Schenkerian analysis and an understanding of Schenkerian theory. (Irreg.)
MUTH 5822	Practicum in Music Theory II	Prerequisite: 5812. A brief comparative study of Baroque and twentieth-century fugues; analysis of compositional techniques and forms in the first half of the twentieth century. (Sp, Su)
MUTH 5823	Pedagogy of Music Theory	Prerequisite: graduate standing and permission of the graduate music office. An examination of the philosophy, logistics, methods, content, and materials of teaching music theory at the undergraduate level. (Irreg.)
MUTH 5833	Analysis of Twentieth-Century Music	Prerequisite: graduate standing and permission of the graduate music office. Traces the origins of twentieth-century music and surveys compositional techniques. (Irreg.)
MUTH 5843	History of Western Music Theory	Prerequisite: graduate standing and permission of graduate music office. Searches for the roots of common concepts (such as the triad), tools (such as staff notation), and terminology (Why do "key" and "clef" both mean "key") of western musical discourse and traces the development of thought about parameters such as meter, mode, scale, consonance, tuning, counterpoint, harmony, and form, while making connections between these stories and the histories of western science, mathematics, theology, philosophy and political and social structures. (Irreg.)

MUTH 5853	Music Of Bartok, Prokofiev, Chicago	Prerequisite: graduate standing and permission of graduate music office. A structural examination of three twentieth-century, pitch-centric repertoires: the Mikrokosmos of Bartók, Prokofiev's Romeo and Juliet, and albums V, VI, and VIII of Chicago. (Irreg.)
MUTH 5863	Advanced Orchestration	Prerequisite: graduate standing and permission of the graduate music office. Continuation of the study of the characteristics of the instruments of the orchestra and their uses in combination covering advanced techniques and practices, including historical background or orchestral style, including the twentieth century. No student may earn credit for both 4863 and 5863. (Sp)
MUTH 5873	Theory and Analysis of Rock Music	Prerequisite: graduate standing and permission of the graduate music office. Structural analysis of phases rhythm, key, melodic structure, harmony, and form in selected works from the rock era of popular music (1955-Present). (Irreg.)
MUTH 5883	Analysis of Tonal Music	Prerequisite: graduate standing and permission of the graduate music office. Analysis of form and harmony in selected works from the common practice era (1670-1900). (Irreg.)
MUTH 5960	Directed Readings	1 to 4 hours. Prerequisite: 18 hours of music, permission of the director of the school. May be repeated; maximum undergraduate credit eight hours, graduate credit six hours. Individual topics in music theory. (F, Sp, Su)
MUTH 5970	Seminar in Music Theory	1 to 4 hours. Prerequisite: 30 hours of music or permission. May be repeated with change of subject matter; maximum graduate credit 12 hours. (F, Sp, Su)
MUTH 5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
MUTH 5990	Special Studies in Music Theory	1 to 3 hours. Prerequisite: 30 hours of music, permission of the director of the school. May be repeated with change of subject matter; maximum graduate credit six hours. Individual study, research and analysis in music theory. (F, Sp, Su)
MUTH 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
MUTH 6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
MUTH 6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
MUTH 6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUTK 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
MUTK 2263	Musical Instrument Digital Interface I	A basic course in electronic music utilizing the University of Oklahoma MIDI laboratory. Laboratory (F)
MUTK 3263	Musical Instrument Digital Interface II	Prerequisite: 2263. Moving from MIDI theories of operation to several applications of MIDI such as MIDI sequencing and musical notation. (Sp)
MUTK 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
MUTK 4113	Understanding Electroacoustic Music	Prerequisite: sophomore, junior or senior standing. Designed to explore the genre of electroacoustic music, primarily through listening, reading and in-class conversations. (Irreg.)
MUTK 4133	Introduction to Digital Signal Processing	Prerequisite: sophomore, junior, or senior standing. Introduction to the theory of digital audio and various digital signal processing applications. (Irreg.)

MUTK	4143	Advanced Digital Signal Processing	Prerequisite: 4133. Advanced methods and theories of digital audio and digital signal processing applications. (Irreg.)
MUTK	4153	Interactive Performance	Prerequisite: 4143 and junior or senior standing. Designed to creatively explore the real-time interaction between performers and computer through reading, listening, and programming. (Irreg.)
MUTK	4163	Real Time MIDI Control	Prerequisite: 4133 and sophomore, junior, or senior standing. An introduction to the real-time MIDI control and various MIDI processing applications through reading, listening, and composing. (Irreg.)
MUTK	4173	Recording Techniques	Prerequisite: 4183 and junior or senior standing. Provides an understanding to the fundamentals of recording techniques and studio procedures. (Irreg.)
MUTK	4183	Sound Design	Prerequisite: sophomore, junior, or senior standing. A course designed to expand ones knowledge of MIDI sequencing, software-hardware synthesizers, and digital audio editing. (Irreg.)
MUTK	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
MUTK	4970	Undergraduate Seminar	Prerequisite: sophomore standing. 1 to 3 hours. May be repeated with change with change of content; maximum credit nine hours. In depth look at advanced topics of various fields of electroacoustic music. (Irreg.)
MUTK	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
MUTK	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
N S	0110	Leadership Development	Designed to expose NROTC students to the professional development of a military officer. This is accomplished through military drill, guest lecturers, command situation and role enactment training. The goal is to better prepare young men and women to serve as naval officers in various fleet assignments. (F, Sp)
N S	1132	Introduction to Naval Science	Presents an overview of the mission and organization of the Department of Defense with particular emphasis on the Naval Service. Among the topics covered are military law, leadership fundamentals, naval heritage, naval customs and traditions, and career opportunities for Navy and Marine Corps officers. The course is designed for freshmen enrolled in NROTC but is open to all interested University students. Course materials are provided. (F)
N S	1133	Sea Power And Maritime Affairs	Sea Power And Maritime Affairs. Traces The Development Of Sea Power And Analyzes Its Influence On Maritime Strategy Through The Study Of Major Events In Naval History. Students Will Develop An Appreciation For The Overlapping Roles That National Interests, Technical Advances, Maritime Strategists, And Individual Leaders Play In The Formulation Of U.S. Security Strategy And Policy. Open To All Interested University Students. Textbooks Are Provided. (Sp)
N S	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
N S	2113	Leadership and Management	Designed to teach introductory-level leadership and management concepts and applications to sophomore-level Naval ROTC midshipmen and all other interested University students. (Irreg.)
N S	2133	Navigation	Introduction to marine navigation, including both traditional and electronic navigation theory and practical applications. Includes concepts in navigational safety, rules of the nautical road, and an introduction to relative motion. (Sp)

N S	3223	Naval Ship Systems I: Naval Engineering Systems	Prerequisite: 1132. Detailed study of ship characteristics and types, including design, hydrodynamics, stability, compartmentation, propulsion, electrical and auxiliary systems. Includes study of basic concepts of steam, gas turbine, diesel and nuclear propulsion. Case studies on leadership/ethical issues in engineering are also covered. (Sp)
N S	3333	Evolution of the Art of War	Principles of war, offensive and defensive war, historical campaigns, civil war. (F)
N S	3433	Naval Ship Systems II - Naval Weapons Systems	Prerequisite: 1132 or permission of instructor. Outlines theory and employment of weapon systems. Student explores processes of detection, evaluation, threat analysis, weapon selection, delivery, guidance and explosives. Fire control systems and studies involving the moral and ethical responsibilities of leaders in the employment of weapons. (F)
N S	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
N S	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
N S	4333	Amphibious Warfare	Gallipoli, amphibious doctrine and landing in WWII in Europe and Western Pacific, Korean operations, and amphibious planning. (Irreg.)
N S	4433	Naval Operations and Seamanship	Prerequisite: 2133 or permission of instructor. Advanced navigation concepts, including applications to shipboard evolutions and operations. Overview of operational security and tactical communications. Introduction to the law of the sea and international maritime law, naval warfare doctrine and joint operations. (F)
N S	4633	Naval Leadership and Ethics	Prerequisite: 2113 or permission of instructor. An examination of leadership, ethical concepts, and management of naval (Navy and Marine Corps) resources. Objective is to learn the leadership skills, ethical expectations, and management techniques necessary to succeed as a naval officer in leading people and using limited resources in the most efficient manner. Encompasses leadership and ethical readings, discussion of the uniform code of military justice, and specific service guidance for junior officers. (F, Sp)
N S	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
NAS	1013	Introduction to Native American Studies	This course will introduce students to key concepts and methods in the study of American Indian history, culture, and contemporary governance and socio-economic status. (F, Sp) [IV-NW]
NAS	1713	Beginning American Indian Languages I	(Crosslisted with ANTH 1713) May be repeated with change of language; maximum credit 12 hours. Introduction to the structure of an American Indian language with special attention to its phonology, morphology, and syntax. Conversational practice, vocabulary-building and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
NAS	1723	Beginning American Indian Languages II	(Crosslisted with ANTH 1723) Prerequisite: 1713 in the native language listed as course topic. May be repeated with change of language; maximum credit 12 hours. Introduction to the structure of an American Indian language with special attention to its phonology, morphology and syntax. Conversational practice, vocabulary-building, and the history and culture of the native speech community also are emphasized. (F, Sp) [I-FL]
NAS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

NAS	2013	Foundations in Native American Sovereignty	Prerequisite: sophomore standing or permission of instructor. Introduces the key concepts and methods in the discipline of Native American Studies. Explores the foundational theories, concepts, areas, and methodologies of Native American Studies. Examines the scope and nature of the inherent right and responsibility of tribal sovereignty and self-government. Students will gain understanding of the historical origins of the current laws and policies that constitute the legal, economic, social and political foundations for the environment in which tribal sovereignty operates today, the leadership and persistence of Native peoples in the policy formation process, and the concept of sovereignty and its various interpretations. (Irreg.)
NAS	2733	Intermediate American Indian Languages	(Crosslisted with ANTH 2733) Prerequisite: 1723. May be repeated with change of language; maximum credit 12 hours. A systematic review of the structure of an American Indian language. Syntactic control and vocabulary expansion are emphasized. Conversational practice and traditional oral texts are used to develop proficiency. (F, Sp)
NAS	3013	Native American Studies Internship	Prerequisite: permission of instructor. Participation in a supervised work experience. Grade is based on work performance, regular reports and journals, and on-site supervisor's evaluation. (F, Sp, Su)
NAS	3113	Native American Philosophy	Prerequisite: junior standing or permission of instructor. A survey of systems of understanding and explaining the relationships between human beings and the natural world in Native American cultures including; concepts of power, spirituality, and ceremonialism; ethical systems; and culturally based ways of knowing. (F) [IV-NW]
NAS	3123	Gender and Sexuality in Native North America	Prerequisite: junior standing. Study of gender and sexuality that is indigenous to North American tribal groups, focusing on the status of pre-colonial gender-non-normative peoples. Emergent analyses within Native studies will point to the gendered nature of colonialism by interrogating Western ontological models from Victorian-era and early anthropological ideas about sexuality. (Sp) [IV-NWC]
NAS	3313	Introduction to Native Peoples and Sustainability	Prerequisite: junior standing. Explores the concept of sustainability from a Native perspective, and as it applies to Native peoples. Emphasis is placed on cultural resilience and identity, human-environment relationships, policy and politics of tribal sovereignty in Native North America. (F)
NAS	3323	Tribal Service Learning	Prerequisite: junior standing. Exploration of contemporary issues relevant to Native American tribes and communities, utilizing critical thinking and problem-solving skills relevant to contemporary issues within the Indian Country to develop and implement a service project for a tribe or Native American community. (F, Sp)
NAS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
NAS	3513	Native American Film	Prerequisite: junior standing or permission of instructor. A critical investigation of the role that film, as an art genre, has played in creating the general public's idea of the American Indian, and its construction of images representing that idea. (Su)
NAS	3693	Special Topics	Prerequisite: six hours of NAS courses. May be repeated twice with a change in topic. Covers topics of special interest to NAS such as politics and tribal government, contemporary health issues, educational policies and trends, and tribal culture in the U.S. and Oklahoma. (F, Sp, Su)

NAS	3960	Honors Reading	Prerequisite: admission to Honors Program and permission of instructor. May be repeated with change of content; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. This course will allow the honors candidate the opportunity to study materials not offered in other courses. (F, Sp, Su)
NAS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
NAS	3980	Honors Research	Prerequisite: admission to Honors Program. May be repeated with change of content; maximum credit six hours. The study of issues related to Native American Studies for the gifted Honors candidate allowing him/her to work on a special project. (F, Sp, Su)
NAS	3990	Independent Study	1 to 3 hours. Prerequisite: six hours of NAS major courses and permission of instructor. May be repeated; maximum credit six hours. Work on a topic of the student's choosing taken under the direct supervision of a faculty member. May involve directed reading and research or participation in a community-based activity. Students will be required to give a written report or research papers. (F, Sp)
NAS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
NAS	4033	Research Methods in Native American Studies	(Slashlisted with 5033) Prerequisite: junior standing and permission of instructor. Introduction to research methods in Native American Studies with an emphasis on interdisciplinarity. Students will be introduced to the range of methods available for analysis, and to the presentation of research results. Students will formulate a research proposal that includes problem identification, recommendation and justification of methods for analysis, and preparation of a critical literature review. Emphasis on Indigenous methodologies and ethical issues in research. No student may earn credit for both 4033 and 5033. (Irreg.)
NAS	4043	Sovereignty, Law, and Policy	(Slashlisted with 5043) Prerequisite: junior standing or permission of instructor. Explores what constitutes the basic nature of political sovereignty and how it is exercised in Native American communities and what the possibilities and limitations are for tribal governments. No student may earn credit for both NAS 4043 and NAS 5043. (Irreg.)
NAS	4053	Senior Capstone	Prerequisite: senior standing. Provides a culminating experience giving students the opportunity to incorporate knowledge gained through previous coursework. Students will integrate this knowledge into a final project. (Sp) [V]
NAS	4113	Oklahoma Tribal History	(Slashlisted with 5113) Prerequisite: junior standing. A survey of Native American history for the area known today as Oklahoma and the surrounding region. Explores the general concepts and histories of the region from a Native perspective. Discussion of Oklahoma tribal experiences in the context of regional and national experiences. Examines the Oklahoma Native experience through the world-views and words of Native Americans. No student may earn credit for both 4113 and 5113. (Irreg.)
NAS	4123	Contemporary Issues in Native American Studies	Prerequisite: junior standing or permission of instructor. Familiarizes and sensitizes students to dynamics of change relevant to prevailing issues and concerns among American Indian entities with a special focus on tribal development/progress. No student may earn credit for both 4123 and 5123. (F) [IV-NW]

NAS	4133	Tribal Historic Preservation	(Slashlisted with 5133) Prerequisite: junior standing or permission of instructor. Provides basic grounding in processes necessary to understand and participate in the federal tribal historic preservation program. Students will receive material and insights to help them gain skills in understanding laws and regulations relating to the federal historic preservation system. No student may earn credit for both 4133 and 5133. (Irreg.)
NAS	4333	American Indian Health Issues and Concerns	Prerequisite: junior standing or permission of instructor. Historical information about American Indians with emphasis on health, including behavioral health, and tribal/Indian health service policy issues. Discusses traditional medicine and healing, research needs related to American Indian health, and career opportunities in health professions. (Irreg.)
NAS	4343	American Indian Education Policy and Development	(Slashlisted with 5343) Prerequisite: junior standing or permission of instructor. Enables students to come to an understanding of American Indian education history and policy as related to western European educational thought, philosophies, theories, and practices. No student may earn credit for both 4343 and 5343. (Sp) [III-SS]
NAS	4513	Native Cultural Aesthetics & the Heritage Industry	(Slashlisted with 5513) Prerequisite: junior standing. Focus on aspects of heritage tourism pertaining to Native American experience in the United States from early 19th century to present, examining ways of life of tribes in the form of buildings, art, artifacts, and customs. No student may earn credit for both 4513 and 5513. (Irreg.) [IV-NW]
NAS	4523	Contemporary Native American Artist	Prerequisite: junior standing or permission of instructor. Discussion of the broad and modern sensibilities that make up the contemporary diversity of the indigenous arts and people of the North American hemisphere. May include but not limited to artwork dealing with race, class, tribal sovereignty, as well as formalist modes. Introduction to a survey of common methods of contemporary artistic practice. (Irreg.) [IV-NW]
NAS	4533	Contemporary Native American Artist II	(Slashlisted with 5533) Prerequisite: junior standing, NAS 4523 or permission of instructor. A continuation of NAS 4523. Explores the modern sensibilities that make up the contemporary diversity of indigenous arts and people of this hemisphere. Focuses on native art from North America, Canada, and Latin America. No student may earn credit for both 4533 and 5533. (Sp) [IV-NW]
NAS	4543	Understanding Native American Art of Today	(Slashlisted with 5543) Prerequisite: junior standing. Contemporary indigenous artistic forms made by non-western Native cultures and First Peoples of this hemisphere. Presents ideas from artists which speak to issues in contemporary society today. Themes include issues of race, class, gender, tribal sovereignty and formal artistic forms of expression. Introduces students to a diverse variety of contemporary types of art practice, encourages students to become comfortable with engaging artistic forms as well as assessing artistic and cultural value, and fosters a life-long affinity with the creative arts and patronage. No student may earn credit for both 4543 and 5543. (Irreg.) [IV-NW]
NAS	4933	Introduction to Tribal Economic Development	Prerequisite: junior standing. Introduces students to the concept of tribal economic development and the relevant issues facing tribal, local, state, and federal agencies. Examines theories and roles of tribal economic development as they relate to the survival and continuation of tribal governments. No student may earn credit for both 4933 and 5933. (F)
NAS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
NAS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated with change of topic; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library research or special projects. (Irreg.)

NAS	4363	Tribal Governance and Leadership	(Slashlisted with 5363) Prerequisite: junior standing. Examines traditional and contemporary forms of tribal government and leadership. Students will be exposed to the historical development of modern tribal governments through examination of government policies and legislation. Explores contemporary issues in tribal government and styles of tribal leadership. No student may receive credit for both 4363 and NAS 5363. (Irreg.)
NAS	4973	Contemporary Native American Artist III	Prerequisite; junior standing. A continuation of 4893. Explores the modern sensibilities that make up the contemporary diversity of indigenous arts and people of this hemisphere. Focuses on native art from North America, Canada, and Latin America. (Sp)
NAS	4990	Independent Study	Prerequisite: nine hours of NAS courses and permission of Program Director or instructor. May be repeated; maximum credit six hours. The study of issues related to Native American Studies to include research and special projects. (F, Sp, Su)
NAS	5033	Research Methods in Native American Studies	(Slashlisted with 4033) Prerequisite: graduate standing. Introduction to research methods in Native American Studies with an emphasis on interdisciplinarity. Students will be introduced to the range of methods available for analysis, and to the presentation of research results. Students will formulate a research proposal that includes problem identification, recommendation and justification of methods for analysis, and preparation of a critical literature review. Emphasis on Indigenous methodologies and ethical issues in research. No student may earn credit for both 4033 and 5033. (Irreg.)
NAS	5043	Sovereignty, Law, and Policy	(Slashlisted with NAS 4043) Prerequisite: graduate standing. Explores what constitutes the basic nature of political sovereignty and how it is exercised in Native American communities and what the possibilities and limitations are for tribal governments. No student may earn credit for both NAS 4043 and NAS 5043. (Irreg.)
NAS	5050	Directed Readings in Native American Studies	Prerequisite: graduate standing. May be repeated with change of content; maximum credit 12 hours. Graduate-level independent study for Master's candidates. (Irreg.)
NAS	5103	Interdisciplinary Seminar	Prerequisite: graduate standing. An introduction to basic disciplinary approaches to the study of American Indian cultures and history and to current scholarship in history, anthropology, literature, and the arts dealing with American Indians. (F)
NAS	5113	Oklahoma Tribal History	(Slashlisted with 4113) Prerequisite: graduate standing. A survey of Native American history for the area known today as Oklahoma and the surrounding region. Explores the general concepts and histories of the region from a Native perspective. Discussion of Oklahoma tribal experiences in the context of regional and national experiences. Examines the Oklahoma Native experience through the world-views and words of Native Americans. No student may earn credit for both 4113 and 5113. (Irreg.)
NAS	5123	Contemporary Issues in Native American Studies	Prerequisite: graduate standing. Familiarizes and sensitizes students to dynamics of change relevant to prevailing issues and concerns among American Indian entities with special focus on tribal development/progress. No student may earn credit for both 4123 and 5123. (F)
NAS	5133	Tribal Historic Preservation	(Slashlisted with 4133) Prerequisite: Graduate standing. Provides basic grounding in processes necessary to understand and participate in the federal tribal historic preservation program. Students will receive material and insights to help them gain skills in understanding laws and regulations relating to the federal historic preservation system. No student may earn credit for both 4133 and 5133. (Irreg,)
NAS	5343	American Indian Education Policy and Development	(Slashlisted with 4343) Prerequisite: graduate standing. Enables students to come to an understanding of American Indian education history and policy as related to western European educational thought, philosophies, theories, and practices. No student may earn credit for both 4343 and 5343. (Sp)

NAS	5363	Tribal Governance and Leadership	(Slashlisted with 4363) Prerequisite: graduate standing. Examines traditional and contemporary forms of tribal government and leadership. Students will be exposed to the historical development of modern tribal governments through examination of government policies and legislation. Explores contemporary issues in tribal government and styles of tribal leadership. No student may receive credit for both 4363 and 5363. (Irreg.)
NAS	5513	Native Cultural Aesthetics & the Heritage Industry	(Slashlisted with 4513) Prerequisite: graduate standing. Focus on aspects of heritage tourism pertaining to Native American experience in the United States from early 19th century to present, examining ways of life of tribes in the form of buildings, art, artifacts, and customs. No student may earn credit for both 4513 and 5513. (Irreg.)
NAS	5533	Contemporary Native American Artist II	(Slashlisted with 4533) Prerequisite: graduate standing. Explores the modern sensibilities that make up the contemporary diversity of indigenous arts and people of this hemisphere. Focuses on native art from North America, Canada, and Latin America. No student may earn credit for both 4533 and 5533. (Sp)
NAS	5543	Understanding Native American Art of Today	(Slashlisted with 4543) Prerequisite: graduate standing. Contemporary indigenous artistic forms made by non-western Native cultures and First Peoples of this hemisphere. Presents ideas from artists which speak to issues in contemporary society today. Themes include issues of race, class, gender, tribal sovereignty, and formal artistic forms of expression. Introduces students to a diverse variety of contemporary types of art practice, encourages students to become comfortable with engaging artistic forms as well as assessing artistic and cultural value, and fosters a life-long affinity with the creative arts and patronage. No student may earn credit for 4543 and 5543. (Irreg.)
NAS	5920	Native American Studies Practicum	Prerequisite: graduate standing. A component of the core curriculum for the master's credential within the NAS discipline. Provides learning experiences and the application of understanding and skills in American Indian related professional settings. (F, Sp, Su)
NAS	5933	Tribal Economic Development	Prerequisite: graduate standing. Introduces students to the concept of tribal economic development and the relevant issues facing tribal, local, state, and federal agencies. Examines theories and roles of tribal economic development as they relate to the survival and continuation of tribal governments. No student may earn credit for both 4933 and 5933. (F)
NAS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
NAS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated with change of topic; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library research or special projects. (Irreg.)
NAS	5971	Pre-Thesis Seminar	Prerequisite: graduate standing. This course is a one-hour course to orient students to thesis research and assist them in the development of topics. It will meet in a concentrated format during the last third of the semester. (F)
NAS	5980	Research for Master's Thesis	Prerequisite: graduate standing. Variable enrollment, two to six hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
NAS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
NAS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
NS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

NURS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
NURS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
NURS	4990	Nursing/Contemp Issues	Contemporary Issues in Nursing.
NURS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
OBOE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
OBOE	2000	Freshman and/or Sophomore Secondary Oboe	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
OBOE	2020	Oboe for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
OBOE	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
OBOE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
OBOE	4000	Junior and/or Senior Secondary Oboe	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
OBOE	4020	Oboe for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
OBOE	5000	Master's-Level Secondary Oboe	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
OBOE	5010	Master's-Level Oboe for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
OBOE	5020	Master's-Level Oboe for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
OBOE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
OBOE	6000	Doctoral Secondary Oboe	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)

OBOE 6010	Doctoral Oboe for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
OBOE 6020	Doctoral Oboe for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
ODYN 5113	The Psychology of Leadership	Prerequisite: graduate standing or permission of instructor. Focuses on the theories, principles, and practice of leadership in organizational settings; particular focus on technologically based organizations, leading change in organizations, and leading teams. (Irreg.)
ODYN 5123	Survey of Organizational Dynamics	Prerequisite: admission to the Organizational Dynamics program or instructor's consent. Overview of theories and practices used in human resource management; project management; and knowledge management. Emphasis is on research methodologies and key theories relevant to each of the three substantive area, as well as application of general principles of each of the three areas in the workforce, considering individual, group and organizational levels. (Irreg.)
ODYN 5133	Teams and Motivation	Prerequisite: graduate standing or permission of instructor. Team formation, socialization and identity, team problem solving, individual and collective motivation, conflict and power, learning and team development, and group liabilities. (Irreg.)
ODYN 5153	Design, Evaluation, and Statistics	Prerequisite: graduate standing or permission of instructor. Covers applied research designs such as quasi-experimental and correlation designs; covers basic statistics, hypothesis testing, correlation/multiple regression, and quality control models. Focus will be on application of statistics in organizational problem solving. (Irreg.)
ODYN 5163	Applied Measurement and Analysis	Prerequisite: graduate standing or permission of instructor. Focuses on teaching principles and practices of individual and organizational assessment, covering concepts such as validity, reliability, survey and instrument development, and characteristics of organizational data. Techniques for analyzing organizational data and conducting program evaluation will also be discussed. (Irreg.)
ODYN 5173	Technology and Organizations	Prerequisite: graduate standing or permission of instructor. Technology impacts every aspect of organizational life. Focus is on the role of technology in obtaining, accessing, moving, and storing knowledge and information, technology and patterns of interaction and communication, automation of work processes, and other topics. (Irreg.)
ODYN 5183	Capstone Project	Prerequisite: graduate standing or permission of instructor. This capstone project will involve "real-world" application of the material covered in the program. (Irreg.)
ODYN 5213	Job Analysis Methods and Applications	Prerequisite: admission into Organizational Dynamics program or permission of instructor. The course focuses on the major theories, principles and applications of job analysis in business and industrial settings. The topics covered include job analysis methods and tools, and the application of job analysis information in human resource management functions such as personnel selection, training and development and change, workforce planning, and compensation. (Irreg.)
ODYN 5223	Performance Management	Prerequisite: 5153 and 5163, or permission of instructor. Covers basic approaches to motivating and developing individuals to perform well within organizational settings; includes discussion of alternative methods for measuring and assessing individual, team, and organizational performance. (Irreg.)

ODYN 5233	Training and Career Development	Prerequisite: graduate standing or permission of instructor. Overview of principles, theories, and practices of learning and development in organizations. Application of various training techniques and designs will be covered as well as roles of different organizational constituencies in employee training and development. (Irreg.)
ODYN 5243	Staffing, Selection, and Compensation	Prerequisite: graduate standing or permission of instructor. Focuses on recent, state-of-the-art processes and technologies for organizational staffing, personnel selection, and employee benefits and pay. Relevant theories in these areas will be reviewed. (Irreg.)
ODYN 5253	Organizational Behavior, Change, and Development	Prerequisite: graduate standing or permission of instructor. Explores theories and practices related to the planned process of changing an organization or group's culture to increase organizational productivity and effectiveness. Topics such as organizational assessment and diagnosis, continuous learning, problem solving sessions, reward systems, visioning, and empowerment will be covered. (Irreg.)
ODYN 5263	Human Resource Management Systems and Techniques	Prerequisite: admission to Organizational Dynamics program or permission of instructor. Survey of theory and practice in primary areas of human resource management such as workforce planning, recruiting, selection and staffing, performance management, compensation, and training and development. Focuses on a systems approach to human resource management, including how aspects of HRM are interrelated, as well as strategies and technologies being used to perform various HRM functions. (Irreg.)
ODYN 5273	Topics in Human Resource Management	Prerequisite: graduate standing or permission of instructor. In-depth examination of existing and emerging issues and problems facing human resource professionals who work as internal or external consultants and administrators. May include issues such as human resource costing, equal employment opportunity, downsizing, selection, training, and globalization. (Irreg.)
ODYN 5283	Employee Health, Safety and Wellness	Prerequisite: admission to Organizational Dynamics program or permission of instructor. Focuses on health, safety and wellness issues relevant to the workplace. Individual, social, situational and environmental factors that affect workplace health, safety and wellness will be covered, including topics such as: stress and burnout; work-life conflict; workplace safety and injury prevention; legal and regulatory compliance; and workplace conflict, aggression, and violence. (Irreg.)
ODYN 5313	Planning Processes and Strategy Development	Prerequisite: graduate standing or permission of instructor. Overview of principles and practices of planning and strategy development. Planning processes will be examined at micro as well as macro organizational levels; organizational strategies such as succession planning and workforce planning will be discussed. (Irreg.)
ODYN 5323	The Psychology and Practice of Project Management	Prerequisite: graduate standing or permission of instructor. Focuses on strategies and steps involved in developing project proposals and work plans. Includes topics such as needs assessment, budgeting, resource utilization, managing diverse project teams, troubleshooting, and others. (Irreg.)
ODYN 5333	Customer Service and Market Analysis	Prerequisite: 5153 or permission of instructor. Principles, theories and applications of market analysis and customer service will be reviewed; techniques for gathering, assessing, and analyzing market and customer data will be covered; techniques for improving customer service will be discussed. (Irreg.)
ODYN 5343	Organizational Communication	Prerequisite: graduate standing or permission of instructor. Overview of theories and systems of communication in organizational settings. Various forms and effectiveness of communication as well as purposes and strategies at different organizational levels will be covered. (Irreg.)

ODYN 5353	Global Business Practices and Ethics	Prerequisite: graduate standing or permission of instructor. Covers the relationship between organizations and global markets. Explores how organizational systems work together to meet global demands, system breakdowns, and assessment of organizational performance. (Irreg.)
ODYN 5373	Technical Management and Industrial Engineering	Prerequisite: graduate standing or permission of instructor. Overview of principles, theories and practices of industrial engineering. Will cover integrated product/service and operational process design; productivity and quality improvement; use of technology; and operations management. (Irreg.)
ODYN 5383	Emerging Topics in Project Management	Prerequisite: admission to Organizational Dynamics program or instructor's consent. In-depth examination of existing and emerging issues and problems facing project management professionals who work as internal or external consultants. May include issues such as risk management, project selection, conflict resolution, and strategic management decision processes. (Irreg.)
ODYN 5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
ODYN 5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
ODYN 5973	Proposing and Presenting Research	Prerequisite: admission to Organizational Dynamics master's program. Students in the course will learn to (a) read, synthesize and summarize existing research in organizational dynamics; (b) develop a research proposal that is founded in real world problems, that is based on sound research principles, and that meets accepted standards for professional and scholarly publication. The proposal, on approval of the faculty, may serve as the prospectus for either the professional project or the master's thesis. (F, Sp)
ODYN 5980	Research for Master's Thesis	Prerequisite: permission of instructor. Supervised research in area agreed upon by the student and the instructor. (F, Sp, Su)
ODYN 5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
ORGN 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
ORGN 2000	Freshman and/or Sophomore Secondary Organ	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
ORGN 2020	Organ for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 8 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
ORGN 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
ORGN 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

ORGN	4000	Junior and/or Senior Secondary Organ	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
ORGN	4020	Organ for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 14 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
ORGN	5000	Master's-Level Secondary Organ	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
ORGN	5010	Master's-Level Organ for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
ORGN	5020	Master's-Level Organ for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
ORGN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
ORGN	6000	Doctoral Secondary Organ	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
ORGN	6010	Doctoral Organ for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
ORGN	6020	Doctoral Organ for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
P E	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
P E	2011	Introduction to Petroleum Engineering Systems	Prerequisite: Physics 2514 or concurrent enrollment. Overview of petroleum engineering systems including: uses of petroleum products, exploration, exploitation subjects such as drilling, production, reservoir and formation evaluation, transportation and refining; marketing; government regulation and political influence. (Sp)
P E	2113	Statics and Dynamics	Prerequisite: Physics 2514 and Mathematics 2934 or 2433 or concurrent enrollment in Mathematics 2934 or 2433. Vector representations of forces and moments; general three-dimensional theorems of statics and dynamics; centroids and moments of area and inertia. Free-body diagrams, equilibrium of a particle and of rigid bodies, principles of work and energy; principle of impulse-momentum. Motion of particles and rigid bodies of translating and rotating reference frames. Newton's laws of motion and Lagrange's equation, including application to lumped-parameter systems. Analyses of trusses, frames, and machines. (F)

P E	2153	Mechanics of Materials	Prerequisite: PE 2113. Basic principle of mechanics, including the definition of stress, transformations and principal values for the stress and strain tensors, kinematic relation review of conservation equations and the development and application of consecutive laws for idealized materials. Elementary elastostatics utilizing Hooke's Law; consecutive relations for a linear-elastic continuum, including elastic parameters such as youngs modulus, shear and bulk moduli and poisson-s ratio. Solution of elementary one- and two-dimensional mechanics problems, including thermal stresses and strains, beam flexure, shear and deflections, pressure vessel and buckling of columns. (Sp)
P E	2213	Thermodynamics	Prerequisite: MATH 2934 or 2433 and PHYS 2524 or concurrent enrollment in both MATH 2934 or 2433 and PHYS 2524. First and second law of thermodynamics are developed and applied to the solutions of problems from a variety of engineering fields. Extensive use is made of differential calculus to interrelate thermodynamics functions. (Sp)
P E	2281	Engineering Co-Op Program	(Crosslisted with AME, CH E, CEES, C S, ECE, ENGR, EPHY, G E, I E 2281) Prerequisite: student participation in the program. The Co-Op program provides student placement in jobs outside the University, but in a position related to the student's major. On completion of a semester work period, the student submits a brief written report. One hour of credit (elective) granted for each work period, with a maximum credit of six hours. (F, Sp, Su)
P E	3022	Technical Communications	Prerequisite: ENGL 1213. Skill to be developed: communicating effectively and efficiently; summarizing and distilling; reading for understanding; planning and writing business letters, memoranda, emails, resumes, technical reports; active listening; preparing and delivering oral technical presentations and interviewing skill. (Sp)
P E	3123	Petroleum Reservoir Fluids	Prerequisite: GEOL 1114. Properties of petroleum behavior of gases, phase behavior of liquids, qualitative and quantitative phase behavior of hydrocarbon systems, reservoir fluid characteristics. Application of these concepts to the prediction of gas and gas-condensate reservoir behavior. (F)
P E	3213	Reservoir Rock Properties	Prerequisite: PE 2011, PE 2213 or concurrent enrollment in PE 2011, PE 2213; corequisite PE 3221. Fundamental course establishing primary petrophysical concepts, properties and their measurement. Covers rock types, distribution, composition and structure, porosity, permeability, resistivity, wettability, water saturation, elastic moduli and includes effects of pressure and temperature on rock properties. (Sp)
P E	3221	Rock Properties Laboratory	Prerequisite: PE 3022 or concurrent enrollment, co-requisite PE 3213. Laboratory course aimed at exposing the student to the measurement and analysis of reservoir properties such as porosity, permeability, fluid saturation, grain size, elastic moduli and pore throat sizes. The course will stress safety concerns appropriate for all laboratory procedures, error analyses and report writing. (Sp)
P E	3222	Petroleum Engineering Practice II (Internship)	Prerequisite: P E 2011. Full time Career-related work experience of at least eight weeks in the petroleum industry. The internship may also involve research with faculty members. (F, Su)
P E	3223	Fluid Mechanics	Prerequisite: PE 2113, PE 2213 or AME 2213, Mathematics 2934 or 2443, Mathematics 3113 or concurrent enrollment. Coverage of the fundamental of fluid statics and dynamics. Formulation of the equations of fluid flow such as Navier Stokes, Euler, Bernoulli, etc. and their application. Examples of ideal and viscous fluid flow in open and closed conduits. (F)
P E	3313	Drilling I	Prerequisite: PE 2153 or CEES 2153, PE 3213, PE 3223 or concurrent enrollment in PE 3223. Drilling operations, drilling costs and economics, drilling fluids, pressure losses in circulating systems, rotary drilling bits and penetration rate, rotary drilling techniques, pore and fracture gradients. (F)

P E	3413	Production Engineering I	Prerequisite: PE 3123. Tubing and packer design; hydraulic fracturing and acidizing; oil and gas well performance; vertical lift and choke performance; systems analysis; production operations. (Sp)
P E	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
P E	3513	Reservoir Engineering I	Prerequisite: PE 3213 or concurrent enrollment, PE 3123, PE 3723. Fundamentals of evaluation of oil and gas reservoirs. Reservoir volumetrics; material balance; Darcy's law and equation of continuity; diffusivity equation; streamlines; well models; introduction to well testing; decline curve analysis; natural water influx. (Sp)
P E	3712	Petroleum Economics	Prerequisite: PE 2011. Application of petroleum engineering principles and economics to the evaluation of oil and gas projects; evaluation principles, time value of money concepts, and investment measures; cost estimating, price and production forecasting; risk and uncertainty, project selection, and capital budgeting. (F)
P E	3723	Numerical Methods for Engineering Computation	Prerequisite: MATH 3113 or MATH 3413 or concurrent enrollment. Course uses specific software applications tailored toward petroleum engineering majors. Basic methods for obtaining numerical solutions with a digital computer. Included are methods for the solutions of algebraic and transcendental equations, simultaneous linear equations, ordinary and partial differential equations, and curve fitting techniques. The methods are compared with respect to computational efficiency and accuracy. Any student who earns credit for P E 3723 cannot receive duplicate credit for AME 3723, C S 3723, or CH E 3723. This course may not be taken for graduate credit within the College of Engineering. (F)
P E	3813	Formation Evaluation with Well Logs	Prerequisite: PE 3213 or concurrent enrollment, Geology 3003 or concurrent enrollment. Basic formation evaluation concepts, borehole environment, principles of resistivity, radiation, thermal and elastic wave measurements and measuring tools, applications to formation evaluation using commercial software package. (Sp)
P E	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in regular coursework. (F, Sp)
P E	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work on a special project in the student's field. (F, Sp)
P E	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
P E	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
P E	4033	Oil, Gas and Environmental Law	Prerequisite: PE 3712. Review and analysis of legal principles and leading cases related to oil and gas exploration, production and marketing in the areas of land titles, leases, operating agreements, contracts, acquisitions, gas marketing, environmental regulation, pollution, and litigation. (F)

P E	4113	Oil Field Development	Prerequisite: EMGT 3001 and declared Energy Management major. Properties of petroleum fluids and reservoir rocks; geophysical environment and exploration methods; drilling and completion methods; well testing; producing mechanisms; evaluation methods. (Sp)
P E	4221	Petroleum Engineering Practice III	Prerequisite: 3222. Career-related work experience of at least eight weeks in the petroleum industry. (F, Su)
P E	4233	Subsurface Engineering and Tunneling	Prerequisite: senior standing in engineering or permission. Engineering properties of earth materials, theories of rock failure, tunneling, mining and excavation procedures; nature of geologic hazards; geothermal, oil shale, oil mining, earthquake, rock bolting, permafrost engineering, etc. (F)
P E	4323	Drilling II	Prerequisite: PE 3313. Wellbore, well planning, casing design, direction control, drilling program preparation, offshore operations, cost control and AFE, post-drilling review, and economics. (F)
P E	4331	Drilling and Production Engineering Laboratory	Prerequisite: P E 3313. Properties of drilling and completion fluids; well control; oil and gas well testing; production operations; evaluation of artificial lift systems; gas measurement. (Sp)
P E	4423	Production Engineering II	Prerequisite: PE 3123 and PE 3223. Artificial lift design; sucker rod pumping, electric submersible pumping, plunger lift, and gas lift; design of surface production equipment; oil and gas separation; oil treating; gas dehydration; single and two-phase flow through pipes, fluid measurement; pipeline system design. (Sp)
P E	4521	Reservoir Fluid Mechanics Laboratory	Prerequisite: PE 3513. Laboratory experiences in hydrocarbon phase behavior, saturation pressure, real fluid properties, relative permeability, secondary recovery by water flooding and gas displacement, volumetric reserve estimation, statistical analyses of core data, two-dimensional flow, enhanced oil recovery using surfactants and polymers. (F)
P E	4533	Reservoir Engineering II	Prerequisite: PE 3513. Advanced reservoir engineering concepts required for effective production of oil and gas. Reservoir characterization; reservoir heterogeneity and anisotropy; recovery mechanisms; Leverett J-functions; upscaling; flow simulation; history matching and forecasting; uncertainty and risk. (F)
P E	4553	Integrated Reservoir Management	(Slashlisted with 5553) Prerequisite: PE 3313, PE 3813, PE 4712, PE 4423, PE 4533, PE 4323 or concurrent enrollment in PE 4712, PE 4423, PE 4533, PE 4323. Application of petroleum engineering and geoscience principles to the design of the reservoir management plan. The management environment; integrated reservoir description; performance prediction; developing the reservoir management plan; economics. Capstone course for Petroleum Engineering majors. No student can earn credit for both 4553 and 5553. (F, Sp) [V]
P E	4563	Well Test Analysis	Prerequisite: PE 3513 or PE 3413. Diffusivity equation; exponential integral solution; principle of superposition; draw-down testing, skin effects, wellbore storage, type curve matching, reservoir limit test; buildup testing, bounded reservoirs, average reservoir pressure; drill stem testing; interference testing; pulse testing; reservoir heterogeneities; anisotropy, stratification, sealing faults. (Irreg.)
P E	4583	Improved Recovery Techniques	(Slashlisted with 5583). Prerequisite: PE 3513. New wellbore and reservoir techniques for improved recovery. Feasibility analysis; diagnostic techniques; single well operations; infill drilling; horizontal wells and multilaterals; waterflooding; enhanced oil recovery. No student may earn credit for both 4583 and 5583. (Sp)
P E	4712	Petroleum Project Evaluation	Prerequisite: PE 3413, PE 3513, PE 3712. Application of petroleum engineering principles and economics to the evaluation of oil and gas projects; evaluation principles, time value of money concepts, and investment measures; cost estimating, price and production forecasting; risk and uncertainty, project selection, and capital budgeting. (F)

P E	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
P E	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
P E	4990	Special Studies	1 to 4 hours. Prerequisite: department instructor permission. May be repeated; maximum credit 4 hours. Special research on current or special problems. (F, Sp, Su)
P E	5133	Non-Newtonian Fluid Mechanics	(Crosslisted with G E 5133) Prerequisite: Graduate standing or instructor permission. Characteristics of stress in fluids, the role of Newtonian fluid mechanics, extension of Newtonian analysis to Bingham plastics; fluids without yield stress, time dependent non-Newtonian fluids, laminar and turbulent flow, boundary layers in non-Newtonian fluids. (Sp)
P E	5143	Fluid Flow in Porous Media	(Crosslisted with G E 5143) Prerequisite: Graduate standing or instructor permission. Physical concepts involved in the flow of fluids in porous media; treatment of Darcy's Law in a mathematical sense; the concept of relative permeability applied also in a mathematical sense. (F)
P E	5243	Introduction to Rock Mechanics	(Crosslisted with G E 5243) Prerequisite: Graduate standing or instructor permission. Engineering properties of rock; rock testing techniques; in-situ methods; mathematical approach to stress-strain analysis; discontinuities in rock; applications for underground openings; rock slopes; foundations and drilling. (Sp)
P E	5353	Advanced Drilling	Prerequisite: Graduate standing or instructor permission. Cost control, hole problems, planning a well, drilling; muds, drilling fluid solids removal, pressure losses, lifting capacity of drilling fluids, surge and swab pressures, pore pressure and fracture gradients, pressure control, well control equipment, blowouts, deviation in boreholes, rotary drilling bits. (F)
P E	5423	Advanced Stimulation	Prerequisite: Graduate standing or instructor permission. Theory and application of continuum mechanics concepts to hydraulic fracturing, acidizing, acid fracturing and other stimulation processes. (Irreg.)
P E	5433	Horizontal Well Technology	Prerequisite: Graduate standing or instructor permission. Horizontal well technology including: horizontal drilling, horizontal well completions and stimulation, pumping and lift systems, well testing, horizontal wells in waterflooding and enhanced oil recovery, costs, economics, regulations, tax incentives. (Irreg.)
P E	5443	Formation Damage	(Crosslisted with GEOL 5443) Prerequisite: graduate standing or permission of instructor. This course presents an overview of the common formation damage processes, mechanisms, theories, and parameters; methods for diagnosis, determination, and control of formation damage; and application of mathematical models for analysis of laboratory and field data (Irreg.)
P E	5523	Advanced Production Engineering	Prerequisite: graduate standing or permission. Overview of design and management of production systems to optimize oil and gas well performance. (Sp)
P E	5533	Petroleum Reservoir Development	(Crosslisted with G E 5533) Prerequisite: Graduate standing or instructor permission. Petroleum reservoir development and extension. Simulation methods for evaluating a petroleum reservoir, schemes for oil field development. Engineering application of logging and geological, fluid and well-testing data. Student-oriented reservoir simulation projects. (Sp)
P E	5543	Waterflooding	Prerequisite: Graduate standing or instructor permission. Evaluating and operating secondary recovery projects; fundamental consideration of petroleum engineering and reservoir behavior applied to secondary recovery of oil. (F)

P E	5553	Integrated Reservoir Management	(Slashlisted with 4553) Prerequisite: PE 3313, PE 3813, PE 4712, PE 4423, PE 4533, PE 4323 or concurrent enrollment in PE 4712, PE 4423, PE 4533, PE 4323. Application of petroleum engineering and geoscience principles to the design of the reservoir management plan. The management environment; integrated reservoir description; performance prediction; developing the reservoir management plan; economics. No student can earn credit for both 4553 and 5553. (F, Sp)
P E	5563	Mathematical Simulation Models	Prerequisite: Graduate standing or instructor permission. Principles of simulating engineering systems by partial differential equation systems; considers the use of engineering principles in formulating mathematical simulation models and analytic techniques for solving the resulting mathematical models. (Sp)
P E	5573	Well Test Analysis	Prerequisite: Graduate standing or instructor permission. Diffusivity equation; exponential integral solution; principle of superposition; draw-down testing, skin effects, wellbore storage, type curve matching, reservoir limit test; buildup testing, bounded reservoirs, average reservoir pressure; drill stem testing; interference testing; pulse testing; reservoir heterogeneties; anisotropy, stratification, sealing faults. (F)
P E	5583	Improved Recovery Techniques	(Slashlisted with 4583) Prerequisite: senior standing, or graduate standing. New wellbore and reservoir techniques for improved recovery. Feasibility analysis; diagnostic techniques; single well operations; infill drilling; horizontal wells and multilaterals; waterflooding; enhanced oil recovery. No student may earn credit for both 4583 and 5583. (Sp)
P E	5603	Introduction to Natural Gas Engineering and Management	Prerequisite: Graduate standing or instructor permission. Global natural gas supply and demand, international gas trade and infrastructure, gas policy, regulation, safety and environmental issues, natural gas resource base: conventional and unconventional, gas exploration, drilling and production, gas processing, storage and pipeline, gas trading and marketing, gas utilization, LNG, chemicals. (F)
P E	5613	Natural Gas Engineering	Prerequisite: Graduate standing or permission of instructor. Review of properties of natural gases and condensate systems; gas flow in porous media; gas reservoir engineering; gas field development; gas condensate reservoirs; natural gas transportation and storage. (Alt. Sp)
P E	5623	Natural Gas Processing	Prerequisite: PE 5603, graduate standing or permission of instructor. Gas conditioning; processing of gas for its liquids; design of adsorption and absorption facilities; fractionation design. (Alt. Sp)
P E	5643	Natural Gas Finance - Valuation and Investment	Prerequisite: Graduate standing or instructor permission. This course is the first in a two-course sequence in natural gas finance. The first course covers valuation and investment topics; and the second course covers risk management and natural gas trading topics. The valuation and investment course exposes students to basic concepts and practices of valuation and investment in the natural gas industry. Topics include accounting systems, financial statement analysis, valuation of company stocks, competitive comparisons, value of reserves in the ground, corporate restructuring, legal and tax environment for mergers, valuation of bonds and preferred stocks. The emphasis of the course will be on the application of the basis financial theories of valuation and investment on the natural gas industry. (F)

P E	5653	Natural Gas Finance - Trading and Risk Management	Prerequisite: Graduate standing or instructor permission. This course is the second in a two-course sequence in natural gas finance. The first course covers valuation and investment topics; and the second course covers risk management and natural gas trading topics. The gas risk management course exposes students to basic concepts and practices of risk management in the natural gas industry. Topics include basic structure of the gas physical and financial markets, derivatives, hedging strategies, futures and forward price determination, option pricing theories, value at risk and market fundamental and technical analyses. The emphasis of the course will be on the application of the basis financial risk management theories to the natural gas industry. (Sp)
P E	5713	Introduction to Geostatistics	(Crosslisted with G E 5713 and GEOL 5713) Prerequisite: Graduate standing or instructor permission. Introduction to geostatistical concepts, Principles and tools for description and modeling of spatial variability in oil/gas reservoirs and other geological formations. Topics include review of basic statistic concepts, exploratory spatial data analysis, stationary and ergodicity, variogram and covariance, kriging, spatial sampling, stochastic realizations and simulations, conditioning, and indicator kriging. (Sp)
P E	5812	Research in Special Petroleum Engineering Problems	(Sp, Su)
P E	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
P E	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
P E	5971	Seminar in Petroleum Engineering	Prerequisite: graduate standing. Current petroleum literature, lectures, and reports; emphasis upon reservoir behavior and conservation. (F, Sp)
P E	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
P E	5990	Special Studies	1 to 4 hours. Prerequisite: graduate standing in petroleum engineering. May be repeated with change of topic; maximum credit twelve hours. Supervised individual study or specialized research in petroleum engineering. (F, Sp, Su)
P E	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
P E	6153	Transport Phenomena in Porous Media	(Crosslisted with G E 6153) Prerequisite: Graduate standing or instructor permission. Fundamental theory of mass, momentum and energy transport in porous media. Emphasis placed upon enhanced oil recovery processes, in situ energy extraction, and other processes relevant to energy production. (Irreg.)
P E	6253	Advanced Petrophysics	(Crosslisted with G E 6253) Prerequisite: Graduate standing or instructor permission. Techniques of sampling petroleum reservoirs with emphasis upon the rock and fluid properties. (Irreg.)
P E	6263	Advanced Rock Mechanics I	(Crosslisted with G E 6263) Prerequisite: Graduate standing or instructor permission. In-situ stress determinations, effects of stress and strain gradients, time-dependent effects, Griffith's theory, crack phenomena, fracture toughness of rocks, poroelasticity concepts. (Irreg)
P E	6273	Advanced Rock Mechanics II	(Crosslisted with G E 6273) Prerequisite: 6263. Stereographic projections, properties of discontinuities, fluid flow in fractures, stability and design of rock slopes (two- and three-dimensional).

