Course Title:
Theory and Research in Education

Course Number:
ILAC 5143-223

Course Description:
This course serves an introduction to the processes and products of educational research such as stages in designing a study, research methods, and identification of the components of a research-based article. This course also serves to develop critical consumers of educational research.

Class Dates, Location and Hours:

Dates: March 24-29, 2015
Location: Stuttgart, Germany. See site director for classroom location.
Hours: Tue-Fri 6:00-9:30 pm; Sat-Sun 8:30 a.m.-4:30 p.m.
Last day to enroll or drop without penalty: February 23, 2015

Site Director:
Antoinette Colaninno. Stuttgart Army Education Center. DSN: 431-3304; Fax 431-2571 or CIV 07031-15-2580 FAX 07031-15-2571. Email: apstuttgart@ou.edu

Professor Contact Information:
Course Professor: Timothy A. Laubach, Ph.D.
Mailing Address: 820 Van Vleet Oval, Rm 114
Norman, OK 73019
Telephone Number: (405) 325-1979
Fax Number: (405) 325-4061
E-mail Address: laubach@ou.edu
Professor availability: The professor will be available via e-mail to students before and after the in-class sessions. On-site office hours are half an hour before and after each class session, by appointment.

Textbook(s) and Instructional Materials:
Student materials are available at the OU Follett Bookstore located at 1185 Asp Avenue; Norman, OK, and can be ordered online, by phone, by email, or by fax. Ordering online at www.oklahoma.bkstr.com is strongly recommended – students can track the status of their order within 48 hours. If an order has not been shipped within three days, students can contact the Follett textbook manager by phone (405) 325-3511, (800) 522-0772 (toll-free) or email 0831mgr@fheg.follett.com. Phone orders (ask for the textbook manager and identify yourself as an Advanced Programs student) can be placed 8 a.m. to 6 p.m. Monday through Thursday; 8 a.m. to 5 p.m. on Friday; 10 a.m. to 4 p.m. on Saturday (CST). Summer hours: 9 a.m. to 5 p.m. Monday through Friday (CST). Fax orders can be placed 24 hours a day at (405) 325-7770. Text prices are available online.


2. Materials posted on the OU Desire to Learn (D2L) system: Access D2L at http://learn.ou.edu; enter your OU NetID (4+4) and password, and select course to access material. Please contact your local Site Director if you require assistance.
Note: Follett is the Advanced Programs contractual textbook provider. Should text changes become necessary after publication of the course syllabus, Advanced Programs will facilitate text returns/refunds only for texts purchased through Follett.

**Course Objectives:**

- Demonstrate understanding of ethical issues that arise in all stages of research
- Distinguish between five major research designs/methodologies (quantitative, qualitative, mixed methods, action research, and research synthesis) and understand the stages and processes used in each method
- Demonstrate an understanding of the procedures necessary to evaluate existing research
- Demonstrate the ability to use on-line databases when conducting research (OU Libraries, Cabell’s Directory, Google Scholar)

**Course Outline:**

**Prior to In-Person Class Meeting: February 24-March 23, 2015**

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Order textbook and familiarize yourself with the course D2L website.</td>
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<tr>
<td>February 24-</td>
<td>Complete the online diagnostic formative assessment by <strong>Tuesday, February 24 at 11:59 PM.</strong></td>
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<tr>
<td>March 2</td>
<td>Read Creswell (2013) Chapter 1 and post SRQ to D2L Dropbox by <strong>Monday, March 2 at 11:59 PM.</strong></td>
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<tr>
<td>Week 2</td>
<td>Read Creswell (2013) Chapter 8 and post SRQ to D2L Dropbox by <strong>Monday, March 9 at 11:59 PM.</strong></td>
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<tr>
<td>March 3-9</td>
<td>Read Creswell (2013) Chapter 9 and post SRQ to D2L Dropbox by <strong>Monday, March 16 at 11:59 PM.</strong></td>
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<tr>
<td>Week 3</td>
<td>Read Creswell (2013) Chapter 10 and post SRQ to D2L Dropbox by <strong>Monday, March 23 at 11:59 PM.</strong></td>
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<td>March 10-16</td>
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<td>Week 4</td>
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<tr>
<td>March 17-23</td>
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**During In-Person Class Meetings: March 24-29, 2015**

