

Health and Exercise Science Course Listings

NOTE: Students must be admitted to the HES program in order to take HES core courses.

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.

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.

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.

1041 Yoga. Beginning level Yoga class focusing on basic asanas (poses), breathing, relaxation and meditation. Students will improve their flexibility and body awareness.

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.

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.

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.

1321 Wall Climbing. The purpose of this class is to learn and practice the basic techniques and safety concerns for rock climbing and bouldering.

1351 Recreational Activities. May be repeated with change of subject matter; maximum credit three hours.

1521 Beginning Swimming.

1562 Lifeguard Certification. Introduces the new concept of rescuing victims at all waterfront areas with an emphasis on speed. Will satisfy both federal and state guidelines which are required for all lifeguards.

1661 Beginning Racquetball. Fundamental skills of racquetball, i.e., serving, forehand, backhand, court positions and strategy.

1681 Beginning Tennis.

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 diseases/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.

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.

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.

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.

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.

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. **Laboratory.**

2823 Introductory Nutrition (Crosslisted with Clinical Dietetics 1823). 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]

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.

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.

3021 Sports Officiating: Football and Volleyball. Prerequisite: English 1213 or Expository Writing 1213. Standards and principles involved in the art of officiating with emphasis on football and volleyball. Laboratory experience required.

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.

3213 Principles and Practice of Sport Management for Non-HES Majors. Prerequisite: Non-HES majors 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.

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.

3502 Care and Prevention of Athletic Injuries. Prerequisite: 2212 or equivalent; 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.**

3513 Health Promotion Program Planning. (HES Core) 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.

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.

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.

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.

3563 Lifestyle Interventions. (HES Core) 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.

3573 Obesity and Weight Management. Prerequisite: Junior standing and HES 2913 and either HES 1823 or BIOL 2124. Provide students with knowledge of the physiology and psychology of obesity and overweight. Course is 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.

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.

3803 Exercise Physiology for Non-HES 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.

3813 Principles of Health and Fitness. (HES Core) Prerequisite: HES Major or HES Minor 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.

3823 Physiology of Exercise. (HES Core) Prerequisite: 3813 and Health and Exercise Science major or permission of instructor. An 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.

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.

3853 Exercise Testing and Prescription. (HES Core) 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.

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.

3883 Principles of Endurance Training. Prerequisite: junior standing. Emphasis will be placed on understanding physiology related to endurance performance and principles of endurance training. Performance testing procedures for predicting endurance performance will be conducted throughout the semester. In addition, it will be required that an endurance training program utilizing the information covered in class will be designed.

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.

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.

3970 Honors Seminar. 1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. An opportunity for the Honors' candidate to work with a faculty mentor on a research project of special interest to the student.

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.

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.

4213 Management in Health and Exercise Science. Prerequisite: Junior standing. Concentration on managerial theories, research, and their applications in health and sport organization and administration. Specific topics include organizational theories, communication, leadership, motivation, managerial skills, and functions of management, issues of policies, marketing, and financial aspects of management.

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.

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.

4430 Internship in Health and Exercise Science. 1 to 4 hours. Prerequisite: HES major and nine credit hours of HES major core, and permission of instructor. May be repeated with change in organization or advanced position with approval of adviser; maximum credit four hours. Practical experience in administration, techniques, organizational structure and appropriate materials used with health, fitness, or sport related occupations.

4503 Principles of Community Health. (HES Core) Prerequisite: Health and Exercise Science major or permission. Designed to examine the importance of maintaining, protecting, and improving the health of populations through organized community efforts. In particular course lectures, exams, readings, and in-class discussions/activities will focus on helping you achieve two goals: (1) to understand health issues in the community such as drug abuse, environmental health, minority health, health care, mental health, safety, and occupational health; and (2) to develop skills necessary to understand the planning, implementation and evaluation of health promotion and health education programs. To meet these goals, a brief review of the historical foundations of community health will be presented as well as major health problems prevalent in the U.S., basic concepts in community health, and principles used in health promotion and health education.

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.

4523 Human Sexuality II. Prerequisite: 3523 or permission. In-depth 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.

4543 Comprehensive Stress Management. Prerequisite: BIOL 2234 or 2255, BIOL 2124 and a course in PSY. 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.

4553 Measurement and Evaluation in Health Promotion. 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.

4573 Chronic Disease Intervention. (HES Core) Prerequisite: Health and Exercise Science major or permission. Provide students with 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.

4803 Nutrition and Sports 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.

4823 Sport and Exercise Nutrition. Prerequisite: CHEM 1315 and HES 2823. Provides students with a basic understanding of the influence of nutrition on sport and exercise performance. It will require 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.

4833 Physiology of Exercise Laboratory. (HES Core) 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 circulatorrespiratory systems. Includes factors affecting physiological performance capacities and experimental basis of exercise assessment and training. Laboratory.

4863 Physical Activity and Aging. Prerequisite: Permission of instructor. Discussion of general concepts of aging and the issues related to dying, the expected changes related to aging in the various physiological systems, i.e., body composition, cardiovascular, bone, and skeletal muscle. In addition, exercise programming concerns for the aged as well as the possible benefits of exercise during aging will be discussed.

4883 Advanced Strength and Conditioning. Prerequisite: junior standing. Advances knowledge of strength and conditioning concepts in an applied setting. Prepares 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.

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.

4953 Senior Capstone. (HES Core) 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. [V-Capstone]

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.

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.

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.