P E	6283	Seismic Reservoir Modeling	(Crosslisted with G E and GEOL 6283) Prerequisite: Graduate standing or permission of instructor. This course is designed to explore the seismic response of rocks and how it is related to petrophysical parameters. This understanding is key to interpretation of seismic data in terms of subsurface rocks and fluids. (F)
P E	6443	Petroleum Production Systems	(Crosslisted with G E 6443) Prerequisite: graduate standing, permission. Principles of the development and operation of petroleum production systems. Considers the combined behavior of the reservoirs, the surface equipment, the pipeline system and the storage facilities. Optimization of these systems for various production schedules using queuing theory, linear programming and dynamic programming. (Irreg.)
P E	6573	Advanced Oil Reservoir Engineering	(Crosslisted with G E 6573) Prerequisite: graduate standing. Optimization of material balance equations; saturation calculations, with and without counterflow; dynamics of water drive reservoirs; accelerated blowdown of strong water drive gas reservoirs; conformal mapping of oil and gas fields; the subsidiary equation; tracer methods; streamlines; miscible processes; dispersion models and optimum solvent slug size. (Irreg.)
P E	6583	Enhanced Oil Recovery	(Crosslisted with G E 6583) Prerequisite: graduate standing or permission. New principles of recovery of oil and gas fields including: polymer, surfactants, miscible recovery processes, inert gas injection, emulsions, steam, in situ and wet combustion techniques. (Sp)
P E	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
P E	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
P E	6980	Research for Doctoral Dissertation	(F, Sp, Su)
P E	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
P SC	1113	American Federal Government	Not accepted for major credit. A study of the structure, organization and powers of the executive, legislative and judicial branches including relationships between state and national governments. Emphasis upon political processes and popular government; elections, political parties, pressure groups, voting behavior. (F, Sp, Su) [III-PSC]
P SC	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
P SC	2001	Political Science, Fields and Careers	Serves as an introduction to the academic subfields of the discipline. Provides career guidance and information relevant to post-BA employment, graduate schools, law schools and government service. (Su)
P SC	2013	Introduction to Political Analysis	Prerequisite: 1113. Scientific method and the variety of approaches to a science of politics; problems of research design; methods and techniques of systematic political inquiry. (F)

P SC	2103	Politics in America	Prerequisite: P SC 1113. Focuses on the practice of politics in the United States and the forces and ideas that shape political conflict and determines who wins. The three major national institutions of American government are considered: Congress, the presidency, and the judiciary. Examines their constitutional bases of power, their evolving relationships, and their roles in contemporary policymaking. Also considers how ideas and power relationships influence the shape of political conflict. Contemporary political issues will be integrated into course content. (F)
P SC	2173	Administration and Society	Prerequisite: 1113. Studies relation of public administration to legislators, executives, and courts; and challenges to public management, such as diversity, equality, and justice. Topics include government budgeting, personnel, leadership, and organizing and delivering programs and services. Focuses on how to maintain ethics and accountability and increase efficiency and effectiveness in public programs. (F, Sp)
P SC	2223	Making Public Policy	Prerequisite: 1113. Explores government actions to address social problems such as crime, poverty, health care, education, welfare reform, and the environment. Focuses on how to craft policy responses to conflict situations; resolve competing political demands for more services yet lower taxes; and achieve important societal goals of efficiency, equity, fairness, and freedom. (F)
P SC	2503	Global Politics	Prerequisite: P SC 1113. Introduces sources of continuity and change in world politics. Emphasis is given to the struggle for power and search for peace among state and non-state actors. Additional topics include the relevance of international law, foreign policy decision-making, balance of power, collective security, and moral choices in international politics. (F)
P SC	2603	Governments Around the World	(Crosslisted with IAS 2603) Prerequisite: P SC 1113. Gateway course in political science and international and area studies. Provides an introduction to the varieties of politics and governmental systems around the world. Students will develop skills in comparative analysis to understand why countries have distinct types of government. (F, Sp, Su) [IV-WC]
P SC	2703	Justice, Liberty and the Good Society	Prerequisite: P SC 1113. An introduction to the literature about the best form of government, how a just and free society should be designed, and what difficulties stand in the way of our pursuit of the good society. Topics may include: the classic idea of a republic, theories shaping American democracy, the theory of equality and liberty, and contemporary ideas for the critical analysis and improvement of democracy. (F, Sp)
P SC	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
P SC	3020	Problems in American Government and Politics	1 to 3 hours. Prerequisite: 1113 or permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Will not assume prior knowledge on the part of the students in reference to the topics under examination. The focus is on the national government, including the political processes and policies that relate to it. (F, Sp)
P SC	3023	Law and Courts	Prerequisite: 1113 or permission of the instructor. This is an introduction to the judicial process, origin and sources of law, and the relationship between courts and other sectors of the American political system. It will focus on the criminal justice system, civil justice system, constitutional law, judicial selection, judicial policymaking, and how interest groups use the courts. (F)
P SC	3033	Religion and Politics in America	Prerequisite: 1113. Examines the diverse religious traditions in America and explores their political manifestations. Assesses the religious impact on voting, lobbying, political mobilization and political culture. Particular attention will be paid to the strategic environment in which religious political actors must operate. [IV-WC]

P SC	3043	Gender, Power and Leadership in Politics and Public Administration	(Crosslisted with W S 3043) Prerequisite: 1113. Focuses on the relationship between gender, power, leadership, and government in politics and public administration. Causes of under-representation of women in elected office and the bureaucracy are explored. Historical, social, psychological, and organizational barriers are considered. (Irreg.)
P SC	3053	Global Religion and American Foreign Policy	Prerequisite: 1113 or permission of instructor. This course examines the intersection of American faith-based movements, global religious developments, and U.S. foreign policy. It explores how global religious conflicts impinge on American foreign policy, and how domestic religious groups attempt to shape U.S. policy on such concerns as human rights, humanitarian aid, and conflict mediation. (F, Sp)
P SC	3063	Religion and the American Constitution	Prerequisite: P SC 1113. This course examines the vital role of religion in the American Constitution, its antecedents and contemporary interpretations. (F)
P SC	3073	Immigration Politics	Prerequisite: P SC 1113 or permission of instructor. An examination of the politics of immigration in America. Includes lively debate, in addition to daily discussions of current events involving immigration. Emphasis will be placed upon the development of a unique research project that examines an important question, puzzle, or aspect of immigration in American politics. (Irreg.)
P SC	3090	Special Topics	Prerequisite: 1113 or permission of instructor. May be repeated with change of content; maximum credit nine hours. Topics considered will deal with issues whose subject matter spans two or more subfields of the undergraduate curriculum in political science and/or public affairs and public administration. (Irreg.)
P SC	3113	Bureaucracy and Citizenship	Prerequisite: 1113 or permission of instructor. Focuses upon various aspects of political life in bureaucratic society, including the scope of contemporary public programs and their impact on society, and extent and character of citizens' bureaucratic encounters, administrative pathology, bureaucratic helping, appeals of administrative decisions, bureaucratic accountability and democratic theory, and the future of citizen-bureaucratic relations. (Sp)
P SC	3123	Social Statistics	(Crosslisted with SOC 3123) Prerequisite: Sociology 1113 or permission of instructor, and completion of General Education Mathematics requirement. Descriptive and inferential statistics as they are used in sociology to analyze survey and macro-level data. Problems of research design and interpretation of analysis in sociological theory are major topics. A grade of C or higher in this course is a prerequisite for Sociology capstone courses. (F, Sp, Su)
P SC	3133	Politics and Public Administration	Prerequisite: 1113 and sophomore standing. Examines the concept of the political role of the bureaucracy and the impact of other government institutions on bureaucratic structure, functions and behavior. The role of the bureaucracy in public policy making and the influence of politics on policy implementation is analyzed. (F) [III-SS]
P SC	3143	U.S. Congress	An introduction to the legislative process, with emphasis upon the United States Congress: the legislative process, committee systems; legislative leadership; the legislator and constituents; lobbyist and interest groups; legislative-executive relations. (Sp)
P SC	3163	The American Presidency	Prerequisite: 1113. Examination of the constitutional, electoral, administrative and political aspects of the contemporary American presidency; ending with an assessment of its capabilities in the context of its demands. (F)

P SC	3170	Problems in Public Administration	1 to 3 hours. Prerequisite: five hours of political science or three hours of another social science, or junior standing and permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. Special topics and/or problems in the field of public administration not covered in the regular curriculum or by supervised individual study. The course will involve readings appropriate to the subject matter and requires completion of a substantial paper. Additional requirements will be covered by the instructor in the syllabus. (Irreg.)
P SC	3173	Theory of Public Organizations	Prerequisite: 1113 and 2173. Analyzes public organizations to distinguish them from private organizations. Looks at the intellectual heritage of Adam Smith, Marx, Weber and Freud and the political theory of American public organizations from Wilson, through the Principles writers, to the administrative behavior schools and modern open systems. (F)
P SC	3183	Politics of Government Budgeting	Prerequisite: 2173. Provides an introduction to budgeting and the budgetary process in American government. Budgeting decision-making about government revenues and expenditures. (Sp)
P SC	3193	Nonprofits and Government	Prerequisite: junior standing or permission of instructor. Examines nonprofit-government relationships in addressing societal problems. The nonprofit sector and government closely interact with each other in the realms of public policy and service delivery. Nonprofit roles in the domain of service delivery have intensified in recent years and thus triggered numerous research interests in academic and practical concerns for both government and nonprofit organizations. (Sp)
P SC	3203	Sexuality, Gender, and the Law	Prerequisite: P SC 1113 or permission of the instructor. The course will examine a number of the most politically significant legal debates regarding gender and sexuality. Though the issues covered will vary by semester, they will include many of the following: discrimination on the basis of gender and sexual orientation, reproductive rights, the regulation of pornography, same-sex marriage, sexual harassment in the workplace, and the right to sexual privacy. (Irreg.)
P SC	3213	Law, Politics, and Society	Prerequisite: 1113 or permission of instructor. Examines how courts and other political actors use law to solve problems and how judicial decisions incorporate legal and political considerations. It explores how law shapes or alters the political community, the extent that law changes to fit needs of society, and the role of politics in interpretation of law. (Sp)
P SC	3220	Topics in Public Policy	1 to 3 hours. Prerequisite: 1113. May be repeated with change of content; maximum credit six hours. Research and investigation on selected topics in public policy. (Irreg.)
P SC	3233	Environmental Policy and Administration	Prerequisite: 1113. Characterizes the evolution of public sector involvement in protection of the environment; addresses current issues associated in environmental protection including administrative efficiency and effectiveness and intergovernmental relations, and assesses potential solutions to emerging environmental problems. (F)
P SC	3243	Health Policy	Prerequisite: 1113 and junior standing. Analyze United States health policy, the impact of health policy on the nation's health, and contemporary health policy issues. (Irreg.)
P SC	3253	Human Resource Management	Deals with the techniques, problems and processes of human resource management at the undergraduate level. Specific topics include: civil service reform, recruitment and training in the public sector and public sector EEO and labor problems. (Sp)

P SC	3263	Social Welfare	Prerequisite: ENGL 1213 or EXPO 1213. Introduction to the basics of welfare policy in the United States. To do so, we will review the history of this policy area from early efforts in Western Europe up to the changes made by, and the impacts of, the Personal Responsibility and Work Opportunity Act of 1996 which did away with the Aid to Families with Dependent Children (AFDC) program and ushered in TANF (Temporary Assistance to Needy Families). There will be a specific focus on the logic behind policy components (to include examining competing theories of human behavior and how they relate to relief efforts), their evolution, and the role of the political environment in fostering change. (Sp)
P SC	3313	Urban Government and Politics	Structure and function of urban governments and analysis of politics in urban areas. (F)
P SC	3323	State Government	The organization, structure, functions, and administration of American state and local governments; federal-state relations; constitutions and legal systems; legislative, executive, and judicial departments; a study in the political process; problems of metropolitan areas; fiscal and administrative systems. (F)
P SC	3403	Interest Groups and Social Movements	Role of interest groups and collective action in the political process; theory of collective action and development of American pressure groups; group organization and internal behavior; patterns of external behavior; collective action and foreign political systems; and organized interests and democratic government. (F)
P SC	3413	American Political Parties	A descriptive and critical examination of the political processes in the United States, with special reference to the role and organization of political parties and their relationship to voter behavior and the popular control of government. (Irreg.)
P SC	3423	Public Opinion	Relies on three basic themes as a framework for the study of public opinion: coalitions, elites and masses. More specific subjects studied include political socialization, the parties and the media. Students may not take both P SC 3423 and P SC 4013 for credit. (Irreg.)
P SC	3433	Voters and Campaigns	Prerequisite: 1113. Covers some of the literature on voting behavior and political campaigns: political socialization; political participation; election studies; influence on voting such as party, candidate, issues, and group affiliations; the legal framework and impact of reform; election outcomes and their policy import. Coverage of the campaign process includes party and interest group activity, campaign financing, strategy, the media, and campaign reform. (Irreg.)
P SC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
P SC	3443	Mass Media and American Politics	Prerequisite: 1113. Role of mass media in American politics including origin and development of relationship between press and politics, how the press covers politics, effects of mass media on public opinion, political elites, and institutions. (Irreg.)

P SC	3453	Southern Politics	Prerequisite: 1113 and junior standing, or permission of instructor. Focuses on the history and evolution of southern politics and the role of race, religion, and political culture as these factors impact and give the region its distinctive political features. These factors, plus the realignment of the political parties in these states, contribute to southern political strength in Congress, which in turn impacts national politics as a whole. The course will examine all of these factors both in terms of institutional structures and behavioral values. (Sp) [III-SS]
P SC	3463	American Political Development	Prerequisite: 1113 or permission of instructor. Analyzes the institutional development of American politics. The premise is that institutions are created to solve conflicts at specific historical junctures. Once in place, these institutions create opportunities and constraints for future generations. Focus on explaining large-scale political change in the United States from the founding to the present. (Irreg.) [IV-WC]
P SC	3473	Political Psychology	Prerequisite: P SC 1113 or permission of instructor. An overview of political psychology, where students will engage in debates about the relative power of the situation vs. the individual, whether human beings are truly rational actors, the extent to which human beings exercise free will, and whether morality is achievable. Specifically, delves into the following questions:1) Why do people engage in hostile, aggressive, and "evil" behavior; 2) Why is there intergroup conflict; 3) Why does the media have such a powerful impact on political attitudes; 4) What drives political ideology, partisan affiliation, and voting behavior; and 5) What explains the behavior of political elites? (Irreg.)
P SC	3483	Campaign Management	Prerequisite: P SC 1113 or permission of instructor. Campaign Management is the core course in the area concentration/minor in Campaign Management. Addresses practical aspects of campaign management and is designed to prepare students for careers in this field. Over the next sixteen weeks, students will learn about the strategic decisions campaign managers make in gathering information, raising money, harnessing technology, honing and disseminating messages, and targeting volunteers and voters in the context of aiding a candidate in running for and winning office. Students will also learn practical lessons on elements of campaign management from guest speakers and engage in hands-on training through the use of existing electoral databases and on-campus resources. (Irreg.)
P SC	3493	Congress: Politics, Policy and the Constitution	Prerequisite: P Sc 1113. Introduces students to theory and research on the role of the Congress under the U.S. Constitution and the relationship of the Congress to the coordinate branches of the federal government, as well as to the state governments in interpreting and applying the Constitution. Experience in original archival research on the politics, policies and constitutional struggles of the Congress through the Carl Albert Congressional Research & Studies Center will be gained. (Irreg.)
P SC	3503	Ethnicity, Energy, and Elections in Eurasia	Prerequisite: P SC 1113 or permission of instructor. Focus is on the political phenomena that spill across borders in Eurasia. Ethnicity matters in terms of the structure of nationalist movements that ended the Soviet system and the legacies of ethnic conflicts that keep states and societies deeply divided. Energy is the dominant resource in Eurasia, and the struggle to control the flow of energy across borders coincides with the revival of the "Great Game" and Russia's attempt to restore hegemony in the region. All the states of Eurasia hold regular elections, though rarely are they free and fair elections. While autocrats share "political technologies" to legitimate dictatorship, elections also are sites of mass mobilization that bear the potential for revolution and a second chance at democracy. (Sp)

P SC	3513	Causes of War	Prerequisite: 1113 or permission of instructor. This course will examine causes and consequences of war, looking at the changing nature of war, international relations theories about causes of war, and case studies, primarily from the 20th century. (Irreg.)
P SC	3523	The History of Terrorism	Prerequisite: Junior standing or permission of instructor. Surveys terrorism from its first use during the Roman Empire through the French Revolution and up to its modern form. Includes a focus on several important groups such as the Irish Republican Army and the Ku Klux Klan, as well as how terrorist goals move in historical cycles. (Irreg.)
P SC	3533	Contemporary Terrorism	Prerequisite: junior standing or permission of instructor. Designed to help students develop a better understanding of the nature of terrorism, the variety of terrorist motivations, the means by which governments attempt to deal with the problem, and the variety of research questions that remain unanswered. (Irreg.)
P SC	3543	United States-Latin American Relations	Prerequisite: junior standing or permission of instructor. This course studies both the historical development and current problems of conflict and cooperation between the United States and the countries of Latin America, and the ways their interactions affect each country's security, politics, economy, society, and culture. (Irreg.)
P SC	3550	Topics in International Relations	1 to 3 hours. Prerequisite: 1113 or permission of instructor. May be repeated with change of content; maximum credit nine hours. Systematically explores contemporary problem areas in international relations. Will not assume prior knowledge on the part of the students in reference to the topics under examination. Meets in a seminar format where emphasis will be placed on classroom presentations and extensive research papers. (Irreg.)
P SC	3553	International Political Economy	Prerequisite: 1113. Focus on patterns, processes, and problems of international trade, monetary, technological, and investment relations. Deals with the roles played by key international organizations in managing conflict and cooperation among states. Students learn to apply theoretical approaches in analyzing issues in the global economy. (F) [IV-WC]
P SC	3563	United States Diplomatic History	Prerequisite: none. A survey of American diplomatic history from the War for Independence to the present, emphasizing relations with major European, Latin American and Far Eastern countries. [IV-WC]
P SC	3600	Topics in Comparative Politics	1 to 3 hours. Prerequisite: 1113 or permission of instructor. May be repeated with change of content; maximum credit nine hours. Will examine contemporary issues in politics and government around the world. Meets in a seminar format where emphasis will be placed on classroom presentations and research. (Irreg.)
P SC	3603	Politics of Ireland and the United Kingdom	Prerequisite: P SC 1113. Introduction to the politics of the Republic of Ireland and the United Kingdom of Great Britain and Northern Ireland. Political, social, and institutional development of England, Ireland, Scotland, and Wales; the Irish struggle for independence and civil war; and the creation of national identities. Studies contemporary political institutions and party systems. (Irreg.)
P SC	3613	Politics in Western Europe	Comparative analysis of the governmental systems of selected European states, with special reference to France, Germany, and the Soviet Union; historical background and political environment; constitutional structure; legislative, executive, and judicial processes; political parties and interest groups; local government. (Sp) [IV-WC]
P SC	3623	Politics of Transitional Areas	The major characteristics of the political systems of the new states of Asia and Africa. Through an examination of the common problems of these new nations, the student will not only survey such basic issues as nation building and political modernization, but will increase his/her understanding of new concepts in the field of comparative politics. (F, Sp)

P SC	3633	Politics in East Asia	Prerequisite: 1113 or permission of instructor. This course provides a survey of politics and political systems in select countries in east Asia and aims at developing comprehensive understanding of contemporary Asian politics. We will identify similarities and differences in the politics of these countries in specific dimensions and explore the basis of each of them. (F) [IV-NW]
P SC	3643	Democracies and Democratization: A Comparative Inquiry	Prerequisite: 1113. Studies the theory, history, causes, and prospects for democracy in the world, beginning with ancient Greece and ending with the challenges of democracy and democratization in countries around the world today. Although primarily a social science course, questions about the philosophical underpinnings of democracy are also raised. (Sp) [IV-WC]
P SC	3653	Government and Politics of Latin America	Prerequisite: 1113 or permission of instructor. General survey of structure, organization and operation of Latin American governments. Problems of dictatorship, underdevelopment, social reform and relations with the United States are covered. (F) [IV-WC]
P SC	3663	Politics of the Middle East	Prerequisite: 1113 or permission of instructor. This course surveys the developments in current domestic politics in Middle Eastern countries. It will focus on the process of state building, great power politics, Islam and political ideologies, economic crises, and regime stability and change. (Irreg.)
P SC	3683	The Politics of Russia	Prerequisite: five hours of political science, or 1113 and three hours of another social science, or junior standing and permission. Introduction to domestic politics in the Russian Federation. An overview of Russian and Soviet history, focusing on recurrent dilemmas of Russian political life. Special emphasis will be on Gorbachev's reforms, the collapse of communism, the emergence of post-Soviet politics, and the future of Russian democracy, economic institutions and inter-ethnic relations. (F) [IV-WC]
P SC	3693	Ethnicity, Energy, & Elections in Eurasia	Prerequisite: P SC 1113 or permission of instructor. Focuses on the political phenomena that spill across borders in Eurasia. Ethnicity matters in terms of the structure of nationalist movements that ended the Soviet system and the legacies of ethnic conflicts that keep states and societies deeply divided will be studied. Energy is the dominant resource in Eurasia and the struggle to control the flow of energy across borders coincides with the revival of the "Great Game" and Russia's attempt to restore hegemony in the region. All the states of Eurasia hold regular elections as a matter of course, though rarely are they free and fair elections. While autocrats share "political technologies" to legitimate dictatorship, elections also are sites of mass mobilization that bear the potential for revolution and a second chance at democracy. Each of the major themes straddle the division between comparative politics and international relations: ethnic conflict relates to civil war as well as inter-state conflict; energy relates to domestic as well as international political economy; and elections relate to the sharing or emulation of authoritarian practices and the diffusion of regime change. (Sp)
P SC	3703	From Plato to Machiavelli, the Classic Art of Politics	Prerequisite: 1113 and sophomore standing. Study of the origins of political science or political philosophy in the thought of classical antiquity and of the continuing influence of the classic works. Topics may include: Plato and Aristotle's attempt at a systematic political science; Thucydides on democracy and war; the interaction of religion and politics; and the early modern rebirth of the classical republican era. (F) [IV-WC]
P SC	3713	The Idea of a Liberal Society	Prerequisite: 1113 and sophomore standing. Study of the major works of modern political thought that inspired the idea of a rights-oriented liberal society. Readings vary, but may include Thomas Hobbes and John Locke, their followers and critics in later centuries (such as Montesquieu, Rousseau, Kant, Hegel, and Mill), and those who later subjected the liberal idea to fundamental criticism (Marx, Nietzsche, and others). (Sp) [IV-WC]

P SC	3723	Foundations of American Politics	An examination of the principal issues and ideas of the American colonial, revolutionary and founding periods and their influence on, and relevance to contemporary American politics.
P SC	3733	Modernity and its Discontents	Prerequisite: junior standing or permission of instructor. Survey of the foundational thinkers of the 19th and early 20th century. Begins with an analysis of the political implications of the "enlightenment project" before moving on to consider the major critique of modernity in the second half of the 19th and early part of the 20th century. Focuses on major philosophical approaches to key concepts such as: property, labor, freedom, democracy, equality, reason, and the rule of law. (Sp)
P SC	3743	Problems in Political Theory	Prerequisite: junior standing or permission of the instructor May be repeated with change of content; maximum credit six hours. Special topics in political theory, including concepts such as power, liberty, justice, equality, democracy, etc., or particular theorists or schools of thought. (Irreg.)
P SC	3910	Government Internship	2 to 3 hours. Prerequisite: good academic standing with 45 semester hours completed, including nine hours of political science; permission of instructor. May be repeated; maximum credit six hours. Interns observe and participate in the functions, processes and actions of governmental institutions at the federal, state and local level. Grade of S/U based on completion of directed readings, an academic research paper, performance reports. (F, Sp, Su)
P SC	3913	Public Opinion and Survey Research	Prerequisite: 1113 and junior standing. Explores public opinion and survey research to understand the meaning, theory and role of public opinion, facilitate competency in the basic conduct of survey research methods, and explore the ways public opinion and survey research are used in election, public policy formation, and in policy evaluation. (irreg.)
P SC	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
P SC	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated: maximum credit six hours. The projects covered will vary. The content will deal with concepts not usually presented in regular coursework. (F, Sp)
P SC	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
P SC	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; junior standing; permission of instructor and department. May be repeated; maximum credit six hours. Through a written contract, independent study may be arranged for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
P SC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
P SC	4020	Problems in American Government	1 to 3 hours. May be repeated with change of content; maximum credit nine hours. Focus on the national government, including the political processes and policies that relate to it. (Irreg.)
P SC	4023	Community Scholars	Prerequisite: P SC 1113. Service-learning course allows students to become participants in community activities and organizations designed to address community needs. At the same time, students develop skills and abilities for critical thinking, group problem-solving, and effective civic engagement. Combines community service and academic learning to examine how local government agencies work along side community organizations, mainly nonprofit organizations, to meet the needs of their community. (F)

P SC	4033	Capitol Scholars: A Service Learning Course	Prerequisite: P SC 1113 and permission of instructor. The course uses service-learning and weekly seminars to focus on institutions, policy-making and politics in legislative settings. (Sp)
P SC	4043	Public Policy Implementation	(Slashlisted with 5043) Prerequisite: 2223. This course examines how public laws are implemented. It investigates actors, institutions and processes influential in decisions and actions regarding public program delivery. No student may earn credit for both 4043 and 5043. (Irreg.)
P SC	4093	Capstone Seminar in Political Science	Prerequisite: senior standing, completion of four of the following courses: 2103, 2173, 2223, 2503, 2603, 2703; and permission of department. Capstone seminar for major in political science. Explore topics in political science for students with substantial background in the discipline and includes a significant writing component. Specific subtitles will vary. (F, Sp) [V]
P SC	4113	American Foreign Policy from World War II to the Present	Prerequisite: 1113 or permission of instructor. An analysis of American foreign policy in the twentieth century. Covers the emergence of the United States as a great power, abandonment of isolation, World War II and the development of internationalism, the Cold War and policies of containment, the American involvement in the Far East, Middle East and Latin America. (Irreg.) [IV-WC]
P SC	4143	Policy/Program Evaluation	Prerequisite: 2223. Introduces the planning and implementation of a variety of evaluation types and methods. Considers the utilization of findings in a political environment. (Irreg.)
P SC	4193	The Profession of Public Management	Prerequisite: 1113 or permission of instructor. Open to undergraduate students only. Focuses on the internal administrative processes of public agencies, concentrating on the generic management functions of planning, directing and controlling as they relate to the development and implementation of public policy programs. (Irreg.)
P SC	4203	Capstone Seminar in Public Affairs and Administration	Prerequisite: senior standing and permission of instructor. May be repeated once with change of content. The focus and subtitle will vary. Develops the ability to analyze and interpret the subject matter; contains a substantial writing component. (F, Sp) [V]
P SC	4213	Regulatory Policy	Prerequisite: junior standing or permission of instructor. Examines the topic of administration and the agencies that are responsible for these government activities. Emphasizes the constitutional, legal, administrative, and political issues raised by the growth and nature of regulatory activities. (F)
P SC	4220	Problems in Public Policy	1 to 3 hours. Prerequisite: 1113 or permission of instructor. May be repeated with change of content; maximum credit nine hours. Research and investigation on selected problems in the field of public policy. (Irreg.)
P SC	4223	Public Policy Analysis	Prerequisite: 2223. Introduces students to public policy theories and analytical methods. Public policy is placed within the context of similar disciplines and practical applications. (Irreg.)
P SC	4263	American Constitutional Law I: Governance	Prerequisite: P SC 1113. Chronological exploration of the role of constitutional principles and the United States Supreme Court in the historical and contemporary political struggles concerning the structure, distribution, and uses of national governmental power in the American polity. Examines the Constitution's allocation of powers vertically between the national government and the states, and horizontally among the legislative, executive, and judicial branches; the changing understandings of the relationship between the economic powers of private individuals and the national government; the powers of the national government over non-citizens; and the Constitution's allocation of war-making powers. (F)
P SC	4273	Constitutional Interpretation	Prerequisite: 1113 or permission of instructor. Asks basic questions about the nation's fundamental law: What is the Constitution? Who is authorized to interpret it? How might one authoritatively interpret it? Why should anyone try to interpret it? (F) [IV-WC]

P SC	4283	American Constitutional Law II: Civil Rights and Civil Liberties	Prerequisite: P SC 1113 or permission of instructor. Investigates the character, function, and enforcement of civil rights and civil liberties in the American constitutional system. (Sp) [IV-WC]
P SC	4323	Political Communication	(Crosslisted with COMM 4323) Prerequisite: Communication 1113 and junior standing. Considers the role of communication in political settings. Major topics include political persuasion, public speaking in political campaigns, political debating, political advertising, bias in news coverage of campaigns. (F, Sp)
P SC	4523	International Organizations	Prerequisite: P SC 1113 or permission of instructor. Focuses on the organization of international politics via formal multilateral arrangements (international organizations) and informal multilateral agreements (international regimes). (F)
P SC	4603	Comparative Public Policy	Prerequisite: 2603. Introduces students to the study of public policy in advanced industrial societies; emphasis is placed on understanding differences in policy outcomes in countries with similar economic and political systems; introduces students to the thematic study of different areas of public policy. (Irreg.)
P SC	4623	Globalization and Industrial Democracy	Prerequisite: senior standing. Examines the impact of globalization on political economies of the advanced industrial countries, including Germany, Japan, and the United States. Compares industrial policy for economic development and corporate governance in these countries. Reviews the globalization of finance and commerce. Evaluates the convergence of political and economic activities under globalization. (Irreg.)
P SC	4713	Princes, Tyrants, Statesmen: On Political Leaders	Prerequisite: P SC 1113. Examines important works that aim either to instruct major political leaders or to evaluate them for the purpose of political understanding. The studies range over a number of cases, classical, modern, and contemporary, of very different kinds and quality. Cases discussed may represent a high degree of excellence in leadership, or the worst examples of tyranny. (Irreg.) [IV-WC]
P SC	4723	Philosophical Issues in American Politics	Prerequisite: 3723 or permission of instructor. May be repeated with change of content; maximum credit six hours. An in-depth examination of specific philosophical issues and ideas of American politics. Content will vary but may include pluralism, liberalism and conservatism, representation, etc., as well as a focus on the work of specific American political theorists such as Robert Dahl or John Rawls. (Sp) [IV-WC]
P SC	4730	Topics in Political Theory	1 to 3 hours. Prerequisite: sophomore standing. May be repeated with change of content; maximum credit nine hours. Devoted to specific problems and issues in political theory. Content will vary from course to course. Each course will examine a principal problem or issue in some depth. Descriptions of specific courses may be obtained from the department prior to pre-enrollment. (Irreg.)
P SC	4833	Intelligence Collection, Covert Action, and Politics	Prerequisite: P SC 1113. An examination of present-day covert action as well as a comparison of the original concepts of covert action with current political polices and practices. A key question addressed in this course is if covert action has a future in modern politics. Finally, this course examines intelligence requirements and production and what happens when political influence distorts or misdirects the intelligence process. (Irreg.)
P SC	4843	Foreign Intelligence Services	Prerequisite: P SC 1113. Applies the comparative political science method to intelligence policy and intelligence organization. Primary focus is on English-speaking intelligence community in comparison to other intelligence communities. Key topics include organization and management of intelligence services; objects or targets of intelligence activities; and the challenges of cooperation between US and foreign intelligence agencies. (Irreg.)

P SC	4853	Ethics and Intelligence	Prerequisite: P SC 1113. Examines the fundamental question of "Is spying ethical?" Since antiquity, virtually all major powers have maintained intelligence services for the basic purpose of ensuring their security and existence. Key topics include: intelligence and personal ethics versus rules-based ethics; professional ethics in intelligence; ethical dilemmas; domestic intelligence collection and civil liberties; interrogation; intelligence analysis and ethics; and politicization of intelligence. (Irreg.)
P SC	4863	Strategic Intelligence Challenges	Prerequisite: P SC 1113. Studies problem identification in international politics and how 'politics problems' become 'intelligence problems'. Identifies historic and emerging theories of intelligence collection and use; adapting intelligence collection to changing problems; the evolution of intelligence tools and personnel training. Topical content such as WMD proliferation, terrorism, illicit trafficking, and electronic surveillance are used as subject matter vehicles. (Irreg.)
P SC	4873	Tools of Statecraft	Prerequisite: P SC 1113. Provides an introduction to the range of tools of statecraft, other than war, and examines the role of intelligence as a foreign policy tool. Offers a broad overview of the functional areas of intelligence (collection, analysis, counterintelligence, overt political action and covert activities); the organizational makeup of the US Intelligence Community; laws, guidelines and ethics pertaining to intelligence collection; and explores real world examples of how tools of statecraft are employed in the conduct of foreign policy in the modern world. (Irreg.)
P SC	4883	Intelligence Analytics I	Prerequisite: P SC 1113. Provides an introduction to the fundamentals of effective intelligence writing and presentation. Emphasis is placed on critical thinking, writing and oral communication skills for intelligence analysis. Topics include structuring analytical problems; sources of intelligence information; and using analytical software for writing exercises with oral presentations. (Irreg.)
P SC	4893	Intelligence Analytics II	Prerequisite: P SC 1113 and P SC 4883. Develops advanced critical thinking, writing and oral communication skills by enhancing ability to apply methods for intelligence analysis. Emphasis is placed on assessing bias in information sources, critiquing analytical products, and applying analytical software to major writing exercises with oral presentations. (Irreg.)
P SC	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
P SC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
P SC	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; senior standing; permission of instructor and department. May be repeated; maximum credit six hours. Through a written contract, independent study may be arranged for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
P SC	5003	Introduction to Public Administration	Prerequisite: graduate standing. An introductory graduate seminar surveying the field of public administration and its role and position in contemporary government, providing a basis from which to undertake advanced studies of theoretical and substantive nature. Attention will be given to key themes in past and present of mainstream public administration, such as the foundation, personnel, organization, and policies of government. (F, Sp, Su)

P SC	5013	History and Theory of Urban Planning	(Crosslisted with RCPL and SOC 5013) Prerequisite: open to seniors in social science departments, civil engineering and architecture, and to graduate students in regional and city planning. An introductory course on the history and theory of contemporary planning, focusing on the physical, social, institutional and economic structure and dynamics of human settlements, and on the role and responsibilities of the professional planner. (F)
P SC	5023	Problems in American Government	Prerequisite: 12 hours in political science or senior standing and permission of instructor. May be repeated with change of content; maximum credit nine hours. Content varies with instructor. The focus is on the national government, including the political process and policies that relate to it. (Irreg.)
P SC	5033	Foundations of Nonprofit Management	Prerequisite: graduate standing. Introduces broad theories and managerial practices in the field of nonprofit management. The main foci of the course are to provide theoretical foundations of the nonprofit sector by examining its nature, scope, legal frameworks, functions, and policy implications and to examine various managerial challenges nonprofit organizations face due to their unique sector positions and how they respond to those challenges. Challenges are multifaceted (leadership, financial, personnel, performance evaluation and accountability, governmental relations) and the course will provide several case studies for students to review and seek potential solutions in individual as well as group settings. (Irreg.)
P SC	5043	Public Policy Implementation	(Slashlisted with 4043) Prerequisite: graduate standing. This course examines how public laws are implemented. It investigates actors, institutions and processes influential in decisions and actions regarding public program delivery. No student may earn credit for both 4043 and 5043. (Irreg.)
P SC	5053	Agenda-Setting in Public Policy	Prerequisite: graduate standing. This class will focus on agenda-setting and policy change - that is, how policy agendas are determined and their impact on policy change. In so doing, we will examine the role that various actors play (including public administrators), the impact of focusing events, political institutions, and the media. (Irreg.)
P SC	5063	Nonprofits and the Public Sector Relations	Prerequisite: graduate standing. Explores various issues that arise from collaborative efforts between the nonprofit and government sectors in delivering public services. Includes an examination of a nonprofit-public sector collaboration and partnership, especially the nature of nonprofit-public sector strategic alliances, the dynamics of service delivery networks, and the effectiveness of collaborations. The role of nonprofits and the policy implications in social service contracting are examined. (Irreg.)
P SC	5073	Municipal Management and Leadership	Prerequisite: graduate standing. Streets, water, sewer, trash, public safety, and business all center on Main Street U.S.A., and cities are literally where politics and policy directly meet citizens in their everyday lives. The management of urban areas involves a wide array of public administration skills and topics. Topics include: infrastructure, municipal finance, economic development, human resource management, and basic service delivery. Students will hone the skills of political analysis, project planning and strategic management. (Irreg.)
P SC	5103	Organizations: Design, Structure and Process	Prerequisite: full graduate standing or permission of instructor. Analyzes large, complex organizations, particularly governmental units and other public sector agencies. Attention will be given to the principal theoretical models for their design and structure. Also seeks to understand system-subsystem relationships in the processes of decision making, communication, influence, leadership and technology. (F)
P SC	5113	Federalism and Intergovernmental Relations	Covers the origins, development, and operational aspects of federalism in the U.S. Intergovernmental relations as the dynamics of federalism are studied as they impact on decision-making, administrative and fiscal patterns. Decentralization and reorganization are analyzed as they affect the administration of national programs. (Sp)

P SC	5123	The Making of American Foreign Policy	A study of American policy formulation with its problems and limitations. Current American foreign policies and alternate courses of action are examined critically. (Irreg.)
P SC	5133	Strategic Planning and Performance Measurement	Prerequisite: graduate standing or permission of instructor. Introduces students to strategic planning, performance measurement, and benchmarking in the public sector. Provides an overview of strategic management and illustrates the development, implementation and reformulation of public policy and operational strategy. Emphasis on the changes in an organization's environment. (Irreg.)
P SC	5143	Program Evaluation and Applied Policy Analysis	Prerequisite: graduate standing. Methodology of planning and evaluating government policies and programs. Emphasizes research design, economic analysis of public policies and programs, and methods for handling threats to validity of research results. (F)
P SC	5153	Problems in Public Management	Prerequisite: graduate standing. Content will vary. May be repeated with change of content; maximum credit nine hours. Focus will center on various issues in public management. Particular courses may include emergency management, managing diversity, network management in public service delivery, or performance management. (Irreg.)
P SC	5163	Legislative Process and Behavior	Prerequisite: graduate standing or permission of instructor. Examination of character of legislative process in United States Congress, American state legislatures and foreign legislative bodies; in-depth exploration of empirical hypotheses and related data concerning legislative process and behavior; major focus on legislature (especially Congress) as institution and on such topics as: committees; norms; socialization; leadership; staff; voting cues. (Irreg.)
P SC	5170	Problems in Public Administration	2 to 3 hours. May be repeated; maximum credit six hours. Research and investigation on selected problems of public administration. Some alternative subjects; administrative theory and organizational theory; bureaucracy; organization and management; government corporations; administrative policy making; responsibility and accountability. (Irreg.)
P SC	5173	Bureaucracy and Politics	Prerequisite: graduate standing. Examines the concept of the political role of the bureaucracy and the impact of other government institutions on bureaucratic structure, functions and behavior. The role of the bureaucracy in public policy making and the influence of politics on policy implementation are analyzed. (Sp)
P SC	5183	Public Budgeting and Finance	Prerequisite: graduate standing or permission of instructor. Examines the techniques and politics of raising and spending public funds. Discusses topics such as deficit politics, legislative and executive powers, and the budgetary role of the courts. Assesses the impacts of taxing and spending policies. Explores issues relevant to national, state, and local governments. (Sp)
P SC	5193	Comparative Administration	Will compare analytically the political, legal, economic and cultural influences. Similarities and contrasts in the bureaucratic functions and structures will be examined and attention given to organization around the chief executive, both centrally and in departments and ministries. (Irreg.)
P SC	5203	Urban Land Use Controls	(Crosslisted with RCPL and SOC 5203) Prerequisite: open to seniors in social sciences, architecture and civil engineering, and to graduate students in regional and city planning. Provides a study of the historical development of property systems; of zoning law, ordinance preparation, and administrative procedures; of subdivision regulations and other codes used in the regulation and control of land use. (Sp)

P SC	5213	Risk, Public Policy, and Law	Prerequisite: graduate standing. This seminar will focus on how concepts of risk serve to justify and shape public policies, legal rules, and risk management practices. It will introduce some of the primary methods for analyzing potentially risky policies and managing risk. We will begin with a focus on the definition of risk as it applies to public policy, and as it has been used to analyze and inform policies and laws designed to address risks. We will then turn to the differences between formal assessments of risk and the "perceived risks" and social, political and institutional responses that typically drive public policy. These concepts will then be applied to a set of specific cases in current public policies that involve the intersection of environmental, energy, natural disaster, and security concerns. (Irreg.)
P SC	5223	Public Policy Analysis	An introduction to public policy analysis and policy making with emphasis on the examination of selected policy issues. (F)
P SC	5233	Health Policy	Prerequisite: graduate standing. This course is designed to provide students with a clear understanding of the nature and dynamics of health policy making and administration in the United States. (Irreg.)
P SC	5243	Managing Public Programs	Introduces MPA students to the general principles of management as they are applied in the public sector. Topics include: systems theory, systems design (PERT), organization design, techniques of supervision, public sector labor relations, public sector personnel practices, agency interface with political actors in the environment. (Irreg.)
P SC	5253	Human Resource Administration	An analysis of the structure and role of manpower in all levels of U.S. government, focusing on the development of the public service, manpower planning, unionization of public employees and recent trends in public personnel relations. (Sp)
P SC	5263	Congress in the Political System	Prerequisite: graduate standing or permission of instructor. Empirically based course considering United States Congress and its role in American political system; examination of relationships between Congress and other institutions and actors. Possible topics include: Congress and the Presidency, interest groups, and lobbyists; Congress and Supreme Court; Congress and foreign policy; Congress and executive bureaus. (F)
P SC	5283	Problems in Law and the Constitution	Content varies. Intensive analysis of specific problems in legal or constitutional theory. Topics could include: Slavery and the constitution, capitalism and constitutional order, constitutional crisis and failure, law and morality, jurisprudence. (Irreg.)
P SC	5293	Administration, Ethics and American Government	Prerequisite: graduate standing. An exploration of the role of ethics in American government, especially in public administration. Topics to be studied include codes of professional ethics for administrators, ethics and constitutionalism, law and ethics, and the ethical implications of differing approaches to administrative work and to democracy. (Irreg.)
P SC	5313	Urban Politics	Prerequisite: graduate standing. Examine differing theories as to how urban governance, administration, and politics actually operate. Included in this examination are a variety of major issues related to urban governance and administration including intergovernmental relations, urban service delivery, fragmentation of urban areas between cities and suburbs, the rise of sunbelt cities, urban sprawl, racism, poverty, crime, and national urban policy. We will also examine broader visions and proposals to revitalize and enhance urban living. Finally, we will consider the current state of urban politics and where it might go in the future. (Irreg.)
P SC	5323	Problems in Public Policy	May be repeated with change of content; maximum credit six hours. Content varies with professor. Focus on topics related to public policy issues at all levels of government, including the design, implementation, and evaluation of specific policy initiatives. (Irreg.)