<table>
<thead>
<tr>
<th>Date</th>
<th>Readings/Activities</th>
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<tbody>
<tr>
<td>Class 1</td>
<td>Introductions and Syllabus</td>
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<tr>
<td>March 24</td>
<td>Creswell Chapter 1 (The Selection of a Research Approach) discussion</td>
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<tr>
<td>Tuesday</td>
<td>Creswell Chapter 8 (Quantitative Methods) discussion</td>
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<td>Class 2</td>
<td>Lee, Kinzie, &amp; Whittaker (2012) article analysis</td>
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<tr>
<td>March 25</td>
<td>Cerwell Chapter 9 (Qualitative Methods) discussion</td>
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<tr>
<td>Wednesday</td>
<td>Piccolo et al. (2008) article analysis</td>
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<tr>
<td>Date</td>
<td>Readings/Activities</td>
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<td>Class 4</td>
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<tr>
<td>March 27</td>
<td>Creswell Chapter 10 (Mixed Methods) discussion</td>
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<td>Friday</td>
<td>Russell &amp; Curtis (2013) article analysis</td>
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<td>Creswell Chapter 3 (Use of Theory) discussion</td>
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<td>Class 5</td>
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<tr>
<td>March 28</td>
<td>Creswell Chapter 4 (Ethical Considerations, pp. 92-103) discussion</td>
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<td>Saturday</td>
<td>Designing Research Discussion: Creswell Chapters 5-7</td>
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<td>Action Research Field Experience Preparation</td>
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<td>Action Research Field Experience</td>
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<td>Action Research Filed Experience Reflections and Presentations</td>
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<td>Class 6</td>
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<tr>
<td>March 29</td>
<td>Online Database Workshop</td>
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<tr>
<td>Sunday</td>
<td>Creswell Chapter 2 (Review of the Literature)</td>
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<td>Shanahan (2000) and Slavin &amp; Cheung (2005) research synthesis documents analysis</td>
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<td>Research Synthesis Project discussion and development</td>
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</tbody>
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**Following In-Person Class Meetings: March 31-April 20, 2015**

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Week 6</td>
<td>Submit Literature Map and Narrative Description for Research Synthesis Project by <strong>Monday, April 6 at 11:59 PM.</strong></td>
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<tr>
<td>March 31-</td>
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<td>April 6</td>
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<tr>
<td>Week 7</td>
<td>Incorporate instructor feedback from Literature Map and Narrative Description in the Final Research Synthesis Paper</td>
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<tr>
<td>April 7-13</td>
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<tr>
<td>Week 8</td>
<td>Submit Final Research Synthesis Paper by <strong>Monday, April 20 at 11:59 PM.</strong></td>
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<td>April 14-20</td>
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**Assignments, Grading and Due Dates:**

**Online Diagnostic Formative Assessment**

This assignment serves as a snapshot of your understandings about theory and research prior to beginning this course. Please DO NOT consult any references prior to submitting your responses. The grade associated with this assignment will be based on completion. **Upload to D2L Dropbox by Tuesday, February 24 at 11:59 PM.**

**Summarize-Respond-Question (SRQ) Assignments**

These assignments give you the opportunity to thoughtfully and thoroughly prepare for the individual face-to-face class meetings. You will prepare a 500-600 word paper (word processed, professional 12 point font, double spaced, 1 inch margins) for each of the designated chapters in the Creswell text and **upload each SRQ to the Dropbox by the provided deadlines.**

The title of each SRQ assignment will be the number and title of the Creswell chapter (e.g., Chapter 1: The Selection of a Research Design). Structure your response into the following categories:
a. Summarize: Complete a short summary of the major points of the reading.

b. Respond: Discuss your thinking about the chapter as you read it. That is, respond to the reading on a personal level. You may discuss how the chapter relates to your own work (text-to-self response); how it relates to other professional reading you have done (text-to-text response); how the text relates to broader issues in education (text-to-world response); or a combination of two or more of these text responses.

c. Question: Identify 2-3 questions that you are still asking yourself as a result of reading the chapter. Explain why you are asking these questions. For example, you may have a contents-based question (information in the chapter that was not clear to you) or a practice-based question (how a process is carried out). Any question is valid as long as you can provide a justification for it.

Action Research Project

As a class, we will participate in an Action Research Field Experience by visiting a site in the local community. While working in pairs, you will observe your surroundings to design either a practical or a participatory action research project following the “Steps in Conducting an Action Research Study” by Creswell (2008). For the purposes of this course, you will complete Steps 1-7 of this 8-Step approach and present your plan to the class. Due Class 5.

