EDUC 5394: Syllabus

Instructor Information

Professor:
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Office Phone: 817-272-0370
Office Hours: By Appointment

Catalog Description
An overview of the educational research process with emphasis on research paradigms using a scientific approach to developing research questions and selecting methods of data collection and analysis for planning and writing research studies.

Course Prerequisites
EDUC 5305 Curriculum Design, Implementation, and Evaluation

Textbook(s) and Materials
Note: Text can be ordered from the UTA Bookstore:
- Education, Social Science, and Psychological scholarly journal articles available online or via the UTA Library.

University Mission
The mission of The University of Texas at Arlington is to pursue knowledge, truth and excellence in a student-centered academic community characterized by shared values, unity of purpose, diversity of opinion, mutual respect and social responsibility. The University is committed to lifelong learning through its academic and continuing education programs, to discovering new knowledge through research and to enhancing its position as a comprehensive...
EDUC 5394: Understanding Classroom Research

educational institution with bachelor’s, master’s, doctoral and non-degree continuing education programs.

College Mission

The mission of the UTA College of Education is to develop and deliver educational programs that ensure the highest levels of teacher, administrator, and allied health science practitioner preparation and performance. As a recognized contributor to the fields of education and allied health science, the College engages in effective teaching, quality research, and meaningful service. The College is committed to diversity and to the advancement of active teaching and learning in all educational environments and at all levels.

Core Values

• Effective teaching
• Active learning
• Quality research
• Meaningful service

Conceptual Framework

The work of the College of Education is grounded in constructivism as a theory of teaching and learning and is done in a spirit of expectation that all involved in the College of Education, whether candidate, faculty or administrator, will hold the following as important: Excellence, Student-Centered Environments, Research, Collaboration, Diversity, Technology, Field Experiences and Life-Long Learning.

Partners for the Future is the theme of the UTA College of Education and communicates the understanding that it takes a village of partners to insure the future of education for all.

Learning Outcomes

This course has two major objectives. First, the course is designed to provide you with an introduction to education research. This will include the purposes, procedures, and implications of educational research. Second, in this course you will begin preparing an action research proposal that you will complete and implement in subsequent courses. In this course, you will write the Introduction section, outline the Literature Review section, write Research Questions, and write the Methods Section of your research proposal.

Specific learning outcomes are:

1. Be informed of current trends, research, and issues in education and their implications for curriculum and instruction, recognizing the role of research in the improvement of teaching and learning.

2. Become familiar with professional journals, organizations and other resources that support instruction and research.

3. Use research journals and other professional literature, outline a written review of the literature related to an individually selected topic of significance and interest in education.

4. Design a science or math-related research study that shows promise for improving education, and prepare the first three chapters (Introduction, Literature Review outline, and Method section) of a scholarly research proposal for conducting a classroom action research project.

Become knowledgeable of the format and form of the master's action research project in order that the proposed research may be implemented in future coursework (EDUC 5395 and 5397) or in your professional career.
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Attendance and Drop Policy

Attendance. As this course is online, it is expected that all students will access the learning platform as required and complete assignments, discussions, and assessments as directed. Assignments are to be completed and submitted by the posted deadline.

Drop Policy. If you choose to withdraw from the course for any reason, you must follow University procedures. It is your responsibility to execute these procedures correctly and within the deadlines.

Policies

The Research Project Proposal required in this course will follow a specific format as directed and communicated in class meetings and posted on the course website. All work in this course, including the research project is to be submitted in Microsoft Word and formatted according to APA formatting style.

Grade Calculation

A = 90 – 100
B = 80 – 89
C = 70 – 79
D = 60 – 69
F = Below 60

Email Communication

All e-mail communication must occur via the MAIL function in the course software. You are responsible if you do not receive information because you do not regularly check your email.

American with Disabilities Act (ADA)

If you are a student who requires accommodations in compliance with the ADA, please consult with me at the beginning of the semester. As a faculty member, I am required by law to provide “reasonable accommodation” to students with disabilities, so as not to discriminate on the basis of that disability. Your responsibility is to inform me of the disability at the beginning of the semester and provide me with documentation authorizing the specific accommodation. Student services at UTA include the Office for Students with Disabilities (located in the lower level of the University Center), which is responsible for verifying and implementing accommodations to ensure equal opportunity in all programs and activities.

Student Support Services

The University supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.
**EDUC 5394: Understanding Classroom Research**

**Academic Honesty**

Academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form at The University of Texas at Arlington. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. “Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2., Subdivision 3.22).

**Assignments**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points Possible</th>
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<tbody>
<tr>
<td>Research Proposal Introduction</td>
<td>15</td>
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<tr>
<td>Literature Review Outline (with 15 References)</td>
<td>20</td>
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<tr>
<td>Research Questions</td>
<td>10</td>
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<tr>
<td>Method Section</td>
<td>20</td>
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<tr>
<td>Research Proposal Draft:</td>
<td>30</td>
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<tr>
<td>• Introduction</td>
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<td>• Literature Review Outline</td>
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<td>• Research Questions</td>
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<td>• Method</td>
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<td>• References</td>
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<tr>
<td>Class Participation (Readings, Online Discussions)</td>
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**Detailed Guidelines for Assignments**

All assignments are due by 11:59 PM, Sunday of the assigned week. One of these assignments will be designated to upload to TK20 as well as into EPIC.