P SC	5333	Environmental Policy and Administration	Prerequisite: graduate standing. United States environmental policy, environmental movements, policy process, cost-benefit analysis, risk analysis and management, clean air policy, hazardous waste policy, other topical policy areas, global environmental issues. (Irreg.)
P SC	5343	Public Policy and Inequality	Prerequisite: graduate standing or permission of instructor. Explores alternative definitions of equality and their implications in terms of public policy. Specific topics include the role of issue definition and agenda-setting in policy formation, the causes and politics of inequality, the difficulties in measuring inequality, and institutional dynamics that exacerbate or ameliorate inequality. (F)
P SC	5353	State and Local Public Finance and Budgeting Systems	(Crosslisted with RCPL 5353) Prerequisite: graduate standing or permission. An overview of the process and methods for local capital improvement programs and capital budget preparation, and an examination of the relationships between local development policies and fiscal decision making, including revenue potential. (CE)
P SC	5363	Public Financial Management	Prerequisite: graduate standing or permission of instructor. Introduces students to important concepts, procedures, and skills associated with managing public monies. Major topics include government accounting, debt management, forecasting, cash management, and capital budgeting. (Irreg.)
P SC	5373	Education Policy	Prerequisite: graduate standing. This course is designed to give students an overview of the major policy issues in primary, secondary, and higher education. Special attention will be given to how these issues relate to prominent theories of the policy process. (Irreg.)
P SC	5383	Survey of Political Communication	(Crosslisted with COMM 5338) Prerequisite: graduate standing. Surveys communication in the political system. Discusses theory and research on interpersonal, public and mass communication in politics, particularly political campaigns. (F)
P SC	5393	Regulatory Policy	Prerequisite: graduate standing or permission of instructor. Examines the reasons for the growth of administration regulation, regulatory agencies and processes, the nature of their formal, legal and informal powers, organization and procedures, and of their relationships with legislature, chief executives, courts, and interest groups, including consumer interests. (Irreg.)
P SC	5400	Problems in Political Behavior	2 to 3 hours. Prerequisite: graduate standing, qualified senior by permission of instructor. May be repeated; maximum credit six hours. Content varies, representative topics would include interdisciplinary contributions to the study of political behavior, political socialization, decision making, voting behavior, belief systems, political violence, personality and politics and political culture. (Irreg.)
P SC	5403	Mediating Institutions: Parties, Interest Groups, and Mass	Prerequisite: graduate standing. Surveys literature on parties, interest groups and mass media as institutions linking citizens and governments. (Irreg.)
P SC	5413	Rational Choice and Politics	Prerequisite: graduate standing or permission of instructor. Rational choice and politics-the theory, applications, and critiques. Builds on the assumption that humans are narrowly self-interested and proceeds to examine whether this assumption can illuminate and explain various political outcomes, both in the abstract and in the particular context of American political institutions. (Sp)
P SC	5423	Mass Politics: Public Opinion, Voting, Realignment	A survey of the literature on public opinion, voting behavior and realignment (or electoral change). Additional topics may include political socialization, participation and elite-mass interactions. (Irreg.)
P SC	5433	American Constitutional Development	Prerequisite: graduate standing or permission of instructor. This course focuses on changing conceptions of our national institutions and political thought that have led to dramatic changes in our view of the Constitution. (F)
P SC	5453	The Presidency	Will survey recent literature on the institution of the American presidency and examine behavior of recent presidents. A research paper is required. (Irreg.)

P SC	5463	Representation in American Politics	Prerequisite: graduate standing or permission of instructor. Explores the concept of representation in American politics and government, and the implications of political representation for public policy and governance. With a primary focus on legislative and electoral institutions that shape representation, the course will also deal with the causes and consequences of under-representation. (Irreg.)
P SC	5513	International Relations Theory	Overview and appraisal of the state of the field of international relations. Primary emphasis will be placed on scope and method issues and on a review of theoretical attempts to explain general and specific aspects of international relations. (Irreg.)
P SC	5523	Morality and Foreign Policy	Prerequisite: graduate standing or permission of instructor. Addresses the moral and ethical foundations of foreign policy. Emphasis will be on American foreign policy, but may also include broader issues of foreign policy and international relations. Sample issues may include national interest versus conceptions of justice as foundations for foreign policy, idealism and realism in the American foreign policy tradition, ethical issues in international relations, globalization, genocide, just war theory, etc. Readings may be taken from political theory, American foreign policy, and international relations. (Irreg.)
P SC	5543	International Law and Organizations	Prerequisite: graduate standing. Focuses on the organization of international politics via formal multilateral arrangements (international organizations) and informal multilateral agreements (international regimes) from a theoretical perspective. (F)
P SC	5550	Problems in International Relations	2 to 3 hours. May be repeated; maximum credit six hours. Analysis of current international conflicts and problems with study of possible solutions. May include study of the role and current problems of the United Nations. (Irreg.)
P SC	5553	International Security	Prerequisite: graduate standing. This course examines major theoretical approaches to the study of international security, including traditional approaches, the role of weapons, and new dimensions in internal security. (F)
P SC	5563	International Political Economy	Prerequisite: graduate standing or permission of instructor. The organization of the international economic system and the opportunities and constraints faced by national governments in managing economic relations with other countries. Also examines the role of international agencies in managing economic crises and the globalization of the world economy. (Irreg.)
P SC	5573	Political Economy of Emerging Nations	Prerequisite: graduate standing or permission of instructor. Examines political, economic, and social development in emerging nations. The course investigates first how colonialism affected Asia, Latin America, and Africa, and then analyzes development under the post-independence government. (Irreg.)
P SC	5583	Gender and Global Politics	Prerequisite: graduate standing. Provides a comprehensive survey of various approaches to understanding and analyzing how gender matters in global politics and international relations. Specifically, the course focuses on the gendered impact of neoliberal institutions and practices, migration and feminization of labor, and perspectives on human trafficking and sex trafficking. (Irreg.)
P SC	5600	Problems in Comparative Government	2 to 3 hours. May be repeated; maximum credit six hours. Content varies, but involves systematic comparative treatment of such central themes as the transitional society, change and revolution, modernization, political groups, constitutionalism, and bureaucracy. (Sp)
P SC	5603	Russian Politics in Comparative Perspective	Prerequisite: graduate standing or permission of instructor. Designed to demonstrate how comparativists who focus on Russia have engaged in seminal works in the subfield of comparative politics. (Irreg.)

P SC	5613	Political Economy of Industrial Democracies	Prerequisite: graduate standing. Examines the interrelationship of political and economic factors in influencing both political and economic outcomes. A key element will be application of microeconomic theory to obtain a better understanding of decision-making processes. Topics will include theory of collective action, comparative economic performance, political business cycles and theories of economic voting. (Irreg.)
P SC	5623	Nationalism and Ethnic Politics	Prerequisite: graduate standing. Is nationalism, in the words of George Orwell, merely "power hunger tempered by self-deception," or does it contribute to the development of a democratic and tolerant citizenry? Why is nationalism associated with authoritarianism and ethnic conflict in the modern age, when the "golden age" of nationalism is linked to the emergence of democracy and self-determination? Did nationalism and the modern state arise simultaneously, or did one produce the other? How do elites seek to mobilize primordial bonds of kinship and loyalty, and what accounts for their success or failure to do so? When do nationalists seek autonomy or secession, and how might they be induced to share power after achieving independence? What motivates violence among ethnic actors and how might it be contained? This course addresses these questions and others in examining major theoretical approaches and thematic issues relevant to understanding nationalism and ethnic politics as modern phenomena. While focused explicitly on political issues, the literature on nationalism and ethnic politics is multidisciplinary and eclectic. Throughout the semester, we will draw on works from history, sociology, anthropology, economics, geography, law, and (of course) political science. (Irreg.)
P SC	5633	Comparative Public Policy Analysis	Analyzes the content of public policies cross-nationally, comparing the United States and several Western European democracies. Particular attention is given to social and economic policies, i.e., welfare state issues. (Irreg.)
P SC	5643	Politics in Western Europe	Analyzes western European politics in a comparative perspective. Attention will be given to both processes and structures of governments in western European countries with particular emphasis on interest articulation and policy outcomes. (Irreg.)
P SC	5653	Democracies and Democratization	Prerequisite: graduate standing or permission of instructor. Examines the historical sources of modern democracy, the causal factors underlying the genesis and survival of democracy, the dynamics of democratic breakdowns and transitions from authoritarian rule, and the problems of democratic regime consolidation and quality. (Irreg.)
P SC	5663	Politics of the Middle East	Prerequisite: graduate standing or permission of instructor. This course will survey the political structure of Middle Eastern states and societies. It will highlight the processes of state and nation building, the growth of political ideologies, and economic change in the region. A number of theoretical perspectives will be used. (F)
P SC	5673	Comparative Political Economy	Prerequisite: graduate standing or permission of instructor. Examines the organization of economic institutions in different national settings, asking in particular how political systems help shape the economic institutions and outcomes. Specific issues include the organization of economic actors and their influence on economic policy, the impact of technology, and globalization. (Irreg.)
P SC	5683	Politics in Latin America	Prerequisite: graduate standing or permission of instructor. Covers recent approaches to understanding politics in Latin America, with an emphasis on questions of transitions to democracy and regime stability, the nature of democratic rule, and the role of political institutions, the economy, and the military. (F)

P SC	5693	Political Economy of China	Prerequisite: graduate standing or permission of instructor. Explores debates over the political economy of China. Examines theories of institutional change and economic performance, state capacity and political development, rent-seeking and corruption, and class formation and collective action. How do China's reforms over the past three decades confirm or challenge the assumptions and propositions central to these established social science theories? How have recent studies of political economy in China advanced our understanding of these theories or suggested new approaches to the study of comparative political economy? These and other core questions will be covered including topics such as popular protest, global capitalism, corruption, and the nature of one-party rule in China. (Irreg.)
P SC	5703	Problems in Political Theory	Prerequisite: graduate standing or permission of instructor. Content varies; may be repeated for credit with change of content; maximum credit twelve hours. Focuses on special topics in political theory. These might include concepts such as power, liberty, justice, equality, democracy, etc.; or particular theorists or schools of thought. (Irreg.)
P SC	5713	Classical Political Theory	Prerequisite: 3703 or other undergraduate work introducing classical political thought. Open to qualified undergraduate students with permission of instructor. Devoted to study of the political thought developed in classical antiquity, at which time the quest for a systematic and rational understanding of political life emerged and permanently altered the way we think about politics. Emphasis will be given to the works of Plato and Aristotle. (Irreg.)
P SC	5723	Modern Political Theory	Prerequisite: 3713 or other undergraduate work introducing modern political thought. Open to qualified undergraduate students with permission of instructor. Devoted to major works in modern political theory, from Machiavelli through Hegel, Marx and Nietzsche in the nineteenth century. Emphasis will be given to those thinkers whose ideas contribute to shaping the major forms of society and government found in the modern state. (Irreg.)
P SC	5733	Contemporary Political Theory	Prerequisite: open to qualified undergraduates with permission of instructor. Will study selected issues in contemporary political theory. Specific topics will include the modern theory of a "social science," problems of modern democratic theory, contemporary Marxism, the crisis of the idea of progress, economics and politics, historicism, contemporary analysis of natural law and natural right and others. (Irreg.)
P SC	5743	Foundations of International Political Thought	Prerequisite: graduate standing or permission of instructor. Survey course on the foundational thinkers in international law and international political thought. Examines different philosophical approaches to just war theory and the laws of war, theories of sovereignty and laws governing the interaction of states, theories of human rights, and debates over humanitarian intervention. (Irreg.)
P SC	5910	Government Internship	2 to 8 hours. Prerequisite: 15 hours of political science or 24 hours of social science. May be repeated; maximum credit eight hours. (F, Sp, Su)
P SC	5913	Introduction to Analysis of Political and Administrative Data	Presents an introduction to the foundations and use of quantitative methods in political science/public administration. Topics covered include: conducting systematic research in political science/public administration, measurement theory, bivariate analysis, hypothesis testing and statistical inference. (F)
P SC	5933	Intermediate Analysis of Political Data	Prerequisite: 5913; 5000-level prerequisite. Continues the study of the foundations and use of quantitative methods in political science. Topics covered include: probability theory, distribution theory, control table analysis, analysis of variance and correlation and regression analysis. (Sp)

P SC	5940	Advanced Research Methods: Special Topics	1 to 3 hours. Prerequisite: 5913 or permission of instructor. May be repeated with change of subject matter; maximum credit six hours. Provides introduction into advanced qualitative or quantitative analytical methods for students who will pursue a career in research. Topics will vary but may include such methodologies as ethnographic, cultural, discriminant, or factor analysis. (Irreg.)
P SC	5950	Research Problems	2 to 5 hours. May be repeated with change of subject matter; maximum credit ten hours. Students must indicate field of research and hours credit at the time of enrollment. To be subdivided topically as follows: American national government, public administration, American state and local government, public law, popular government, international relations, comparative government, political theory, elections and political behavior, behavioral laboratory. (F, Sp, Su)
P SC	5953	Qualitative Research Methods	Prerequisite: P SC 5913 or permission of instructor. This course provides graduate-level training in qualitative research methods as preparation for dissertation research. The course begins by orienting students towards research traditions and epistemological issues. It then considers a range of options for designing research and achieving causal inference. The last third of the course covers concrete tools that researchers may deploy while conducting fieldwork. (Irreg.)
P SC	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. (F, Sp, Su)
P SC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
P SC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)
P SC	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
P SC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
P SC	6003	Political Science: Survey of a Discipline	Prerequisite: admission to doctoral program in political science. Traces the development of the discipline of political science as well as the epistemological and theoretical foundations of the field. Emphasis is given to the role of research design for political analysis. Attention also is devoted to the professional norms and expectations of an academic career in political science. (Every third semester)
P SC	6023	Field Seminar in American Politics	Prerequisite: graduate standing. Seminar designed to introduce as much of the field of American politics as possible. Includes epistemology and paradigms, institutionalism, the various political institutions that structure our politics, and the role of the individual in American politics. (Irreg.)
P SC	6103	Field Seminar in Public Administration	Prerequisite: graduate standing. Review of the field of public administration. Investigates epistemology and paradigms of the field and considers the role of bureaucratic organizations in the American system of governance. (Irreg.)
P SC	6113	Foundations in Public Administration	Prerequisite: graduate standing or permission of instructor. Broad overview of the public administration literature. Historical underpinnings of the subfield and its evolution. Focuses on the frameworks and theories scholars have developed to understand public administration generally. Both theoretical and empirical research are reviewed to examine the "big picture." (Irreg.)
P SC	6123	Seminar in American Politics and Bureaucracy	Content varies; examination of topics relating to the role of bureaucracy in the American political system and the economic, political and cultural impact of other institutions upon bureaucracy. (Irreg.)

P SC	6133	Foundations in Public Policy	Prerequisite: graduate standing or permission of instructor. Gives students a broad overview of the public policy literature. We examine the historical underpinnings of the subfield and familiarize ourselves with its evolution. The course is not substantive in the sense of studying particular policy areas (e.g., environmental, education), but rather focuses on the frameworks and theories scholars have developed to understand the policy process generally. Both theoretical and empirical research are reviewed in an effort to examine the "big picture." (Irreg.)
P SC	6143	Seminar in Public Organization Behavior	Covers the literature of organization theory which led to the organization behavior movement. Deals with the models or organization behavior in a cultural as well as organizational/governmental framework. (Irreg.)
P SC	6173	Seminar--Public Administration	Directed research in selected areas of public administration. Commentary and discussion by instructor over general area or areas selected for research. Paper prepared by students and based upon individual research presented to the seminar for analysis and discussion. Example of topic: Decision making in governmental bureaucracy. (Irreg.)
P SC	6223	Field Seminar in Public Policy	Prerequisite: permission of the instructor. A capstone seminar for doctoral students who have substantially completed public policy coursework in preparation of information on completing theories, frameworks, approaches, analytical tools, and guiding principles central to the study of the formulation, implementation, and evaluation of public policy. Attention also will be given to crosscutting topics such as values in the policy process, the role(s) of the policy analyst; ethics; and the utilization and misutilization of the results of social science research. (Irreg.)
P SC	6603	Field Seminar in Comparative Politics	Prerequisite: graduate standing. This course is an exploration of the central theoretical concepts and problems of comparative politics. (Irreg.)
P SC	6753	Seminar in Political Theory	Participants should have a basic knowledge of the history of political theory and should have taken at least one core graduate course in the field (5713, 5723, 5733) or the equivalent. The intensive study of a major text or issue in political theory. Topics examined in recent years include the politics of Aristotle, Rousseau, the political theory of the Enlightenment, and the Greek theory of the Polis. (Irreg.)
P SC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
P SC	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
P SC	6980	Research for Doctoral Dissertation	(F, Sp, Su)
P SC	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
PBIO	1114	General Botany	Previous course in chemistry (high school or college) recommended. Fulfills Arts and Sciences' biological science requirement. Basic processes and structures in plants; their relation to factors in the environment; reproduction; heredity, heritable and nonheritable variations in plants and their causes and consequences are studied. Scientific procedures are acquired through application and discussion. Laboratory (F, Sp, Su) [II-LAB]
PBIO	1999	Lower Division Transfer Credit	This course is not offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is not OU equivalent course.

PBIO	2404	Ecology & Environmental Quality	(Crosslisted with ZOO 2404) Prerequisite: sophomore standing. Study of ecological principles and their applications to human systems, study of population, air pollution, water pollution, energy issues, etc. Laboratory exercises focus on learning scientific methods of measurement of environmental quality factors. Laboratory (Sp) [II-LAB]
PBIO	2503	Plant Care and Cultivation	Prerequisite: PBIO 1114, or Biology 1005, or Biology 1114, or Biology 1134, or any introductory college Biology course. Application of the principles of botany to the cultivation, propagation, and maintenance of plants grown in home environments. Particular attention is given to the effects of light, water, minerals, and soil factors on plant growth; seed and vegetative propagation; pest control; and proper conditions for cultivated plants. (F)
PBIO	3113	Cell Biology	(Crosslisted with MBIO and BIOL 3113) Prerequisite: 1114, or Biology 1134, or Biology 1114 and 1121, or Biology 1124; and Chemistry 3053. Introduction to the cell as a unit of life. A chemical and physical comparison of procaryotic and eucaryotic cells to include a discussion of cell metabolism, types of metabolic regulation and an analysis of ultrastructure. Emphasis will be placed on the dynamic changes in metabolism and ultrastructure which occur during the life of a cell. (F, Sp)
PBIO	3163	Economic Botany	Prerequisite:1114, or Biology 1134, or Biology 1005, or any introductory biology course. A survey of plants and plant products used in industry, drug plants and drugs, and especially food plants and food adjuncts. Origin of agriculture, domestication and evolution of crop plants, and uses of plants in different cultures are emphasized. (F) [IV-WC]
PBIO	3283	Introduction to Genomics	(Crosslisted with MBIO 3283) Prerequisite: PBIO 1114, or BIOL 1114, or BIOL 1134, or one course in Organic Chemistry (CHEM 3053 or CHEM 3153 or CHEM 3064 or CHEM 3164). Provides the most updated knowledge on prokaryotic and eukaryotic genomics including the biochemical, molecular and cellular structure of the genome as well as the current molecular and bioinformatics technologies existing when analyzing complex genomes and gene function. Through lectures and presentation of scientific literature, specific examples will be presented to highlight each aspect of the course. (F)
PBIO	3333	Genetics	(Crosslisted with ZOO 3333) Prerequisite: eight hours of zoology and/or PBIO and/or microbiology, or five hours of zoology or PBIO or microbiology and permission of instructor. Principles of inheritance at gene, chromosome and population levels; nature of the genetic material and its involvement in the determination of structure and function. No laboratory. (F, Sp)
PBIO	3342	Genetics Laboratory	(Crosslisted with ZOO 3342) Prerequisite: 3333 or concurrent enrollment or equivalent. The demonstrations, crosses and experiments are designed to illustrate various genetic phenomena, including Mendelian laws, recombination, mutation, natural and artificial selection and interaction of genotype with environment. The primary organism studied is Drosophila, with some use of corn, Neurospora and others. Laboratory (F)
PBIO	3451	Methods in Plant Ecology	Corequisite: PBIO 3453. Methodology in plant physiological, population, community and ecosystem ecology will be covered. Emphasis will be on actual field or laboratory experience and the applicability of these methods to other areas of ecology. Laboratory. (F)
PBIO	3452	Methods in Plant Ecology	Prerequisite: 3534; corequisite 3453. Methodology in plant physiological, population, community and ecosystem ecology will be covered. Emphasis will be on actual field or laboratory experience and the applicability of these methods to other areas of ecology. Laboratory (F)
PBIO	3453	Principles of Plant Ecology	Prerequisite: PBIO 1114 or Biology 1134 or permission of instructor. Introduction to physiological, population and community ecology. Emphasis is placed on environmental factors, disturbance and succession and how these factors affect species diversity and landscape patterns. One field trip. (F)

PBIO	3534	Flowering Plants	Prerequisite: 1114 or six hours of biology or permission of instructor. Introduction to the classification of vascular plants with emphasis on the origin, evolutionary relationships and reproductive biology of the flowering plants. Laboratory activities stress identification skills, terminology, field techniques and family recognition for the flora of Oklahoma. Field trips. Laboratory (Sp)
PBIO	3673	Practical Bioinformatics	(Crosslisted with MBIO 3673) Prerequisite: PBIO 1114, or MBIO 2815, or MBIO 3813, or BIOL 1005, or BIOL 1114, or equivalent introductory biology course, and junior standing, or instructor permission. Study of the use of computers to analyze and interpret various types of biological data. Topics covered will include accessing genomics databases, aligning DNA and protein sequences, searching genomic databases for similar sequences, analyzing protein structure, and building molecular phylogenies. Classes will emphasize group work and in-class computer exercises in a highly interactive environment. (Sp)
PBIO	3932	Instrumental Methods in Biology	(Crosslisted with MBIO 3932) Prerequisite: one of the following: PBIO 4115 or Microbiology 2815 or Microbiology 3813 or Biology 2124 or one course in biochemistry; and Physics 2414. Principles of analytical measurements; common categories of instruments; advantages and disadvantages of each method; examples are chosen from medical technology, environmental technology, biochemistry, physiology, etc. (F)
PBIO	3953	Global Change Biology	Prerequisite: PBIO 1114. Students will read, discuss and synthesize key literature in global change biology using a combination of lectures, in-class activities, and in class discussions of primary literature. Explores the impacts of two main global change factors, climatic change and invasive species, influencing biodiversity, ecosystem structure and function with a final focus on the potential of adaptation and conservation approaches and utilization of models to help predict future impacts. (F, even-numbered years)
PBIO	3960	Honors Reading (HONORS)	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. (F, Sp, Su)
PBIO	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. (By request)
PBIO	3980	Honors Research (HONORS)	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. (F, Sp, Su)
PBIO	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PBIO	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PBIO	4064	Advanced Light Microscopy	(Crosslisted with MBIO 4064; Slashlisted with 5064) Prerequisite: permission of instructor and junior standing. Corequisite: Lab section. Focuses on theory and techniques in light microscopy covering principles including confocal laser scanning microscopy, multiple photon imaging, FLIM/FCS, FRET, fluorescence microscopy, phase contrast, DIC, 3D rendering, and other advanced optical technologies. Also includes a lab section where students will learn to use advanced epifluorescence and confocal microscopes. Students are required to complete an independent microscopy research project that they will work on in the lab section and present at the end of the course. No student may earn credit for both 4064 and 5064. (F)
PBIO	4114	Principles of Plant Physiology	Prerequisite: PBIO 1114 and organic chemistry. The physiology of green plants, including respiration, photosynthesis, metabolism of carbohydrates, fats and proteins, mineral nutrition, translocation, water relations, growth and development. Laboratory (F)

PBIO	4263	Cell Biology Laboratory	(Crosslisted with MBIO 4263) Prerequisites: MBIO 3812 and 3813, or two courses in Plant Biology, and completion of or concurrent enrollment in MBIO/PBIO/BIOL 3113 Cell Biology. This lab course will give students experience with modern techniques used in the study of cells. The techniques covered will allow exploration of cell biology at the level of tissues, single cells, subcellular components, and molecules. (F)
PBIO	4264	Morphology of Vascular Plants	(Slashlisted with 5264). Prerequisite: permission of instructor. Structural organization and phylogenetic relationships of vascular land plants are explored using living and extinct plants. Emphasis is given to understanding the origins, unique and common features of plant life histories, organography and morphogenesis. No student may earn credit for both 4264 and 5264. (Irreg.)
PBIO	4283	Plant Anatomy	Prerequisite: seven hours in biology or permission of instructor. The structure and development of the organs of vascular plants as revealed by observations of representative living and prepared specimens. Theories concerning the evolution of organs and internal structure. (Sp odd-numbered years)
PBIO	4313	Biotechnology Applications	(Crosslisted with MBIO 4313) Prerequisite: PBIO/BIOL 3113 or PBIO/BIOL 3333 or PBIO/MBIO/BIOL 4843 or PBIO/MBIO 4873 or Chemistry 3653 or permission of instructor. Intended for students who possess a working knowledge of molecular biology, this course will focus on developing familiarity with methods used in biotechnology to address pressing societal challenges. Students will put into practice central methods of biotechnology, gaining practical skills for use in future careers in laboratory science, particularly methods relevant to pharmaceutical production, agricultural improvement, bio-fuel production, and medical and forensic diagnostics, among others. (Sp)
PBIO	4413	Paleobotany	(Crosslisted with GEOL 4413; Slashlisted with 5413) Prerequisite: permission of instructor. Introduction to the fossil record of terrestrial plants from algae to flowering plants. Lectures will address anatomy, morphology, taphonomy and paleoecology, including climate and plant-animal interactions. Laboratories will put lecture topics into practice using fossil plants from the Oklahoma Museum of Natural History collection and from fieldwork. Field trips. No student may earn credit for both 4413 and 5413. Laboratory (Sp, even-numbered years)
PBIO	4483	Physiological Plant Ecology	(Slashlisted with 5483) Prerequisite: PBIO 3453 or PBIO 4115 or permission of instructor. Study of energy budgets, plant water relations, carbon uptake and release, nutrient uptake and availability, and other factors as they affect plant growth, competition and ecosystem-level factors. In-depth analysis of current literature. No student may earn credit for both 4483 and 5483. (F, even-numbered years)
PBIO	4553	Plant Geography	(Slashlisted with 5553) Prerequisite: 3453, 3534, or permission of instructor. Analysis of the evolutionary, ecological, genetic and historical factors that affect present-day distributional patterns of plants on continents and islands. Particular emphasis is directed to range disjunctions and endemism as well as the effects of continental drift, geoclimatic changes, dispersal, polyploidy and phylogeny on the flora of North America. No student may earn credit for both 4553 and 5553. (F odd-numbered years)
PBIO	4561	Field Studies	(Slashlisted with 5561) Prerequisite: 3453, 3534, or permission of instructor. May be repeated. Field-based studies of the flora and vegetation of a particular area. Readings and lectures focus on a regional flora, and the geohistorical, biogeographic, and ecological factors affecting vegetational patterns and dynamics. Observations of characteristic habitats and plant communities, and identification and recognition of important plants are stressed during field trips. No student may earn credit for both 4561 and 5561. (Irreg.)

PBIO	4623	Ecosystem Ecology	(Slashlisted with 5623) Prerequisite: 3453 or equivalent. Studies interactions between organisms and their environment with an earth-system context. Students will learn general concepts of ecosystems; examine major factors that control ecosystems properties; explore ecosystem functions and structure and their spatial and temporal variation; and evaluate implications of ecosystem processes for functioning of the global system and sustainable use by human beings. No student may earn credit for both 4623 and 5623. (F)
PBIO	4723	General Mycology	(Slashlisted with 5723) Prerequisite: PBIO 1114, or BIOL 1134, or MBIO 3812 and MBIO 3813. A survey of the fungi, including diversity, biology, and significance in ecology and human affairs. No student may earn credit for both 4723 and 5723. (Irreg.)
PBIO	4733	Environmental Remote Sensing	(Slashlisted with 5733; Crosslisted with GIS 4733) Prerequisite: either a course or hands-on experience in remote sensing, GIS, statistical analysis, computer programming, or permission of the instructor and adviser. This course aims to help students develop comprehensive knowledge and advanced skills of remote sensing, and to apply it to the study of the structure, composition, and functions of vegetation, landscapes, and the biosphere. Students will learn laboratory and field-based hyperspectral data acquisition and analysis; field survey methods; land cover classification from multiple sensors (optical, microwave, and LiDAR) and time series data; and estimation of biophysical and biochemical parameters. Includes image processing software (ENVI) and algorithms. No student may earn credit for both 4733 and 5733. (Sp)
PBIO	4810	Special Topics	(Slashlisted with 5810) 1 to 3 hours. Prerequisite: two courses in botany and permission. May be repeated with change of content; maximum credit three hours per semester, nine hours total. Topics will include newly developing areas of the discipline. Taught at an upper-division level based on previous course background. No student may earn credit for both 4810 and 5810 for the same course content. (Irreg.)
PBIO	4843	Intro to Molecular Biology	(Crosslisted with MBIO and ZOO 4843; Slashlisted with 5843) Prerequisite: 1114, or Zoology 1124, or Microbiology 3813 and 3812, or Biology 1134, and one course in organic chemistry. Introduction to the characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of microbial genetics--transformation, transduction and conjugation; and emphasis on molecular immunology and genetic engineering/recombinant DNA technology. No student may earn credit for both 4843 and 5843. (F, Sp)
PBIO	4873	Microbial Phys & Molec Bio Lab	(Crosslisted with MBIO 4873) Prerequisite: junior standing or permission of instructor. Current techniques to explore molecular aspects of gene expression and regulation. Experiments include: plasmid and phage propagation, nucleic acid purification, DNA and protein manipulation, and gene analysis. (F, Sp) [II-LAB]
PBIO	4953	BioWriting	(Slashlisted with 5953; Crosslisted with BIOL/MBIO 4953) Prerequisite: permission of instructor. This course provides students engaged in research with the information and skills needed to effectively communicate as professional biologists. Students will learn to report the results of their own research in the format of a journal article, conference-style presentation, and poster. No student may earn credit for both 4953 and 5953. (Irreg.)
PBIO	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

PBIO	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
PBIO	4983	Senior Capstone: Plant Biol	Prerequisite: 12 hours of botany and senior standing. Interdisciplinary approach to synthesize ideas from the major areas of botany. Readings, research and discussions on the important issues in botany at the present and into the next century. A major written assignment required. [V]
PBIO	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PBIO	5064	Advanced Light Microscopy	(Crosslisted with MBIO 5064; Slashlisted with PBIO 4064) Prerequisite: permission of instructor and graduate standing. Corequisite: Lab section. Focuses on theory and techniques in light microscopy covering principles including confocal laser scanning microscopy, multiple photon imaging, FLIM/FCS, FRET, fluorescence microscopy, phase contrast, DIC, 3D rendering, and other advanced optical technologies. Also includes a lab section where students will learn to use advanced epifluorescence and confocal microscopes. Students are required to complete an independent microscopy research project that they will work on in the lab section and present at the end of the course. No student may earn credit for both 4064 and 5064.(F)
PBIO	5264	Morphology of Vascular Plants	(Slashlisted with 4264). Prerequisite: graduate standing, permission of instructor. Structural organization and phylogenetic relationships of vascular land plants are explored using living and extinct plants. Emphasis is given to understanding the origins, unique and common features of plant life histories, organography and morphogenesis. No student may earn credit for both 4264 and 5264. (Irreg.)
PBIO	5293	Cytology Ultrastructure	(Crosslisted with MBIO and ZOO 5293) Prerequisite: 12 hours of biology. A descriptive survey of bacterial, plant and animal cells. Emphasis will be given to the ultrastructural morphology of cellular organelles and their functional significance. (F)
PBIO	5364	Transmis Electron Microscopy	(Crosslisted with MBIO and ZOO 5364) Prerequisite: permission. Introduction to the theory of transmission electron microscopy and practical instruction in specimen preparation, ultramicrotomy, instrument operation, photography and quantitative methods. Laboratory (F)
PBIO	5374	Scanning Electron Microscopy	(Crosslisted with MBIO and ZOO 5374) Prerequisite: basic chemistry; basic physics; demonstrated need; permission of instructor. Principles of scanning electron microscopy combined with training in the operation of the SEM and ancillary equipment. Students will be certified in the operation of all equipment. Sample preparation on a variety of samples and darkroom procedures will be performed. Independent project with oral report and poster required. Laboratory
PBIO	5413	Paleobotany	(Crosslisted with GEOL 5413; Slashlisted with 4413) Prerequisite: permission of instructor. Introduction to the fossil record of terrestrial plants from algae to flowering plants. Lectures will address anatomy, morphology, taphonomy and paleoecology, including climate and plant-animal interactions. Laboratories will put lecture topics into practice using fossil plants from the Oklahoma Museum of Natural History collection and from fieldwork. Field trips. No student may earn credit for both 4413 and 5413. Laboratory (Sp, even-numbered years)

PBIO	5453	Advanced Ecology/Evolut Biol	(Crosslisted with MBIO and ZOO 5453) Prerequisite: general ecology. Required for students in the ecology and evolutionary biology doctoral program. An introduction to current research opportunities and research programs in ecology and evolutionary biology at the University of Oklahoma. Specific topics and lecturers will vary from week to week to give students a broad overview of ongoing research projects. (F)
PBIO	5471	Seminar-Ecology/Evolut Biology	(Crosslisted with MBIO and ZOO 5471) Prerequisite: graduate standing. Two semesters of enrollment are required for students in the ecology and evolutionary biology doctoral program. An intensive, student-based seminar in which students present both proposals and ongoing progress reports on doctoral level research projects in ecology and evolutionary biology. (F, Sp)
PBIO	5483	Physiological Plant Ecology	(Slashlisted with 4483) Prerequisite: graduate standing and PBIO 3453 or PBIO 4115 or permission of instructor. Study of energy budgets, plant water relations, carbon uptake and release, nutrient uptake and availability, and other factors as they affect plant growth, competition and other ecosystem-level factors. In-depth analysis of current literature. No student may earn credit for both 4483 and 5483. (F, even-numbered years)
PBIO	5553	Plant Geography	(Slashlisted with 4553) Prerequisite: 3453 or equivalent, 3534. Analysis of the evolutionary, ecological, genetic and historical factors that affect present-day distributional patterns of plants on continents and islands. Particular emphasis is directed to range disjunctions and endemism as well as the effects of continental drift, geoclimatic changes, dispersal, polyploidy and phylogeny on the flora of North America. No student may earn credit for both 4553 and 5553.
PBIO	5561	Field Studies	(Slashlisted with 4561) Prerequisite: 3453, 3534, or permission of instructor. May be repeated. Field-based studies of the flora and vegetation of a particular area. Readings and lectures focus on a regional flora, and the geohistorical, biogeographic, and ecological factors affecting vegetational patterns and dynamics. Observations of characteristic habitats and plant communities, and identification and recognition of important plants are stressed during field trips. No student may earn credit for both 4561 and 5561. (Irreg.)
PBIO	5620	Investigations in Botany	1 to 6 hours. Prerequisite: 15 hours of BOT/PBIO, permission of instructor. May be repeated; maximum of nine hours for a masters student and twelve hours for Ph.D. student. Only six hours allowed with one professor, unless approved by Department Chair by petition. Fields: Ecology, morphology, physiology, systematics, mycology, anatomy, electron microscopy, plant molecular biology. (F, Sp, Su)
PBIO	5623	Ecosystem Ecology	(Slashlisted with 4623) Ecosystem Ecology (Slashlisted With 4623). Prerequisite: 3453 Or Equivalent. Studies Interactions Between Organisms And Their Environment Within An Earth-System Context. Students Will Learn General Concepts Of Ecosystems; Examine Major Factors That Control Ecosystems Properties; Explore Ecosystem Functions And Structure And Their Spatial And Temporal Variation; And Evaluate Implications Of Ecosystem Processes For Functioning Of The Global System And Sustainable Use By Human Beings. No Student May Earn Credit For Both 4623 And 5623. (F)
PBIO	5723	General Mycology	(Slashlisted with 4723) Prerequisite: PBIO 1114, or BIOL 1134, or MBIO 3812, and MBIO 3813, and graduate standing. A survey of the fungi, including diversity, biology, and significance in ecology and human affairs. No student may earn credit for both 4723 and 5723. (Irreg.)

PBIO	5733	Environmental Remote Sensing	Prerequisite: either a course or hands-on experience in remote sensing, GIS, statistical analysis, computer programming, or permission of the instructor and adviser. This course aims to help students develop comprehensive knowledge and advanced skills of remote sensing, and to apply it to the study of the structure, composition, and functions of vegetation, landscapes, and the biosphere. Students will learn laboratory and field-based hyperspectral data acquisition and analysis; field survey methods; land cover classification from multiple sensors (optical, microwave, and LiDAR) and time series data; and estimation of biophysical and biochemical parameters. Course is composed of lecture, computer laboratory, data collection, student project, presentations and reports, and review of literature. Students will learn image processing software (ENVI) and algorithms. No student may earn credit for both 4733 and 5733. (Sp)
PBIO	5810	Special Topics	(Slashlisted with 4810) 1 to 3 hours. Prerequisite: two courses in plant biology, graduate standing, and permission of instructor. May be repeated with change of content; maximum credit three hours per semester, nine hours total. Topics will include newly developing areas of the discipline. Taught at the graduate level based on previous course background. No student may earn credit for both 4810 and 5810 for the same content. (Irreg.)
PBIO	5843	Intro to Molecular Biology	(Crosslisted with MBIO and ZOO 5843; Slashlisted with 4843) Prerequisite: 1114, or Zoology 1114, or Zoology 1124, or Microbiology 3812 and 3813, or Biology 1134, and one course in organic chemistry. Introduction to the characteristics and biological functions of nucleic acids and proteins in living cells with emphasis on nucleic acid replication, transcription, translation and regulation; also emphasis on the molecular aspects of microbial genetics -- transformation, transduction and conjugation; and emphasis on molecular immunology and genetic engineering/recombinant DNA technology. No student may earn credit for both 4843 and 5843. (F, Sp)
PBIO	5883	Advanced Molecular Biology	(Crosslisted with MBIO 5883) Prerequisite: graduate standing and MBIO/Plant Biology/Biology 4843 or 5843; or Chemistry 3653; or permission of instructor. This course will expose students to the study of molecular biology in real-life research laboratories, focusing on the thought and practice behind molecular biology. Scientific literature will be used as a source of information to highlight the practical concerns for students working in molecular biology laboratories. (Sp)
PBIO	5953	BioWriting	(Slashlisted with 4953; Crosslisted with BIOL/MBIO 5953) Prerequisite: permission of instructor. This course provides students engaged in research with the information and skills needed to effectively communicate as professional biologists. Students will learn to report the results of their own research in the format of a journal article, conference-style presentation, and poster. Graduate students have additional assignments beyond those completed by undergraduates. No student may earn credit for both 4953 and 5953. (Irreg.)
PBIO	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
PBIO	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
PBIO	5971	Seminar in Botany	Prerequisite: graduate standing, majors only, and permission of instructor. Required of all graduate students in botany. May be repeated; maximum credit two hours for the master's degree, three hours for the doctor's degree. Selected topics in botany. Each student is called upon for discussion or formal presentations. No laboratory. (F, Sp)

PBIO	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. Preparation of an original research paper in one of the fields of botany. (F, Sp, Su)
PBIO	5990	Special Studies in Botany	1 to 3 hours. Prerequisite: 15 hours of BOT/PBIO, permission of instructor. May be repeated; maximum credit 12 hours, with a limit of six hours with one professor unless approved by Department Chair by petition. The student selects an area in which the student desires to read intensively, then selects a staff member who is an authority in that field and together they plan a program for investigation of the literature. (F, Sp, Su)
PBIO	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
PBIO	6003	Ecological Modeling	(Crosslisted with MBIO and ZOO 6003) Prerequisite: one computer course, one course in ecology, or permission of instructor. Trains students to use modeling tools in their research and to gain greater ability to understand, appreciate, and criticize modeling work. Students will learn general procedure and principles with case studies of successful models in ecology and participate in course projects to gain hands-on experience in model development. (Irreg.)
PBIO	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
PBIO	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
PBIO	6980	Research Doctoral Dissertation	2 to 16 hours. Preparation of a research paper consisting of a notable contribution to knowledge in one of the fields of botany. (F, Sp, Su)
PBIO	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
PCUS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
PCUS	2000	Freshman and/or Sophomore Secondary Percussion	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
PCUS	2020	Percussion for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
PCUS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
PCUS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PCUS	4000	Junior and/or Senior Secondary Percussion	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)

PCUS	4020	Percussion for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
PCUS	5000	Master's-Level Secondary Percussion	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
PCUS	5010	Master's-Level Percussion for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
PCUS	5020	Master's-Level Percussion for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
PCUS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
PCUS	6000	Doctoral Secondary Percussion	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
PCUS	6010	Doctoral Percussion for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
PCUS	6020	Doctoral Percussion for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
PDC	6003	History and Philosophy of Planning, Design and Construction	Prerequisite: graduate standing with permission of instructor. Explore the events, phases and evolution of planning, design and construction; review historical developers, city planners and contractors and the contributions/impacts they had on the professions and marketplace; explore the future based on the past. (Sp)
PDC	6023	Advanced Research Methods	Prerequisite: graduate standing with permission of instructor. Explore discipline-based qualitative and quantitative research methods; develop dissertation research design and support documentation; apply for funding for the dissertation project. (F)
PERS	1115	Beginning Persian	This course is for students who have no background in the Persian language and wish to learn the language at an academic level. Students learn the Persian alphabet, phonology, and syntax. (F) [I-FL]
PERS	1225	Beginning Persian Continued	Prerequisite: PERS 1115 or permission of department. A continuation of PERS 1115. An elementary-level course, which stresses oral communication, vocabulary building, simple sentence structure, reading comprehension and writing elementary-level texts, and gaining familiarity with Persian culture. (Sp)
PERS	2113	Intermediate Persian	Prerequisite: PERS 1225. Continuation of PERS 1225. An intermediate level course, which will stress listening, speaking, reading and writing at the intermediate level with more emphasis on reading and writing. Students are expected to gain proficiency of Intermediate Mid on the American Council on Teaching of Foreign Languages Scale. (F)
PERS	2223	Intermediate Persian Continued	Prerequisite: PERS 2113. Continuation of PERS 2113. Intermediate-level course, which will continue developing language skills: speaking, writing, listening and reading at the intermediate high-level. Students are expected to gain proficiency of Intermediate High on the American Council on Teaching of Foreign Languages Scale. (Sp)

PERS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
PHIL	1013	Introduction to Philosophy	Basic problems of philosophy explored through a consideration of selected philosophers. (F, Sp, Su) [IV-WC]
PHIL	1103	Critical Reasoning	An informal survey of evaluative principles of reasoning. The application of these principles is emphasized, and common errors and fallacies in everyday, ethical, legal, and scientific reasoning are discussed. This course is not a course in formal symbolic logic or mathematical logic. (F, Sp) [III-SS]
PHIL	1113	Introduction to Logic	Prerequisite: MATH 0123 or satisfactory score on Math placement test. An introduction to modern logic and its applications. Emphasis is placed on deductive logic, but may also include some treatment of inductive logic. Various common fallacies and errors in reasoning will also be discussed. (F, Sp, Su) [I-M]
PHIL	1203	Philosophy and Human Destiny, East and West	(Crosslisted with IAS 1203) An inquiry into values bearing upon human destiny or fulfillment with special attention to values inspired by religion in both western and eastern traditions. (Irreg.) [IV-WC]
PHIL	1213	Introduction to Ethics	Basic issues in moral philosophy examined through a consideration of selected philosophers, including a sampling of normative theories as well as an introduction to issues of metaethics. (F, Sp, some Su) [IV-WC]
PHIL	1223	Introduction to Asian Philosophy	(Crosslisted with IAS 1223) Survey of the major figures and schools of philosophy in Asia. Includes study of Hinduism, Buddhism, Confucianism, and Daoism. (F) [IV-NW]
PHIL	1263	Introduction to Ethics in Health Care	An overview of important issues in health care ethics, including dilemmas facing providers, patients, researchers, and society at large. The course will introduce facts and concepts drawn from health care practice, and a variety of philosophical approaches used to analyze ethical dilemmas. (F, Sp) [IV-WC]
PHIL	1273	Introduction to Business Ethics	An overview of important issues in business ethics, including the morality of market systems, business-customer relations, employer-employee relations, and firm-shareholder relations. The course will introduce facts and concepts drawn from economic analysis and business practice, as well as a variety of philosophical approaches used to analyze ethical considerations. (F, Sp) [IV-WC]
PHIL	1713	Justice in Society	Introduces students to justice, both as a regulative ideal and as a conscious process of social transformation. Consideration of how to reflect on the society we could have without ignoring past and present transgressions of sexism, racism, ethnic hatred, economic discrimination, religious discrimination, etc. (Irreg.)
PHIL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
PHIL	2403	Introduction to Philosophy of Religion	A systematic critical discussion of religious world-views. Topics covered include definitions of religion, reason and faith, authority, proofs for God's existence, evil and immortality. (Irreg.)
PHIL	2900	Special Topics	1 to 4 hours. May be repeated with change of topic; maximum credit nine hours. Topics in philosophy not accommodated by the existing curriculum will be taught from time to time (examples: Islamic philosophy, Navajo thought, feminism). (Irreg.)