Research Synthesis Project

Select a topic of interest and importance. Your topic may be related to a question you have in education. Conduct a research synthesis of the topic using procedures outlined by Shanahan in “Research Synthesis: Making Sense of Accumulation of Knowledge in Reading;” and drawing upon the article by Slavin and Cheung, “A Synthesis of Research on Language of Reading Instruction for English Language Learners” as a model for reporting.

Literature Map and Narrative Description

Follow the steps outlined and example provided by Creswell (Chapter 2-Review of the Literature) to produce a literature map, which is a visual summary of the existing research related to your topic that has been conducted by others. The literature map presents an overview of the existing literature. Upload to D2L Dropbox by Monday, April 6 at 11:59 PM.

The narrative description of your literature map must include the following components: (a) description of the procedures initially used to collect a broad database of articles related to your topic; (b) description of the broad database of articles related to the topic that resulted from your search; (c) description of the inclusion and exclusion criteria used to pare down the broad database of articles; (d) description of the review criteria used to classify and analyze the articles that have been selected for review (you are not expected to compute effect sizes). Upload to D2L Dropbox by Monday, April 6 at 11:59 PM.

Research Synthesis Paper

You are expected to incorporate instructor feedback received from your Literature Map and Narrative Description in your final research synthesis paper. This final paper should include the following sections: Introduction, Methods (steps a-d from Narrative Description), Results (report of the findings resulting from the synthesis), and Conclusions (conclusions and implications for future research). Upload to D2L Dropbox by Monday, April 20 at 11:59 PM.

Class Participation

You are expected to act professionally in both speech and action during the class. This includes but is not limited to the following:

1. Coming to class on time
2. Staying for the entire class
3. Being attentive during class discussions
4. Willingly participating in group assignments
5. Respecting the comments and questions made by fellow students during both small and large group discussions
6. Refraining from any behavior that disrupts the academic process.

You will be expected to participate actively in each class session and prepare for each session by doing the assigned readings and activities.

Grading:
This is a letter-graded course: A, B, C, D, or F. A = 120-108; B = 107-96; C = 95-84; D = 83-72; F = below 72

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Points</th>
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<tbody>
<tr>
<td>Diagnostic Formative Assessment</td>
<td>Tuesday, February 24 at 11:59 PM</td>
<td>5</td>
</tr>
<tr>
<td>Summarize-Respond-Question (SRQ), (10 points each)</td>
<td>Creswell Chapter 1, Monday, March 2 at 11:59 PM</td>
<td>40</td>
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<td>Creswell Chapter 8, Monday, March 9 at 11:59 PM</td>
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<td>Creswell Chapter 9, Monday, March 16 at 11:59 PM</td>
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<td>Creswell Chapter 10, Monday, March 23 at 11:59 PM</td>
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<tr>
<td>Action Research Project</td>
<td>Present projects March 28</td>
<td>10</td>
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<tr>
<td>Research Synthesis Project</td>
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<td>50</td>
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<tr>
<td>Literature Map</td>
<td>April 6 at 11:59 PM</td>
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<tr>
<td>Narrative Description</td>
<td>April 6 at 11:59 PM</td>
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<tr>
<td>Final Paper</td>
<td>April 20 at 11:59 PM</td>
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<tr>
<td>Class Participation</td>
<td>Ongoing</td>
<td>15</td>
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Notice: Failure to meet assignment due dates could result in a grade of I (Incomplete) and may adversely impact Tuition Assistance and/or Financial Aid.
POLICIES AND NOTICES

Attendance/Grade Policy

Attendance and participation in interaction, individual assignments, group exercises, simulations, role playing, etc. are valuable aspects of any course because much of the learning comes from discussions in class with other students. It is expected that you attend all classes and be on time except for excused emergencies.

Excused absences are given for professor mandated activities or legally required activities such as emergencies or military assignments. It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Unavoidable personal emergencies, including (but not limited to) serious illness; delays in getting to class because of accidents, etc.; deaths and funerals, and hazardous road conditions will be excused.

If you are obtaining financial assistance (TA, STAP, FA, VA, Scholarship, etc.) to pay all or part of your tuition cost, you must follow your funding agency/institution’s policy regarding “I” (Incomplete) grades unless the timeline is longer than what the University policy allows then you must adhere to the University policy. Students who receive Financial Aid must resolve/complete any “I” (Incomplete) grades by the end of the term or he/she may be placed on “financial aid probation.” If the “I” grade is not resolved/completed by the end of the following term, the student’s Financial Aid may be suspended make the student ineligible for further Financial Aid.