1. **Research Proposal Introduction (15 Points)**

For this assignment you will select a science or math-related research topic and write a two-page Introduction section for your research proposal. The Introduction section is not a literature review. Rather it introduces the issues surrounding the topic and explains why the topic is important. It may begin by pointing out a national or local problem that the research is designed to address.
2. Literature Review Outline (20 Points)

For this assignment you will develop an outline of the literature review section of your research proposal. This outline may include several major sections. For example, if the topic is using an inquiry instruction approach to teach science to students with reading problems, the literature may begin with an overview of the research findings on inquiry teaching, then move to research findings on reading problems, then conclude with the findings of any previous studies that have tried using inquiry teaching methods with struggling readers. A literature review begins broadly, then moves to specifics, and leads directly to the research questions. A literature review is not and annotated bibliography. Rather it is a synthesis of the research findings of many studies. It progresses topic-by-topic, not study by study. Your literature review will be completed in a subsequent course in this master's degree program.

As you prepare to outline the Literature Review, go to the library and/or do an on-line search for references that you may want to include in your review. Identify a minimum of 15 references. Save these to include in the Reference Section of your proposal. Use the American Psychological Association (APA) 5th Edition Publication Manual for formatting of references.

3. Research Questions (10 Points)

For this assignment, you will write 2-4 research questions for your research proposal. The research questions are the focus of the proposal. The questions should be derived from the literature review and then form the basis of the Method section of the research proposal. Research questions may be brief, but every word matters. A sample research question for a quantitative/experimental study is:

• What are the effects of using graphic organizers during pre-reading discussions on the science learning of struggling 5th-grade students?

A sample research question for a qualitative/descriptive study is:

• What backgrounds, attitudes, and behaviors are characteristic of 7th-grade students who struggle to learn mathematics?

4. Method Section (20 Points)

For this assignment you will write the Method section of your research proposal. This section will include a description of the setting and participants, the research design, measures/instruments, data collection procedures, and data analysis techniques to be used. The Methods section is the plan you will use to answer your research questions. Each of the measures/instruments you select must be directly connected to one of the research questions. Every part of the Method section must be detailed enough so that someone else could read the section and follow your plan to effectively replicate the study.

5. Research Proposal (First Draft) (30 Points)

Using feedback provided by the instructor and peers throughout the course, you will revise and compile the research project proposal components you created during the course, and prepare a final copy.
Your final submission of research project components for this course includes:

- Cover/Title Page
- Introduction
- Literature Review Outline
- Methods
- References
- Appendix (optional)

6. Class Participation (5 Points)

Each week, several chapters from the textbook will be assigned for you to read. The purpose of these chapters is to help give you an overview of educational research methods AND to help you prepare your research proposal. Reading-related discussion prompts will be given each week for you to discuss with your online colleagues. Your substantive participation in these online discussions will be monitored and scored as part of your course grade.

Tentative lecture/topic schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic/Activity</th>
<th>Assignment &amp; Due Dates</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Course intro: instructor, syllabus, textbook</td>
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<td>Intro to education research</td>
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<td>- quantitative and qualitative research</td>
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<td>Reading published research</td>
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<td>- summaries and original studies</td>
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<td>Intro to writing a research proposal</td>
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<td></td>
<td>Ch. 1. Introduction to Educational Research</td>
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<td>Ch. 2. Selecting and Defining a Research Topic</td>
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<td>Select a research topic</td>
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<td>1st draft of Introduction Due</td>
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<td>Ch. 10. Experimental Research</td>
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<td>Ch. 03. Reviewing the Literature</td>
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<td>Sample experimental study, p. 279</td>
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<td></td>
<td>Outline of Literature Review</td>
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<td>Due</td>
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<td>Week 2</td>
<td>Experimental research</td>
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<td>- purpose and process</td>
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<td>- Random sampling and assignment</td>
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<td>- Measures: reliability/validity</td>
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<td>- Statistical tests</td>
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<td></td>
<td>Writing a Literature Review</td>
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<td>- Academic writing</td>
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<tr>
<td>Week</td>
<td>Topics</td>
<td>Chapter(s)</td>
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</tbody>
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| 3    | Descriptive statistics  
- mean  
- median  
- mode  
- standard deviation  
Inferential statistics  
- t-test  
- ANOVA  
- chi-square  
- correlation/regression  
Writing research questions | Ch. 12. Descriptive statistics  
Ch. 13. Inferential statistics | **Research Questions Due** |
| 4    | Qualitative research data collection  
- observation, field notes  
- interviews  
- examining documents  
Ethnographic Research  
- purpose and process  
- participant observer  
- triangulation | Ch. 14. Qualitative Data Collection  
Ch. 16. Ethnographic Research  
- Sample qualitative study on p. 410 | **Methods section Due** |
| 5    | Action Research  
- characteristics and types of action research  
- action research process and techniques | Ch. 20. Action Research  
Sample action research report, p. 521 | **Revised Research Proposal Due**  
- Introduction  
- Literature Review outline  
- Research Questions  
- Method Section |