PHIL	3023	Aesthetics and the Philosophy of Art	Prerequisite: six hours of Philosophy or junior standing. Examines historical and contemporary views about the nature, value, social role and interpretation of artworks in a variety of artistic media. The appreciation of nature and of everyday experience is also discussed. (Irreg.) [IV-WC]
PHIL	3033	Philosophy and Literature	Literature expresses in concrete form what philosophy discusses in abstract terms: views of the world that human beings inhabit; views of the nature of human freedom and rationality; and views of the good human life. Use of literature to illustrate philosophical issues, and philosophy to reveal the unstated assumptions and implications of selected literary works. (Irreg.) [IV-WC]
PHIL	3043	Philosophy and Film	Prerequisite: six hours of philosophy or junior standing. Use of films to shed light on philosophical issues, and philosophy to reveal the philosophical assumptions and implications of selected films. Training in philosophical modes of thought can enrich our understanding of film-as of other cultural products and activities-by revealing dimensions that might otherwise go unnoticed or insufficiently appreciated. (Irreg.) [IV-WC]
PHIL	3113	Reasoning, Judgment and Decision Making	Prerequisite: Six hours of philosophy or junior standing; and Math 0115 or equivalent; math placement test. This course covers the three basic approaches to reasoning and decision making. The first (normative) component covers the basics of probability theory and decision theory. The second (descriptive) component focuses on research on the ways people actually reason. The third (prescriptive) component focuses on ways of improving reasoning. (Irreg.) [I-M]
PHIL	3253	History of Ethics	Prerequisite: six hours of philosophy. A survey of the major figures in the history of moral philosophy with emphasis on their interrelations, influences on each other and effect on contemporary moral philosophy. (Sp) [IV-WC]
PHIL	3263	Virtue Ethics	Prerequisite: junior standing or six hours of Philosophy. An overview of the history of virtue ethics from the ancient Greeks to the present day, covering the historical zenith of virtue ethics through the Middle Ages, the fall of virtue concepts in the early modern period, and the rebirth of virtue ethics in the later 20th century. Discusses a number of executive, moral, intellectual, and civic virtues and their related vices, and addresses some of the fundamental philosophical questions that arise in the study of virtue ethics. (F, Sp) [IV-WC]
PHIL	3273	Ethics and Business	Prerequisite: Six hours of philosophy or junior standing. A study of how ethics illuminates business activities. Topics include: the philosophical bases of capitalism; the legitimacy of the profit motive; virtue and the marketplace; corporate responsibility; government regulation; the marketplace and the environment; the ethics of advertising; employee privacy; and the challenges posed by the developing information age. (Irreg.) [IV-WC]
PHIL	3293	Environmental Ethics	Prerequisite: junior standing or permission of instructor. Surveys the field of environmental ethics. Various principles philosophers use to assign value to the natural world and assign obligations toward nature to human beings are examined by students in order to articulate and defend their own reasoned points of view on environmental questions. (Irreg.) [IV-WC]
PHIL	3303	East Asian Philosophy	Prerequisite: six hours of philosophy or junior standing. Survey and analysis of the major texts and schools of philosophy in East Asia (China, Korea, Japan, and surrounding regions). Included are Confucianism, Taoism, and Buddhism. (Irreg.) [IV-NW]
PHIL	3313	History of Ancient Philosophy	Prerequisite: six hours of philosophy. A survey of Greek and Roman philosophy with concentration on selected readings in classical philosophy from Thales to St. Augustine. (F) [IV-WC]
PHIL	3333	History of Modern Philosophy	Prerequisite: six hours of philosophy. A survey of modern European philosophy with concentration on selected readings from the Renaissance through Kant. (Sp) [IV-WC]

PHIL	3343	Chinese Philosophy	(Crosslisted with IAS 3343) Prerequisite: Six hours of philosophy or junior standing. Survey and analysis of the major texts and schools of philosophy in China, from the ancient world to the contemporary era. (Irreg.) [IV-NW]
PHIL	3353	American Philosophy	A study of important American philosophers and philosophical movements, from Jonathan Edwards through pragmatism. (Irreg.) [IV-WC]
PHIL	3363	Comparative Philosophy	(Crosslisted with IAS 3363) Prerequisite: Six hours of philosophy or junior standing. A study of topics of significant philosophical interest that includes study and analysis of both western and non-western philosophical sources. (Irreg.) [IV-WC]
PHIL	3393	History of Analytic Philosophy	Prerequisite: six hours of philosophy or junior standing. This course, open to non-majors, explores some of the main methods and topics of interest in the analytic philosophical tradition. We will examine the views of influential philosophers, starting around the beginning of the twentieth century, on questions such as: What is the world made up of? What is the nature of time? What is knowledge, and do we have any? What is the relationship between thought and language, and which comes first? How is the mind related to the body? Can computers think? And just how should philosophers approach such questions? (Irreg.) [WC]
PHIL	3423	Ancient and Medieval Religious Philosophy	Prerequisite: six hours of philosophy or junior standing. Covers the history of religious philosophy in the West from ancient Greece until the 16th century. Major figures studied include Plato, Aristotle, the Stoics, Plotinus, Augustine, Boethius, Anselm, Maimonides, Aquinas, Averroes, Scotus, Ockham, and the Reformers. (Irreg.) [IV-WC]
PHIL	3433	Modern Philosophy of Religion	Prerequisite: six hours of philosophy or junior standing. Covers the history of modern religious philosophy in the West from the 17th to the mid-20th centuries. Major figures studied include Descartes, Pascal, Leibniz, Locke, Hume, Kant, Kierkkegaard, Nietzsche, Clifford, James, Freud, and Wittgenstein. (Irreg.) [IV-WC]
PHIL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
PHIL	3443	Contemporary Issues in Philosophy of Religion	Prerequisite: six hours of philosophy or junior standing. Issues currently debated in philosophy of religion. Topics include the rationality of religious belief, the problem of evil, the dilemma of divine foreknowledge and human free will, life after death, the relation between science and religion, and religion and public policy. (Irreg.) [IV-WC]
PHIL	3503	Self and Identity	Prerequisite: 1013 or permission of instructor. Introduction to a number of philosophical topics about the self including personal identity, immortality, unity of self-consciousness, self-knowledge, and nature of self. (Irreg.) [IV-WC]
PHIL	3533	Language, Communication, and Knowledge	Prerequisite: six hours of philosophy or junior standing. The nature of language and communication as studied by linguists and philosophers. Topics will include the nature of meanings; the relationship between syntax, semantics, and pragmatics; and the transmission of knowledge through testimony. Combines philosophical readings with readings from the empirical sciences. (Irreg.) [IV-WC]
PHIL	3613	Philosophy of Biology	Prerequisite: six hours of philosophy or junior standing. Philosophical issues raised by evolutionary theory. Topics include creationism versus evolutionary theory; what makes a hypothesis scientific; can evolutionary theory explain psychological or cultural phenomena? (Irreg.) [IV-WC]

PHIL	3623	Philosophical Issues in Physics and Cosmology	Prerequisite: six hours of philosophy or junior standing. Focus on philosophical issues raised by relativity theory (e.g. the nature of space and time), quantum theory (e.g. non-local action, the measurement problem), and cosmology (e.g. how did the universe begin, will it end and how, and what sense can be made of the universe beginning and ending?). (Irreg.) [IV-WC]
PHIL	3633	The Nature of Science	Prerequisite: six hours of Philosophy or junior standing. Issues related to the nature and scope of science. Topics may include distinguishing science form pseudo-science; the nature of scientific theories; the history of scientific progress; and the theory-ladenness of observation. Also, brief comparisons of different special sciences may be made in order to investigate what they have in common and what is special to each. (Irreg.)
PHIL	3713	History of Social and Political Philosophy	Prerequisite: six hours of philosophy or junior standing. A survey of the views of major philosophers from Plato to the nineteenth century on the nature of man's relation to society and to the state in the context of their wider philosophical (logical, epistemological, metaphysical and ethical) doctrines. Plato, Aristotle, Aquinas, Hobbes, Locke, Rousseau, Hegel and Marx are the chief figures covered, though others will be considered as time permits. (Irreg.) [IV-WC]
PHIL	3723	Contemporary Social and Political Philosophy	Prerequisite: Six hours of philosophy or junior standing. A study of contemporary discussions of political legitimacy, political obligation, democracy, theories of justice and desert, and accounts of individual and group rights. Topics include issues such as political liberalism and its contemporary critiques, discourse-based political theory, theories of procedural and deliberative democracy, and cultural pluralism. (Irreg.) [IV-WC]
PHIL	3733	Religion in Political Theory	Prerequisite: six hours of Philosophy or junior standing. Survey of views on religion in political life held by important political theorists in the modern western tradition and consider how theoretical positions on the role of religion in political life are reflected in political institutions, such as the first amendment establishment clause. (Irreg.) [IV-WC]
PHIL	3743	Feminist Philosophy	Prerequisite: Six hours of philosophy or junior standing. A study of the major schools of feminist philosophy, as well as issues of perennial and contemporary interest in feminist philosophy. (Irreg.) [IV-WC]
PHIL	3753	Philosophy of Race	Prerequisite: junior standing or six hours of philosophy. Addresses philosophical questions about race. Social justice will be an important focus of the course. Additional specific issues related to race and racism will also be addressed; hopefully, a better understanding of the philosophical issues and a commitment to the eradication of racism and racial injustice will be reached. (Irreg.) [IV-WC]
PHIL	3763	Law and Society	Prerequisite: six hours of philosophy or junior standing. An introduction to the history and structure of the main controversies in modern law, with special attention to the United States legal system. Covered topics include natural law, legal realism, the law and economics movement, theories of responsibility and liability, feminist legal theory, and theories of text interpretation. (Irreg.) [IV-WC]
PHIL	3811	Philosophy Writing Workshop	Prerequisite: co-requisite with 3813, 3833 or 3853. Intensive instruction on how to write papers in philosophy. Students will use the workshop to help them write the term paper for a designated target class, in which they must be concurrently enrolled. (F, Sp)
PHIL	3813	History of Ancient Philosophy for Majors	Prerequisite: six hours of philosophy and Philosophy or Ethics and Religion major. A survey of Greek and Roman philosophy with concentration on selected readings in classical philosophy from Thales to St. Augustine. For majors in Philosophy or Ethics and Religion. No student may earn credit for both 3313 and 3813. (F, Sp)

PHIL	3833	History of Modern Philosophy for Majors	Prerequisite: six hours of philosophy and Philosophy or Ethics and Religion major. A survey of modern European philosophy with concentration on selected readings from the Renaissance through Kant. For majors in Philosophy or Ethics and Religion. No student may earn credit for both 3333 and 3833. (F, Sp)
PHIL	3853	History of Ethics for Majors	Prerequisite: six hours of philosophy and Philosophy or Ethics and Religion major. A survey of the major figures in the history of moral philosophy with emphasis on their interrelations, influences on each other and effect on contemporary moral philosophy. For majors in Philosophy or Ethics and Religion. No student may earn credit for both 3253 and 3853. (Sp)
PHIL	3900	Special Topics	1 to 4 hours. May be repeated with change of topic, maximum credit nine hours. Topics in philosophy not accommodated by the existing curriculum will be taught from time to time. (Irreg.)
PHIL	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. Topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
PHIL	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
PHIL	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PHIL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PHIL	4023	Survey of Analytic Aesthetics and Philosophy of Art	(Slashlisted with 5023) Prerequisite: eight hours of philosophy or permission of department. Survey of major philosophical topics in aesthetics and the philosophy of art. Topics include the ontology of art, interpretation, the value of artworks, the relationship between aesthetic and moral value, and aesthetic experience in everyday life. No student may earn credit for both 4023 and 5023. (Irreg.)
PHIL	4133	Symbolic Logic I	An introduction to the symbolism and methods of modern deductive logic. (F)
PHIL	4293	Ethical Theory	(Slashlisted with 5293) Prerequisite: eight hours of philosophy including an ethics course or permission. A survey of theories of the nature and foundations of morality. Topics may include the analysis of moral language, the justification of moral beliefs, and the status of ethical theories. No student may earn credit for both 4293 and 5293. (Sp)
PHIL	4343	Early Chinese Philosophy	Prerequisite: eight hours of Philosophy or permission. Survey of pre-Qin Chinese philosophy, including the major texts and figures of Confucianism, Daoism, and other notable schools. No student may earn credit for both 4343 and 5343. (Irreg.)
PHIL	4473	Philosophy of Religion	(Slashlisted with 5473) Prerequisite: eight hours of philosophy or permission. Survey of topics in the philosophy of religion. Topics covered include the concept of God, the problem of religious knowledge, the nature of religious language, the problem of evil, and particular thinkers. No student may earn credit for both 4473 and 5473. (Irreg.)
PHIL	4513	Metaphysics	(Slashlisted with 5513) Prerequisite: eight hours of philosophy or permission. Survey of major philosophical views about the nature of reality. Topics covered may included the mind-body problem, causation, personal identity, free will and determinism, universals, and the existence of God. No student may earn credit for both 4513 and 5513. (Sp)

PHIL	4523	Epistemology	(Slashlisted with 5523) Prerequisite: eight hours of philosophy or permission. Survey on the evaluation of human reasoning and the nature and scope of human knowledge. Topics include skepticism, the nature of justification, the ethics of belief, and the problem of induction. No student may earn credit for both 4523 and 5523. (F)
PHIL	4533	Philosophy of Language	(Crosslisted with LING 4533; Slashlisted with 5533) Prerequisite: eight hours of philosophy or permission. Survey of major philosophical views on the nature and workings of language. Topics covered include: meaning and truth, sense and reference, speech acts, and communication. No student may earn credit for both 4533 and 5533. (Irreg.)
PHIL	4543	Philosophy of Mind	(Crosslisted with LING 4543; Slashlisted with 5543) Prerequisite: eight hours of philosophy or permission. Survey of major philosophical views on the nature of the mind. Topics covered may include: the nature and unity of consciousness, the mind-body problem, personal identity, the emotions, actions and intentions, self-knowledge, and other minds. No student may earn credit for both 4543 and 5543. (Irreg.)
PHIL	4613	Philosophy of Science	(Slashlisted with 5613) Prerequisite: eight hours of philosophy or permission. Survey of main issues in the philosophy of science. Topics will include the structure of scientific theories, theory testing, and the rationale of scientific methodologies. The rationality of scientific belief and the moral constraints on scientific research may also be discussed. No student may earn credit for both 4613 and 5613. (Irreg.)
PHIL	4623	Philosophy of The Social Sciences	(Slashlisted with 5623) Prerequisite: nine hours of upper-division social sciences or permission. Survey of issues in the philosophy of the social sciences. Topics covered will include explanation in the social sciences, theory construction, theories and observation, evidence and theory of confirmation, theoretical constructs and operationism, verstehen and objectivity. No student may earn credit for both 4623 and 5623. (Irreg.)
PHIL	4713	Survey of Social and Political Philosophy	(Slashlisted with 5713) Prerequisite: Eight hours of philosophy or permission. Survey of important theories in social and political philosophy. Beginning with ancient theories (Plato and Aristotle), to modern social contract theories and the foundations of liberalism (Hobbes, Locke, Rousseau, and Mill), and concludes with the debate between liberals and communitarians (Rawls and his critics). No student may earn credit for both 4713 and 5713. (Irreg.)
PHIL	4763	Philosophy of Law	(Slashlisted with 5763) Prerequisite: eight hours of philosophy or permission. Survey of philosophical treatments of concepts and problems fundamental to the law, including (a) the origin, ground, status, justification and language of laws and systems of laws; (b) legal right and duties; and, (c) the nature and justification of legal sanctions. No student may earn credit for both 4763 and 5763. (Irreg.)
PHIL	4893	Senior Capstone in Philosophy	Prerequisite: graduating majors. Covering the major areas of philosophy taught in the undergraduate major, coordinated with the departmental objectives for undergraduate majors and for the purpose of assessing the level of learning among graduating seniors. (Sp) [V]
PHIL	4900	Special Topics	1 to 3 hours. Prerequisite: eight hours of philosophy. May be repeated with change of topic; maximum credit nine hours. Topics in philosophy not accommodated by the existing curriculum. (Irreg.)
PHIL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
PHIL	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

PHIL	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PHIL	5023	Survey of Analytic Aesthetics and Philosophy of Art	(Slashlisted with 4023) Prerequisite: graduate standing. Survey of major philosophical topics in aesthetics and the philosophy of art. Topics include the ontology of art, interpretation, the value of artworks, the relationship between aesthetic and moral value, and aesthetic experience in everyday life. No student may earn credit for both 4023 and 5023. (Irreg.)
PHIL	5143	Symbolic Logic II	(Crosslisted with LING 5143) Further study of first order predicate logic: identity, axiomatic development. Various metatheorems; soundness, consistency and completeness. (Alt. Sp)
PHIL	5293	Ethical Theory	(Slashlisted with 4293) Prerequisite: graduate standing. A survey of theories of the nature and foundations of morality. Topics may include the analysis of moral language, the justification of moral beliefs, and the status of ethical theories. No student may earn credit for both 4293 and 5293. (Sp)
PHIL	5313	Studies in Ancient Philosophy	Prerequisite: 3313. May be repeated with change of content; maximum credit 18 hours. Survey of philosophical writings of a major ancient Greek philosopher, typically Plato and Aristotle. Works covering different philosophical topics and written at different stages in the philosopher's development will be studied. Selection of figure will alternate each year the course is offered. (Sp)
PHIL	5333	Studies in Modern Philosophy	May be repeated with change of content; maximum credit 18 hours. Survey of philosophical writings of major philosophers. Figures covered will alternate each year between the Rationalists (Descartes, Leibniz, and Spinoza) and the Empiricists (Locke, Berkeley, and Hume), though other combinations (e.g., Locke and Leibniz) may be offered. (F)
PHIL	5343	Early Chinese Philosophy	Prerequisite: eight hours of Philosophy or permission. Survey of pre-Qin Chinese philosophy, including the major texts and figures of Confucianism, Daoism, and other notable schools. No student may earn credit for both 4343 and 5343. (Irreg.)
PHIL	5473	Philosophy of Religion	(Slashlisted with 4473) Prerequisite: graduate standing. Survey of topics in the philosophy of religion. Topics covered include the concept of God, the problem of religious knowledge, the nature of religious language, the problem of evil, and particular thinkers. No student may earn credit for both 4473 and 5473. (Irreg.)
PHIL	5513	Metaphysics	(Slashlisted with 4513) Prerequisite: graduate standing. Survey of major philosophical views about the nature of reality. Topics covered may included the mind-body problem, causation, personal identity, free will and determinism, universals, and the existence of God. No student may earn credit for both 4513 and 5513. (Sp)
PHIL	5523	Epistemology	(Slashlisted with 4523) Prerequisite: graduate standing. Survey on the evaluation of human reasoning and the nature and scope of human knowledge. Topics include skepticism, the nature of justification, the ethics of belief, and the problem of induction. No student may earn credit for both 4523 and 5523. (F)
PHIL	5533	Philosophy of Language	(Crosslisted with LING 5533; Slashlisted with 4533) Prerequisite: graduate standing. Survey of major philosophical views on the nature and workings of language. Topics covered include: meaning and truth, sense and reference, speech acts, and communication. No student may earn credit for both 4533 and 5533. (Irreg.)

PHIL	5543	Philosophy of Mind	(Crosslisted with LING 5543; Slashlisted with 4543) Prerequisite: graduate standing. Survey of major philosophical views on the nature of the mind. Topics covered may include: the nature and unity of consciousness, the mind-body problem, personal identity, the emotions, actions and intentions, self-knowledge, and other minds. No student may earn credit for both 4543 and 5543. (Irreg.)
PHIL	5613	Philosophy of Science	(Slashlisted with 4613) Prerequisite: graduate standing. Survey of main issues in the philosophy of science. Topics will include the structure of scientific theories, theory testing, and the rationale of scientific methodologies. The rationality of scientific belief and the moral constraints of scientific research may also be discussed. No student may earn credit for both 4613 and 5613. (Irreg.)
PHIL	5623	Philosophy of The Social Sciences	(Slashlisted with 4623) Prerequisite: graduate standing. Survey of issues in the philosophy of the social sciences. Topics covered will include explanation in the social sciences, theory construction, theories and observation, evidence and theory of confirmation, theoretical constructs and operationism, verstehen and objectivity. No student may earn credit for both 4623 and 5623. (Irreg.)
PHIL	5713	Survey of Social and Political Philosophy	(Slashlisted with 4713) Prerequisite: Eight hours of philosophy or permission. Survey of important theories in social and political philosophy. Beginning with ancient theories (Plato and Aristotle), to modern social contract theories and the foundations of liberalism (Hobbes, Locke, Rousseau, and Mill), and concludes with the debate between liberals and communitarians (Rawls and his critics). No student may earn credit for both 4713 and 5713. (Irreg.)
PHIL	5763	Philosophy of Law	(Slashlisted with 4763) Prerequisite: graduate standing. Survey of philosophical treatments of concepts and problems fundamental to the law, including (a) the origin, ground, status, justification and language of laws and systems of laws; (b) legal right and duties; and, (c) the nature and justification of legal sanctions. No student may earn credit for both 4763 and 5763. (Irreg.)
PHIL	5833	Gender, Values, and Education	(Crosslisted with EDS 5833) Prerequisite: graduate standing or permission of instructor. May be repeated with change of topic; maximum credit six hours. Topics vary each semester, but are developed from philosophical studies in and about education, politics, ethics, aesthetics, law and religion that address the issues of gender and sexuality. Intensive oral and written theoretical inquiry. (Irreg.)
PHIL	5900	Special Topics	1 to 3 hours. Prerequisite: graduate standing. May be repeated with change of topic; maximum credit nine hours. Topics in philosophy not accommodated by the existing curriculum. (Irreg.)
PHIL	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
PHIL	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
PHIL	5990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and adviser. May be repeated with change of subject matter; maximum undergraduate credit eight hours; maximum graduate credit 12 hours. (F, Sp, Su)
PHIL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

PHIL	6010	Writing Educational Inquiry	(Crosslisted with EDS 6010) 1 to 3 hours. Prerequisite: graduate standing, enrollment in any graduate EDFN or philosophy course, and permission based on review of academic writing samples. May be repeated; maximum credit nine hours. Individual or group tutorial study of informal logic and rhetorical theory concerning academic writing as a social practice. Emphasis on contextually appropriate documentation practices, philosophical moves, and rhetorical devices; development of clarity and grace in written formulations of educational concepts and values. Address various scholarly and professional situations. Aimed toward public presentation or publication. (F, Sp)
PHIL	6013	Gender, Knowledge, and Inquiry	(Crosslisted with EDS 6013) Prerequisite: graduate standing and Womens' Studies 4003 or equivalent, or any graduate-level course in research methods or philosophy, or three graduate hours in EDFN. Interdisciplinary seminar introducing feminist criticisms of epistemology and exploring their possible significance for design and practices of gender sensitive inquiry in various academic fields and educational contexts. (F)
PHIL	6023	Seminar in Aesthetics and Philosophy of Art	Prerequisite: graduate standing. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in aesthetics and the philosophy of art. (Irreg.)
PHIL	6173	Seminar in Logic	Prerequisite: 4133 or permission. May be repeated with change of subject matter; maximum credit 12 hours. (Irreg.)
PHIL	6203	Seminar in Ethics	May be repeated with change of subject matter; maximum credit 12 hours. (F, Sp)
PHIL	6383	Seminar in Chinese Philosophy	Prerequisite; graduate standing. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in Chinese philosophy. (Irreg.)
PHIL	6393	Seminar in the History of Philosophy	May be repeated with change of subject matter; maximum credit 12 hours. (Irreg.)
PHIL	6473	Seminar In Philosophy Of Religion	Seminar In Philosophy Of Religion. Prerequisite: 5473 Or Permission. May Be Repeated With Change Of Content; Maximum Credit 12 Hours. Intensive Seminar On A Topic In The Philosophy Of Religion. (Irreg.)
PHIL	6513	Seminar in Metaphysics	Prerequisite: 5513 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in metaphysics. (Irreg.)
PHIL	6523	Seminar in Epistemology	Prerequisite: 5523 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in epistemology. (Irreg.)
PHIL	6533	Seminar in Philosophy of Language	Prerequisite: 5533 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in the philosophy of language. (Irreg.)
PHIL	6543	Seminar in Philosophy of Mind	Prerequisite: 5543 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in the philosophy of mind. (Irreg.)
PHIL	6593	Seminar in Contemporary Philosophy	May be repeated with change of subject matter; maximum credit 12 hours. (Irreg.)
PHIL	6613	Seminar in Philosophy of Science	Prerequisite: 5613 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in the philosophy of science. (Irreg.)
PHIL	6763	Seminar in Philosophy of Law	Prerequisite: 5763 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in the philosophy of law. (Irreg.)
PHIL	6793	Seminar in Social and Political Philosophy	Prerequisite: 5763 or permission. May be repeated with change of content; maximum credit 12 hours. Intensive seminar on a topic in the philosophy of law. (Irreg.)
PHIL	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

PHIL	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
PHIL	6980	Research for Doctoral Dissertation	Research for doctoral dissertation. (F, Sp, Su)
PHIL	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
PHYS	1114	General Physics for Non-Science Majors	Prerequisite: high school algebra II. Not open to students who intend to do major work in mathematics or physical science. Not open to students with credit in 1205, 2414 or 2514. Concepts of force, energy, matter, atomic physics, electricity, light, presented as a part of a liberal education. (F, Sp, Su) [II-NL]
PHYS	1205	Introductory Physics I for Physics Majors	Prerequisite: enrollment in Mathematics 1823 or 1914 or permission of instructor. To be taken by physics, astronomy and engineering physics majors during the first semester of their freshman year. Kinematics, dynamics, work and energy, many-particle systems, rigid body rotation, simple harmonic motion. Laboratory is an integral part of the course. Laboratory (F) [II-LAB]
PHYS	1215	Introductory Physics II for Physics Majors	Prerequisite: 1205 or permission of instructor. Electricity and magnetism: static fields and forces, circuits, electromagnetic induction. Thermodynamics: the First and Second Laws, temperature, heat, work and entropy. Laboratory is an integral part of the course. Laboratory (Sp)
PHYS	1311	General Physics Lab I	Corequisite: 2414 or 2514. Experiments in basic law of mechanics and thermodynamics. (F, Sp, Su) [II-LAB]
PHYS	1321	General Physics Lab II	Corequisite: 2424 or 2524. Experiments in basic laws of electricity, magnetism, and optics. (F, Sp, Su) [II-LAB]
PHYS	1453	Musical Acoustics	An introduction to the science of sound and its propagation with special emphasis on the production of sound by musical instruments and the voice, psychological aspects of sound perception, and room acoustics. Topics are explored through lectures, demonstrations, and discussions. No previous musical experience or proficiency is required. Not for major credit. (F) [II-NL]
PHYS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
PHYS	2203	Introductory Physics III: Modern Physics	Prerequisite: 1215 or 2524 (or concurrent enrollment), or permission of instructor. An introduction to and overview of key concepts in contemporary physics, with emphasis on the contrast between classical and modern ways of thinking about the physical universe. Includes an introduction to selected major subject areas, which might include light and optics, relativity, atoms and molecules, the solid state, nuclei, elementary particles, fundamental interactions, cosmology and/or chaos. Students will also explore selected topics in current physics research. (F)
PHYS	2303	Electronics	Prerequisite: 1215 or 2524 (or concurrent enrollment), or permission of instructor. An introduction to the characteristics of semiconductor electronic components and their use in the design and operation of practical analog and digital electronic circuits. The emphasis will be on gaining a working knowledge of basic circuits and preparation for understanding and building electronic circuits encountered by experimental research physicists. (F)
PHYS	2414	General Physics for Life Science Oriented Majors	Prerequisite: Mathematics 1523 or 1743. Not open to students with credit in 1205 or 2514. Kinematics and dynamics of particles and rigid bodies, gravitation, equilibrium, momentum, energy, static and flowing fluids, kinetic theory, heat and thermodynamics, vibrations, waves and sound. (F, Sp, Su) [II-NL]

PHYS	2424	General Physics for Life Science Oriented Majors	Prerequisite: 2414. Not open to students with credit in 1215 or 2524. Electric charge, electric field, electric potential, energy, DC and AC currents, magnetic fields, electromagnetic induction, geometrical optics, wave nature of light, optical instruments, early quantum theory, models of the atom, the nucleus, radioactivity, nuclear reactions and nuclear energy. (F, Sp, Su)
PHYS	2514	General Physics for Engineering and Science Majors	Prerequisite: Mathematics 1823 or Mathematics 1914 with grade of C or better. Not open to students with credit in 1205. Vectors, kinematics and dynamics of particles, work and energy systems of particles, rotational kinematics and dynamics, oscillations, gravitation, fluid mechanics, waves. (F, Sp, Su) [II-NL]
PHYS	2524	General Physics for Engineering and Science Majors	Prerequisite: PHYS 2514 and MATH 2423 or MATH 2924 with grade of C or better. Not open to students with credit in PHYS 1215. Temperature, heat, thermodynamics, electricity, magnetism, optics. (F, Sp, Su)
PHYS	2970	Selected Topics in Physics	1 to 3 hours. Prerequisite: sophomore standing or permission of instructor. May be repeated; maximum credit six hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
PHYS	3043	Physical Mechanics I	Prerequisite: 1205 or 2514, and Mathematics 3113 or 3413 (or concurrent enrollment); or permission of instructor. Differential equations based continuum mechanics: Newtonian particle mechanics, driven and damped oscillations, vibrations and waves, and their application to other linear systems, non-linear oscillations, introduction to Lagrange's equations. (Sp)
PHYS	3053	Physical Mechanics II	Prerequisite: 3043 or permission of instructor. Lagrangian and Hamiltonian dynamics. Non-inertial reference frames. Rigid body motion. Central forces and collisions. Special relativity. (F)
PHYS	3183	Electricity and Magnetism I	Prerequisite: 2203, Mathematics 3413 or concurrent enrollment; or permission of instructor. Electrostatics, dielectrics, continuity conditions, magnetic forces and fields, magnetic induction, magnetization, Maxwell's equations. (F)
PHYS	3223	Modern Physics for Engineers	Prerequisite: Mathematics 3113 or equivalent. Relativity, atomic structure, nuclear theory, wave mechanics, statistical physics, solid state physics. (F)
PHYS	3302	Advanced Lab I	Prerequisite: 2303 or permission of instructor. Junior-level experiments in physics. (F, Sp)
PHYS	3312	Advanced Lab II	Prerequisite: 3302 or permission of instructor. Junior-level experiments in physics. (F, Sp)
PHYS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
PHYS	3803	Introduction to Quantum Mechanics I	Prerequisite: PHYS 3043 and MATH 3413 or permission of instructor. Fundamental ideas of quantum physics. Postulates of quantum theory, wave functions, operators, the Schrodinger equation, one-dimensional systems. Mathematical tools of quantum mechanics. Theory of measurement. Stationary and nonstationary states. (Sp)
PHYS	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. Covers materials not usually presented in the regular courses. (F, Sp, Su)
PHYS	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)

PHYS	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PHYS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PHYS	4153	Statistical Physics and Thermodynamics	Prerequisite: 3803. Statistical properties of physical systems. Entropy and temperature, the Boltzmann distribution, Fermi-Dirac and Bose-Einstein gases. Thermodynamic functions. Statistical interpretation of thermodynamics. (F)
PHYS	4183	Electricity and Magnetism II	Prerequisite: 3183. Maxwell's equations, electromagnetic wave equations, propagation of electromagnetic waves, reflection and refraction, radiation. (Sp)
PHYS	4213	Nuclear and Particle Physics	(Slashlisted with 5213) Prerequisite: 3803. Basic nuclear structure, nuclear models, radioactivity, nuclear reactions. Particle interactions and families, quark model, weak decays of quarks and leptons. No student may earn credit for both 4213 and 5213. (F)
PHYS	4223	Modern Optics	Prerequisite: junior standing. Geometric optics, physical optics, nonlinear optics, optical devices, interference, coherence theory, absorption and emission of light by matter and quantum optics. No student may earn credit for both 4223 and 5223. (Irreg.)
PHYS	4243	Solid State Physics	(Slashlisted with 5243) Prerequisite: 3803. Crystal structure, electrons in simple metals, electron band theory, semiconductors, superconductivity, phonons. No student may earn credit for both 4243 and 5243. (Sp)
PHYS	4300	Senior Research Project	1 to 3 hours. Prerequisite: senior standing in major and permission of instructor. May be repeated once. Research project, experimental or theoretical, to be arranged with individual faculty, leading to a senior thesis. Group seminars to discuss projects and other topics of current interest in physics and astronomy. Total of four hours required for general education capstone. (F, Sp) [V]
PHYS	4803	Introduction to Quantum Mechanics II	Prerequisite: 3803 or permission of instructor. Quantum mechanics of three-dimensional systems. Angular momentum. Approximation methods: perturbation theory, variational methods. Time-dependent perturbations: transition rates, selection rules. Interaction of radiation with matter. Applications. Quantum mechanics of atoms and molecules. (F)
PHYS	4813	Atomic and Molecular Physics	(Slashlisted with 5813) Prerequisite: 4803. Hydrogen atom: fine structure and external field effects. Many-electron atoms. Interaction with radiation. Molecular bonding. Spectroscopy of diatomic molecules. No student may earn credit for both 4813 and 5813. (Sp)
PHYS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
PHYS	4970	Seminar-Selected Topics in Physics	1 to 3 hours. Prerequisite: permission of instructor. May be repeated with change of subject; maximum credit six hours. (Irreg.)
PHYS	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied, permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PHYS	5001	Introduction to Graduate Studies in Physics	Prerequisite: graduate standing. Introduction to research in general as well as specific research done within the department; familiarizes students with departmental procedures; improves their teaching of Physics; and conveys the expectations and demands of a career in Physics or Astronomy. (F)

PHYS	5013	Mathematical Methods in Physics	Prerequisite: graduate standing. Orthogonal transformations and tensor analysis; partial differential equations and special functions: spherical harmonics, Bessel functions, SHO and hydrogen atom wave functions; theory of complex variables; integral definition of special functions. (F)
PHYS	5153	Classical Mechanics	Prerequisite: 3053 or equivalent. Hamilton's principle, Lagrange's equations, mechanics of particles and rigid bodies, Hamilton's equations, canonical transformations, Poisson brackets. (F)
PHYS	5163	Statistical Mechanics	Prerequisite: 4153 or equivalent. Ensembles and thermodynamics, fluctuations, monatomic crystals, ideal gases, phase equilibrium, chemical equilibrium in ideal gas mixtures, ideal gas in an electric field, Bose-Einstein and Fermi-Dirac statistics, blackbody radiation, electrons in metals. (Sp)
PHYS	5213	Nuclear and Particle Physics	(Slashlisted with 4213) Prerequisite: 4803; graduate standing. Basic nuclear structure, nuclear models, radioactivity, nuclear reactions. Particle interactions and families, quark model, weak decays of quarks and leptons. No student may earn credit for both 4213 and 5213. (F)
PHYS	5223	Modern Optics	Prerequisite: junior standing. Geometric optics, physical optics, nonlinear optics, optical devices, interference, coherence theory, absorption and emission of light by matter and quantum optics. No student may earn credit for both 4223 and 5223. (Irreg.)
PHYS	5243	Solid State Physics	(Slashlisted with 4243) Prerequisite: 4803; graduate standing. Crystal structure, electrons in simple metals, electron band theory, semiconductors, superconductivity, phonons. No student may earn credit for both 4243 and 5243. (Sp)
PHYS	5393	Quantum Mechanics I	Prerequisite: 4803 or equivalent. Topics in nonrelativistic quantum mechanics including the Heisenberg and Schroedinger pictures, Dirac formalism, angular momentum, bound states of spherically symmetric potentials, time independent perturbation theory; potential scattering. (Sp)
PHYS	5403	Quantum Mechanics II	Prerequisite: 5393. Time-dependent perturbation theory, electromagnetic interactions, spin and angular momentum coupling, symmetry and statistics, density matrix, multiparticle systems. (F)
PHYS	5573	Electrodynamics I	Prerequisite: 4183 or equivalent. Topics covered include special relativity; 3+1 and 4-dimensional Maxwell theory; charged particle and electromagnetic field Langrangians; conservation of energy, momentum and angular momentum; delta function sources and Green's function for Maxwell's theory. (F)
PHYS	5583	Electrodynamics II	Prerequisite: 5573. Topics include: applications of advanced and retarded Green's functions to time-dependent electric and magnetic dipoles, and acceleration point charges; synchotron radiation; Bremsstrahlung; radiation damping and classical renormalization. (Sp)
PHYS	5813	Quantum Mechanics of Atoms	(Slashlisted with 4813) Prerequisite: 4803; graduate standing. Hydrogen atom: fine structure and external field effects. Many-electron atoms. Interaction with radiation. Molecular bonding. Spectroscopy of diatomic molecules. No student may earn credit for both 4813 and 5813. (Sp)
PHYS	5910	Problems in Natural Science	(Crosslisted with BOT, MBIO, and ZOO 5910) 1 to 2 hours. Prerequisite: admission to candidacy for degree of Master of Natural Science. (F, Sp, Su)
PHYS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
PHYS	5970	Seminar--Selected Topics in Modern Physics	1 to 3 hours. Prerequisite: permission. May be repeated with change of subject matter; maximum credit for master's degree six hours, for doctor's degree 12 hours. (F, Sp, Su)
PHYS	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
PHYS	5990	Special Studies	Prerequisite: 12 hours of physics, permission. May be repeated with change of subject matter; maximum credit for a master's degree four hours, for a doctor's degree ten hours. (F, Sp, Su)

PHYS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
PHYS	6213	Advanced Particle Physics	Prerequisite: 5213, 5403 or equivalents. The theory and phenomenology of the "standard model" of particle physics which encompasses the electro-weak and strong interactions. Topics will include: symmetries, groups and conservation laws; bound states, quarkonium; Feynman diagrams, QED; QCD; weak interactions; gauge theories. (Irreg.)
PHYS	6243	Advanced Solid State Physics	Prerequisite: 4243, 5403, or equivalents. The physics of metals, semiconductors and insulators. Free electron theory, crystal structure and phonons, electron band theory, semiclassical model, applications to electronic and optical properties of solids, effects of magnetic fields. (Irreg.)
PHYS	6283	Advanced Atomic/Molecular Physics	Prerequisite: 5403, 5813, or equivalents. Calculation and evaluation of electronic wave functions for atoms and molecules via Hartree-Fock and configuration interaction methods; the Born-Oppenheimer approximation and ro-vibrational wave functions; molecular quantum states and group theory; fine and hyperfine structure. (Irreg.)
PHYS	6333	General Relativity	Prerequisite: 5013, 5583. The mathematical and physical basis for the relativistic theory of gravitation; the principle of equivalence; tensor analysis; Einstein's field equations; tests of general relativity; gravitational collapse; cosmology; toward a quantum theory of gravity. (Irreg.)
PHYS	6433	Quantum Field Theory	Prerequisite: 5403. Canonical quantization of scalar and spinor fields; perturbation theory and Feynman diagrams; renormalization; path integral formulation; renormalization group; gauge fields with selected applications to QED, electro-weak theory and QCD. (Irreg.)
PHYS	6443	Advanced Quantum Field Theory	Prerequisite: graduate standing and 6433. Path integral quantization; renormalization; renormalization group equations; gauge theories of strong and electroweak interactions. (F)
PHYS	6810	Seminar on Atomic And Molecular Collision Dynamics	1 to 3 hours. Prerequisite: permission. May be repeated with change of subject matter; maximum credit nine hours. A research seminar devoted to the study of specialized topics in atomic and molecular collisions. Topics selected will reflect the interests of instructor and students. (Irreg.)
PHYS	6821	Seminar on Chemical Physics	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. A research seminar devoted to the study of specialized topics in chemical physics. Topics selected will reflect the interests of instructor and students. (Irreg.)
PHYS	6831	Seminar on Applied Physics	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. A research seminar devoted to the study of specialized topics in applied physics. Topics selected will reflect the interests of instructor and students. (Irreg.)
PHYS	6841	Seminar on Nuclear and Particle Physics	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. A research seminar devoted to the study of specialized topics in nuclear and/or particle physics. Topics selected will reflect the interests of instructor and students. (Irreg.)
PHYS	6851	Seminar on Solid State Physics	Prerequisite: permission of instructor. May be repeated with change of subject matter; maximum credit nine hours. A research seminar devoted to the study of specialized topics in solid state physics. Topics selected will reflect the interests of instructor and students. (Irreg.)
PHYS	6860	Advanced Topics in Mathematical Methods in Physics	1 to 3 hours. Prerequisite: 5013 or permission. May be repeated with change of content; maximum credit nine hours. Topics covered will be selected by instructor and announced prior to the term in which it will be offered. The course is intended to offer material currently used in theoretical physics. (Irreg.)
PHYS	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

PHYS	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
PHYS	6980	Research for Doctoral Dissertation	Research For Doctoral Dissertation. (F, Sp, Su)
PHYS	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
PIAN	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
PIAN	2000	Freshman and/or Sophomore Secondary Piano	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
PIAN	2020	Piano for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 8 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
PIAN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
PIAN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PIAN	4000	Junior and/or Senior Secondary Piano	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
PIAN	4020	Piano for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 14 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
PIAN	5000	Master's-Level Secondary Piano	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
PIAN	5010	Master's-Level Piano for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
PIAN	5020	Master's-Level Piano for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
PIAN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
PIAN	6000	Doctoral Secondary Piano	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)

PIAN	6010	Doctoral Piano for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
PIAN	6020	Doctoral Piano for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
PORT	1115	Beginning Portuguese	Develop the skills necessary to grasp fundamental principles of Portuguese and Luso-Brazilian culture, and to acquire basic proficiency in the four skills of language learning: listening, speaking, reading and writing. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp) [I-FL]
PORT	1225	Beginning Portuguese Continued	Prerequisite: 1115. Give continuity to the skills acquired during the first semester of Portuguese in order to become more fluent in the spoken language as well as more proficient in writing. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp) [I-FL]
PORT	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
PORT	2113	Intermediate Portuguese	Prerequisite: 1225. Develops reading skills and control of grammar while cultivating depth of oral and writing ability. Emphasis on expansion of vocabulary and strong reinforcement of grammatical structures. Reading and discussion of texts of literary and cultural interest. Oral and written assignments. (F, Sp)
PORT	2223	Intermediate Portuguese (Continued)	Prerequisite: 2113. Refines reading skills and mastery of grammar. Emphasis on sophisticated vocabulary and understanding of grammatical structures. Literary and cultural texts discussed in oral and essay form. (F, Sp)
PORT	2970	Special Topics/Seminar	NULL
PORT	3113	Advanced Portuguese	Prerequisite: 2223. Develops further reading skills and control of grammar, cultivates speaking and writing ability, and exposes students to a wide range of topics covered daily by Brazilian newspapers and magazines. (F)
PORT	3223	Advanced Portuguese Continued	Prerequisite: 3113. Continuation of 3113. Develops further reading skills and control of grammar while cultivating depth of oral and writing ability. Exposes the student to a wide range of topics covered daily by Brazilian newspapers and magazines. (Sp)
PORT	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
PORT	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
PORT	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
PORT	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)