Students are responsible for meeting the guidelines of Tuition Assistance and Veterans Assistance. See the education counselor at your local education center for a complete description of your TA or VA requirements.

Academic Integrity and Student Conduct

Academic integrity means honesty and responsibility in scholarship. Academic assignments exist to help students learn; grades exist to show how fully this goal is attained. Therefore all work and all grades should result from the student's own understanding and effort.

Academic misconduct is any act which improperly affects the evaluation of a student’s academic performance or achievement. Misconduct occurs when the student either knows or reasonably should know that the act constitutes misconduct. Academic misconduct includes: cheating and using unauthorized materials on examinations and other assignments; improper collaboration, submitting the same assignment for different classes (self-plagiarism); fabrication, forgery, alteration of documents, lying, etc…in order to obtain an academic advantage; assisting others in academic misconduct; attempting to commit academic misconduct; destruction of property, hacking, etc…; intimidation and interference with integrity process; and plagiarism. All students should review the Student’s Guide to Academic Integrity at [http://integrity.ou.edu/students_guide.html](http://integrity.ou.edu/students_guide.html)

Students and faculty each have responsibility for maintaining an appropriate learning environment. All students should review policies regarding student conduct at [http://studentconduct.ou.edu/](http://studentconduct.ou.edu/)

Accommodation Statement

The University of Oklahoma is committed to making its activities as accessible as possible. For accommodations on the basis of disability, please contact your local OU Site Director.

Course Policies

Advanced Programs policy is to order books in paperback if available. Courses, dates, and professors are subject to change. Please check with your OU Site Director. Students should retain a copy of any assignments that are mailed to the professor for the course. Advanced Programs does not provide duplicating services or office supplies.

Any and all course materials, syllabus, lessons, lectures, etc. are the property of professor teaching the course and the Board of Regents of the University of Oklahoma and are protected under applicable copyright.

For more information about Advanced Programs, visit our website at: [http://www.goou.ou.edu/](http://www.goou.ou.edu/)
INSTRUCTOR VITA
Timothy A. Laubach, Ph.D.

Education
- Ph.D. Science Education, University of Oklahoma, Norman, OK, December 2005
- B.S. Earth Science Education, Coaching Minor, Tennessee Temple University, Chattanooga, TN, May 1995

Current Positions
- Assistant Professor of Science Education
- Co-Director of the John W. Renner Science Education Center

Major Areas of Teaching and Research Interest
- EDSC 4093, Inquiry Based Science Teaching (Fall 1999-Spring 2013)
- EDSC 4093, Inquiry Based Science Teaching-Early Childhood Education, OU-Tulsa Campus (Summer 2008-Summer 2011)
- EDSC 4193, Teaching Elementary School Science (Fall 1999-current)
- EDSC 5514, Research and Development of Science Curricula (Summer 2002-current)
- ENGR 4/5513, Science, Engineering and Mathematics Educational Outreach for STEM Majors (Fall 2006-2010)
- ILAC 6013, Pro-Seminar in Instructional Leadership and Academic Curriculum (Fall 2011)

Representative Publications and Presentations

Publications


**Presentations**


• Laubach, T. A. (2013, July). *Aligning scientific practices with common core literacy standards for the elementary school classroom.* Paper presented at the annual summer meeting of Oklahoma State Department of Education (OSDE), Oklahoma City, OK.


**Representative Honors and Awards Received**

• Junior Faculty Award, Jeannine Rainbolt College of Education, University of Oklahoma, 2013-2014

• Academic Keys Who’s Who in Curriculum & Education, University of Oklahoma, 2011-2012

• Young Scholar Award, Jeannine Rainbolt College of Education, University of Oklahoma, 2005-2006

• Outstanding Thesis National Finalist, National Association for Research in Science Teaching, 1999

**Major Professional Affiliations**

• American Association of Physics Teachers (AAPT)

• American Educational Research Association (AERA)

• Association for Science Teacher Education (ASTE)

• Association for Supervision and Curriculum Development (ASCD)

• National Association of Biology Teachers (NABT)

• National Association for Research in Science Teaching (NARST)

• National Science Teachers Association (NSTA)

• Oklahoma Science Teachers Association (OSTA)

• School Science Mathematics Association (SSMA)

• Southwest Association for Science Teacher Education (SW-ASTE)