PORT	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
PORT	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PORT	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
PORT	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
PORT	4990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. (F, Sp)
PORT	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
PSY	1113	Elements of Psychology	A survey of the scientific study of human behavior. Emphasis is placed upon scientific method, basic life processes, mechanisms of adaption, individual differences and group behavior. Students have the opportunity to be exposed to the research process either by serving as participants in research experiments or by conducting reviews of research topics. (F, Sp, Su) [III-SS]
PSY	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
PSY	2003	Understanding Statistics	Cannot be substituted for 2113. Prerequisite: Math 0123 or satisfactory score on math placement test. An introductory applied statistics course which will focus on descriptive and inferential statistical methods. Emphasis will be placed on in-class activities and homework which help the student learn by experience. Topics include measures of central tendency and variability, z-scores, normal distribution, correlation, regression, sampling distributions, hypotheses testing, t-tests and chi-square tests. Laboratory (F, Sp, Su) [I-M]
PSY	2113	Research Methods I: Statistics	Prerequisite: 1113 and satisfactory score on the math placement test (equivalent to completion of Math 0123). An introduction to scientific method in psychological research. Topics include: philosophical issues; hypothesis formulation; experimental design; and data collection, organization and interpretation. Laboratory (F, Sp, Su)
PSY	2213	Survey in Information Processing, Perception and Cognition	Prerequisite: 1113 or permission. Surveys the sensory, perceptual and information processing systems of the human. Covers the basic mechanisms of the major senses, how stimuli are identified and classified, and how this information is then processed by the brain. (Irreg.)
PSY	2403	Introduction to Personality	Prerequisite: 1113. Processes of personality formation and development. 'Normal' and 'neurotic' personalities; basic principles of personality development. (F, Sp, Su)
PSY	2503	Computing for Behavioral Sciences	Students will learn to identify the parts and functions of personal computers. Building on that basic knowledge, such topics as developing and publishing a web page, collecting data from participants through the web, and using the advanced features of Excel for statistical analysis will be covered. Programming languages will include HTML and JavaScript. (F, Sp, Su)

PSY	2513	Psychology of Personal Adjustment	Prerequisite: 1113. An applied personality course for majors and nonmajors. Basic information and principles from personality, social psychology and learning are applied to real-life problems to help students gain insight into ways and means of coping with their personal concerns. (Irreg.)
PSY	2603	Lifespan Development	Prerequisite: PSY 1113. Survey of the psychological changes across the life span; the changes in cognitive, social, emotional, and physiological development from conception to death will be included. (F, Sp, Su)
PSY	2910	Special Topics in Psychology	1 to 3 hours. Prerequisite: 1113 or permission. May be repeated once with change of topic; maximum credit six hours. Special topics in psychology requiring a minimal background in psychology. Topics typically will be of an applied nature. (F, Sp, Su)
PSY	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
PSY	3003	Advanced Undergraduate Statistics	Prerequisite: 2113 or equivalent. Review of previous material, SAS, multiple comparisons, two-way ANOVA, power calculations, repeated measures designs, multiple linear regression, general linear model, nonparametric methods. Designed to help students prepare for graduate statistics courses. (Irreg.)
PSY	3083	Animal Behavior	(Crosslisted with ZOO 3083) Prerequisite: Zoology 2013 or permission of instructor. Animal behavior from an evolutionary perspective. The effects of natural selections on mechanisms underlying behavior and on diversity of behavior among and within species. (F, Sp)
PSY	3092	Animal Behavior Laboratory	(Crosslisted with ZOO 3092) Prerequisite: junior standing; concurrent or previous enrollment in 3083. Laboratory and field studies on the adaptive nature of animal behavior, illustrating basic principles of experimental design, data analysis, and scientific writing. Laboratory. (F odd-numbered years)
PSY	3114	Research Methods II: Applications and Experimental Design	Prerequisite: 1113 and 2113. Laboratory investigation of processes involved in animal and human learning, information processing, motivation, perception, sensation, social-personality, developmental, physiological and comparative psychology. Required of all undergraduate psychology majors. Laboratory (F, Sp, Su)
PSY	3203	Cognitive Psychology	Prerequisite: 1113, 2113 or permission of instructor. Surveys how people extract relevant information from their environment and store, retrieve and utilize such information at a later time. Topics will include memory storage and retrieval, attention, imagery, mnemonic devices and other cognitive processes. (F, Sp)
PSY	3213	Prejudice and the Civil Rights Movement	Prerequisite: junior standing. A study of the African-American social movement for equal rights, including contemporary events concerning civil rights. Focused around documentary films with supported readings. Emphasis on the study of stereotypes, prejudice, and racism. (F, Sp)
PSY	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

PSY	3613	Developmental Psychology: Infancy through Adolescence	Prerequisites: PSY 2003 or PSY 2113. Provides an introduction to themes, theories, and scientific research on cognitive, social, and emotional development from infancy through adolescence. The goal is to explore fundamental psychological questions of how we become who we are, what factors cause children's development of behavior and mind, and what leads to the diversity of developmental outcomes. No student may earn credit for both PSY 2603 and PSY 3613. (Irreg.)
PSY	3703	Social Psychology	Prerequisite: PSY 1113; PSY 2003 or PSY 2113. The science of how people think and feel about, relate to, and influence one another. Topics include classic and contemporary research on stereotypes, persuasion, attitude change, emotions, the self-concept, aggression, impression formation, and altruism, among others. (F, Sp, Su)
PSY	3753	Introduction to Industrial Organizational Psychology	Prerequisite: PSY 1113 and PSY 2113 or permission of instructor. Industrial Organizational psychology is the scientific study of the workplace. Covers psychological theories and methods addressing issues of critical relevance to the well-being and performance of people and the organizations that employ them. Topics include but are not limited to: employee selection, training, assessment, performance management, work motivation, job attitudes, fairness in the workplace, leadership, work-life balance, work teams/groups, organizational change and others. (F, Sp, Su)
PSY	3803	Physiological Psychology	Prerequisite: 1113 or equivalent and Zoology 1114 or equivalent. An introduction to physiological and neurological foundations of behavior. Some emphasis will be placed on contemporary issues and theoretical models. (F, Sp)
PSY	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program, 2113. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
PSY	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program, 2113. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
PSY	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied, 2113 or permission of instructor. May be repeated; maximum credit, six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PSY	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
PSY	4023	Psychological Test and Measurements	Prerequisite: 1113, 2113, junior standing. An introduction to the measurement of human behavior. Special reference is given to tests of intelligence, achievement, personality and interest. (Irreg.)
PSY	4113	Capstone Survey of Major Fields in Psychology	Prerequisite: PSY 3114 or permission of instructor, senior standing. Lecture-based course focusing on major areas of psychology. Attempts to instill in the student an understanding of the integration and diversity of the field of psychology. Content and title vary with instructor. (F, Sp) [V]
PSY	4143	Capstone Practicum Experience	Prerequisite: 2403, 3114, 4453, senior standing and permission of instructor. Provides students with the experience of working in an arena involving the practice of psychology. Student is to develop a written description of the experience and the psychological principles applied. (F, Sp) [V]
PSY	4153	Capstone History of Psychology	Prerequisite: 1113, 2113, 3114 or permission of instructor, and senior standing. Introduction to the origin of modern psychology within science. The origins of psychology will be examined from the ancient Greeks through philosophy, physiology and astronomy. Special emphasis will be placed on the historical trends and the people involved in these. (F) [V]

PSY	4243	Decision Making and Problem Solving	Prerequisite: 2113. 3203. Review of issues in inductive thinking, deductive reasoning, inference generation, problem solving, insight, expertise, algorithms, and heuristics. The emphasis will be on current research investigations. (Irreg.)
PSY	4253	Selected Topics in Cognitive Science	Prerequisite: PSY 1113, PSY 2113, PSY 3114; PSY 3203 or permission of instructor. May be repeated with change of content; maximum credit six hours. Seminar focusing on specific issues in cognitive science. Topics include memory representation and retrieval, symbol and referent processing, knowledge structure, expert and novice differences, imagery, etc. (Irreg.)
PSY	4263	Psychology and Law	Prerequisite: 3114. Examines some of the most important points of contact between the fields of psychology and the law, including eyewitness identification, the prison system, juries, and confessions and interrogations. (Irreg.)
PSY	4313	Motivation	Prerequisite: PSY 2113. Primary motivational states and learned motivational states (e.g., fear, frustration, anxiety, etc.) will be considered as well as emotion and curiosity. Topics of current interest in both human and animal motivation will also be covered. (Irreg.)
PSY	4403	Advanced Personality	Prerequisite: 1113, 2113, 2403, 2603 or 3603, 3114 or concurrent enrollment, and junior standing; or permission of instructor. An examination of the major approaches, concepts, issues and research findings in the field of personality. (Irreg.)
PSY	4453	Abnormal Psychology	Prerequisite: 1113, 2113, and 2403, or permission of instructor. An examination of the major clinical and research findings in the field of abnormal psychology. Topics include studies of conflict, anxiety, neurosis, character disorders, schizophrenia and psychotherapy. (F, Sp)
PSY	4510	Applications of Psychology Practicum	1 to 3 hours. Prerequisite: 2113, 12 hours of psychology, permission of instructor. May be repeated, undergraduates limited to two enrollments. Individualized field experiences in an area of interest in psychology. (F, Sp)
PSY	4533	Introduction to Behavior Modification Techniques	Prerequisite: 1113, 2113 and junior standing; or permission of instructor. Applications of behavior principles of reinforcement and punishment to various areas of human endeavor are discussed with emphasis on recently reported literature. Some example topics include: behavior modification in self-adjustment; education; industry; or therapy. (F)
PSY	4613	Current Topics in Developmental Psychology	Prerequisite: 2603 or 3603, 2113 or permission of instructor. May be repeated with change of subject matter; maximum credit six hours. An advanced seminar dealing with contemporary issues in developmental psychology. Content will vary with the instructor. (Irreg.)
PSY	4703	Psychology of Leadership	Prerequisite: senior standing or permission of instructor. Provide students with an understanding of the psychological principles underlying leadership in government, industry, and society. Review psychological research on leadership and management, examining topics such as leadership skills, leading changes in organization, leader-follower relationships, and leadership tactics. Students will participate in various exercises to analyze leadership strategies and assess their potential strengths and weaknesses as leaders. (Sp)
PSY	4733	Selected Topics in Social Psychology	Prerequisite: junior standing or permission of instructor. May be repeated once with change of topic; maximum credit six hours. Content varies with the instructor. Deals with central topical areas of study in social psychology (i.e., attitudes and social cognition; person perception; groups and group dynamics; or theory construction). (Irreg.)
PSY	4753	Industrial Psychology	Prerequisite: 1113, 2113 or permission of instructor. A study of the application of psychological principles, methods and techniques in business and industry. (Irreg.)

PSY	4793	Psychology of Groups	Prerequisite: 1113. Provides students with an understanding of the psychological principles underlying group behavior. Topics covered will include group formation and development, cohesion and norms, social influence, power, inter-group relations, stereotyping and prejudice, group decision making, diversity within groups, stigma in the workplace, social identity, leadership in groups, group performance, and staffing organizational groups. (Irreg.)
PSY	4823	Developmental Psychobiology	Prerequisite: 2113, 2603 or 3803; or permission of instructor. Advanced seminar which will include such topics as: prenatal, neural and sensory development and cultural differences in child rearing. Discussion of specific developmental issues from the behavioral and biological levels of analysis. (Irreg.)
PSY	4843	Animal Cognition	Prerequisite: 2113 and Zoology 1114, or permission of instructor. How animals represent space, time, and number; estimate averages, form concepts, make inferences, assess risk, recognize, communicate and deceive. How these processes are implemented in navigation, foraging decisions, predator avoidance, mate localization and selection, and other fitness-related activities. (Sp)
PSY	4853	Neurobiology of Memory	(Crosslisted with ZOO 4853) Prerequisite: 3803 or Zoology 3103. Advanced seminar dealing with current research on how the nervous system responds to, and is changed by, experience. Experience is broadly defined and may include learning, maturation and/or pathology.
PSY	4910	Instructional Aides	1 to 3 hours. Prerequisite: 1113, 2113, and junior standing (or honors students). May be repeated once. Enrollment limited to majors with grade point averages of at least 3.00 and acceptance of an application, or by invitation by faculty member. Designed for students contemplating graduate school to offer experience in all aspects of instruction. Individual assignments of special instructional tasks in psychology. Supervised instructional experience will be part of each enrollment. (F, Sp, Su)
PSY	4913	Bachelor Of Science Thesis	Prerequisite: 2113, 3114, admission to B.S. program in psychology and permission of B.S. adviser. B.S. candidates are required to generate an independent research project, under the direct supervision of their specific faculty sponsor and overseen by the B.S. adviser. This course will be used for this function and only this function. (F, Sp, Su)
PSY	4920	Current Topics in Basic and Applied Psychology	1 to 3 hours. Prerequisite: 1113 and 2113, or 1113 and six hours of other social sciences; or permission of instructor. May be repeated with change of topic; maximum credit nine hours. Content and number of credit hours varies with instructor and section. Focus on current topics in psychology not covered in existing course offerings. Intended for purpose of offering high interest course topics during regular semester, summers and intersession. (F, Sp, Su)
PSY	4940	Seminar in Psychology	1 to 3 hours. Prerequisite: 1113, 2113, junior standing, permission. May be repeated once with change of topic; maximum credit six hours. Advanced seminar dealing with contemporary issues and problems in psychology. Content varies with instructor. (F, Sp, Su)
PSY	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
PSY	4970	Special Topics	Special Topics. 1 to 3 hours. Prerequisite: Junior standing or permission of instructor. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

PSY	4990	Independent Study	1 to 3 hours. Prerequisite: 2113, three courses in general area to be studied, 3114, and permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
PSY	5003	Psychological Statistics I	Prerequisite: graduate standing and undergraduate statistics course, or permission of instructor. Applied statistics with emphasis upon statistical problems in behavioral sciences research. Includes probability, descriptive statistics, estimations and test of hypotheses. Techniques covered in depth include t-test, one and two factor ANOVA methods, multiple comparison methods (e.g., Scheff, Tukey, Ryan, etc.), and the robustness of these techniques to violation of their assumptions.
PSY	5013	Psychological Statistics II	Prerequisite: 5003 or equivalent, or permission of instructor. The general linear model is covered as it applies to the analysis of variance including fixed, mixed, and random models, individual comparisons, analysis of covariance, and multiple regression. Also, some nonparametric techniques are discussed including chi-square and distribution free procedures.
PSY	5043	Quantitative Methods in Evaluation Research	Prerequisite: 5003 or equivalent. The role of quantitative analysis in psychological, educational and program evaluation is discussed, with emphasis on experimental design, sampling theory, randomization tests, analysis of covariance models and structural equation methods. (Irreg.)
PSY	5053	Exploratory Data Analysis	Prerequisite: 5003 or equivalent. Uses new statistical approaches by Tukey, Mosteller and others to introduce students to EDA. Topics include graphical data analysis, robustness and resistance, data transformations and fitting mathematical models to data.
PSY	5103	Physiological Psychology	Prerequisite: graduate standing or permission. Surveys the neuroanatomical, hormonal and neurochemical bases of food and water intake, sleep and dreaming, emotion, reward and punishment, learning and memory, mental disorders. (Irreg.)
PSY	5203	Survey in Cognitive Psychology	Prerequisite: graduate standing or permission. Survey of the field of cognitive psychology designed to provide a foundation for the study of human higher mental processes. Topics include: pattern recognition, attention, episodic memory, semantic memory, psycholinguistics, comprehension, reasoning, decision making and problem solving.
PSY	5280	Seminar in Cognitive Processes	1 to 4 hours. Prerequisite: 5203 or permission of instructor. May be repeated with change of subject matter; maximum credit six hours. Considers special topics in cognitive psychology emphasizing recent research literature.
PSY	5403	Theories and Methods in Developmental Psychology	Prerequisite: graduate standing in the department or permission of instructor. Examination of the theories and methods specific to life-span developmental psychology. (Irreg.)
PSY	5423	Current Theories in Social Psychology	Prerequisite: graduate standing and permission of instructor. An overview of current theory and research in social psychology, including such topics as motivated cognition, automatic and controlled processing, stereotyping, impression formation, attributions, the self-concept and self-regulation, relationships, emotions, attitudes, altruism, and aggression. (Irreg.)
PSY	5433	Classic Issues in Social Psychology	Prerequisite: Graduate standing and permission of instructor. An overview of classic theories and studies from the first 100 years of social psychology. Topics include attitudes and persuasion, group processes, attraction, social influence, conformity, helping, aggression, dissonance, emotions, and attribution. (Irreg.)
PSY	5703	Survey of Industrial/Organizational Psychology	Prerequisite: graduate standing. An overview of the theory and practices used in industrial/organizational psychology. Focus on the general principles involved in applying psychological theory in the work place, considering applications at the individual, group, and organizational level. Also considers the major methodological techniques used to support those applications. (F)

PSY	5713	Training and Development	Prerequisite: 5703. Design and development of training courses as well as practical considerations in the delivery of training in organizational settings. (Sp)
PSY	5723	Selection and Assessment in Organizations	Prerequisite: 5703. Covers a variety of substantive topics including; the choice and design of personnel selection tools, validation of employment tests, legal issues regarding personnel assessment and selection, assessment of intelligence, experience, personality and integrity, the use of common assessment methods such as situational judgment tests, interviews, biodata, and assessment centers, frame-of-reference training, theoretical and empirical literature regarding assessment center technology, and development and administration of an assessment center. (Irreg.)
PSY	5733	Techniques in Industrial and Organizational Psychology	Prerequisite: 5703. Provides an overview of how to develop and apply several methodologies and techniques that I/O psychologists commonly use to address organizational needs. During this course we will explore topics such as basic consulting skills, job analysis, individual assessment and selection, biodata, performance appraisal, ad organizational surveys. Some basic familiarity with these areas is assumed. This class focuses on how to develop and implement these types of applications in organizational settings. (Irreg.)
PSY	5783	General Seminar in Industrial and Organizational Psychology	Prerequisite: 5703. May be repeated with change of content; maximum credit nine hours. Examine in-depth one or more topics that provide a basis for current work in industrial and organizational psychology. May include topics such as leadership, motivation, performance management, job satisfaction, and individual differences. (F)
PSY	5901	Foundations of Psychological Science I	Prerequisite: admission to graduate psychology program. Overview of current research in psychological science. Discussion of ethics, professional development, the pedagogical arts, methodology and grantsmanship. Participants complete a first year research project including a grant proposal, presentation at a professional meeting and presentation at departmental speaker series.
PSY	5911	Foundations of Psychological Science II	Prerequisite: 5901. Continuation of 5901. Advanced topics in professional development, research planning, funding and communication.
PSY	5960	Directed Readings in Psychology	1 to 4 hours. Prerequisite: graduate standing, permission of instructor, adviser and dean. Maximum credit nine hours. Supervised reading of selected topics in psychology by agreement of instructor and student. (F, Sp, Su)
PSY	5970	Pre-Master's Research in Psychology	Prerequisite: graduate standing; pre-master's status; permission of instructor. May be repeated; maximum credit nine hours. Supervised research in area agreed upon by student and instructor. Students conducting research for the master's thesis should enroll in 5980. (F, Sp, Su)
PSY	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
PSY	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
PSY	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
PSY	6013	Factor Analysis and Structural Equation Models	Prerequisite: 5003, 5013 or equivalent. Several exploratory factor analysis models are discussed including principle factors, maximum likelihood, and alpha-factors analysis. Factor-analytic-like models such as components analysis and image analysis are also covered. Offers an overview of the application of structural equations in the social sciences. (Irreg.)
PSY	6023	Statistical Models of Tests Scores	Prerequisite: 5003, 5013 or equivalent. Topics include classical test theory, item-sampling theories, latent ability test theory, item analysis and test validation. (Irreg.)

PSY	6063	Seminar in Quantitative Psychology	Prerequisite: 5013 or permission of instructor. May be repeated with change of topic; maximum credit 15 hours. The topic or topics to be covered depend upon the faculty member or members in charge of the seminar at the time it is offered.
PSY	6073	Experimental Design for Psychology	Prerequisite: 5003, 5013, or permission of instructor. Classical experimental design applied to research problems in the behavioral sciences; completely randomized, randomized blocks, factorial, Latin square, fractional factorial and repeated measures designs, confounding, and related topics are discussed. (F)
PSY	6103	Comparative Cognition	Prerequisite: 5103, 5203, 5303, or graduate standing and permission of instructor. Evolutionary perspectives on knowledge. Includes: representation of time, space and number; abstraction, concept formation, analogical and deductive reasoning; decision and choice; communication, language and deceit. Equal emphasis given to selective pressures and mechanisms underlying animal cognition.
PSY	6123	Physiological Psychology Laboratory	Prerequisite: 5103 or graduate standing and permission of instructor. Instruction in techniques and concepts used in physiological psychology research to include neurophysiological, neuroanatomical and neuropharmacological analyses of behavior.
PSY	6133	Seminar in Biopsychology	Prerequisite: 5103, 6103, 6163 or permission. May be repeated with change of topic; maximum credit nine hours. Special topic areas in biopsychology will be considered in detail. (Irreg.)
PSY	6213	Attention and Memory	Prerequisite: 5203 or permission. Detailed examination of current data and theory in attentional and automatic processes, short- and long-term memory, implicit memory, and the effect of knowledge on memory.
PSY	6223	Quantitative Models in Cognition	Prerequisite: 5203 or permission. Survey of quantitative models in cognition, with an emphasis on memory and reaction time. Techniques for model testing and development will be taught and supported by exercises.
PSY	6253	Psycholinguistics	Prerequisite: 5203 or permission. Detailed examination of current data and theory in the psychology of language including grammar, syntactic processing, memory for language, inference making, implicatures, discourse processing, reading, and language acquisition.
PSY	6263	Introduction to Cognitive Science	Prerequisite: 5203 or permission. In-depth consideration of the interdisciplinary approach to mind. Includes topics in cognitive psychology, artificial intelligence, linguistics, philosophy, and neuro-science.
PSY	6280	Advanced Seminar in Cognitive Processes	1 to 4 hours. Prerequisite: 5203 or permission. May be repeated with change of subject matter; maximum credit 12 hours. Special topics in human learning and memory or in memory and cognitive processes will be considered in detail, emphasizing recent research literature and development of research proposals. (Irreg.)
PSY	6413	Stereotyping and Prejudice	Prerequisite: Graduate standing and permission of instructor. Classic and contemporary approaches in social psychology to the nature of prejudice and its motivational substrates, as well as the formation, content, use, and consequences of stereotypes. (Irreg.)
PSY	6423	Seminar in Social Psychology	Prerequisite: graduate standing and permission of instructor. May be repeated with change of topic; maximum credit nine hours. Intensive study of major problem areas in social psychology, including intrapersonal processes, group dynamics, the self, and research methods. Course topic will vary. (Irreg.)
PSY	6433	Seminar in Theories of Personality	Prerequisite: graduate standing in Psychology or permission of instructor. May be repeated with change of topic; maximum credit 12 hours. Intensive exploration of both traditional and modern theories of personality. Examples from several major categories of personality theory are examined through intensive primary readings, writing, and discussion. (Irreg.)

PSY	6453	Seminar in Interpersonal Relationships	Prerequisite: Graduate standing and permission of instructor. Covers classic and contemporary theories and findings in the social psychological literature on interpersonal relationships, with a focus on the biological, motivations, social and personality factors that contribute to attraction, closeness, satisfaction, and stability in dyadic relationships. (Irreg.)
PSY	6643	Seminar in Developmental Psychology	Prerequisite: graduate standing or permission of instructor. May be repeated with change of topic; maximum credit 12 hours. Involves in-depth study of theory and research in major areas of developmental psychology, e.g., social cognition, peer relations, emotions, temperament and personality, morality, aggression, theory of mind. (Irreg.)
PSY	6703	Advanced Seminar in Industrial and Organizational Psychology	Prerequisite: 5703. May be repeated with change of content; maximum credit nine hours. Focus in-depth on one or more topics examining the area with respect to new theoretical developments and major research findings. Topics may include active, emergent research areas likely to lead to changes in theoretical and professional practice including motivation, team effectiveness, work and family issues, changes in job design, etc. (Sp)
PSY	6713	Leadership Theories, Research, and Practice	Prerequisite: 5703. This graduate seminar examines the theoretical and empirical research as well as case studies on a variety of topics in the field of leadership, leadership dyads, outstanding forms of leadership (transformational, charismatic, pragmatic), politics, leading innovation and change, assessing leadership effectiveness, gender and leadership, and cross-cultural leadership. (Irreg.)
PSY	6723	Groups and Teams in Organizations	Prerequisite: 5703. This course explores the literature on groups and teams in organizations. The goal is to understand group dynamics, with particular emphasis on those group processes most relevant to organizational groups, such as primary work groups, project teams, top management teams, and so forth. Some of the topics covered include group formation and development, cohesion, social identity, social influence, intergroup dynamics, group decision making, creativity in groups, group performance, leadership in groups, and team training. (Irreg.)
PSY	6903	Seminar in Contemporary Problems	Prerequisite: five graduate courses including 5003 or permission of instructor. May be repeated with change of topic; maximum credit eighteen hours. Content dependent upon faculty member in charge of the seminar at the time it is offered. Intensive consideration of major contemporary issues in psychology. (F, Sp, Su)
PSY	6910	Readings in Psychology	1 to 4 hours. Prerequisite: advanced graduate standing (post-master's). May be repeated; maximum graduate credit nine hours. Supervised reading for advanced students. Topics chosen by agreement of instructor and student.
PSY	6920	Research in Learning, Motivation and Comparative Psychology	1 to 6 hours. Prerequisite: by permission of instructor only. May be repeated; maximum graduate credit 18 hours. Supervised individual laboratory research on major projects in an area of mutual interest with a faculty member. Upon advice of the instructor involved, enrollment for work on minor research projects in the above areas may alternatively be in 4990. (F, Sp, Su)
PSY	6923	History of Psychology	Prerequisite: graduate standing. Introduction to origin of modern psychology within science. Origins are examined from the ancient Greeks through philosophy, physiology, and astronomy. Special emphasis placed on the historical trends and the people involved.
PSY	6930	Res-Cognitive Process, Sensation-Perception, Physiological Psy	1 to 6 hours. Prerequisite: by permission of instructor only. May be repeated; maximum graduate credit eighteen hours. Supervised laboratory research on major projects in an area of mutual interest with a faculty member. Upon advice of the instructor involved, enrollment for work on minor research projects in the above areas may alternatively be in 4990. (F, Sp, Su)
PSY	6933	Seminar in Human Learning and Motivation	Prerequisite: permission of instructor. Special topics in human learning, motivation, and memory are considered in detail. Emphasis is placed on recent research literature and development of research proposals.

PSY	6940	Research in Personality: Social and Developmental Psychology	1 to 6 hours. Prerequisite: by permission of instructor only. May be repeated; maximum graduate credit 18 hours. Supervised individual laboratory research on major projects in an area of mutual interest with a faculty member. Upon advice of the instructor involved, enrollment for work on minor research projects in the above areas may alternatively be in 4990. (F, Sp, Su)
PSY	6960	Research in Industrial and Organizational Psychology	1 to 6 hours. Prerequisite: 5703 and permission of instructor. May be repeated; maximum credit twelve hours. Provide guided research experiences preparatory for master's and doctoral degrees. Topics selected in consultation with faculty member may include leadership, management ethics, and motivation. Exposure to key aspects of the research process including literature reviews, study design, data analysis, report preparation, proposal writing, paper presentation, and article writing. (F, Sp, Su)
PSY	6970	Post-Master's Research in Psychology	Prerequisite: master's degree and permission of instructor. May be repeated; maximum credit 12 hours. Supervised research for advanced graduate students on major projects of mutual interest with a faculty member. (F, Sp, Su)
PSY	6980	Research for Doctoral Dissertation	(F, Sp, Su)
PSY	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
RCDR	5000	Recorder	NULL
RCPL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
RCPL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
RCPL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
RCPL	4003	The Global City and Planning Issues	(Crosslisted with GEOG 4003; Slashlisted with 5003) Prerequisite: English 1213 and junior standing. An introduction to the concept of globalization and its effects on cities, and the city planning issues related to those effects. Characteristics, theories, and strategies of city development are reviewed. Cities are observed from several perspectives: natural and built environment, governance, society, economics, and history. No student may earn credit for both 4003 and 5003. (Sp)
RCPL	4043	Chinese Architecture, Landscape Architecture and Cities	Prerequisite: Junior or Senior standing. Introduces traditional and modern architecture, landscape architecture, and urban form in China. Intensive lecture and an instructor-guided field trip to Beijing, Shanghai, Xian, Suzhou, and Hangzhou. No student may earn credit for both 4043 and 5043. (Irreg.)
RCPL	4213	Principles and Practice of Urban Planning	(Slashlisted with 5213) Prerequisite: Junior standing. The field of urban and regional planning is a multi-dimensional discipline that seeks, by its actions, to promote the public purpose. What falls within the embrace of the public purpose varies by and within each jurisdiction. This survey course is about how the planning process, and specifically urban planners, help identify and cultivate that purpose across special interests. A student may not earn credit for both 4213 and 5213. (F)

RCPL	4253	Transportation and the City	Prerequisite: Junior standing. This course introduces students to the various modes of transportation: freight, auto, rail, mass transit, bicycle, pedestrian, among others. Students will explore the barriers to the success of these systems and examine best practices about how such deficiencies can be improved to increase urban vitality. (Sp)
RCPL	4463	Geographic Information Systems for Land Use Planning	(Slashlisted with 5463) Prerequisite: junior standing. This introductory course is concerned with theories, models, and techniques for geographical information system (GIs) and its associated spatial data management, spatial analysis, and quantitative modeling within a GIs environment for effective socio-economic decision-making for problems in the field of regional and city planning. The course introduces to students the regional and city planning applications of micro computer-based mapping and geographic information systems (GIs). Students may not earn credit for both 4463 and 5463. (F)
RCPL	4863	Environmental Assessment Methodologies	(Slashlisted with 5863; Crosslisted with CEES 4863) Prerequisite: Environmental Science 3603 or graduate standing. Develop knowledge of various environmental assessment methodologies or "tools," including assessments of socio-economic, physical/chemical and biological impacts at the pre-project, operational and post-project phases on human and non-human components of the environment. No student may earn credit for both 4863 and 5863. (Sp)
RCPL	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
RCPL	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
RCPL	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
RCPL	5003	The Global City and Planning Issues	(Crosslisted with GEOG 5003; Slashlisted with 4003) Prerequisite: graduate standing. An introduction to the concept of globalization and its effects on cities, and the city planning issues related to those effects. Characteristics, theories, and strategies of city development are reviewed. Cities are observed from several perspectives: natural and built environment, governance, society, economics, and history. No student may earn credit for both 4003 and 5003. (Sp)
RCPL	5013	History and Theory of Urban Planning	(Crosslisted with P SC and SOC 5013) Prerequisite: open to seniors in social science departments, civil engineering and architecture, and to graduate students in regional and city planning. An introductory course on the history and theory of contemporary planning, focusing on the physical, social, institutional and economic structure and dynamics of human settlements, and on the role and responsibilities of the professional planner. (F)
RCPL	5033	Sociology of Housing	(Crosslisted with SOC 5033) Prerequisite: 12 hours of sociology and graduate standing; open to graduate students in regional and city planning. A study of major developments in housing in the U.S. since 1860, including housing reform agitation, sociological problems, ecological patterns of housing areas, minimum standards for healthful housing, government intervention and its current role, and problems of providing adequate housing for different social groups. (F)

RCPL	5043	Chinese Architecture, Landscape Architecture and Cities	Prerequisite: Graduate standing. Introduces traditional and modern architecture, landscape architecture, and urban form in China. Intensive lecture and an instructor-guided field trip to Beijing, Shanghai, Xian, Suzhou, and Hangzhou. No student may earn credit for both 4043 and 5043. (Irreg.)
RCPL	5053	Planning Management	Prerequisite: 5525. Planning management draws on the skills and experiences in previous courses, internships, and/or planning studio to prepare students for the day-to-day life of a professional planner. Topics covered include planners' roles in a democratic society, citizen participation, planning ethics, communication and presentation skills, project management, proposal and grant writing, and systems management. (Sp)
RCPL	5113	Urban Planning Research Methods	Prerequisite: graduate standing or permission of instructor. Introduces the basic research and statistical methods used by urban planners and related professions. The course emphasizes application of statistical methods to urban planning problems. (F)
RCPL	5173	Urban and Regional Analysis	(Crosslisted with ECON 5173) Prerequisite: 5113 or equivalent. A lecture-seminar-problems-oriented course designed to acquaint the student with the scientific techniques used to analyze urban and regional social, economic, political and environmental problems. Oriented to reflect requirements for studies leading to the preparation of goals, policies and plans for urban and regional scale development. (Sp)
RCPL	5203	Urban Land Use Controls	(Crosslisted with P SC and SOC 5203) Prerequisite: open to seniors in social sciences, architecture and civil engineering, and to graduate students in regional and city planning. A study of the historical development of property systems; of zoning law, ordinance preparation, and administrative procedures; of subdivision regulations and other codes used in the regulation and control of land use. (Sp)
RCPL	5213	Principles and Practice of Urban Planning	(Slashlisted with 4213, Crosslisted with GEOG 5213) Prerequisite: open to seniors in social science departments, architecture and civil engineering, and to graduate students in regional and city planning. Examines the physical, social, economic, and public interest determinants of land use; the economic, population, and land use studies required to provide the basis for planning; space and location requirements and design characteristics for residential, commercial, industrial, and public uses of land; and the study of urban traffic as a function of land use in terms of structure and systems of movement. A student may not earn credit for both 4213 and 5213. (F)
RCPL	5343	Urban Facilities Planning	(Crosslisted with ARCH 5343) Prerequisite: upper-division or graduate standing. Long- and short-term considerations in urban facilities planning. Tactical facility planning and management in organizational environment; site, layout, economic criteria, human factors, facility planning-programming standards.
RCPL	5353	State and Local Public Finance and Budgeting Systems	(Crosslisted with P SC 5353) Prerequisite: graduate standing or permission. An overview of the process and methods for local capital improvement programs and capital budget preparation, and an examination of the relationships between local development policies and fiscal decision making, including revenue potential. (Irreg.)
RCPL	5423	Transportation Policy and Politics	Prerequisite: Graduate standing or consent of instructor. Covers the developments of transportation policies in the United States, supplemented with international examples as appropriate, by focusing on exploring their economic, social, and political contexts. (Irreg.)
RCPL	5453	Public Mass Transportation Systems	(Crosslisted with CEES 5453) Prerequisite: 3884 or permission of instructor. Service characteristics of the principal modes of public mass transportation with emphasis on urban transit (fixed-route bus, light rail, subways, commuter rail, paratransit, taxi); legislation and regulations; institutional structures; financing; need and demand studies; planning strategies; management; operations and record keeping; case studies of leading systems. (Irreg.)

RCPL	5463	Geographic Information Systems for Land Use Planning	(Slashlisted with 4463) Prerequisite: graduate standing or permission of instructor. This introductory course is concerned with theories, models, and techniques for geographical information system (GIs) and its associated spatial data management, spatial analysis, and quantitative modeling within a GIs environment for effective socio-economic decision-making for problems in the field of regional and city planning. The course introduces to students the regional and city planning applications of micro computer-based mapping and geographic information systems (GIs). Students may not earn credit for both 4463 and 5463. (F)
RCPL	5483	Urban and Regional Transportation Planning	(Crosslisted with CEES 5483) Prerequisite: graduate standing or permission. Characteristics of urban and regional passenger and freight demand; travel demand forecasting methodologies; long- and short-range planning strategies; role of governments; characteristics of major modes of transport; decision-making strategies; case studies. (Sp)
RCPL	5493	Transportation and Land Development	(Crosslisted with CEES 5493) Prerequisite: graduate standing or permission. Study of interactions between land development activity and the transportation network. Application of planning and design techniques to manage the impacts of development upon the transportation system.
RCPL	5513	Subdivision and Planned Unit Development Planning	Prerequisite: graduate standing. Theories, concepts, and methods used to plan and assess the subdivision of land based on typical legal code requirements. Topics include legal requirements, human settlement issues, economic aspects, environmental analysis, infrastructure systems, land use, and city planning requirements of preliminary and final plats. (Sp)
RCPL	5522	Comprehensive RCPL Project: Reporting and Implementation	Prerequisite: Graduate standing. This is the second course in a two-course sequence that is intended to fulfill the 5-credit studio requirement in Masters of Planning curriculum and Studio V in the MLA curriculum. This second course focuses the data analysis and presentation of recommendations to a community. This will involve quantitative or qualitative analysis of gathered data, the development of recommendations and the preparation of professional deliverables to a client. Laboratory (F, Sp, Su)
RCPL	5523	Comprehensive RCPL Project: Research and Plan Making	Prerequisite: Graduate standing. This is the first course in a two-course sequence that is intended to fulfill the 5-credit studio requirement in Masters of Planning curriculum and Studio V in the MLA curriculum. This first course focuses the data collection for community projects as well as community engagement aspects of professional planning practice. These elements are often the most time consuming elements of professional practice and usually precede actually "plan making". These will included engaging in quantitative or qualitative data collection as well as facilitating opportunities for citizen participation in planning for their communities. Laboratory (F, Sp, Su)
RCPL	5525	Comprehensive Regional And City Planning Project	Comprehensive Regional And City Planning Project. Prerequisite: 5513 Or 5515. Theories, Concepts, And Methods Used To Develop And Implement A Comprehensive Regional Or City Plan. Topics Include The Methods To Assess, Analyze, Plan, And Implement The Elements Of A Comprehensive Plan Such As Citizen Participation, Human Settlement Issues, Demographics And Economics, Environmental Factors, Infrastructure Systems, Transportation Systems, Land Use, Community Facilities, And Typical Legally Mandated City Planning Processes. Laboratory (F)
RCPL	5603	Environmental Protection	(Crosslisted with CEES 5603) Prerequisite: permission of instructor. Mitigation of human health and environmental problems with a focus on differences between developing and developed countries. Topics include baseline heath indicators, population growth, toxicology, epidemiology and risk assessment, water and waste-water, air quality, solid and hazardous waste and environmental management systems. (F)

RCPL	5643	Urban Design Analytics	(Crosslisted with ARCH 5643) Prerequisite: graduate standing in Architecture or Regional and City Planning. A survey of analysis techniques applicable to the field of urban design, including the interpretation of basic demographic statistics, an introduction to survey and observation research techniques, visual survey methodologies, environmental assessment strategies, forecasting, gaming and decision analysis. (Sp)
RCPL	5653	Urban Design Seminar	(Crosslisted with ARCH 5653) Prerequisite: permission of instructor. May be repeated with change of content; maximum credit six hours. Advanced seminar in urban design problems and issues through an in-depth and on-site investigation and evaluation of significant national and international urban development projects. Topics covered will be announced by instructor in the term prior to course offerings. (F, Sp)
RCPL	5713	Urban Economic Development Planning	Prerequisite: graduate standing or permission of instructor. An introductory course on planning for economic development in the United States at the local, substate and state level. Topics include organizing the economic development planning process, identifying appropriate development strategies, the role of different community components, business attraction and retention, infrastructure issues, industrial parks, financing, training, and programmatic assistance currently available. (Sp)
RCPL	5723	Community Development and Revitalization	Prerequisite: graduate standing or permission. An overview of community development, revitalization and preservation programs, their historical context, principles and procedures, current approaches and function in the planning process. Topics also include housing, public/private cooperation, financing methods, historic issues, legal context and case studies. Laboratory (F, Sp)
RCPL	5733	Real Estate Development in Urban Planning	Prerequisite: graduate standing or permission. A survey of the real estate development process that introduces the urban planner and other professions to the concepts and terminology of essential topics, beginning with site selection and including financing, zoning, forms of ownership, market feasibility, information resources, working with related professions, marketing and transferring ownership of property.
RCPL	5813	Environmental Planning Methods	Prerequisite: graduate standing or permission. An introduction to the use of environment factors in the urban planning process. Current methodologies for minimizing detrimental environmental impacts are introduced and applied to case study examples. Alternative approaches are compared and contrasted.
RCPL	5823	Rural and Regional Planning	Prerequisite: graduate standing or permission of instructor. Examines regional planning and the methods it utilizes. Explores issues of land use competition, federal and state land utilization policies, and other matters pertaining to rural regional environmental planning process. (Sp)
RCPL	5853	World Economic Development	(Crosslisted with ECON 5853) Prerequisite: graduate standing. The economics of the developing nations; a review and analysis of common problems and issues. (Irreg.)
RCPL	5863	Environmental Assessment Methodologies	(Slashlisted with 4863; Crosslisted with CEES 5863) Prerequisite: Environmental Science 3603 or graduate standing. Develop knowledge of various environmental assessment methodologies or "tools," including assessments of socio-economic, physical/chemical and biological impacts at the pre-project, operational and post-project phases on human and non-human components of the environment. No student may earn credit for both 4863 and 5863. (Sp)

RCPL	5893	Historic Preservation Planning	Prerequisite: Graduate standing. Through this course, students will: understand and be able to articulate the social and economic values associated with preservation; Gain exposure to and understanding of local, state and federal guidelines for delineation and regulation of historic districts and buildings; Develop case studies in economic feasibility and adaptive reuse, reconstruction and rehabilitation; Understand the role of the State Historic Preservation Office; Understand design-based and economic development based community and district revitalization strategies. (F)
RCPL	5960	Directed Readings	1 to 6 hours. Prerequisite: enrollment in regional and city planning. May be repeated; maximum credit six hours. Designed to permit the individual student to read extensively in one or more phases of urban or regional planning. (F, Sp)
RCPL	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
RCPL	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
RCPL	5990	Special Studies in Urban and Regional Planning	2 to 6 hours. Prerequisite: enrollment in regional and city planning. May be repeated with change of subject matter; maximum credit 15 hours. A research problems course designed for the specific needs of students desiring intensive study in a specialized phase of urban or regional planning. Studies are provided in urban and regional analysis, community organization and action programs, and similar areas of concern. Laboratory (F, Sp, Su)
RCPL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
RCPL	6520	Field Studies	1 to 6 hours. Prerequisite: 5213, 5613, enrollment in regional and city planning or permission of staff. Provides the individual student with practical experience in working on a professional staff on a specific planning project. The design of the project and the staff situation under which the student will work is carefully controlled to provide opportunity for significant and meaningful experience. (F, Sp, Su)
RCPL	6643	Urban Design Theory	(Crosslisted with L A 6643 and ARCH 6643) Prerequisite: graduate standing. A survey of theory relevant to the urban design process, including social and behavioral concepts, visual and aesthetic theory, spatial and geographic factors of urban form. (Sp)
RCPL	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
RCPL	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
RCPL	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
RELS	1113	Introduction to Religious Studies	Examines inner workings and external practices of religion, including various definitions of religion, and how religion functions in the world through ritual, myth, and symbol. Analysis of varieties of religious experience, human destiny and the use of sacred texts among the world's religions. (F, Sp, Su) [IV-WC]
RELS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

RELS	2003	Special Topics in Introduction to Religious Studies	May be repeated with change of content; maximum credit six hours. Various topics in introduction to religious studies including comparative studies and theories in the study of religion. (Irreg.)
RELS	2013	Introduction To Religious Traditions	May be repeated with change of content; maximum credit nine hours. An introduction to religious traditions, examining traditions such as Buddhism, Hinduism, Islam, Christianity, and native traditions as well as other religious traditions. (Irreg.)
RELS	2143	Introduction to the Bible	Examines Biblical texts to better understand the Bible as the scriptural background of both Judaism and Christianity. Introduces students to modern scholarship and current debates surrounding the composition, themes, content, and dating of Biblical texts, and pays special attention to the historical and geographic circumstances that surround the composition of Biblical texts. (Irreg.)
RELS	2303	Islamic Religious Tradition	An exploration of the historical development of the world's second largest religious tradition. Investigation of the major tenets of Islam, the Qur'an, the life of Muhammad, ritual and worship, development of Islamic law and the spread of Islamic civilization and ideas. (Irreg.) [IV-NW]
RELS	2403	Introduction to Comparative Religion	A general study of the world's most representative religious traditions, including Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, and Islam. A comparative consideration of the differences and similarities among the religions. (Irreg.) [IV-NW]
RELS	2413	Religion, Culture, and the Meaning of Life	Examines religion as a resource for understanding values and for making meaning of life. The study will include comparative consideration of some religious traditions, as well as critical questions and analysis regarding the proper role and adequacy of religion. (Irreg.) [IV-WC]
RELS	2503	Interpreting Muslim Voices: A Textual Survey of Islam	A close reading and analysis of writings and other forms of expression by and about Muslims, such as the Qur'an, biographies of the prophet Muhammad, Hadith, legal and theological and mystical writings, ritual practices, responses to the Christian west, Islamist writings, modernist critiques, American Muslim voices, and news media. (Irreg.) [IV-NW]
RELS	2703	Introduction to Buddhism	An introductory study of Buddhism, including sacred text and concepts; Examines the four noble truths, the noble eight-fold path; the four immeasurables, and the three traditions of Buddhism; Theravada, Mahayana, and Vajrayana Buddhism. Examines the development of Buddhism from its Asian origins to its adaptation to western culture. (Irreg.) [IV-NW]
RELS	2713	Introduction to Hinduism	Study of the tradition of Hinduism. Examines the historical development of the tradition as well as the thoughts of modern philosophers. Examines Aryan and early Indian culture, epics, scriptures, and philosophies that have developed. Explores fundamental premises and guiding principles and organic process of change. Generally inquires into the historical development of the Hindu religious tradition. (Irreg.) [IV-NW]
RELS	2900	Special Topics in Religious Studies	May be repeated with a change of content; Maximum credit six hours. Special topics in religious studies not accommodated by the current curriculum. (Irreg.)
RELS	2903	Introductory Topics in Judaic Religious Tradition	May be repeated with a change of content; Maximum credit six hours. An introductory course in the religious traditions of Judaism. Includes historical context of the tradition, basic teachings and different approaches to their interpretations. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	2913	Introductory Topics in Christian Religious Tradition	May be repeated with a change of content; Maximum credit six hours. An introductory course in the religious tradition of Christianity. Includes historical context of the tradition, basic teachings, and different approaches to their interpretations. Examines organic process of religious and/or philosophical change. (Irreg.)

RELS	2923	Introductory Topics in Islamic Religious Tradition	May be repeated with a change of content; maximum credit six hours. An introductory course in the religious tradition of Islam. Includes historical context of the tradition, basic teachings and different approaches to their interpretations. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	2933	Introductory Topics in Eastern Religious Traditions	May be repeated with a change of content; maximum credit six hours. An introductory course in a religious tradition such as Buddhism, Hinduism, Shinto, Taoism, Confucianism or other Eastern tradition. Includes historical context of the traditions, basic teaching and different approaches to their interpretation. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	2943	Introductory Topics in Indigenous Religious Traditions	May be repeated with a change on content; maximum credit six hours. An introductory course in an indigenous or folk religious tradition. Includes historical context of the tradition, basic teachings and different approaches to their interpretation examines organic process of religious and/or philosophical change. (Irreg.)
RELS	2960	Directed Readings	1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major. Topics will cover materials not usually presented in the regular course offerings. (F, Sp, Su)
RELS	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
RELS	3013	Special Topics in Religious Texts	Prerequisite: junior standing or permission of instructor. May be repeated with change of text; maximum credit nine hours. An examination of religious texts, and may include the Koran, Jewish scriptures, Christian scriptures, Bhagavad Gita, Vedas, etc. (Irreg.)
RELS	3023	Special Topics in Religious Traditions	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit nine hours. An examination of religious traditions, and may include traditions such as Buddhism, Hinduism, Islam, Judaism, Christianity, native traditions or other religious traditions. (Irreg.)
RELS	3033	Special Topics in Religion, Literature & the Arts	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit nine hours. An examination of the relationship of religion, literature, and the arts, and may include study of various religious expressions through art, music, or literature; or the influence of religious traditions upon the art, music, or writing of a culture or society. (Irreg.)
RELS	3043	Special Topics in Religion, Social Organization & Politics	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit nine hours. An examination of issues and topics in religion, social organization and politics. (Irreg.
RELS	3053	Special Topics in Religion and History	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit nine hours. An examination of religious phenomena throughout history, appearance and development of religious traditions, or special issues or topics in religion and history. (Irreg.)
RELS	3063	Special Topics in Religion and Philosophy	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit nine hours. An examination of issues and topics in religion and philosophy. (Irreg.)
RELS	3113	Internship in Religious Studies	Prerequisite: Major in Religious Studies, junior standing, and permission of instructor. Practical vocational experience in the community directed by a Religious Studies faculty member; includes a significant research paper. (Irreg.)
RELS	3123	Comparative American Christianity	Prerequisite: junior standing or permission of instructor. An overview and analysis of American Christianity, including the comparison of various denominational origins and traditions. (Irreg.)

RELS	3133	Introduction to Christianity	Prerequisite: junior standing or permission of instructor. Broad phenomenological study of the religious tradition of Christianity. Examines origins and early myths, the teacher and key element of his teachings, founders of the early movements, the spread of the tradition, sacred texts, key practices and rituals, symbols, moral codes and ethical issues, polity and leaders, challengers to its system of faith, and the globalization of Christianity. (Irreg.)
RELS	3143	Christian Scriptures	Prerequisite: Junior standing or permission of instructor. Using historical criticism, students will study the dating authorship, historical setting, and liturgical and literary forms of the texts. Attention will be given to the canonization process and a brief look at some of the deuteron-canonical texts from recent archaeological finds that shed new light on the history and development of the Christian sacred texts. (Irreg.)
RELS	3153	Historical Jesus	Prerequisite: Junior standing or permission of instructor. Examines the character in the Christian Scriptures known as Jesus. Study of the historical figure through a variety of scholarly perspectives in order to understand the diversity of beliefs within the Christian religion. Employs a variety of scholarly and historical schemes for understanding and interpreting the man and his life. (Irreg.)
RELS	3163	New Testament/Early Christian Literature	Prerequisite: junior standing or permission of instructor. Examines the history and literature of the earliest Christian communities, from the lifetime of Jesus through the legalization of Christianity under the Emperor Constantine. Special emphasis on understanding the historical context of early Christian writings, especially the letters of Paul and a range of canonical and apocryphal gospels. (Irreg.)
RELS	3173	The Bible in the 21st Century	Prerequisite: junior standing. Investigates how people from various parts of the contemporary world understand the meaning and significance of the Bible. Questions addressed include: How do people make this ancient book applicable to contemporary living, and what are the possibilities and pitfalls of such an endeavor? In what ways does a person from Oklahoma read the Bible differently from someone in Africa or Asia? What kinds of competing methods of interpretation are used in the contemporary academic study of the Bible? What are the range of opinions about the role of the Bible in public life, particularly here in America? (Irreg.)
RELS	3183	Lost Christian Scriptures	Prerequisite: Junior standing or permission of instructor. This course studies the vast array of writings that were read by early Christians but not included in the Bible. Readings will include originally Jewish texts that were popular with Christians, such as the Books of Enoch and the Life of Adam and Eve; apocryphal gospels attributed to Thomas, Peter, and other apostles; narratives about Jesus' birth and childhood, such as the Revelation of the Magi and the Childhood Deeds of Jesus; accounts of the apostles' travels, teaching, and miracles; and fragmentary Gnostic Christian writings discovered in Egypt. Familiarity with the New Testament will be helpful for participants, but not required. (Irreg.)
RELS	3203	Women, Religion, and Secularism	Prerequisite: junior standing or permission of instructor. Examines the historical and contemporary experiences of women in light of the ways in which religious beliefs and ideologies influence religious, social, economic, and political institutions. Investigates how the role of women is used symbolically in ethno-religious conflicts and the contemporary political role of religion and its impact on women's lives. (Irreg.)

RELS	3213	Religion and Violence	Prerequisite: junior standing or permission of instructor. Examines the causes, characteristics, and consequences of religious violence around the world, and investigates religion's unique relationship to violence as the only institution other than the state that can legitimate violent action. Treats the particular ways in which religion frames political violence in terms of a struggle between the sacred and the profane, good and evil. Focuses on theories from sources such as sacred texts, social/psychological explanations, and global processes. (Irreg.)
RELS	3303	Conceptions of the Afterlife	Prerequisite: junior standing or permission of instructor. An examination of the variety of answers given to the question, "what happens after death?" Particular attention is given to the views of Jews, Christians, Muslims, Hindus, and Buddhists and the ways these views related to life in this world. Conducted in a seminar format. Students will also explore ways the afterlife is presented in popular movies. (Irreg.) [IV-NW]
RELS	3313	World Religions in America	Prerequisite: junior standing or permission of instructor. The United States of America is arguably the world's most religiously diverse nation at the beginning of the 21st century. The framers of the Constitution could not have imagined the scope of religious diversity in the United States today when they wrote the famous sixteen words of the First Amendment: "Congress shall make no law respecting an establishment of religion or prohibiting the free exercise thereof...." This course explores the history of and contemporary challenges and opportunities presented by the presence of and freedom for adherents of the world's religions in America. Through readings, class lectures and discussion, guest lectures, and access to superb electronic resources, students will become conversant with multiple factors that have shaped the American experience and are as current as the headlines in today's news. (Irreg.)
RELS	3403	Death, Grief, and Growth	Prerequisite: junior standing or permission of instructor. Explores the universal human experience of dying, death, and grief. Using an interdisciplinary approach, students will discuss such topics as the dying process, grief, mourning, American attitudes toward death and dying, religious perspectives on death, the funeral, suicide, euthanasia, and war. (F) [IV-WC]
RELS	3413	Approaches to the Study of Religion	Prerequisite: junior standing or permission of instructor. Examines ways religion may be studied in order to better understand it. The course will include theory and the methodologies of the social sciences and humanities. (Irreg.)
RELS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
RELS	3533	The Qur'an	Prerequisite: Junior standing or permission of instructor. Intensive study of the Qur'an, its major themes, and literary forms, with attention to a range of classical and contemporary discourses about the Qur'an, emphasizing the great variety of ways in which Muslims and non-Muslims have analyzed and interpreted the Qur'an. (Irreg.) [IV-NW]
RELS	3543	Islamic Law	Prerequisite: Junior standing or permission of instructor. A close reading and discussion of primary texts (scriptural, classical, and modern) and accounts of court cases, focused on one aspect of Islamic law such as equity, violence, authority, or gender. (Irreg.) [IV-NW]
RELS	3563	Islamic Theology	Prerequisite: junior standing or permission of instructor. A close reading and discussion of primary texts (the Qur'an creeds, classical theological arguments, and modern writings) on major theological problems such as salvation, God, revelation, and religious pluralism. (Irreg.) [IV-NW]

RELS	3573	Jesus in the World's Religions	Prerequisite: junior standing or permission of instructor. This seminar examines some of the great diversity of ways in which Jesus has been understood and imagined by adherents of five religious traditions (Christianity, Judaism, Islam, Hinduism, and Buddhism). Rather than asking who Jesus actually was, we will focus on how he has been represented, and why. (Irreg.)
RELS	3583	Comparative Sacred Texts	Prerequisite: junior standing or permission of instructor. This seminar examines a selection of passages from texts that are sacred to five religious traditions (Judaism, Christianity, Islam, Hinduism, and Buddhism), as well as selections from later commentaries that interpret those sacred texts. The chosen texts relate to the origin of the world, the human condition, and salvation from that condition - especially as achieved through sacrifice. As we carefully and collectively build our mental models of how each text and each commentary envisions the human condition and the way to salvation from it, we will test the usefulness of comparison between different traditions as a tool for understanding scriptures, commentaries, and religions. We will also try to develop some general theories about how scriptures function, and how they are used and interpreted, within the religious communities that hold them sacred. (Irreg.)
RELS	3603	Legal Issues in Church/State Relations	Prerequisite: junior standing or permission of instructor. Examines case and statutory laws that have implications for the legal relationship between church and state. Acquaints students with the use of legal research materials in order to answer legal questions; Students will read and analyze material regarding the history, sociological, and political issues surrounding the religion clause of the constitution. (Irreg.)
RELS	3613	Modern Catholicism	Prerequisite: junior standing or permission of instructor. Study of the origins and development of the Catholic tradition and its relationship to other Christian and Non-Christian traditions. Explores the highlights of Catholic church history, and development of doctrinal positions, with a focus on the fundamentals of Catholic social teaching and their place in historical debates about industrial capitalism, Marxism, liberal democracy, religious freedom, and post-modernity. (Irreg.)
RELS	3623	Discovering the Apostle Paul: His Life and Thoughts	Prerequisite: junior standing or permission of the instructor. Explores who Paul claimed to be within his own Jewish and then Greco-Roman first-century context. Explores the letter-writing medium, his view of law, the role of women, resurrection and afterlife, and his goals for the church. (Irreg.)
RELS	3633	Religious Leaders for Social Justice	Prerequisite: junior standing or permission of instructor. Examines social and political leaders taking a stand against injustice by both speaking and acting against it. They are called religious in that they derive part of their inspiration and motivation from their faith tradition. Surveys the writing of activists from among various faith traditions for life experiences and personal attributes that give rise to their ability to speak out and lead. (Irreg.) [IV-NW]
RELS	3643	Special Topics in Religious Studies: Travel Abroad	Prerequisite: RELS major or minor, junior standing, permission of instructor and satisfaction of criteria established by OU Education Abroad office (including overall GPA of 2.5). May be repeated with change of content/location; maximum credit six hours. An examination of themes, shifts, events or major sites of various religions. (Irreg.)
RELS	3653	Jesus On Screen and Off	Prerequisite: junior standing or permission of instructor. Surveys common understandings of the person and goals of Jesus, and the roles of other Biblical figures, through film and literature. Examines the role film plays in religious understanding, the role of culture in religion, the variety of conceptions of Jesus, and key issues of the Christian tradition. (Irreg.)
RELS	3663	Roman Religion	Prerequisite: junior standing or permission of instructor. The course examines religious practices and beliefs in the Roman world from the founding of the Roman Republic to Late Antiquity through a survey of literary and archaeological evidence. (Irreg.)

RELS	3673	Church Fathers	Prerequisite: junior standing or permission of instructor. Examines how Christian theologians, apologists, and biographers attempted to define an orthodox Christianity that was distinct from Greek and Roman religions, Judaism, and other forms of Christianity between c. 150-450 C.E. Focuses on literary and archaeological evidence for the varieties of Christianity in the period and early Christian doctrinal controversies. Texts include selected works of Greek and Latin church fathers and Biblical texts. (Irreg.)
RELS	3683	Christian Heresies	Prerequisite: junior standing. Investigates the relationship between religious orthodoxy and heresy, and how the clamor for the former only generated more of the latter. We will examine what became orthodox and why and how, and what heresies emerged, persisted or re-emerged, and under what conditions. We will examine how cultural, socio-economic, ethnic, and political/power relationships impinged upon the definition and evolution of authority, orthodoxy, and heresy. The goals of this course include the tracing of the recurrence of ancient heretical ideas into the modern period, and the consequences of the orthodox/heterodox dialectic across Christian history. (Irreg.)
RELS	3693	Greek Religion	Prerequisite: junior standing or permission of instructor. Examines the religious rituals, beliefs, and sacred sites of the ancient Greeks. Considers such topics as the relationship between myths and ritual, sacred time and space, concepts of the afterlife, and the role of religion in the family and city-state. (Irreg.)
RELS	3723	Buddhist Meditation Traditions	Prerequisite: junior standing or permission of instructor. Explores in detail systems and techniques of meditation within different traditions of Buddhism. Meditation is understood as necessary to fulfilling the highest goals of Buddhism. Yet different traditions within Buddhism have had different understandings of what meditation entails and how it relates to other aspects of the complex of the Buddhist tradition as a whole. Course will examine different conceptions of meditation and how these different conceptions affect the understanding of the Buddhist life. Also considers from the perspective of the philosophy of religion, the issue of the validity of religious experience in meditation as a source of gnosis and self-transformation that crosses religious and sectarian boundaries. (Irreg.) [IV-NWC]
RELS	3900	Special Topics	1 to 4 hours. Prerequisite: junior standing or permission of instructor. May be repeated with change of topic; maximum credit nine hours. Topics in Religious Studies not accommodated by the existing curriculum. (Irreg.)
RELS	3903	Topics in Judaic Religious Tradition	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit six hours. An upper division course in the religious tradition of Judaism. Includes historical context of the tradition, basic teachings and different approaches to their interpretations. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	3913	Topics in Christian Religious Tradition	Prerequisite: junior standing or permission of instructor. May be repeated with change of content; maximum credit six hours. An upper division course in the religious tradition of Christianity. Includes historical context of the tradition, basic teachings and different approaches to their interpretations. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	3923	Topics in Islamic Religious Tradition	Prerequisite: junior standing or permission of instructor. May be repeated with change of content; maximum credit six hours. An upper division course in the religious tradition of Islam. Includes historical context of the tradition, basic teachings and different approaches to their interpretations. Examines organic process of religious and/or philosophical change. (Irreg.)

RELS	3933	Topics in Eastern Religious Traditions	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; Maximum credit six hours. An upper division course in a religious tradition such as Buddhism, Hinduism, Shinto, Taoism, Confucianism or other eastern tradition. Includes historical context of the tradition, basic teachings and different approaches to their interpretation. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	3943	Topics in Indigenous Religious Traditions	Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit six hours. An upper division course in an indigenous or folk religion. Includes historical context of the tradition, basic teachings and different approaches to their interpretation. Examines organic process of religious and/or philosophical change. (Irreg.)
RELS	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Topics will cover materials not usually presented in the regular course offerings. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
RELS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
RELS	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. Topics will cover materials not usually presented in the regular offerings. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
RELS	3990	Independent Study	1 to 3 hours. Prerequisite: 1113, Anthropology 1823, Philosophy 1203 or 2403; junior standing, and permission of instructor. May be repeated; maximum credit six hours. Through a written contract, independent study may be arranged for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or field projects. (F, Sp, Su)
RELS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
RELS	4323	Capstone	Prerequisite: Major in Religious Studies and permission of instructor. Capstone provides the opportunity to integrate knowledge about the major and apply it to a project culminating in a presentation and senior paper. The project will develop a selected problem, issue, or controversy in religious studies. (F, Sp) [V]
RELS	4640	Field Study in Religious Studies	(Slashlisted with 5640) 1 to 6 hours. Prerequisite: junior standing and permission of instructor or RELS program. May be repeated with change of content/location; maximum credit 12 hours. Students participate in excavation and field study of material culture. Course combines lectures, lab, discussion, and/or research. The subject matter depends upon the specific summer session. No student may earn credit for both 4640 and 5640 for the same content/location. (Su)
RELS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
RELS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

RELS	4990	Independent Study	1 to 3 hours. Prerequisite: 1113, Anthropology 1823, Philosophy 1203 or 2403; senior standing, and permission of instructor. May be repeated; maximum credit six hours. Through a written contract, independent study may be arranged for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or field projects. (F, Sp, Su)
RELS	5640	Field Study in Religious Studies	(Slashlisted with 4640) 1 to 6 hours. Prerequisite: graduate standing, permission of instructor or RELS program. May be repeated with a change of content/location; maximum credit twelve hours. Students will participate in excavation and field study of material, social, and visual culture. Combines lectures, lab, discussion, and/or research. The subject matter depends upon the specific summer session. No student may earn credit for both 4640 and 5640. (Su)
RELS	5960	Independent Study In Religious Studies	1 to 3 hours. Prerequisite: graduate standing and/or permission of instructor. May be repeated with change of content; maximum credit nine hours, maximum of six hours with one professor/instructor. Independent study/directed reading arranged between the professor and student on a special topic in religious studies, to give students the opportunity to complete intensive readings in field of study under direct guidance of the student's advisory committee. F, Sp, Su)
RELS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
RELS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
RELS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
RELS	6960	Advanced Readings in Religious Studies	1 To 3 Hours. Prerequisite: permission of instructor; student must be at PhD level. May be repeated with change of content; maximum credit nine hours. Advanced independent study/directed reading, arranged between the professor and student on a special topics in religious studies. Designed to give students the opportunity to complete intensive readings in field of study under direct guidance of his/her advisory committee. (F, Sp, Su)
RELS	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
RELS	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
RPHD	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
RPHD	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
RPHD	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.

RPHD	6022	Graduate Recital-Doctor of Philosophy Degree	Prerequisite: concurrent enrollment in 6010, permission of adviser and instructor. May be repeated for credit with the approval of the student's advisory committee. May not be elected during first enrollment. Preparation and performance of a public recital. (F, Sp, Su)
RUSS	1115	Beginning Russian	An elementary course in understanding, speaking, reading and writing Russian. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]
RUSS	1225	Beginning Russian (Continued)	Prerequisite: 1115. An elementary course in understanding, speaking, reading and writing Russian. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp) [I-FL]
RUSS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
RUSS	2003	Masterpieces of Russian Literature in Translation	Acquaints the students who have had no previous background in the Russian language or Russian literature with the most important writers of the classical period of Russian culture. Analyzes the works of Russian classics in depth with consideration of their impact beyond the frontiers of Russia. May not be used to meet College of Arts and Sciences intermediate foreign language requirement. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (Correspondence)
RUSS	2113	Intermediate Russian	Prerequisite: 1225. Training in reading, writing, speaking, and understanding contemporary Russian. Emphasis on expansion of vocabulary and strong reinforcement of grammatical structures. (F, Sp)
RUSS	2223	Intermediate Russian (Continued)	Prerequisite: 2113. Continued training in reading, writing, speaking, and understanding contemporary Russian. Emphasis on expansion of vocabulary and strong reinforcement of grammatical structures. (F, Sp)
RUSS	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
RUSS	3023	Beginning Business Russian	Prerequisite: twenty hours of Russian. Intended to enable Russian students to read, write, and translate business Russian. Readings in this course will consist of translating contracts, agreements, and other areas of commercial correspondence. (Irreg.)
RUSS	3073	Russian Conversation	Prerequisite: RUSS 2113. Training in reading, writing, and understanding contemporary Russian. Emphasis on expansion of vocabulary and strong reinforcement of grammatical structures. (F, Sp)
RUSS	3123	Advanced Business Russian	Prerequisite: twenty hours of Russian, 3023. Enables Russian reading and translation of more advanced Russian business texts. Readings will consist of translating business orders, contracts, agreements and other areas of commercial correspondence. (Correspondence)
RUSS	3203	Scientific Russian	Prerequisite: ten hours of Russian. Training in the reading of scientific material of gradually increasing difficulty. (Irreg.)
RUSS	3213	Scientific Russian	Prerequisite: 3203. Training in the reading of scientific material of gradually increasing difficulty. (Correspondence)
RUSS	3313	Russian Phonetics	Prerequisite: 2113. A detailed study of the sounds of Russian and the inculcation of proper speech habits. (Irreg.)
RUSS	3323	Advanced Russian Reading and Composition	Prerequisite: 2223. A systematic grammar review with a view toward improving the student's control of written Russian. (F)
RUSS	3423	Advanced Russian Reading and Composition (Continued)	Prerequisite: 3323. A systematic grammar review with a view toward improving the student's control of written Russian. (Sp)

RUSS	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
RUSS	3523	Interpreting the Russian Media	Prerequisite: 2223. Focus on developing higher-level receptive and productive language skills through an exposure to authentic texts from Russian print media and television news reports. Students will focus on vocabulary-building, recognizing and employing journalistic conventions, reading between the lines, understanding nuance and enhancing their awareness of cultural references. (Irreg.)
RUSS	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
RUSS	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
RUSS	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp)
RUSS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
RUSS	4123	Contemporary Russian Prose	Prerequisite: 3423 or permission of instructor. Post-Soviet Russian literature, i.e., literature of the late Soviet underground and works written after 1991. The politics, re-assessment of history, gender, family, national identity, war, and immigration will be addressed and part of the class discussions. This course will also help students to understand the social context that influences the lives of Russians in the present. (F)
RUSS	4133	Contemporary Russian Poetry	Prerequisite: 3423 or permission of instructor. Close reading and analysis of Russian poetry in the period of post-modernism (1980's - 2000's). Poetic developments of this period are viewed against the background of Russian modernism of the 1920's and the processes that took place in Russian poetry of the soviet era to which this course dedicates a fair amount of attention. Students will understand the various motifs and stylistic tendencies in poetry which is being written today. (F)
RUSS	4173	Topics in Nineteenth-Century Russian Literature and Culture	Prerequisite: 3423. May be repeated once with change of content; maximum credit six hours. A course for advanced students of the Russian language. All reading assignments and lectures will be in Russian. (F)
RUSS	4183	Topics in 20th and Post-20th Century Russian Literature and Culture	Prerequisite: 3423. May be repeated once with change of content; maximum credit six hours. A course for advanced students of the Russian language. All reading assignments and lectures will be in Russian. (Sp) [V]
RUSS	4613	Advanced Russian Conversation	Prerequisite: 3073, 3323. Conversation on topics in Soviet history, government, literature and sociology with emphasis on the particular terminology of each of these fields. (Sp)
RUSS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

RUSS	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special Topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
RUSS	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp)
RUSS	5910	Problems in Research	2 to 4 hours. May be repeated with change of content; maximum credit nine hours. An individual course of intensive research with the area and problem to be determined by the student and directing instructor. (F, Sp)
RUSS	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
RUSS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
RUSS	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
RUSS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
S WK	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
S WK	2113	Introduction to Social Work	Prerequisite: sophomore or junior standing. Defines the profession of social work and describes its historical development. Provides foundation knowledge in social work values, professional ethics, and the history of social welfare and social services policy in the United States. (F, Sp)
S WK	2223	Statistics for Social Work	Prerequisite: DMAT 0123, MATH 0123, or satisfactory score on math placement exam. Introduction to statistics and data analysis in social work and the helping professions. Covers descriptive statistics (univariate and bivariate), inferential statistics (estimation and significance tests) and data interpretation (causality and generalizability). (F, Sp, Su) [I-M]
S WK	2970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
S WK	3003	Interviewing Skills for Generalist Practice	Prerequisite: majors only. Introduction to basic interviewing and communication skills utilized in culturally sensitive, generalist social work practice. Emphasis on the development of self-awareness and skill development and on providing both didactic and experiential learning. (F)
S WK	3103	Generalist Practice with Individuals and Families	Prerequisite: majors only. First of three generalist social work practice courses explicates a generalist perspective that focuses on the knowledge, values, skills, and techniques appropriate for engagement, assessment, intervention and evaluation with individuals and families. (F)
S WK	3113	Generalist Practice with Families and Groups	Prerequisite: S WK 3103. The second of three generalist social work practice courses; explicates a generalist perspective that focuses on the knowledge, values, skills and techniques appropriate for engagement, assessment, intervention, and evaluation with families and small groups. (Sp)

S WK	3233	Human Behavior: Individuals and Families	Prerequisite: majors only. Within a social systems framework and bio-psychosocial perspective, students learn empirically based theories which deal with life-span development and family dynamics. This course provides a theoretical foundation for micro-level generalist practice. (F)
S WK	3243	Human Behavior: Organizations and Communities	Prerequisite: S WK 3233. Building on the theoretical content in S WK 3233, students learn theories related to organization and community dynamics and behavior. Special attention is given to establishing theoretical foundations for the assessment of mezzo- and macro-level systems. (Sp)
S WK	3313	Social Welfare Policy: Analysis and Practice	Prerequisite: majors only. An undergraduate level historical and descriptive review of federal and state social welfare programming, introduction to social welfare policy analysis, and the role of the social work profession in affecting change in social welfare policy. (Sp)
S WK	3323	Human Diversity and Social Justice	Prerequisite: majors only. Provides undergraduate students with social work knowledge of human diversity from a social justice perspective. Knowledge of diverse groups' norms/values, differential power, societal oppression, and transactions between and within social groups are emphasized. (F)
S WK	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
S WK	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in regular coursework. (F, Sp, Su)
S WK	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
S WK	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
S WK	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
S WK	4083	Undergraduate Social Work Research Methods I	Prerequisite: senior standing and S WK 2223 or equivalent. Introduction to the design and implementation of quantitative and qualitative research methods appropriate to social work practice evaluation and program evaluation. (F)
S WK	4093	Undergraduate Social Work Research Methods II	Prerequisite: S WK 4083. Introduction to applied data analysis methods appropriate to research in social work practice evaluation and human services program evaluation. (Sp)
S WK	4103	Generalist Practice with Organizations and Communities	Prerequisite: S WK 3113; corequisite: S WK 4311, S WK 4315. Third of three methods courses in the social work practice sequence using a generalist model focuses on knowledge, values and skills requisite for social work practice with various client systems. Course emphasizes development of knowledge and skills specific for assessment and intervention with organizations and communities. (Sp)
S WK	4163	Child Abuse and Neglect	(Slashlisted with 5163) Prerequisite: upper-division standing or permission of instructor. Introduction to the field of child abuse and neglect. Examines the history of the field, different forms of abuse and neglect, causative factors, abuse and neglect dynamics, treatment approaches, the social services system, and prevention strategies. No student may earn credit for both 4163 and 5163. (Irreg)

S WK	4170	Special Topics in Social Work and Social Welfare	(Slashlisted with 5170) 2 to 3 hours. Prerequisite: upper-division standing or permission of director. May be repeated with change of content; maximum credit nine hours. Focus is on issues significant to social work or social welfare. No student may earn credit for both 4170 and 5170 on the same topic. (Irreg.)
S WK	4183	Child Welfare and Sexually Abusive Families	(Slashlisted with 5183) Prerequisite: upper division standing or permission of instructor. Focus on child sexual abuse as a special content area of social work practice within child welfare services. Emphasis will be placed upon intervention. No student may earn credit for both 4183 and 5183. (Irreg.)
S WK	4311	Practicum Seminar I	Prerequisite: senior standing, majors only; corequisite: 4315. Integration of knowledge, values, and skills derived in social work courses with practicum situations. (F, Sp, Su)
S WK	4315	Practicum I	Prerequisite: majors only, senior standing; corequisite: S WK 4311. A structured, educationally directed experience in social work practice, provided under the supervision of a qualified social worker as practicum instructor. (F, Sp, Su)
S WK	4325	Practicum II	Prerequisite: S WK 4315; corequisite: S WK 4331. A continuation of the educational experience in S WK 4315. In combination with Practicum Seminar II (4331), this course comprises the General Education capstone experience in social work. (F, Sp, Su) [V]
S WK	4331	Practicum Seminar II	Prerequisite: S WK 4311; corequisite: S WK 4325. A continuation of the educational experience in S WK 4311. In combination with S WK 4325, this course comprises the general education capstone experience in Social Work. Focus is on the integration of theories, principles, and skills for evaluating generalist practice competency. (F, Sp, Su)
S WK	4333	Alcohol and Drug Abuse	Alcohol And Drug Abuse. Prerequisite: Junior Standing Or Above. Survey Of The Theoretical And Research Writings On The Etiology, Dynamics And Social Work Treatment Of Substance Abuse (Alcohol And Drugs) In Contemporary American Society. Considerable Emphasis On Social Work Practice (Casework And Group Work) With Substance Abusers. (F)
S WK	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
S WK	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
S WK	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be covered; permission of instructor and undergraduate program coordinator. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field practicum projects. (F, Sp, Su)
S WK	5013	Advanced Standing Seminar	Prerequisite: admission to advanced standing status. A seminar course designed to enhance the preparation of advanced standing students for master's level study in Social Work. Foundation content in human behavior, practice, policy, research, and diversity and ethics are overviewed. Individualized student professional development is emphasized. (Su)
S WK	5083	Social Work Research Methods I	Prerequisite: graduate standing in social work and an introductory course in statistics. Introduction to the design and implementation of quantitative and qualitative research methods appropriate to social work practice evaluation and program evaluation. (F)

S WK	5093	Social Work Research Methods II	Prerequisite: graduate standing in Social Work and S WK 5083. Introduction to applied data analysis methods appropriate to research in social work practice evaluation and human services program evaluation. (Sp)
S WK	5103	Generalist Practice with Individuals, Families, and Treatment Groups	Prerequisite: graduate standing in Social Work. One of two generalist social work practice courses; explicates a generalist perspective that focuses on the knowledge, values, skills, and techniques appropriate for engagement, assessment, intervention and evaluation with individuals, families, and treatment groups. (F, Sp)
S WK	5113	Generalist Practice with Groups, Organizations, and Communities	Prerequisite: graduate standing in Social Work. Second of two required foundation-year method courses in the generalist social work practice. Continuation of the exploration of the generalist perspective focusing on the knowledge, values, skills, and techniques appropriate to assessment and interventions with groups, organizations, and communities. (F, Sp)
S WK	5123	Genomics in Social Work Practice	Prerequisite: graduate standing in social work or permission of instructor. Examines current knowledge of the contributions of genetic and environmental factors as determinants of health and behavior and the impact of genetically influenced diseases on individuals and their family. Genomics and policy implications for public health and ethical consideration will be explored. (Irreg.)
S WK	5133	Social Work and Health Care	Prerequisite: graduate standing or permission of instructor. Designed to expose graduate level social work students to a broad range of theories, models and practices related to the provision of social work in a variety of micro-, mezzo- and macro-practice settings within the healthcare arena. The current models of social work direct practice as part of an interdisciplinary team are examined. Public and community health models of services and intervention supporting macro change efforts to improve health are explored. Information from current expanding knowledge regarding determinants of health and behavior are introduced, as well as the ongoing public policy discussions regarding access to care and quality of care. (Irreg.)
S WK	5153	Seminar on Community Health	Prerequisite: graduate standing in social work or permission of instructor. This is an intensive course that immerses students within the OU-Tulsa School of Community Medicine Summer Institute. A variety of experiential learning methods are combined into an interdisciplinary setting. Full participation in the Summer Institute is required in addition to specific assignments relevant to social work. (Irreg.)
S WK	5163	Child Abuse and Neglect	(Slashlisted with 4163) Prerequisite: graduate standing or permission of instructor. Introduction to the field of child abuse and neglect. Examines the history of the field, different forms of abuse and neglect, causative factors, abuse and neglect dynamics, treatment approaches, the social services system, and prevention strategies. No student may earn credit for both 4163 and 5163. (Irreg.)
S WK	5170	Special Topics in Social Work and Social Welfare	(Slashlisted with 4170) 2 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated with change of content; maximum credit 12 hours. Focus is on issues significant to social work or social welfare. No student may earn credit for both 4170 and 5170 on the same topic. (Irreg.)
S WK	5173	Social Gerontology	Prerequisite: Graduate standing or permission of instructor. This course overviews the sociological aspects of aging. It examines the institutions of society that affect the older population and that are affected by them. (Irreg.)
S WK	5183	Child Welfare and Sexually Abusive Families	Prerequisite: graduate standing or permission of instructor. Focus on child sexual abuse as a special content area of social work practice within child welfare services. Emphasis will be placed upon intervention. No student may earn credit for both 4183 and 5183. (Irreg.)
S WK	5193	Social Work Practice in Aging	Prerequisite: Graduate standing or permission of instructor. Practice issues in the care, treatment and delivery of social and health care services to elders. (Irreg.)

S WK	5203	Social Work and the Law	Prerequisite: graduate standing or permission of instructor. Examines law and the legal system. Special attention is given to legal issues impacting social service programs, clients, and the profession of social work. (Irreg.)
S WK	5213	Infant Mental Health	Prerequisite: graduate standing in social work or permission of instructor. This course provides an overview of clinical and policy information necessary to effectively assess, and provide treatment for children ages 1 - 5 years and their families. (Irreg.)
S WK	5223	Ethiopian Social Welfare Issues	Prerequisite: graduate standing or permission of instructor. Provides students with knowledge of social welfare issues in Ethiopia and specifically the local, national and international responses for education and human service institutions. This content is presented within the historical, social, cultural, economic and political context of Africa in general, and Ethiopia specifically. (Irreg.)
S WK	5233	Human Behavior: Individuals, Families, and Treatment Groups	Prerequisite: graduate standing in Social Work. Within a social systems framework and biopsychosocial perspective, students learn empirically based theories which deal with life-span development and family behavior. This course provides a theoretical foundation for micro- and mezzo- level generalist practice. (F)
S WK	5243	Human Behavior II: Groups, Organizations and Communities	Prerequisite: 5233. Building on the theoretical content in S WK 5233, students learn theories related to group, organization, and community dynamics and behavior. Special attention is given to establishing theoretical foundations for the assessment of mezzo and macro level systems. (Sp)
S WK	5253	Alcohol and Other Drugs	Prerequisite: graduate standing in Social Work or permission of instructor. Integrated focus on the action of drugs and the consequences of AOD use, abuse, and addiction. Historical and current policies as well as issues are also examined. Attention is given to diverse populations, research findings and theoretical perspectives. (Irreg.)
S WK	5263	Biopsychosocial Aspects of Health and Behavior	Prerequisite: graduate standing or permission of instructor. The primary focus of this course is on enhancing knowledge and understanding of biological determinants of health and behavior as they interact with the environmental dimensions of health and behavior. These issues will be discussed in relation to the individual, and family, as well as ethical and policy and program implications. (Irreg.)
S WK	5273	School Social Work	Prerequisite: graduate standing in social work or permission of instructor. Designed to help prepare students for social work practice in school settings. It covers a range of practice and policy issues along with the multiplicity of school social worker roles and responsibilities. Currently offered as an internet course. (Irreg.)
S WK	5283	Tribal-U.S.Child/Family Welfare Policy and Practice	Prerequisite: graduate standing. Examines and critically analyzes the policies, regulations, and organizational change issues that aim to improve the lives of children, youth, and families from tribal and United States backgrounds. The contexts, forces, and ideologies that produce the often-changing goals and methods of agencies serving children and their families at a tribal, state, and national levels will be examined. Emphasis will be placed on current opportunities and dilemmas facing Indian child welfare programs and public and private child welfare agencies. Using social and behavioral science research and information related to diversity and social justice, critical frameworks for assessing and analyzing child welfare policies, service systems, and organizational structures will be developed. It is highly recommended that S WK 5293: Social Work with American Indians be taken prior to this course. (Irreg.)

S WK	5293	Direct Practice with Diverse Students, Disabilities, & Transition	Prerequisite: S WK 5103 or EDSP 5093 or permission of instructor; Social Work or Educational Psychology graduate students only. An overview of the theory and skills needed to work with diverse students including students with disabilities as they prepare to transition from school to adult life. Focuses on the knowledge, values, skills, and techniques appropriate for engagement, assessment, intervention and evaluation with diverse students preparing for transition. (Su)
S WK	5303	American Indian Behavioral Health	Prerequisite: graduate standing. Provides the knowledge, skills, and self-awareness necessary for culturally relevant behavioral health services to tribal populations located in the United States. Knowledge will encompass traditional tribal conceptualizations of mental health and the impact of colonization. Indigenous and Western theories will frame the development of skills for mental health and substance abuse assessment, interventions, and prevention with individuals, families, and communities with a particular focus on tribal youth. It is highly recommended that S WK 5293: Social Work with American Indians be taken prior to this course. (Irreg.)
S WK	5313	Social Welfare Policy Practice and Analysis	Prerequisite: graduate standing in Social Work. A graduate-level historical and descriptive review of federal and state social welfare programming, introduction to social welfare policy analysis, and the role of the social work profession in affecting change in social welfare policy. (F, Sp)
S WK	5333	Human Diversity and Societal Oppression	Prerequisite: graduate standing in Social Work. Provides graduate students with social work knowledge of human diversity from a social justice perspective. Knowledge of diverse groups' norms/values, differential power, societal oppression, and transactions between and within social groups is emphasized. (F)
S WK	5343	Social Work with American Indians	Prerequisite: graduate standing in Social Work, Native American Studies or junior/senior undergraduate standing in Social Work or Native American Studies. An introduction to issues influencing social work among American Indians. Knowledge of tribal culture, historical and contemporary oppression, sovereign status, and current service contexts will be framed against the strengths and empowerment perspectives. The skills and values unique to social work with American Indians will be developed to form the essential foundation for effective practice across the individual, family, clan, community, and tribal nation. (Irreg.)
S WK	5353	International Child Welfare	Prerequisite: graduate standing. Comparative study of child welfare policies and practices in Israel and the United States through study abroad. Content areas include international and comparative frameworks in policy and practice analyses, child welfare practices in the United States and Israel, governmental and not-for-profit sectors for the protection of children and their families, cross-cultural learning exchanges with social work students and social workers in Israel and the United States. (Su)
S WK	5413	Social Work Practicum I	Prerequisite: graduate standing in Social Work; 5103 or concurrent enrollment; permission of practicum coordinator. Professionally supervised foundation year practicum placement in an area social service agency. (F, Sp, Su)
S WK	5423	Social Work Practicum II	Prerequisite: graduate standing in Social Work; 5103, 5113 or concurrent enrollment; 5413 or concurrent enrollment. A professionally supervised practicum placement in an area social service agency; continuation of 5413. (F, Sp, Su)
S WK	5490	Research Investigations in Social Work	1 to 6 hours. Prerequisite: graduate standing and permission of instructor, advisor, and graduate program coordinator. May be repeated; maximum credit 12 hours. Initiation and completion of an individual or group research project dealing with some aspect of social work. Students are expected to demonstrate knowledge of the scientific method as applied to social work. Emphasis will be on student's capacity to elaborate implications of research findings for social work theory and practice. (F, Sp, Su)

S WK	5503	Advanced Direct Practice with Populations at Risk	Prerequisite: second-year graduate standing in Social Work or S WK 5013, concentration in direct practice, or permission by instructor. Critical analysis of traditional and emerging social work practice approaches as well as advanced interviewing and assessment skills and techniques. Specific attention on the application of practice models in complex situations, particularly those involving populations at risk and diverse clients, behaviors, strengths, needs and values. (F)
S WK	5553	Human Services Administration	Prerequisite: second-year graduate standing in Social Work or S WK 5013, and concentration in administration and community practice, concurrent enrollment in S WK 5836 and S WK 5763, or permission by instructor. First in a sequence of two advanced practice seminars in the school's administration and community practice concentration. Course content is based on a social systems model. Primary attention is given to the roles of administrator and planner in social work/social welfare settings. (F)
S WK	5603	Supervision and Consultation	Prerequisite: second-year graduate standing in Social Work or S WK 5013, concentration in administration and community practice, concurrent enrollment in S WK 5820, or permission of instructor. Addresses the development of skills in supervision and consultation of social work practice in agency context, and "supervision" and consultation tasks within a social systems context and supervisions challenges in a multicultural society. (F)
S WK	5613	Advanced Group Work	Prerequisite: second-year graduate standing in Social work or S WK 5013, concentration in direct practice, or permission of instructor. Advanced social group work practice using a social systems perspective to enhance well-being in the group context. (F)
S WK	5623	Advanced Social Work Practice with Families	Prerequisite: second-year graduate standing in Social Work or S WK 5013, concentration in direct practice, or permission of instructor. Provides an integrated learning experience in the theory and practice of social work with families. An overview of theories of family functioning and contemporary approaches to family-oriented practice which provides a systemic base for understanding and utilizing the helping process with special attention given to the design and implementation of practice evaluation. (F)
S WK	5633	Resource Development	Prerequisite: second-year graduate standing in Social Work or S WK 5013, and concentration in administration and community practice. Enables students to obtain skills in planning and program implementation through development of funding proposals. (F)
S WK	5713	Adult Psychopathology	Prerequisite: graduate standing or permission of instructor. The study of adult psychopathology based on the current diagnostic and statistical manual of mental disorders. Several diagnostic categories will be addressed from a biopsychosocial perspective, emphasizing the theoretical foundation for these mental illnesses. (Irreg.)
S WK	5733	Mental Health Assessment and Diagnosis	Prerequisite: graduate standing in social work or permission of instructor. Designed to assist the student in understanding and using the prevailing psychiatric taxonomic system, the diagnostic and statistical manual of mental disorders (DSM-IV-TR). Prepares students to function in clinical settings where familiarity with the DSM-IV-TR criteria and the multi-axial diagnostic framework is fundamental knowledge. Additionally, students will examine the benefits and risks of this psychiatric taxonomy in relationship to diversity, culture, prevention, treatment, and recovery from a mental illness. Therapeutic interventions including psychopharmacological strategies will be critically examined. Currently offered as an internet course. (Irreg.)

S WK	5743	Perspectives on International Social Work	Prerequisite: graduate standing in social work or permission of the instructor. Designed to help students acquire knowledge about international social work, models of practice, developmental processes, and strategies. Specific attention is given to the methods and skills of social work practice with international communities. Emphasis is given to social problems adversely impacting at-risk international populations. Currently being offered as an internet course. (Irreg.)
S WK	5753	Child and Adolescent Psychopathology: Assessment and Treatment	Prerequisite: graduate standing in social work or permission of instructor. Provides an overview of clinical information necessary to effectively assess, diagnose and provide social work treatment for children and adolescents in need of mental health services. Currently offered as an internet course. (Irreg.)
S WK	5763	Community Organizing and Development	Prerequisite: second-year graduate standing in Social Work or S WK 5013, and concentration in administration and community practice, or permission of instructor. Within this framework, several concepts, theories and approaches to practice are examined. Special attention is given to social problem identification, assessment, funding advocacy and related matters. (Sp)
S WK	5793	Community Asset Assessment	Prerequisite: graduate standing in social work or permission of instructor. Course offers graduate students in social work a service learning experience in assessing the asset of a specific Oklahoma community. Students will complete assignments in a community setting working collaboratively with other students, faculty and community members. (Irreg.)
S WK	5816	Practicum III - Direct Practice	Prerequisite: graduate standing in Social Work; permission of Field Education Coordinator; successful completion of all foundation year coursework or BSW equivalent; successful completion of two (2) of three (3) total advanced practice courses (SWK 5503, SWK 5613, and SWK 5623); Concurrent enrollment in SWK 5973 during Spring semester. Students must resolve any grades of Incomplete prior to enrollment. May be repeated; maximum credit 12 hours. Direct Practice Concentration-focused candidacy year professionally-supervised practicum placement in an area social service agency. Part I of II. (F, Sp)
S WK	5826	Practicum IV - Direct Practice	Prerequisite: graduate standing in Social Work; permission of Field Education Coordinator; successful completion or good standing enrollment in S WK 5816. Concurrent enrollment in S WK 5973 during Spring semester or successful completion of S WK 5973 if during the summer session. Students must resolve any grades of Incomplete prior to enrollment. Direct Practice Concentration-focused candidacy year professionally-supervised practicum placement in an area social service agency. Part II of II. (Sp,Su)
S WK	5836	Practicum III - Administration & Community Practice	Prerequisite: graduate standing in Social Work; permission of Field Education Coordinator; successful completion of all foundation year coursework or BSW equivalent. Students must resolve any grades of Incomplete prior to enrollment. Full time students must be concurrently enrolled in SWK 5553 and SWK 5763. Administration & Community Practice Concentration-focused candidacy year professionally-supervised practicum placement in an area social service agency. Part I of II. (F)
S WK	5846	Practicum IV - Administration & Community Practice	Prerequisite: graduate standing in Social Work; permission of Field Education Coordinator; successful completion of SWK 5836; Corequisites SWK 5633 and SWK 5983. Students must resolve any grades of Incomplete prior to enrollment. Administration & Community Practice Concentration-focused candidacy year professionally-supervised practicum placement in an area social service agency. Part II of II.(Sp)
S WK	5960	Directed Readings	1 to 4 hours. Prerequisite: graduate standing and permission of instructor, advisor and graduate program coordinator. Directed readings and/or literature reviews under the direction of a faculty member. May be repeated; maximum credit six hours. (F, Sp, Su)

S WK	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
S WK	5973	Advanced Integrative Seminar for Direct Social Work Practice	Prerequisite: S WK 5503, S WK 5613, S WK 5623, concentration in direct practice, concurrent enrollment in S WK 5816 or S WK 5826 or permission by instructor. Integrative seminar for direct practice concentration students taken concurrently with S WK 5816 or S WK 5826 (field practicum) in the final spring semester. Builds on foundation and concentration coursework throughout the MSW curriculum. (Sp)
S WK	5980	Research for Master's Thesis	Prerequisite: permission of instructor. Research for Master's thesis. Variable enrollment, two to six hours; maximum credit applicable toward degree: six hours. (F, Sp, Su)
S WK	5983	Program Monitoring and Evaluation	Prerequisite: concentration in administration and community practice or permission of instructor. Seminar enables students to integrate learning experiences in the administration and community practice concentration through monitoring and evaluation. (Sp)
S WK	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
S WK	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
SAX	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
SAX	2000	Freshman and/or Sophomore Secondary Saxophone	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
SAX	2020	Saxophone for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
SAX	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
SAX	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
SAX	4000	Junior and/or Senior Secondary Saxophone	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
SAX	4020	Saxophone for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
SAX	5000	Master's-Level Secondary Saxophone	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)

SAX	5010	Master's-Level Saxophone for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
SAX	5020	Master's-Level Saxophone for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
SAX	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
SAX	6000	Doctoral Secondary Saxophone	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
SAX	6010	Doctoral Saxophone for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
SAX	6020	Doctoral Saxophone for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
SCM	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
SCM	3223	Logistics Management	(Crosslisted with MKT 3223) Prerequisite: Student must be approved for degree candidacy by Price College, Marketing 3013 or concurrent enrollment. The physical supply and distribution function in business management, including channel selection, transportation, facility location and materials management; concentrates on the analytical and managerial methods necessary for the development and control of an integrated logistics system. (F, Sp)
SCM	3263	Global Class Operations	Prerequisite: Student must be approved for degree candidacy by Price College. Operations management is about converting inputs into outputs (creating goods and services); global class operations is about making this conversion efficiently and effectively in domestic and international environments. Addresses analyzing and understanding contemporary changes in the nature of competitiveness and how organizations adapt to evolving requirements. (F, Sp)
SCM	3323	Purchasing and Buyer Behavior	(Crosslisted with MKT 3323) Prerequisite: Marketing 3013 and declared Marketing or Supply Chain Management major. Consumer and organizational buying processes are examined. Individual and organizational decision-making frameworks, information technology, and the external environment are studied in the context of forming marketing strategies and tactics. Topics include make or buy decision making; supplier development and outsourcing; supplier evaluation, selection, and management; buyer-seller relationships; purchasing capital goods and services; international and electronic commerce; information processing; social and economic influences; preference formation and change; and image creation and positioning. (F, Sp)
SCM	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

SCM	3523	Production/Operations Management	Prerequisite: Student must be approved for degree candidacy by Price College. A study of the principles and practices related to production and operations management including product decisions, process planning, project planning, work measurement, plant location, facilities layout, scheduling and associated analytical techniques. (F, Sp)
SCM	3960	Honors Reading	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)
SCM	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
SCM	3980	Honors Research	1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
SCM	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
SCM	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
SCM	4003	Transportation and Global Logistics	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses, SCM 3323 and SCM 3523. The concept of the global marketplace or global economy has taken on new meaning for all enterprises. This course will examine the contemporary issues and strategies in global transportation management and policy. Emphasis will be placed on evaluation of the impacts of transportation policies, new technologies, and strategic carrier and shipper management practices on the transportation industry in a more competitively economic and geopolitical environment. (F, Sp)
SCM	4013	Operations Planning and Control	Prerequisite: 3523 or permission of instructor; student must be approved for degree candidacy by Price College; all 3000-level Core courses. Second operations management course for supply chain majors. Includes the typical operations planning and control. Addresses the design of OPC systems, typical tasks performed by the OPC system, key components of the OPC system, and product and process issues that affect the OPC system. Topic areas include demand management, sales and operations planning, inventory management, master production scheduling, material requirements planning, distribution requirements planning, capacity planning, production activity control, and ERP. (Sp)
SCM	4023	Principles of Inventory and Materials Management	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses. A study of inventory management with emphasis on order quantities, inventory cost, forecasting, perpetual inventory systems, periodic inventory systems and material requirements planning. (F, Sp)
SCM	4323	Supply Chain Management	Prerequisite: 3223 and declared Supply Chain Management major. Supply chain operating practices and principles (i.e., the fundamentals of materials and logistics management). Studies and analyzes the dynamic nature of supply chain management for products and services and addresses the impact of the global economy on the management process. The course also develops a solid grounding in the theory of supply chain design, which includes strategies for customer service, quality, logistics, inventory management, and integrated supply chain management. Includes forecasting, postponement, sourcing (in particular, global sourcing), network design, and virtual integration (web-centric) and illustrates these concepts through cases. (Sp)

SCM	4710	Special Topics in Supply Chain Management	Prerequisite: Student must be approved for degree candidacy by Price College, all 3000-level Business core courses. May be repeated with change of subject matter; maximum credit six hours with 18 hour major and three hours with 15 hour major. (Irreg.)
SCM	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
SCM	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
SCM	4990	Independent Study	1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
SCM	5502	Supply Chain Management	Prerequisite: graduate standing. Study and analysis of supply chain management for products/services and the dynamic interaction of companies within an integrated supply chain. Topics include: factor guiding companies supply chain development and management; Technology as a supply chain tool; Positioning of a company in terms of its role as a valuable member of the supply chain; and performance measures used across the supply chain. (F)
SCM	5522	Production/Operations Management	Prerequisite: graduate standing and Mathematics 1743 or equivalent. Examines selected topic areas in operations management and widely recognized approaches to dealing with them. The problem areas include process and capacity design, location selection, forecasting, statistical quality control, process layout, project-management, and material requirements planning. The course involves the application of mathematical modeling as well as understanding the fundamental concepts and terminology associated with the production of goods and services. (Irreg.)
SCM	5532	Business Logistics	Prerequisite: 5502 and graduate standing. Provides an overview of current logistics and distribution practices. Students should gain an understanding of the basic components of logistics management and the dynamics of what is considered best practice. Focuses on the complexities associated with the integrated flow of raw materials, in-process goods, finished goods, and information from point-of-origin through the production process to the end consumer. (Irreg.)
SCM	5542	International Logistics Management	Prerequisite: 5522 and 5532. Designed to increase understanding of decision-making variables in international marketing and sourcing in the context of global supply chain optimization. Topics include: global supply chain environment and global logistics strategy; the role of global supply chain intermediaries; and evaluation and assessment of global logistics alternatives. (Irreg.)
SCM	5552	Strategic Sourcing and Relationship Management	Prerequisite: 5532 or permission of instructor. Covers the strategic implications of sourcing and supplier relationships in the context of supply chain management. Critical elements including identifying and selecting suppliers, negotiating contract terms and conditions, implementing contracts, and measuring performance are covered. Practical examples of sourcing excellence are provided. (Irreg.)
SCM	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)

SCM	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
SCM	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
SCM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
SCM	6253	Interorganizational Behavior	Prerequisite: Graduate standing and admission to Price College Ph.D. Program. Provides a strong foundation oriented toward understanding current theoretical and methodological approaches to various aspects of marketing management. In particular, course concentrates on interorganizational issues. The readings explore the major theories that examine the questions associated with how/why organizations seek relationships, how/why organizations manage these relationships. Therefore, the course material reflects a broad approach to marketing management with an "eye" toward interorganizational research. (F)
SCM	6393	Seminar in Evolution of Logistics/SCM Research	Prerequisite: graduate standing and admission to Price College Ph.D. Program. Provides a survey of concepts, frameworks, theory, research issues, and empirical research in content areas related to logistical elements of supply chain management. Major objectives are: help students understand the scope, methods, & theoretical perspectives employed in this area; help students form an integrative view of these perspectives; help students become more sophisticated consumers of research; and help students clarify their own research interests and provide them with a necessary foundation for a dissertation in this area. (F)
SOC	1003	Introduction to Women's and Gender Studies	(Crosslisted with WGS 1003) Examines women's issues and movements in the United States and globally, with a focus on the pervasive role of gender in people's lives and on the ways it is used to create privilege for some and oppress others. Through readings, films, class discussions, and guest speakers, this course is designed to challenge traditional, normative notions about gender and sexuality, which are inextricably entwined. Also explores ways other markers of difference, such as disability, race, and religion, intersect with gender identity and sexual identity. (F, Sp, Su) [IV-WC]
SOC	1113	Introduction to Sociology	The fundamental concepts of sociology; foundations of group life; social change, processes, and problems. (F, Sp, Su) [III-SS]
SOC	1523	Social Problems	Analysis of major social problems of contemporary U.S. and policy debates concerning them. Examination of social science theory and research that are relevant to understanding these problems. Development of social institutions in which social problems occur. (F, Sp, Su) [IV-WC]
SOC	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
SOC	2970	Special Topics	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
SOC	3123	Social Statistics	(Crosslisted with P SC 3123) Prerequisite: 1113 or permission of instructor, and completion of General Education Mathematics requirements. Descriptive and inferential statistics as they are used in sociology to analyze survey and macro-level data. Problems of research design and interpretation of analysis in sociological theory are major topics. A grade of C or higher in this course is a prerequisite for Sociology capstone courses. (F, Sp, Su)

SOC	3133	Methods of Social Research	Prerequisite: SOC 1113 and MATH 1473 or higher numbered Mathematics course or permission of instructor. Basic elements of the scientific method as applied to the study of human group life. Attention is given to the problem of conceptualization, the formulation of hypotheses, designs of proof, the interdependence of theory and fact and the techniques and procedures for assembling and ordering of data. A grade of C or better in this course is a prerequisite for Sociology capstone courses. (F, Sp, Su)
SOC	3353	Race, Class and Gender	(Crosslisted with WGS 3353) Prerequisite: junior standing or permission of instructor. Explores the intersections of race, ethnicity, class, gender and sexuality. Focus is on how systems of power and oppression reinforce each other, how they intersect in shaping social structure and individual experiences, and how the systems of oppression are mutually reinforcing. Theories and practice of intersectionality, how gender, race, class and other categories of identity are constructed and reproduced in social, political and economic structures, and experienced in every day life. (F, Sp)
SOC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
SOC	3523	Criminology	Prerequisite: 1113 or sophomore standing. A study of the nature and causes of various forms of deviant and illegal behavior, especially serious personal injury and property crimes (e.g., homicide, burglary). While some consideration is given to biological and psychological explanations, the primary focus is on sociological theories that attempt to explain crime, criminality, and victimization in modern societies. (F, Sp)
SOC	3533	The System of Criminal Justice	Prerequisite: 1113 or permission of instructor. An analysis of the sociological literature on the American system of criminal justice, viewed as a system of social control. Emphasis is on the functional significance of the system in relation to the various interests represented in the law. Attention given to special problems in each of the major components of the system: law enforcement, the administration of justice and corrections. (F, Sp)
SOC	3543	Sociology of Deviance	Prerequisite: 1113 or permission of instructor. The sociological study of deviant behavior with emphasis on so-called victimless crimes (e.g., drug use) and on normative violations that are not necessarily illegal (e.g., mental illness). Focus is on sociological theories and processes by which behaviors are defined as deviant, and how these definitions affect the individual. (F, Sp)
SOC	3553	Sociology of Law	Prerequisite: 1113 or permission of instructor. Provides a sociological understanding of the interrelationship between law and society. Covers the origins of law, types of legal systems, theories of punishment, and examines law as an independent variable (i.e., as a mechanism for social change) and as a dependent variable (i.e., how laws are created or changed by social pressure). (F, Sp)
SOC	3603	Sociology of Education	Prerequisite: 1113. Examines a variety of historical and contemporary educational issues. Major themes include the function of education in society, racial/ethnic segregation in public schools, the relationship between education and social mobility, and school reform (Irreg.)
SOC	3623	Racial and Ethnic Minority Groups	Prerequisite: SOC 1113 or permission of instructor. Intergroup conflict resulting from the efforts of subordinate groups. Consideration of theories of prejudice and discrimination as devices of control over racial, religious, ethnic and other minority groups. (Irreg.)

SOC	3643	Population and Society	Prerequisite: SOC 1113 or permission of instructor. Introduction to population study. Analysis of human mortality, fertility and migration. Evaluation of demographic theories with emphasis on social and cultural factors. (Irreg.)
SOC	3683	Wealth, Power, and Prestige	Prerequisite: 1113 or sophomore standing or above. Examines the systems in which the central elements of class stratification--wealth, power, and prestige--are created and distributed and addresses the issue of "who gets how much and why?". Topics include a review of the theories and evidence in current stratification studies and an assessment of the racial, ethnic, and religious correlates of inequality. (F, Sp)
SOC	3713	Medical Sociology	Prerequisite: 1113 or permission of instructor. A study of cultural and class factors in health and morbidity. Focus is on the social organization of medical services, including discussion of the hospital as a social institution. The role of medical and paramedical personnel and the interaction of the medical system with other social institutions such as government, church, education, and family. (Irreg)
SOC	3723	Sociology of Family	Prerequisite: 1113 or sophomore standing or above. The sociological study of the family as an institution; the origin and development of the family; the interrelationships of the family and the larger society; the environmental conditions which seem to favor the development and continuance of the major family forms; the rise of the modern democratic family; characteristic patterns of change in the contemporary family. (F, Sp)
SOC	3733	Sociology of Gender	Prerequisite: 1113 or permission of instructor. Sociological analysis of the reinforcement of gender roles by the major institutions of society. Examine the effects on gender roles of education, mass media, economics, public policy, law, religion, and society. (Irreg)
SOC	3753	Sociology of Africa	Prerequisite: 1113 or permission of instructor. A systematic consideration of Africa. Topics include issues of cultural uniqueness and national character, population dynamics, family structures and values, and economic and political institutions. Emphasis is placed on a global perspective and encourages cross-national contrasts. (Irreg) [IV-NW]
SOC	3763	Sociology of Ireland	Prerequisite: SOC 1113 and ENGL 1213 or EXPO 1213. May be repeated once with change of location; maximum credit 6 hours. Focuses on Irish identities. Focus will be on national identity including ethnicity, religion, and politics. Covers identity issues related to social class, gender, sports and local identity (such as Corkonians identification as "The Rebels"). This course may count as Sociology elective credit. The course will be held either in Ireland as a four-week Summer course, primarily in Cork, or as a regular semester course in Norman. (Irreg.)
SOC	3803	Inequality in A Global Perspective	Prerequisite: SOC 1113 or sophomore standing or above. Examines the causes and consequences of socioeconomic inequality in contemporary societies (including the United States) by using theories and research evidence from the vantage point of international political economy. Topics include the nature, structure, and hierarchy of the global economy; the link between international and national distributions of wealth and power; and the racial, ethnic, and religious correlates of social inequality. (Irreg.)
SOC	3813	Individual and Society	Prerequisite: 1113 or permission of instructor. Introduction to social psychological theories and findings. Covers socialization, identity development, emotions, social interaction, deviant behavior, and small group behavior. (Irreg.)

SOC	3823	Work, School, and Play	Prerequisite: SOC 1113 or sophomore standing or above. The study of organizations that structure our everyday lives at work, school, and play. Examples span the broad range of formal groups of which students are members, including internships, volunteer/paid work, fraternities/sororities, academic clubs, religious/charitable affiliations, and sports/recreation leagues. Emphasis will be placed on drawing comparisons across organizational types in terms of their structure, function, and dynamics, including rewards/punishments, power/conflict, and change/inertia. (Irreg.)
SOC	3843	Sociology of Aging	Prerequisite: 1113 or permission of instructor. Comprehensive description of the dimensions of aging. The point of departure is the notion that to talk meaningfully about one aspect of aging requires consideration of its other dimensions. (Irreg)
SOC	3853	Sociology of the Body	Prerequisite: SOC 1113. Examines various forms of body modification from a sociological perspective. We will begin by learning the more popular sociological theories on the body, particularly the docile/disciplined and the carnivalesque/grotesque body. The next section of the course will focus on body modification conceptualized as "body art" with a particular focus on tattooing and piercing, but also covering scarification and other (permanent) forms of body art. The third section will focus on normalization surgeries or surgeries of the "disabled". The final section of the course will focus on cosmetic (as opposed to plastic) surgery as a method of modification. As we move from one section to the next, students should consider the legitimacy or limitations of the above categorization scheme. (Sp)
SOC	3873	Religion and Society	Prerequisite: junior standing. An analysis of the functional significance of religion in society. Topics include the distinction between magic and religion, the functional approach to social phenomena, the relationship between religion and the problem of order in human societies, the relationship between religion and other major institutional arrangements (e.g., the economy and the polity). (F, Su)
SOC	3890	Special Topics For Non-Majors	Special Topics For Non-Majors. 1 To 3 Hours. Prerequisite: 1113 Or Permission Of Instructor. May Be Repeated With Change Of Content; Maximum Credit Six Hours. This Course Cannot Be Used To Satisfy The Major Requirements In Sociology. (F, Sp, Su)
SOC	3893	Environment, Ecology and Society	Prerequisite: SOC 1113 or permission of instructor. Examines relationships between environmental factors and human social arrangements. The class will be organized around these and a number of related topics, which will help to shape the readings, lectures, and discussions. (Irreg.)
SOC	3900	Special Topics in Sociology	1 to 3 hours. Prerequisite: 1113 or permission of instructor. May be repeated with change of content; maximum credit six hours. Cover topics not currently offered in regularly scheduled courses. (Irreg)
SOC	3903	Gangs and Violence	Prerequisite: 1113 and 3523. The course provides an overview of the gang problem in the United States, both historically and as presently defined. Will examine different theories about gangs and gang membership and will examine different types of gangs. (Irreg.)
SOC	3913	The Death Penalty in the United States	Prerequisite: 1113 and 3523. Provides an overview of capital punishment in the United States, and Oklahoma in particular, from a sociological perspective. History of capital punishment in the United States specific cases related to the death penalty, and arguments for and against the use of capital punishment. (Irreg.)
SOC	3923	Alcohol, Drugs and Society	Prerequisite: 1113 and 3523. Explores sociological explanations of alcohol and drug use with a special emphasis on current issues in the United States. (Irreg.)
SOC	3953	Juvenile Justice	Prerequisite: 1113 or permission of instructor. Course examines criminal measurement of juvenile crime, theories of delinquency, legal rights of juveniles and the juvenile justice system. (Irreg.)

SOC	3960	Honors Reading	1 to 3 hours. Prerequisite: 1113 and permission of instructor and admission to Honors Program. May be repeated; maximum credit six hours. Will consist of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (Irreg)
SOC	3963	Sexual Deviance and Society	Prerequisite: 1113 and 3523. A critical examination of the sociology of deviant sexual behaviors. Investigations of deviance, criminology and gender through the study of sexual behavior, sex crimes, and victimology. (Irreg.)
SOC	3973	Sociology of Violence	Prerequisite: SOC 1113 and SOC 3523. An examination of the causes, correlates and consequences of various forms of violent crime. An emphasis on the social nature of violence, social institutions related to violence and the social costs of violence. (F, Sp)
SOC	3980	Honors Research	1 to 3 hours. Prerequisite: 1113 or permission of instructor and admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (Irreg)
SOC	3983	Women, Girls and Crime	(Crosslisted with WGS 3983) Prerequisite: SOC 1113 and SOC 3523, or permission of instructor. In-depth examination of crime and the justice system as it relates to girls and women. The focus will be on girls and women as victims, girls and women as offenders, and criminal justice responses to girls and women. (F, Sp)
SOC	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
SOC	3993	Sociology of Gender and Sexuality in the Media	Prerequisite: junior standing. The sociological constructions of gender and sexuality will be examined through the context of several forms of American media including advertising, television, and film. Explores how manifestations of "normative" behaviors are reproduced and maintained through media representations of gender and sexuality. Using a sociological perspective, advertising, television, and film as they relate to societal shifts in attitudes toward gender and sexuality from the 1980s to present day will be critically examined. Designed to "push the limits" and encourage students to question their conceptualizations of gender and sexuality using a critical sociological lens. (Irreg.)
SOC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
SOC	4163	Advanced Social Statistics	Prerequisite: 1113, 3123 (B or better), 3133 (B or better); or permission of instructor. Statistical inference, applied multiple regression and multivariate analysis will be covered. Computer applications using statistical packages and sociological data will be included. No prior computer background is assumed. (Irreg.)
SOC	4263	Qualitative Research Methods	Prerequisite: 1113, 3123 (B or better), 3133 (B or better), or permission of instructor. Explores the ethics and techniques of qualitative research, including ethnographic research, in-depth interviewing, historical analysis, and content analysis. The focus will be on strengths and weaknesses of qualitative methodologies, ethical issues, data gathering techniques, data analysis techniques, and data presentation. (Irreg)
SOC	4363	Sociological Theory	Prerequisite: 1113, 3123 (C or better), 3133 (C or netter); or permission of instructor. Consideration of classical sociologist including Durkheim, Weber, and Marx. Attention is devoted to the application of classical theories to current research issues. (F, Sp)

SOC	4603	Internship in Sociology	Prerequisite: SOC 1113, SOC 3123, SOC 3133, and at least two of the following: SOC 3523, SOC 3533, SOC 3543, SOC 3553, SOC 3623, SOC 3683, SOC 3723, SOC 3733. Work experience in the field of sociology under the supervision of a faculty member. While the instructor will assist in finding internship opportunities, the ultimate responsibility is with the student. Internships may be served in any setting related to the field of sociology. Student will be required to develop a paper linking the work experience to scholarly research in sociology. (F, Sp, Su)
SOC	4843	Capstone in Criminology	Prerequisite: SOC 1113, SOC 3123 (C or better), SOC 3133 (C or better), and at least two of the following: SOC 3523, SOC 3533, SOC 3543, SOC 3553, and permission of instructor. As a key component of this course, students will actively participate in an in-depth analysis and discussion of a current research topic or topics in the sociological study of criminology (crime and delinquency, deviance, sociology of law, criminal justice). Students will be expected to use material they have learned in Sociology 3123 and 3133, as well as material in 3000-level substantive courses, and will be required to demonstrate in written assignments their ability to understand and critique current quantitative research. Other topics in the course will be at the discretion of the instructor but within the University guidelines for Capstone courses. (F, Sp) [V]
SOC	4943	Capstone in General Sociology	Prerequisite: SOC 1113, SOC 3123 (C or better), SOC 3133 (C or better), and at least two of the following: SOC 3523, SOC 3623, SOC 3643, SOC 3683, SOC 3713, SOC 3723, SOC 3733, SOC 3753, SOC 4363, and permission of instructor. As a component of this course, students will actively participate in an in depth analysis and discussion of a current research topic or topics in sociology (i.e., inequality, family, demography). Students will be expected to use material they have learned in Sociology 3123 and 3133, as well as material in 3000-level substantive courses, and will be required to demonstrate in written assignments their ability to understand and critique current quantitative research. Other topics in the course will be at the discretion of the instructor but within the University guidelines for Capstone courses. (F, Sp) [V]
SOC	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
SOC	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
SOC	4990	Independent Study	1 to 3 hours. Prerequisite: Fifteen hours of Sociology (including 1113, 3123, 3133) and permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
SOC	5013	History and Theory of Urban Planning	(Crosslisted with P SC and RCPL 5013) Prerequisite: open to seniors in social science departments, civil engineering and architecture, and to graduate students in regional and city planning. An introductory course on the history and theory of contemporary planning, focusing on the physical, social, institutional and economic structure and dynamics of human settlements, and on the role and responsibilities of the professional planner. (F)
SOC	5033	Sociology of Housing	(Crosslisted with RCPL 5033) A study of major developments in housing in the U.S. since 1860, including housing reform agitation, sociological problems, ecological patterns of housing areas, minimum standards for healthful housing, government intervention and its current role, and problems of providing adequate housing for different social groups. (F)

SOC	5203	Urban Land Use Controls	(Crosslisted with P SC and RCPL 5203) Prerequisite: open to seniors in social sciences, civil engineering and architecture, and to graduate students in regional and city planning. Provides a study of the historical development of property systems; of zoning law, ordinance preparation, and administrative procedures; of subdivision regulations and other codes used in the regulation and control of land use. (Sp)
SOC	5283	Fundamentals of Sociological Statistics	Prerequisite: SOC 3123 and SOC 3133, or graduate standing, or permission of instructor. Advanced statistical concepts and analysis; analysis of variance and covariance; multiple regression analysis; use of computers for statistical analysis. (F)
SOC	5293	Advanced Methods of Social Research	Prerequisite: SOC 3123 and SOC 3133, or graduate standing or permission of instructor. Advanced research methodology; heavy focus of attention will be on concept measurement, index formation and survey research. (Sp)
SOC	5313	Qualitative Research Methods	(Crosslisted with COMM 5313) Prerequisite: graduate standing. Survey of different qualitative methodological strategies used in the social sciences to collect, code, and analyze information. (Sp)
SOC	5323	Advanced Qualitative Research	(Crosslisted with COMM 5323) Prerequisite: 5313. Designed to immerse students in the actual experience of conducting qualitative research in the field, emphasis on participatory observation, ethnographic research, and textual analysis. (F)
SOC	5333	Seminar in the Criminal Justice System	Prerequisite: graduate standing or permission of instructor. A critical examination of the American system of criminal justice. Attention will be given to the unique problems of the system and to each of its component parts. Special emphasis is placed on the role of extralegal factors in discretionary decision making by the principal actors within the system. (Irreg.)
SOC	5383	Social Stratification	Prerequisite: graduate standing or permission of instructor. In-depth treatment of sociological theories, methods and research in the area of stratification and inequality. (Irreg.)
SOC	5483	Advanced Regression Analysis	Prerequisite: SOC 5283 and graduate standing. A graduate-level introduction to linear regression analysis. Focuses on theory and empirical applications including topics such as model specification, estimation, interpretation, inferences, and assumptions diagnostics. (Sp)
SOC	5523	Criminology	Prerequisite: graduate standing or permission of instructor. Examines the patterns and correlates of crime at the individual, situational, and aggregate levels. Also includes examination of the history of criminological thought as well as contemporary explanations of crime, with an emphasis on critical evaluation of these explanations. (Irreg.)
SOC	5543	Deviance and Social Control	Prerequisite: graduate standing or permission of instructor. A critical examination of the literature on deviance and social control with special emphasis on the scope of the field. The frame of reference for the examination will consist of one or more of the major theoretical perspectives in sociology: the functional, the conflict and the symbolic interactionist. (Irreg.)
SOC	5623	Race and Ethnicity	Prerequisite: graduate standing or permission of instructor. Review of concepts and terminology of social differentiation, and in-depth study of the theories of prejudice and discrimination, power and dominance, and patterns of inter-group relations. Includes a history and analysis of race and ethnicity in the United States and other selected countries. (Irreg.)
SOC	5703	Sociology of Education	(Crosslisted with EDS 5703) Prerequisite: eight hours of education or permission. Social structure in the community wherein the schools must operate, and the nature of human relations within the school; social processes and patterns involved in our educational system relative to other aspects of our society; effect of the school on the behavior and personality of its participants. Lectures, class discussions, audiovisual materials and outside readings, both scientific and literary, portraying the American social scene. (F)

SOC	5723	Sociology of the Family	Prerequisite: graduate standing or permission of the instructor. Analysis of the family as a social institution, focusing on the problems created by changes in the family. The family is examined in historical, cross cultural and demographic perspectives. Applications include consideration of alternative arrangements, including discussion of the probable future of family arrangements in Western society. (Irreg.)
SOC	5733	Sociology of Gender	Prerequisite: graduate standing or permission of instructor. Theoretical and empirical approaches to the study of gender within several substantive areas of sociology such as family, work, race and ethnicity, and social class. (Irreg.)
SOC	5790	Special Sociological Issues	2 to 3 hours. May be repeated with change of subject matter; maximum credit 12 hours. Intensive survey of the literature in a selected area of sociology under the direction of a member of the staff. Instructors rotate each semester. (Sp)
SOC	5823	Social Demography	Social Demography. Prerequisite: Graduate Standing Or Permission Of Instructor. Introduction To The Four Variable That Comprise The Subject Matter Of Demography: Fertility, Mortality, Migration, And Age Structure. Sources Of Demographic Data For The Study Of These Variables Are Examined And Basic Demographic Statistics Are Covered. (Irreg.)
SOC	5831	Teaching Seminar	Prerequisite: graduate standing and majors only. Preparation for teaching sociology. Taken prior to assignment of sole responsibility for teaching a course in sociology. (Sp)
SOC	5832	Professionalization Seminar	Prerequisite: graduate standing. Prepares students for careers in academia. Comprised of units covering research and service. (Sp)
SOC	5833	Social Psychology	Prerequisite: graduate standing or permission of instructor. Examines issues regarding research in social psychology and personality psychology. Addresses the history of social psychology research issues, some class controversies, and new research directions in the field. Specific topics include social cognition attitudes, attribution, the self, groups, expectation states, collective behavior, the life course. (Irreg.)
SOC	5933	Sociological Theory	Prerequisite: graduate standing or permission of instructor. Intensive analysis of the original writings of classical sociologists including Durkheim, Weber and Marx. Attention is devoted to the application of classical theories to current research issues. (F)
SOC	5943	Inequality in a Global Perspective	Prerequisite: graduate standing or permission of instructor. Provides an in-depth review and analysis of the sociological concepts and theories used to study how wealth (and its correlates, power and prestige) are created and distributed. Special emphasis is placed upon how these processes occur within a global system. (Irreg.)
SOC	5960	Directed Readings in Sociology	Prerequisite: Graduate standing, twelve hours of upper-division sociology. No more than six hours may be counted toward the M.A. degree. No more than twelve hours may be counted toward the Ph.D. degree. Intensive survey of literature in a selected area of sociology under the direction of a sociology faculty member. (F, Sp, Su)
SOC	5963	Social Change, Cultures and Development in Africa	Prerequisite: graduate standing or permission of instructor. Focuses on social change and cultures of Africa. Considers how the discipline of Sociology, with its toolbox of theory and methods, can explain African social issues, social change, and economic development. Examines Africa's present social problems and cultural challenges through the lens of colonialism and post-colonial events. Consider Africa's integration into the global political economy and read the leading books published in this area in order to understand how culture, society, and structural position come together to shape life chances on the African continent. (Irreg.)
SOC	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

SOC	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
SOC	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
SOC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
SOC	6233	Advanced Sociological Statistics	Prerequisite: SOC 5283, SOC 5293 and SOC 5483. Specialized treatment of theoretical and applied topics in research methodology for advanced students. Primary focus is placed upon survey research. (F)
SOC	6243	Advanced Quantitative Analysis	Prerequisite: 5283, 5293, 6233. Instruction and extensive hands-on experience in categorical data analysis, structural equation modeling, repeated measure analysis of variance, longitudinal analysis, and confirmatory factor analysis. (Irreg.)
SOC	6343	Special Topics in Criminology	May be repeated once. Covers in depth one significant topic in the area of criminology such as (but not limited to) deterrence, longitudinal research, ecology of crime, drugs and alcohol, societal reaction theory, macro-normative theory, micro-normative theory, penology, mental illness, victimology, and violence.
SOC	6353	Special Topics in Demography	Prerequisite: graduate standing or permission of instructor. May be repeated three times; maximum credit 12 hours. Covers in depth a topic in the area of demography such as (but not limited to) migration, mortality, fertility, population composition, and segregation. (Irreg.)
SOC	6363	Special Topics in Social Differentiation	Prerequisite: graduate standing or permission of instructor. May be repeated with change of topic; maximum credit 12 hours. Covers in depth one significant area of social differentiation such as (but not limited to) racial prejudice/discrimination, status attainment, poverty and welfare, work and occupations, community power and social elites. (Irreg.)
SOC	6373	Special Topics in the Family	Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Considers (but is not limited to) such topics as family violence, divorce and remarriage, family and work and methodological issues in family research. (Irreg.)
SOC	6503	Women and Crime	Prerequisite: graduate standing. Provides an in-depth examination of women and crime, primarily in the United States, from a sociological perspective, focusing on theoretical explanations, women as offenders, women as victims of crime, and societal responses to female crime. (Irreg.)
SOC	6513	The Death Penalty	Prerequisite: graduate standing. Provides an overview of capital punishment in the United States, and specifically in Oklahoma, from a sociological perspective. Covers the history of capital punishment, specific cases related to the death penalty, and the arguments in favor of and opposed to the use of capital punishment. (Irreg.)
SOC	6753	Historical and Comparative Sociology	Prerequisite: Graduate standing or permission of instructor. Examines how religious, educational, economic, and political institutions influence peoples lives from a historical and comparative perspective. Examines general principles and conditions for how societies evolve over time. (Irreg.)
SOC	6833	Seminar in Mortality	Prerequisite: graduate standing or permission of instructor. Introduction to the study of human mortality from the perspective of social demography. Examines how different aspects of social stratification and different variables in the social environment are associated with risks of mortality by age and cause of death. Also, examines the implications for health promotion and public policy. (Irreg.)

SOC	6843	Seminar in Fertility	Prerequisite: graduate standing or permission of instructor. Focus on fertility and its impact on society. Examines the contribution of family planning programs and economic development to fertility change. Examines fertility behavior within gender roles and social norms. (Irreg.)
SOC	6853	Seminar in Migration and Immigration	Prerequisite: graduate standing or permission of instructor. Examines migration and immigration with a special focus on recent immigration to the U.S. Examines migration and immigration from three perspectives: why do people migrate, how do migrants adapt to the receiving society, and the impact migrants have on the receiving society. (Irreg.)
SOC	6903	Issues in Sociological Theory	Prerequisite: 5933. M.A. students may enroll only once; Ph.D. students may repeat the course once with a change of topic; maximum credit six hours. Examines a particular sociological theory in detail at a level appropriate for students who have completed 5933. Topics will vary and may include conflict theory, functionalism, symbolic interactionism, exchange theory, etc. (Irreg.)
SOC	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
SOC	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
SOC	6980	Research for Doctoral Dissertation	Research For Doctoral Dissertation. (F, Sp, Su)
SOC	6990	Special Studies in Sociology	1 to 4 hours. Prerequisite: eighteen hours of sociology and permission of instructor. Individual research in a selected field; a problem is analyzed under the direction of a member of the staff. (F, Sp)
SPAN	1013	Spanish for Reading Proficiency	Prerequisite: graduate standing. Designed for graduate students whose major area of study may include primary and secondary sources in Spanish. Students learn the basic grammar necessary to read Spanish academic prose. In addition, includes learning the skills to be able to skim and determine the importance of a given text and to understand its main ideas. Improves reading proficiency in Spanish. Does not count for major credit in the Department of Modern Languages, Literatures, and Linguistics. (F)
SPAN	1023	Spanish for Reading Proficiency, Continued	Prerequisite: graduate standing and SPAN 1013. This course is a continuation of SPAN 1013. The goal of the course is to provide a reading knowledge of the Spanish language. Students will learn grammatical structures, vocabulary, and idiomatic expressions. By the end of the course, students will be able to read Spanish academic prose with the help of a dictionary. This course is taught in English and translation work done is from the target language, Spanish into English. The focus of this course is reading and translating, activities will include grammatical explanation, review of homework, and group translation of sentences and passages. This course does not count for major credit in the Department of Modern Languages, Literatures, and Linguistics. (Sp)
SPAN	1115	Beginning Spanish	An elementary course in understanding, speaking, reading and writing Spanish. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]
SPAN	1225	Beginning Spanish (Continued)	Prerequisite: 1115. An elementary course in understanding, speaking, reading and writing Spanish. Laboratory. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (F, Sp, Su) [I-FL]
SPAN	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

SPAN	2113	Intermediate Spanish	Prerequisite: 1225 or equivalent. Develops reading skills and control of grammar while cultivating depth of oral and writing ability. Emphasis on expansion of vocabulary and strong re-enforcement of grammatical structures. Reading and discussion of texts of literary and cultural interest. Oral and written assignments. (F, Sp, Su).
SPAN	2223	Intermediate Spanish Continued	Prerequisite: 2113. Refines reading skill and mastery of grammar. Emphasis on sophisticated vocabulary and understanding of grammatical structures. Literary and cultural texts discussed in oral and essay form. (F, Sp, Su)
SPAN	2603	Spanish for Social Work Majors	Prerequisite: social work major and SPAN 1225 or equivalent. Designed to prepare students for an intermediate proficiency in Spanish. An expansion of vocabulary and grammatical structure used in practice settings commonly experienced by social workers is emphasized. This course may not count for credit for any major other than social work. (F, Sp)
SPAN	2970	Special Topics/Seminar	Special Topics. 1 to 3 hours. May be repeated; maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)
SPAN	3073	Grammar in Conversational Communication	Prerequisite: SPAN 2223. Aim is to improve students' conversational skills through an active use of the Spanish language. By using a contextualized content-based approach, focuses on seven core communicative functions and engages in meaningful communicative practices through listening and speaking activities related to cinema and other forms of cultural production. (F, Sp)
SPAN	3423	Grammar in Written Communication	Prerequisite: SPAN 2223. Further develops communicative abilities as well as increasing students' knowledge and ability to produce a variety of forms of cultural production in the Spanish language. Writing as a process that includes brainstorming, organization, outline, drafts and revisions will be learned. Familiarity with authentic texts written in different styles will be developed. (F, Sp)
SPAN	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
SPAN	3623	Business Spanish I	Prerequisite: 2223. Introduces the specialized language used in commercial transactions, the organization and management of companies, the production of goods and services, the management of personnel and labor relations, financial resources, and real property. Emphasis on cultural aspects in Spain and Latin America that affect domestic and international trade. This course does not count for major credit in the Department of Modern Languages, Literatures and Linguistics. (Su)
SPAN	3723	Business Spanish II	Prerequisite: SPAN 3073, SPAN 3623. Designed to develop an understanding of the business cultures of Latin America and Spain. Methods for communicating with Spanish-speaking companies or customers will be learned. In addition, linguistic and intercultural skills that will enable students to perform different commercial transactions, as well as attend a trade fair to meet potential customers, will be learned. (F, Sp)

SPAN	3733	Medical Spanish	Prerequisite: SPAN 3073. Develops new critical perspectives on health care for the Hispanic community in the United States. Develops medical language skills and cultural competency for health care situations in order to allow for more effective communication with Spanish-speaking patients and their families. Introduces essential medical vocabulary, practical reference information, and medical notes written from a cross-cultural perspective. (F, Sp)
SPAN	3743	Legal Spanish	Prerequisite: SPAN 3073. Provides an overview of the Spanish language in the legal context. Spanish legal terminology and conversational topics in areas such as civil rights, employment law, family law, immigration law, and human rights will be studied. Legal texts and arguments in order to discuss their implications for the Spanish community in the United States will be examined. (F, Sp)
SPAN	3753	Spanish for Social Work	Prerequisite: SPAN 3073. Addresses students' needs in the area of social work. Spanish terminology and conversational topics related to social services will be examined. Includes an exploration of current policy issues and emerging social needs affecting Spanish-speaking families in Oklahoma, as well as resources available to this group, and gaps in services. (F, Sp)
SPAN	3763	Spanish for Journalism	Prerequisite: SPAN 3073. An introduction to the exciting world of journalism in Spanish. Explores the ingredients of news and news gathering as well as how to tell stories in Spanish across media platforms (print, radio, television, etc.). How to cover a variety of people, places, things, events, and issues associated with the Hispanic community in the United States will be learned. (F, Sp)
SPAN	3853	Readings in Spanish Literature	Prerequisite: SPAN 2223. Initiates students into the literatures and cultures of the Hispanic world, both in Spain and Latin America. Teaches how to analyze literature by literary genres and movements. Like all other courses in Spanish, it emphasizes as well all four language skills (hearing, speaking, reading, and writing) and culture. (F, Sp)
SPAN	3960	Honors Reading	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp)
SPAN	3980	Honors Research	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp)
SPAN	3990	Independent Study	1 to 3 hours. Prerequisite: one course in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
SPAN	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
SPAN	4083	Literature and Culture of Spain	Prerequisite: SPAN 3853. May be repeated with change of content; maximum credit nine hours. Introduces the literature and culture of Spain. It covers canonical texts from the Early to the Early Modern Period. It also emphasizes culture throughout its rich history. Like all other courses in Spanish, it emphasizes as well all four language skills (hearing, speaking, reading, and writing) and culture. (F, Sp)
SPAN	4093	Survey of Spanish-American Literature I	Prerequisite: 3853. A study of representative works from the colonial period to 1888. (F)
SPAN	4103	Survey of Spanish-American Literature II	Prerequisite: 3853. A study of representative works from 1888 to the present. (Sp)

SPAN	4113	Literature and Culture of Latin America	Prerequisite: SPAN 3853. May be repeated with change of content; maximum credit nine hours. Introduces the literature and culture of Latin America. Covers canonical texts from the Early (Colonial) to the Early Modern (Postmodern) Period. Also emphasizes culture throughout its varied history. Like all other courses in Spanish, it stresses as well all four language skills (hearing, speaking, reading, and writing) and culture. (F, Sp)
SPAN	4143	Transatlantic Literature and Culture	Prerequisites: SPAN 3853. May be repeated with change of content; maxim credit nine hours. Introduces the literature and culture of Spain and Spanish America. Covers canonical texts from the Early, the Early Modern, and the Modern (Postmodern) Period. Also emphasizes culture throughout the ages in its ample history. Like all other courses in Spanish, it stresses as well all four language skills (hearing, speaking, reading, and writing) and culture. (F, Sp)
SPAN	4153	Survey of Spanish Literature to 1700	Prerequisite: 3853. A study of representative works from the beginning to the Neo Classic period. (F)
SPAN	4163	Survey of Spanish Literature (Continued)	Prerequisite: 3853. A study of representative works from 1700 to the present. (Sp)
SPAN	4173	Regional Literature and Cultures	Prerequisite: SPAN 3853. May be repeated with change of content; maximum credit nine hours. Introduces the literature and cultures of specific regions in Spain or Spanish America. Covers canonical texts from the Early to the Early Modern Period. May focus on a specific literary genre, or several, theme, or movement. Like all other courses in Spanish, it emphasizes as well all four language skills (hearing, speaking, reading, and writing) and culture. (F, Sp)
SPAN	4183	Senior Capstone	Prerequisite: 3853, Spanish major and senior standing. Synthesis of Hispanic contributions to world literature and culture. (F, Sp) [V]
SPAN	4313	Spanish Civilization	Prerequisite: 3423, History 2613 or 2623. Spanish cultural heritage from the beginnings to the present day. (Sp)
SPAN	4323	Latin American Civilization and Culture	Prerequisite: 3423, and History 2613 or 2623. Latin American cultural heritage from the beginnings to the present day. (F)
SPAN	4503	Hispanic Cinema Studies	Prerequisite: SPAN 3423. May be repeated with change of content; maximum credit nine hours. Introduces film culture of the Hispanic world. Covers classical and contemporary films from the five main areas producing film (Spain, Mexico, Brazil, Cuba, and Argentina) as well as from other Hispanic regions. (F, Sp)
SPAN	4713	History of the Spanish Language	(Slashlisted with 5713) Prerequisite: SPAN 3853. As an introduction to historical Spanish Linguistics, the basic patterns of the evolution of Modern Spanish from Vulgar Latin, as shown in several major literary texts will be learned. Provides an understanding of how the Modern Spanish sound system evolved from the Vulgar Latin of the Iberian Peninsula. Emphasizes as well all four language skills (hearing, speaking, reading, and writing) and culture. No student may earn credit for both 4713 and 5713. (F, Sp)
SPAN	4773	Topics in Spanish Linguistics	Prerequisites: SPAN 3073 and SPAN 3423. May be repeated with change of content; maximum credit nine hours. Introduces the role of meaning in the structure, function, and use of the language and focuses on the core aspects of the representation of meaning in Spanish. Examines how Spanish speakers combine basic linguistic units into larger linguistic expressions that allow them to represent the complex aspects of reality and thought in this language. (F, Sp)
SPAN	4913	The Structure of the Spanish Language	Prerequisite: SPAN 3073 and SPAN 3423. Aims to improve students' formal knowledge of the Spanish language. Principal articulatory properties of the Spanish sounds, Spanish morphology such as word formation and word categories, and Spanish syntax and semantics will be examined. Topics related to social issues and Spanish variation, and in particular, to its situation in the United States will be explored. (F, Sp)

SPAN	4923	Teaching of Spanish in the United States	(Slashlisted with 5923) Prerequisite: SPAN 3073 and SPAN 3423. A theoretical and practical introduction to teaching of Spanish in the United States. The theoretical component of the course incorporates major contemporary notions about Second Language Acquisition (SLA) and Second Language Teaching (SLT). The practical component of the course focuses on professional development as an instructor, roles of instructor and student, and day-to-day classroom activities. No student may earn credit for both 4923 and 5923. (F, Sp)
SPAN	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
SPAN	4970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
SPAN	4990	Independent Study	1 to 3 hours. Prerequisite: three courses in general area to be studied; permission of instructor and department. May be repeated; maximum credit six hours. Contracted independent study for topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (F, Sp, Su)
SPAN	5113	Traditional Novel in Spanish America: Romanticism to Vanguard	Prerequisite: graduate standing or permission of instructor. Beginning with the earliest forms of long prose, the course treats the Romantic novel, the Naturalistic novel, the Novel of the Land, and the Indianist novel. Representative texts of each mode will provide a thorough grounding in the characteristics of the different forms of prose. (Irreg.)
SPAN	5203	Prose Fiction of Cervantes-The Quijote	Prerequisite: graduate standing or permission of instructor. Style, structure, content, and fundamental criticism of Cervantes' masterpiece. (Irreg.)
SPAN	5213	The New Novel in Spanish America	Prerequisite: graduate standing or permission of instructor. Beginning with Vanguard fiction of the post-Modernists, the course treats the explosion of experimental, prize-winning novels as they developed in Spanish America through the sixties. Representative texts will deal with the wide variety of long fiction during the seminal years that saw political revolution echoed in literary revolution. (Irreg.)
SPAN	5233	The Modernista Movement in Spanish-American Literature	Inspiration, influences and objectives; study of the principal writers. (Irreg.)
SPAN	5333	Studies in Medieval Literature	Prerequisite: graduate standing or permission of instructor. May be repeated once with change of content; maximum credit six hours. A study of the representative works and genres of the Middle Ages. (Irreg.)
SPAN	5413	The Spanish-American Novel of the Post-Boom	Prerequisite: graduate standing or permission of instructor. Beginning with novels that are reactions to the new novel, often by the same novelists, the course treats the different forms that have characterized the novel in Spanish America since the seventies. The novelists portray ordinary characters whose quiet desperation and existential suffering is portrayed different from the new novel. (Irreg.)
SPAN	5423	The Spanish-American Essay	The main currents of Spanish-American thought as they appear in the essay, from Simon Bolivar to the present. (Irreg.)
SPAN	5433	Spanish-American Drama	Prerequisite: graduate standing or permission of instructor. The study of the canonical works tracing the development of Spanish-American drama from colonial times to the present. (Irreg.)
SPAN	5443	Post-Modernista Poetry in Spanish America	A survey of Spanish-American poetry after World War I. (Irreg.)

SPAN	5513	Colonial Literature: The Encounter	Prerequisite: graduate standing or permission of instructor. The objective of this course is to familiarize students with early colonial Latin American discourse and its cultural/literary/historic context. Beginning with the letters of Christopher Columbus, the course includes early chronicles and histories. (Irreg.)
SPAN	5523	Colonial Literature: The Criollos	Prerequisite: graduate standing or permission of instructor. This course familiarizes students with colonial Latin American discourse and its cultural/literary/historic context. The course primarily focuses on writers raised in colonial Spanish America approximately 100 years after the encounter. (Irreg.)
SPAN	5603	Studies in Renaissance and Baroque Prose	Prerequisite: graduate standing or permission of instructor. May be repeated once with change of topic; maximum credit six hours. The study of representative narrative from the Spanish Golden Age, including the Picaresque, Pastoral, Sentimental, Chivalric, Mystical and Byzantine traditions. Works by Quevedo, Fray Luis de León, Cervantes, Jorge de Montemayor, Gracián, and others. (Irreg.)
SPAN	5623	Studies in Renaissance and Baroque Poetry	Prerequisite: graduate standing or permission of instructor. May be repeated once with change of content; maximum credit six hours. Poetry of Garcilaso, Boscan, Fray Luis de Leon, Fernando de Herrera, Luis de Gongora, Francisco Quevedo, Lope de Vega, and others. Concepts of imitatio, cultismo, conceptismo, and the petrarchan and satirical traditions. (Irreg.)
SPAN	5683	Studies in Modern Peninsular Prose	Prerequisite: graduate standing or permission of instructor. May be repeated once with change of content; maximum credit six hours. Representative writings in the development of the nineteenth- and twentieth-century Spanish narrative. The essay, short story, and novel of the Romantic, Realist, Naturalist, Modernist, Vanguard, and post Civil War periods are some of the themes to be covered. (Irreg.)
SPAN	5693	Studies in Modern Peninsular Poetry	Prerequisite: graduate standing or permission of instructor. May be repeated once with change of content; maximum credit six hours. Representative poetry of modern Spain. Topics include the works of Romantic, Realist, and Modernist poetry: the Generation of '98; the Generation of '27; and post Civil War poets. Representative poets include Espronceda, Bécquer, Machado, Jiménez, Lorca, Salinas, Guillén, Diego, Alberti, Aleixandre, Cernuda, and others. (Irreg.)
SPAN	5713	History of the Spanish Language	(Slashlisted with 4713) Prerequisite: SPAN 3853 and graduate standing. As an introduction to Historical Spanish Linguistics, the basic patterns of the evolution of Modern Spanish from Vulgar Latin, as shown in several major literary texts will be learned. Provides an understanding of how the Modern Spanish sound system evolved from the Vulgar Latin of the Iberian Peninsula. Emphasizes as well all four language skills (hearing, speaking, reading, and writing) and culture. No student may earn credit for both 4713 and 5713. (F, Sp)
SPAN	5723	Studies in Modern Peninsular Drama	Prerequisite: graduate standing or permission of instructor. May be repeated once with change of content; maximum credit six hours. Representative writers and works of the modern Spanish theater. Topics include Romanticism, Realism, Expressionism, theater of the absurd., and the Esperpento. Dramatic works of Valle Inclán, Garcia Lorca, Buero Vallejo, Alfonso Sastre, and others will be included. (Irreg.)
SPAN	5910	Problems in Research	2 to 4 hours. May be repeated with change of content; maximum credit nine hours. An individual course of intensive research with the area and problem to be determined by the student and directing instructor. (F, Sp, Su)

SPAN	5923	Teaching Of Spanish In The United States	(Slashlisted with 4923) Prerequisite: graduate standing and Spanish proficiency. A theoretical and practical introduction to teaching of Spanish in the United States. The theoretical component of the course incorporates major contemporary notions about Second Language Acquisition (SLA) and Second Language Teaching (SLT). The practical component of the course focuses on professional development as an instructor, roles of instructor and student, and day-to-day classroom activities. No student may earn credit for both 4923 and 5923. (F, Sp)
SPAN	5930	Seminar in Spanish Literature	1 to 3 hours. May be repeated with change of subject matter; maximum credit nine hours. (F, Sp)
SPAN	5940	Seminar in Spanish-American Literature	1 to 3 hours. May be repeated with change of subject matter; maximum credit nine hours. (F, Sp)
SPAN	5960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)
SPAN	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
SPAN	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp)
SPAN	5990	Independent Studies	1 to 3 hours. Prerequisite: graduate standing, permission of instructor. May be repeated; maximum credit twelve hours. Independent reading on one or more topics under the general direction of a faculty member. (F, Sp, Su)
SPAN	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
SPAN	6960	Directed Readings	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
SPAN	6970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
SPAN	6980	Research for Doctoral Dissertation	2 to 16 hours. (F, Sp)
SPAN	6990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
SRRE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
SRRE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
SRRE	4012	Capstone Writing Seminar	Prerequisite: Permission of applied instrument instructor and senior standing. Designed to emphasize research and writing skills culminating in a major research document to demonstrate knowledge in the student's performance area. The document(s) should reflect study and experience in the undergraduate curriculum of their degree program, including, but not confined to, music theory, musicology, conducting, and ensembles. Normally, this document is extensive program notes related to the repertoire of their senior recital. Students should enroll in the capstone writing seminar the semester before the senior capstone recital. (F, Sp) [V]

SRRE	4021	Senior Capstone Recital	Prerequisite: 4012 or concurrent enrollment, concurrent enrollment in 4020, permission of instructor. Preparation and performance of a public recital by students in all undergraduate music programs. Students are advised to and should complete the Capstone Writing Seminar the semester before the Senior Capstone Recital. (F, Sp) [V]
SRRE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
TCOM	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
TCOM	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
TCOM	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
TCOM	5123	Wireless Communications (Crosslisted with ECE 5123).	(Crosslisted with ECE 5123) Prerequisite: Electrical and Computer Engineering 3793 or permission. Wireless communications principles, multiple access techniques, wireless networking, and systems and standards. (F)
TCOM	5133	Multimedia Communications	Prerequisite: Electrical and Computer Engineering 3793 or permission. Basic concepts of compression and networking techniques for multimedia signals. (F, odd-numbered years)
TCOM	5153	Emerging Topics in LTE-Advanced and 5G	(Crosslisted with ECE 5153) Prerequisite: graduate standing. This course will train students to master the latest developments in the rapidly evolving landscape in wireless cellular networks, thereby preparing them for working on emerging as well as near future wireless technologies. Focuses on selected topics for research and development of LTE-A and 5G cellular networks. These topics include: PHY and MAC layer techniques suitable LTE-A & 5G; network densification techniques such as HetNets and C-RAN; Self Organizing Networks (SON); and Big Data Empowered SON. (Sp)
TCOM	5183	Quantum Information Theory	(Crosslisted with ECE 5183) Prerequisite: linear algebra. Introductory course of quantum information theory. Topics covered include quantum state, quantum measurement, quantum channels, No-Cloning Theorem, Bell's inequalities, entanglement, quantum dense coding, quantum teleportation, distance measures, quantum entropy, quantum mutual information, information of quantum channels. (F)
TCOM	5272	Telecommunications Laboratory	Prerequisite: 5533. Core course designed to enhance the understanding of concepts and principles discussed in the computer networking text through a variety of networking exercises. Also emphasizes network performance, simulation, and internet protocols. Includes approximately eight lab modules, with a short report required for each module. (Su)
TCOM	5353	E-Commerce Architecture	Prerequisite: graduate standing or permission. Comprehensive study of web commerce solutions, current and future. Includes designing, building, and managing web-enabled systems; gaining understanding of e-commerce strategies and how to specify, select customize, and manage web-enabled and digital business. (Sp or Su)
TCOM	5533	Telecommunications Industry Overview	Prerequisite: Electrical and Computer Engineering 3793. Studies the development of telecommunications technology, industry, and policy in the United States, stressing inter-relationships among industry, government bodies and policies, and users. Provides a broad view of telecommunications and of the direction of the industry. (F)

TCOM	5543	Telecom Network Design and Management	Prerequisite: Electrical and Computer Engineering 3793. Introduction to basic issues in the design and management of telecommunications networks; concepts will include those pertinent to Telecommunications Engineering and Electrical and Computer Engineering, such as wide area network design principles that cater to Erlangian Traffic. (Sp)
TCOM	5553	Telecommunications Technology	Prerequisite: Electrical and Computer Engineering 3793. The ways and means by which voice, data and video traffic are moved long distances. Topics include data networks, telephone systems, video, and optical systems. (F)
TCOM	5563	Computer and Communications Security	Prerequisite: Electrical and Computer Engineering 3793. Introduction to security problems in computing and communications, basic encryption and decryption techniques, secure encryption systems, cryptographic protocols and practices, security in networks and distributed systems, legal and ethical issues in computer security. (Sp)
TCOM	5573	Optical Systems and Networks	Prerequisite: Electrical and Computer Engineering 3793. Comprehensive study of new developments and how optical technology is used in optical systems and networks; covers optical fiber applications as the best transmission medium for high capacity traffic in communications networking; also how advanced photonic technology has enable networks to transport broadband exceeding terabits/second/fiber. (Sp)
TCOM	5583	Information Theory	Prerequisite: Electrical and Computer Engineering 4523 or equivalent. Introductory course in information theory. Topics include: asymptotic equipartition property, entropy, Fano's inequality, Huffman coding, lossy source coding theory, and channel coding theory. (F)
TCOM	5593	Free Space Optics in Telecommunication Networking	Prerequisite: Electrical and Computer Engineering 3613 and 4523 or equivalent. Introduction to free space optical communications. Review of Maxwell's equations, LED's and lasers, photodetectors, heterodyne detection of light beam tracking and steering, laser radar and range finders. (Sp)
TCOM	5671	Professional Project Proposal Development	Prerequisite: admission to the TCOM program. May be repeated; maximum credit two hours. Supervised individual study to develop a comprehensive project, which will conclude TCOM studies. The proposal should demonstrate the student's comprehensive grasp of his/her field of study. (F, Sp, Su)
TCOM	5682	Professional Project	Prerequisite: 5671. May be repeated; maximum credit four hours. A comprehensive project that is jointly selected by the project supervisor and the student. The program is to be completed during the final semester. (F, Sp, Su)
TCOM	5960	Readings in Telecommunications	1 to 3 hours. Prerequisite: graduate standing. May be repeated with change of content; maximum credit nine hours. Students will study relevant material in the area of telecommunications or information systems. (Irreg.)
TCOM	5970	Topics in Telecommunications	1 to 3 hours. Prerequisite: graduate standing. May be repeated with change of content; maximum credit nine hours. Covers material from specialized topics in the area of telecommunication and information technology. (Irreg.)
TCOM	5980	Research for Master's Thesis	Variable enrollment, two to nine hours; credit required for the degree, six hours. (F, Sp, Su)
TCOM	5990	Independent Study	1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
TCOM	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
TRF	0999	Remedial Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote remedial transfer credit for which there is no OU equivalent course.
TRF	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
TRF	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.

TRF	5999	Graduate Level Transfer Work	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
TRMP	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
TRMP	2000	Freshman and/or Sophomore Secondary Trumpet	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TRMP	2020	Trumpet for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
TRMP	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
TRMP	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
TRMP	4000	Junior and/or Senior Secondary Trumpet	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TRMP	4020	Trumpet for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
TRMP	5000	Master's-Level Secondary Trumpet	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TRMP	5010	Master's-Level Trumpet for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
TRMP	5020	Master's-Level Trumpet for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
TRMP	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
TRMP	6000	Doctoral Secondary Trumpet	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TRMP	6010	Doctoral Trumpet for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
TRMP	6020	Doctoral Trumpet for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)

TROM 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
TROM 2000	Freshman and/or Sophomore Secondary Trombone	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TROM 2020	Trombone for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
TROM 3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
TROM 3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
TROM 4000	Junior and/or Senior Secondary Trombone	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TROM 4020	Trombone for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
TROM 5000	Master's-Level Secondary Trombone	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TROM 5010	Master's-Level Trombone for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
TROM 5020	Master's-Level Trombone for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
TROM 5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
TROM 6000	Doctoral Secondary Trombone	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TROM 6010	Doctoral Trombone for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
TROM 6020	Doctoral Trombone for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
TUBA 1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

TUBA	2000	Freshman and/or Sophomore Secondary Tuba	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TUBA	2020	Tuba for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
TUBA	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
TUBA	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
TUBA	4000	Junior and/or Senior Secondary Tuba	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TUBA	4020	Tuba for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
TUBA	5000	Master's-Level Secondary Tuba	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TUBA	5010	Master's-Level Tuba for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
TUBA	5020	Master's-Level Tuba for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
TUBA	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
TUBA	6000	Doctoral Secondary Tuba	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
TUBA	6010	Doctoral Tuba for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
TUBA	6020	Doctoral Tuba for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
UCOL	1001	Speed Reading on Computer	Prerequisite: ACT subtest reading score of 19 or above or COMPASS subtest reading score of 83 or above. Development of skills needed for improved reading speed and comprehension at the college course level. Course pedagogy is computer-based. This course does not count for major credit in any department. However, the course may count for elective credit as granted by a department. (F, Sp)

UCOL	1002	Gateway to College Learning	Freshman course introducing topics that include the nature of higher education, library use, time management, essential academic skills (critical reading, writing, listening as well as test taking), campus policies, campus resources, and career education. The course assists students in the transition from high school to college. This course does not count for major credit in any department. However, the course may count for elective credit as granted by a department. (F, Sp)
UCOL	1012	Phillips Scholars Seminar I	Prerequisite: acceptance to Phillips Scholars Program. Orientation course which emphasizes academic skills, life skills, OU resources, Phillips resources, and internships. Discovery of necessary tools to complete a rigorous course of college study and further career possibilities with Phillips Petroleum. This course does not count for major credit in any department. However, the course may count for elective credit as granted by a department. (F)
UCOL	1013	First Steps	Prerequisite: permission of instructor. This course is intended to assist students in the transition from high school to college. Focus is placed on both the characteristics and behavior of the successful college student. Topics to be covered include, but are not limited to, study skills, time management, goal setting, learning styles, financial planning, emotional intelligence, and personal and civic responsibility. (Su)
UCOL	1022	University College Seminar	Each seminar is developed and taught by an individual faculty member who leads students through an in-depth exploration of a specific intellectual topic. This course does not count for major credit in any department. However, the course may count for elective credit as granted by a department. (F, Sp)
UCOL	1030	Leadership Practicum	Prerequisite: permission of Freshman Programs Office. May be repeated with change of content and credit hours; maximum credit six hours. Leadership practicum content to include but not limited to campus cultural programming, presentation/public speaking, interviews/resumes, student program budgets, and peer assistant training. This course does not count for major credit in any department. However, the course may count for elective credit as granted by a department. (F, Sp)
UCOL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
UCOL	2002	Strategies for Success	Prerequisite: permission of instructor. May be repeated; maximum credit four hours. Strategies for Success is designed to assist students in reaching their academic potential. It is required for students who are on academic probation, notice, or who are identified by University College to be in need of academic assistance. This course will emphasize study skills, time management, motivation, and goal setting. (F, Sp)
UCOL	2021	Choosing a Major	This class is designed to help students decide on a major that fits their personality, interests, skills, and goals. Working through the decision making process, this activity based class uses self-assessments, group discussions, and in-class research, to explore majors and related careers. By the end of class, students will have decided on a major or have narrowed their options, and will have the skills and resources needed to make decisions about future career choices. (F, Sp)
UCOL	3001	Transitions for Transfer Students	Prerequisite: must be a transfer student. Introduces transfer students to the academic requirements, policies, and resources at the University of Oklahoma. Students will learn about academic advising, transfer credit, degree programs, resources, student life, and methods for achieving academic success at a four-year research institution. (F, Sp)

UCOL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
UCOL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
UCOL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
UGRE	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
UGRE	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
UGRE	4011	Undergraduate Recital	Prerequisite: concurrent enrollment in 4010, permission of adviser and instructor. Preparation and performance of a public recital by students in the B.M.A. and B.M.E. degree programs. (F, Sp, Su)
UGRE	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
UNIV	1000	University Course	Prerequisite: variable, generally at freshman level. May be repeated without restriction with change of subject matter. An interdisciplinary course, with subject matter, credit and format variable, and usually of an ad hoc and/or experimental nature. (F, Sp, Su)
UNIV	1210	Freshman Mentoring Program	Introduction to the academic community; individual and group meetings to encourage student-faculty interaction and foster awareness of academic and cultural resources available to freshmen. (F, Sp)
UNIV	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
UNIV	2000	University Course	Prerequisite: variable, generally at sophomore level. May be repeated without restriction with change of subject matter. An interdisciplinary course, with subject matter, credit and format variable, and usually of an ad hoc and/or experimental nature. (F, Sp, Su)
UNIV	3000	University Course	Prerequisite: variable, generally at junior level. May be repeated without restriction with change of subject matter. An interdisciplinary course, with subject matter, credit and format variable, and usually of an ad hoc and/or experimental nature. (F, Sp, Su)
UNIV	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
UNIV	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
UNIV	4000	University Course	Prerequisite: variable, generally at senior level. May be repeated without restriction with change of subject matter. An interdisciplinary course, with subject matter, credit and format variable, and usually of an ad hoc and/or experimental nature. (F, Sp, Su)

UNIV	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
VIOA	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
VIOA	2000	Freshman and/or Sophomore Secondary Viola	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOA	2020	Viola for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
VIOA	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
VIOA	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
VIOA	4000	Junior and/or Senior Secondary Viola	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOA	4020	Viola for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
VIOA	5000	Master's-Level Secondary Viola	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOA	5010	Master's-Level Viola for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
VIOA	5020	Master's-Level Viola for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
VIOA	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
VIOA	6000	Doctoral Secondary Viola	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOA	6010	Doctoral Viola for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
VIOA	6020	Doctoral Viola for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)

VIOL	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
VIOL	2000	Freshman and/or Sophomore Secondary Violin	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOL	2020	Violin for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 12 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
VIOL	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
VIOL	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
VIOL	4000	Junior and/or Senior Secondary Violin	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOL	4020	Violin for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 20 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
VIOL	5000	Master's-Level Secondary Violin	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOL	5010	Master's-Level Violin for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
VIOL	5020	Master's-Level Violin for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
VIOL	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
VIOL	6000	Doctoral Secondary Violin	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VIOL	6010	Doctoral Violin for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
VIOL	6020	Doctoral Violin for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)
VOIC	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.

VOIC	2000	Freshman and/or Sophomore Secondary Voice	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For freshman and sophomore music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VOIC	2020	Voice for Music Majors: Freshman/Sophomore	2 to 4 hours. Prerequisite: Majors only. May be repeated; maximum credit 8 hours. Applied instrumental lessons for freshmen and sophomore music majors in a School of Music degree program. (F, Sp)
VOIC	3440	Mentored Research Experience	0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
VOIC	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
VOIC	4000	Junior and/or Senior Secondary Voice	1 to 2 hours. Prerequisite: permission of adviser and instructor. May be repeated; maximum credit toward B.F.A., B.M.A., B.M.E., and B.M. degrees, eight hours. For junior and senior music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VOIC	4020	Voice for Music Majors: Junior/Senior	1 to 4 hours. Prerequisite: majors only; junior standing. May be repeated; maximum credit 8 hours. Applied instrumental lessons for junior and senior music majors in a School of Music degree program. (F, Sp)
VOIC	5000	Master's-Level Secondary Voice	1 to 2 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VOIC	5010	Master's-Level Voice for Non-Performance Music Majors	1 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For master's degree students other than performance majors in their major field. (F, Sp, Su)
VOIC	5020	Master's-Level Voice for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; permission of adviser and instructor; 4020 and 4021 or equivalent. May be repeated; maximum credit toward an M.M. degree 10 hours. (F, Sp, Su)
VOIC	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.
VOIC	6000	Doctoral Secondary Voice	1 to 2 hours. Prerequisite: graduate standing in music, permission of adviser or instructor. May be repeated; maximum credit eight hours on a given instrument (including voice). For doctoral degree music students studying in a secondary (or minor) performance area. (F, Sp, Su)
VOIC	6010	Doctoral Voice for Non-Performance Music Majors	2 to 3 hours. Prerequisite: graduate standing in music; permission of adviser and instructor. May be repeated. Doctoral-level study of applied music in the major performance area for students other than performance majors in their primary field. (F, Sp, Su)
VOIC	6020	Doctoral Voice for Performance Majors	2 to 4 hours. Prerequisite: graduate standing in music; 5042; permission of adviser and instructor. May be repeated; credit applicable toward applied music requirements for the Doctor of Musical Arts degree. Doctoral-level study of applied music for performance majors in their primary field. (F, Sp, Su)

WGS	1003	Introduction to Women's and Gender Studies (Crosslisted with Sociology 1003)	(Crosslisted with SOC 1003) Examines women's issues and movements in the United States and globally, with a focus on the pervasive role of gender in people's lives and on the ways it is used to create privilege for some and oppress others. Through readings, films, class discussions, and guest speakers, this course is designed to challenge traditional, normative notions about gender and sexuality, which are inextricably entwined. Also explores ways other markers of difference, such as disability, race, and religion, intersect with gender identity and sexual identity. (F, Sp, Su) [IV-WC]
WGS	1220	Women's and Gender Studies	1 to 3 hours. Title to be specified by department offering the course. Application is to set aside this number for interdisciplinary Women's and Gender Studies course. 1220 preceded by the department name will be an introductory Women's and Gender Studies course in two (or more) departments. (F, Sp, Su)
WGS	1999	Lower Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote lower division transfer credit for which there is no OU equivalent course.
WGS	2713	Women in Pop Culture	Explores the representation of women in various facets of popular culture. First, the gendered codes that inform the representation of women in mainstream film and television will be considered. The politics of representation in three key genres--chick flicks, action films, and reality TV--will be examined, and the structural barriers that limit women creatively behind the scenes will be explored. Second, the ways in which women are represented in American popular music will be explored, examining in particular, five distinct archetypes that frequently appear including pop princesses, divas, female rappers, girl groups and girl bands. Third, the depiction of girls and women in animated films, video games, comic books and social media will be considered. The goal of this course is to foster a critical consideration of gender representations in American popular culture and, through them, the messages being conveyed about the value of women in society. (F, Su)
WGS	3043	Gender/Power/Ldrshp-Politics	(Crosslisted with P SC 3043) Prerequisite: Political Science 1113. Focuses on the relationship between gender, power, leadership, and government in politics and public administration. Causes of under-representation of women in elected office and the bureaucracy are explored. Historical, social, psychological, and organizational barriers are considered. (Irreg.)
WGS	3073	Women in Early Modern Europe	(Crosslisted with HIST 3073) Prerequisite: History 1223 or History 1523 or junior standing or permission of instructor. Examines the experience of women, life cycle, economic activity, education, exercise of power, and religion, noting the enhanced position of women from c. 1350, following the Black Plague, and the decline in that position which began c. 1500. (Irreg.) [IV-WC]
WGS	3123	Social Justice and Social Change	Prerequisite: W S 1003 or junior standing. Introduces students to the major theories and principles of social justice, including fairness, equality and justice; applies these concepts to contemporary social issues such as poverty, gender equality, racial and ethnic identity and politics, environmentalism, the social role of media, war, and globalization; and suggests strategies for creating social change and social justice. Includes both an analysis of the major cultural and structural causes of inequality and injustice, and an examination of the most effective responses. (Irreg.) [IV-WC]
WGS	3133	Medieval Women	Prerequisite: History 113 or History 1613 or junior standing. Covers social history of women in western Europe from late antiquity to the late Middle Ages. Topics include stages of life, marriage, families, occupation, law, power, health, religion, love and education. (F) [IV-WC]

WGS	3220	WGS Special Topics	Prerequisite: WGS 1003 or junior standing. 1 to 3 hours. 3220 preceded by the department name will be a junior level interdisciplinary course in women's studies. May be repeated with change of title and content; maximum credit nine hours. Content will be agreed upon by the departments in cooperation with women's studies. (F, Sp, Su)
WGS	3223	WGS Special Topics	Prerequisite: WGS 1003 or junior standing. 3223 preceded by the department name will be a junior level interdisciplinary course in women's and gender studies. May be repeated with change of title and content; maximum credit twelve hours. (F, Sp, Su)
WGS	3233	Women Creating Social Change	Prerequisite: junior standing or permission of instructor. Overview of how women's organizations developed as part of the women's movement in the 1960's. Examines how women have organized at the local, regional and national levels, both within and across race, class, ethnicity, religion and sexuality. Provides students with a basic understanding of how to create, run and manage a nonprofit organization. (F) [IV-WC]
WGS	3243	Eur Women & Gender Relations	Prerequisite: History 1233 or History 1623. Explores the social, cultural, political and economic history of European women and gender relations from the Scientific Revolution to the present. (Irreg.) [IV-WC]
WGS	3253	Men and Masculinity	Prerequisite: junior standing or W S 1003. Designed as an introduction to the literature and theory that focuses on men and masculinity. Masculinity will be opened for critique and critical inquiry in cross-cultural and cross-historical comparison. The performance of masculinity and attendant judgments of this performance change based upon class, race, ethnicity, sexuality, politics, geography, culture, and language. Our readings are designed to analyze this performance from a number of contextual and sociological angles. Particular emphasis will focus on the way that masculinity and concepts of masculinity have been received and engaged in women's and gender studies, feminism and queer theory. (Irreg.)
WGS	3273	Queer Theory	Prerequisite: junior standing or W S 1003. Designed as an introduction to Queer Theory's main authors and ideas. Queer Theory's theoretical proposals will be examined vis-a-vis various theoretical attempts to free social theory from the straitjackets of Modernity. A careful selection of readings will introduce students to Queer Theory and various other critiques of Modernity, including Postmodernism, Postcolonial Theory and Multicultural Feminism. Special emphasis will be placed on how western patriarchal social theories set the boundaries within which we traditionally think of gender, sexuality, ethnicity, and identity and how we can explore alternative ways to theorize identity and sexuality. (Irreg.)
WGS	3283	Human Trafficking	Prerequisite: junior standing. Introduces the trafficking of persons in different areas, included, but not limited to, bonded labor, forced migration, and sex trafficking. Human trafficking from a historical and also modern perspective, both in the United States and in the global context, will be studied. Human trafficking is modern day slavery. There are more slaves in the world today than before the time of abolition. Estimates show there are about 27-30 million people are enslaved in the world today. Human trafficking is a 32 billion dollar industry worldwide and is second only to drug trafficking with 36 billion dollar revenue. Explores the different kinds of trafficking, effects of globalization, the demand, and what the governments can do in order to combat human trafficking. (F)

WGS	3353	Race, Class & Gender	(Crosslisted with SOC 3353) Prerequisite: junior standing or permission of instructor. Explores the intersections of race, ethnicity, class, gender and sexuality. Focus is on how systems of power and oppression reinforce each other, how they intersect in shaping social structure and individual experiences, and how the systems of oppression are mutually reinforcing. Theories and practice of intersectionality, how gender, race, class and other categories of identity are constructed and reproduced in social, political, and economic structures, and experienced in every day life. (F, Sp)
WGS	3363	Gender, Personality and Communication: Rough Girls, Sweet Boys	Prerequisite: WGS 1003 or junior standing. Designed to introduce students to the intersection between gender, personality and gender performance. Surveys important theories of gender and provides an overview of modern personality theories that will help the student to foster an understanding of the ways in which gender, personality and communicative acts create hetero-normative standards that deserve critical analysis. Introduces theories of gender performance. Presents students with an overview of relevant personality theories. Additionally, the course provides an opportunity for self-assessment through various personality inventories and scales and critical analysis of those metrics. (F, Sp, Su).
WGS	3373	Feminism and Art: A Feminist Perspective on Women and Creativity	Prerequisite: WGS 1003 or junior standing. Provides an overview of feminist theory in relation to the process of creative expression by selected female artists of the 20th and 21st centuries. Utilizes the framework of radical 2nd wave feminism and particularly 3rd wave feminism to help shape conceptions of the philosophy of art. The course surveys the emergence of the confessional art of artists like Frida Kahlo and Anne Sexton and modern 3rd wave artists like Beyonce and Lady Gaga and efficacy of popular media feminist expressions like Girls and Sex and the City. Students will gain insight into the cultural purpose of feminist expression and explore their own conceptions of feminist creative philosophy. (F)
WGS	3413	Body Image Vs. Reality	Prerequisite: 1003 or junior standing. Looks at the topic of body image, which is of great importance to men and women. We explore women's identity in popular culture, examining how different authors have responded to the pressures on women to be beautiful, to inhabit a particular place in society and to create a space for themselves as subjects rather than objects. (F, Sp, Su)
WGS	3423	Women and Sports	Prerequisite: 1003 or junior standing. Examines six generations of American women athletes and their struggle to achieve equality. Explores how women have historically participated in sports and how sports have changed with the passage to Title IX, as well as contemporary female athletics. (F, Sp)
WGS	3440	Mentored Research Experience	NULL
WGS	3443	Gender & Interpersonal Comm	Prerequisite: 1003 or junior standing. Explores the impact of gender on interpersonal communication. Topics include the impact of gender on speech, language, nonverbal behavior and social interactions. Gender-linked differences in communication will be considered in a variety of interpersonal relationships and social settings including romantic relationships, friendships, family, work, peer and nonpeer groups. Course also considers gender communication patterns across cultures as well as ways in which patterns of inequality are embedded in various forms of communication. (Sp)
WGS	3453	Women's Psychosocial Dev	Prerequisite: 1003 or junior standing. Focuses on women's psychosocial and social development through infancy, adolescence and young adulthood, middle adulthood, later adulthood and elder years. (Sp)
WGS	3463	Women and Religion	Prerequisite: WGS 1003 or junior standing. Explores what the Scriptures in Judaism, Christianity and Islam say with regard to women. Looks at the various roles women play within the Scriptures, their role relative to men in general, their place in the foundational myths such as the creation accounts, and the ways in which they negotiate power and authority. (Sp)

WGS	3473	Red Dirt Women and Power	Prerequisite: 1003 or junior standing. The stories of "red dirt women" are central to an examination of their power and vulnerability in Oklahoma past and present. Individual women come alive as students do oral/video histories. Novels, videos, history and structural social analysis place them in their social context. (F) [IV-WC]
WGS	3483	Domestic Violence and the Law	Prerequisite: 1003 or junior standing. Introduction to the legal aspects of domestic violence by examining case law, statutes and scholarly research and commentary. Studies how domestic violence is addressed by the legal system, and analyzes the different legal treatment of married couples, non-married couples and same-sex couples. Law enforcement, court systems, legal representation, and advocacy groups are evaluated for the role they play in domestic violence law. (F)
WGS	3493	Gender and the Environment	Prerequisite: 1003 or junior standing. Interdisciplinary course explores environmental concerns from a gendered perspective, and gender from an environmental perspective, by focusing on a set of issues including science, health, work, family, development, and activism. The links between the environment and men's and women's differing social roles and experiences are explored. Examines how culturally-defined environments shape gendered experiences and how gender informs the meanings, uses, and abuses of local and global environments. (Irreg.)
WGS	3513	Gender, Law and Human Rights	Prerequisite: junior standing or 1003. This course follows the development of women's human rights and the subsequent evolution of legal remedies for gender specific issues. Studies will include the relevant treaties and conventions of the United Nations as well as international case law affecting women. Various women's human rights issues we will study include religion, employment discrimination, gender violence, cultural relativism, polygyny and reproductive rights. (Irreg.) [III-SS]
WGS	3533	History Early Amer Women	Prerequisite: History 1483 or History 1493 or junior standing. Explores the history of American women from the seventeenth century to the mid-nineteenth century by focusing on women's lives from a wide variety of perspectives including demographic change, sexuality, work patterns, and political involvement. (F) [IV-WC]
WGS	3543	History Modern Amer Women	Prerequisite: History 1483 or History 1493 or junior standing. Explores the history of American women from the mid-nineteenth century to the present by focusing on women's lives from a wide variety of perspectives including demographic change, family life, sexuality, work patterns, and political involvement. (Sp) [IV-WC]
WGS	3563	Gender and Global Politics	Prerequisite: junior standing or permission of instructor. How gender shapes global processes such as war and peace, globalization and labor migration, the rise of ideologies of community such as ethno-nationalism and religious fundamentalism, and the emergence of global norms and activism. A particular focus is on local and global social movements and activism that address gender inequality, as well as the rise of global norms of gender equality. (F) [III-SS]
WGS	3573	Gender, War and Peace	Prerequisite: junior standing or permission of instructor. Examines the gender dimensions of conflict and political violence as well as post conflict peace-building. Explores how each stage of conflict is gendered, including: (1) the origins of aggression and the preparations for war through the militarization of society; (2) the conduct of war, wartime atrocities, and the composition, training and performance of armed forces; and, (3) the aftermath of war and conflict prevention attempts through peace agreements, peacemaking and peace-building efforts, and the structures and practices of transitional justice. Of central concern throughout the course is the way in which social constructions of masculinity and femininity shape war and peace. (Sp)

WGS	3583	Gender and Employment Discrimination Law	Prerequisite: junior standing. Focuses on federal and state employment statutes and case law prohibiting adverse employment actions on the basis of sex. Principal focus is on Title VII of the Civil Rights Act of 1964. Examines in detail sexual harassment law, family leave and pregnancy discrimination, age discrimination, sexual orientation and the Equal Pay Act. By viewing the material through a feminist lens, the role gender plays in equal employment will be better understood. (Sp)
WGS	3593	Women in the American West	Prerequisite: History 1483 and History 1493. Nineteenth-century gender ideologies, multicultural interaction and exchange, work roles and community building, participation in politics, and reform movements of women in trans-Mississippi West. (Irreg.) [IV-WC]
WGS	3623	Gender and Terrorism	Prerequisite: WGS 1003 or junior standing. Even before 9/11, the subject of terrorism has been studied within academics with great interest. Too often, however, scholarship on terrorism fixates on issues of security, nationalism, and technologies of war. In this course, we will examine alternative approaches to understanding representations of terrorism specifically through the lens of gender. We will study various theories of violence while considering how transnational scholars re---situate notions of war, violence, gender, and media cultures in ways that challenge traditional and limiting approaches. (F)
WGS	3703	Female Heroism in Hollywood	Prerequisite: WGS 1003 or junior standing. Examines conceptual and performative shifts in female heroism in Hollywood genre. Students will engage with various theoretical (feminist theory, feminist film theory, critical race theory) and critical texts discussing the social construction of the female body in American society and cinema, and examine the changing generic parameters through which the female body is considered and constituted heroic. The goal of this course is to explore how the female body is constructed as a locus of heroic identity as it engages dynamically in the male dominated and oriented space of physical action. (F)
WGS	3713	Gender and James Bond	Prerequisite: WGS 1003 or junior standing. Explores the unprecedented longevity and popular cultural viability of the James Bond film franchise. First, the representation of heroism and villainy in the series will be considered, focusing on the performance and intersectionality of gender, race, class, nationality and sexual orientation. Second, the popular culture impact of the Bond franchise will be examined. Development of the "Bondian" film formula focusing on aspects of visual style, music, and the role of technology will be explored. They will also consider the marketing of the Bond films through the opening credit sequence, movie posters, and secondary market products such as James Bond videogames, comic books, and cartoons. Third, students will explore the problematic representation of women in the Bond film franchise. They will examine four key characters or character types: the Bad Girl, the Bond Girl, M, and Miss Moneypenny. Finally, students will consider how Casino Royale (2005) functions a prequel and effectively reboots the franchise in the new millennium. They will explore how key "Bondian" elements (such as heroic masculinity) have been reframed in the 2000s and consider why producers chose to reframe the film franchise. Ultimately, the goal of this course is to explore the ongoing commercial viability of the James Bond franchise and explore the popular cultural impact of its films. (Irreg.)
WGS	3810	WGS Special Topics	1 to 3 hours. Prerequisite: WGS 1003 or junior standing. May be repeated with change of content; maximum credit nine hours. Content will vary but will cover a particular aspect of women's studies, be it history, art, communication, literature, contemporary social problems, theory, or other appropriate area of study. Texts and supplementary readings will be assigned according to the topics chosen. (F, Sp)

WGS	3813	WGS Special Topics	Prerequisite: WGS 1003 or junior standing. May be repeated with change of content; maximum credit nine hours. Content will vary but will cover a particular aspect of women's and gender studies, be it history, art, communication, literature, contemporary social problems, theory, or other appropriate area of study. (Irreg.)
WGS	3823	Motherhood Contemp Society	Prerequisite: 1003 or junior standing. Explores various historical, social, economic and personal aspects of motherhood. Examines how definitions of motherhood and family, as well as mothers relationship to work outside the home, have changed over time in the American context. Family relationships, work-family balance, childcare, and gendered expectations of women's and men's roles in the family and workplace will be considered. The public policy context of contemporary motherhood will be examined as well as the perception and reality of motherhood in various cultures. (Su)
WGS	3833	Women and Islam	Prerequisite: junior standing. Examines commonly held beliefs about how Islam regards Muslim women. A broad range of Muslim women, some who identify as feminist, others who do not, consider Islam crucial to their gendered identity. There are also feminist women who were born Muslim, some of whom continue to practice Islam, others who do not, who consider Islam as oppressing their gendered identity. Whatever their positions, it is crucial that these women discuss their relationships, as women, to Islam. In this current historical and cultural moment, critics and proponents of Islam often speak on behalf of Muslim women, while Muslim women remain silent. Reading of Muslim women writing, in their own words, about their religious practices, their feminist practices, and how these practices affect their lives and perspectives. (Irreg.)
WGS	3933	History-Early Mod Witch-Hunt	(Crosslisted with HIST 3933) Prerequisite: junior standing. Covers an important era in the history of human rights and misogyny while offering a view of early modern Europe through social, legal, political, and religious lenses. (Irreg.) [IV-WC]
WGS	3943	Women' Health	Prerequisite: 2003 or permission of instructor. Students will gain basic understanding of subjects necessary to develop physical, mental, and social well-being. Covers female anatomy, physiology, and normal processes, including reproduction, childbearing, and menopause. Healthy life choices and decision-making, stress management, and self-care, including nutrition, exercise, and mental wellness, will also be considered. (F, Sp)
WGS	3953	Women and the Law	Prerequisite: junior standing. This course will examine the history of women's rights and gender discrimination in the United States. It will focus on topics such as the family, education, reproduction, sexual harassment, violence against women, pornography and discrimination in the workplace. Although the subject matter involves legal cases and discourse, it is not intended to be a law school course. (F) [IV-WC]
WGS	3960	Honors Reading (HONORS)	Prerequisite: 2003 and admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the Women's and Gender Studies faculty member. Topics will cover materials not usually presented in regular courses. (Irreg.)
WGS	3970	Honors Seminar	1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
WGS	3980	Honors Research (HONORS)	Prerequisite: 2003 and admission to Honors Program. Individualized research with a Women's and Gender Studies faculty member on a topic leading toward work for the Honors thesis. In-depth research of specialized topic in women's studies. (Irreg.)

WGS	3983	Women, Girls & Crime (Crosslisted with Sociology 3983)	Prerequisite: SOC 1113 and SOC 3523, or permission of instructor. An in-depth examination of crime and the justice system as it relates to girls and women. The focus will be on girls and women as victims, girls and women as offenders, and criminal justice responses to girls and women. (F, Sp)
WGS	3990	Independent Study	1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
WGS	3999	Upper Division Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote upper division transfer credit for which there is no OU equivalent course.
WGS	4003	Women's and Gender Studies Senior Capstone	Prerequisite: WGS 1003 or junior standing and WGS major or minor. Designed to acquaint majors and/or minors with the inter-relationship between theory and methodology in Women's and Gender Studies. The course will interweave the sciences, social sciences, humanities, and arts. Students are expected to write weekly critiques, develop a research proposal, and do an oral presentation. (Sp)
WGS	4013	WGS Internship	Prerequisite: junior standing, permission of adviser and instructor, and an approved women's and gender studies course. May be repeated; maximum credit six hours. Students must relate their academic experience to women's or gender issues by working with a non-profit organization or project. Academic credit is based on the site supervisor's report and a substantial paper relating to the internship experience. (F, Sp, Su)
WGS	4023	Social Justice Internship	Prerequisite: 2223 and junior standing and 2.5 GPA. Designed to provide students an opportunity to relate their academic experience to social justice issues in the community by working in a social justice agency or non-profit organization or on a social justice service-learning project for a semester. (F, Sp)
WGS	4120	WGS Special Topics	1 to 3 hours. Prerequisite: junior standing. May be repeated in a given department, maximum credit nine hours, provided that the course title and content is different in each instance. (F, Sp, Su)
WGS	4123	Contemporary Feminist Thought	Prerequisite: senior standing or permission of instructor. Survey of the core concepts and texts of feminist theory exposes students to the major works in feminist theory as well as critiques and scholarly analysis of them. Includes discussion of the roots of feminist theory, analysis of alternatives to liberal feminist thought, and examination of the impact of postmodernism on feminist thought and the rise of global feminism. (Sp) [V]
WGS	4473	Women and Mental Health	Prerequisite: junior standing. Examines psychological theory and practice as it pertains to women. Will look at traditional theories and practice, new approaches to working with women, and such topical issues as leadership, work issues, depression, trauma, and health. Will be useful to all students who seek to have a better understanding of social and psychological issues that impact women, and how to help resolve those issues. (Irreg.)
WGS	4913	Senior Thesis	Prerequisite: senior standing and permission of instructor. Research and presentation of written thesis on suitable topics in women's or gender studies. Specific topic must be approved in advance by instructor. (F, Sp, Su)
WGS	4960	Directed Readings	1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
WGS	4990	Independent Study	1 to 6 hours. Prerequisite: junior standing, permission of instructor, and an approved Women's and Gender Studies course. May be repeated once with change of content; maximum credit six hours. Designed to accommodate students' interest in reading and research in a specialized area of women's studies. (F, Sp, Su)

WGS	5001	Women & Gender Studies Colloq	Prerequisite: 3 hours at or above the 5000-level. Offers a discussion and review of major debates and current literature in the women's and gender studies field with an emphasis on feminist research methods and approaches. Students will expose one another to approaches to women's and gender studies in such major disciplines as anthropology, sociology, political science, education, English, history, communications, and human relations. (F)
WGS	5013	Graduate Internship	Prerequisite: graduate standing, permission of instructor, and an approved graduate women's and gender studies course. May be repeated; maximum credit six hours. Students must relate their academic experience to women's or gender issues by working with a non-profit organization or project. Academic credit is based on the site supervisor's report and a substantial paper relating to the internship experience. (F, Sp, Su)
WGS	5120	Graduate Interdisciplinary	1 to 3 hours. Prerequisite: graduate standing. May be repeated in a given department, maximum credit nine hours, with a change of content. (Irreg.)
WGS	5123	Contemporary Feminist Thought	(Slashlisted with 4123) Prerequisite: graduate standing or permission of instructor. Survey of the core concepts and texts of feminist theory exposes students to the major works in feminist theory as well as critiques and scholarly analysis of them. Includes discussion of the roots of feminist thought, analysis of alternatives to liberal feminist thought, and examination of the impact of postmodernism on feminist thought and the rise of global feminism. (Sp)
WGS	5960	Directed Readings	1 to 6 hours. Prerequisite: six hours of Women's and Gender Studies courses at the graduate level. Graduate directed readings is designed for specialized research on a women's studies topic. (F, Sp, Su)
WGS	5970	Special Topics/Seminar	1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
WGS	5990	Independent Study	1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
WGS	5999	Graduate Level Transfer Credit	This is not a course offered at the University of Oklahoma. It is used to denote graduate level transfer credit for which there is no OU equivalent course.