Purpose of the course

EDU 508 is an introductory course in educational research. It is designed to provide students with a general introduction to the theory and practice of research as utilized in educational setting. The course presents multiple research designs, procedures and techniques that will assist students in understanding and evaluating both quantitative and qualitative research methodologies in education.

Course Goals/Objectives/ECSU Proficiencies/CCT Standards

<table>
<thead>
<tr>
<th>Course Goals/Objectives</th>
<th>Proficiencies</th>
<th>Alignment</th>
<th>Products</th>
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<tbody>
<tr>
<td>By the end of the course students will:</td>
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<tr>
<td>1. To understand quantitative and qualitative research methodologies in education.</td>
<td>ECP 1.1</td>
<td>1</td>
<td>Attendance, Participation, &amp; Dispositions (APD)</td>
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<td></td>
<td>CCT: 1</td>
<td></td>
<td>Problem Statement and Research Questions (PS &amp; RQ)</td>
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<td></td>
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<td></td>
<td>Literature Review and Research Design (LR &amp; RD)</td>
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<td>Research Proposal (RP)</td>
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<td>Research Critique (PC)</td>
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<tr>
<td>2. To understand fundamental principles and practices associated with both quantitative and qualitative research in education.</td>
<td>ECP 1.1</td>
<td>1</td>
<td>APD, PS&amp;RQ, LR&amp;RD, RP, PC</td>
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<td></td>
<td>CCT: 1</td>
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<td>3. To be able to use basic concepts and terminology of research when critically reading professional literature.</td>
<td>ECP 1.1</td>
<td>3.1, 3.2</td>
<td>APD, PC</td>
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<td></td>
<td>CCT: 1</td>
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<td>Course Goals/Objectives</td>
<td>Alignment</td>
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<td></td>
<td>Proficiencies</td>
<td>Products</td>
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<tr>
<td>4. To be aware of ethical concerns involved in educational research.</td>
<td>ECP 5.1 CCT: 5</td>
<td>APD, PS&amp;RQ, LR&amp;RD, RP, PC</td>
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<td>5. To be familiar with resources (library, computer) for the conduct of research.</td>
<td>ECP 4.1 CCT: 2-4</td>
<td>APD, PS&amp;RQ, LR&amp;RD, RP, PC</td>
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<td>6. Completed a quantitative/qualitative research critique using basic principles of</td>
<td>ECP 1.1, 3.1, 3.2 CCT: 1</td>
<td>APD, PS&amp;RQ, LR&amp;RD, RP, PC</td>
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<td>educational research.</td>
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<td>7. Written a research proposal related to educational research in APA format.</td>
<td>ECP 1.1, 3.1, 3.2 CCT: 1</td>
<td>APD, PS&amp;RQ, LR&amp;RD, RP, PC</td>
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<td>8. Basic data collection, entry and analysis skills (Using SPSS or Excel, as</td>
<td>ECP 1.1, 4.1 CCT: 1</td>
<td>APD, RP</td>
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<td>appropriate).</td>
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**General course requirements**

All work in this course must be typed and APA formatted. All assignments should be double spaced on letter-size format, with at least one-inch margin on all sides. **All of the assignments must be submitted by the specific due dates. Please note that the no late assignments are accepted.**

**Student Evaluation**

Final grades in this course will be determined on total points earned out of 100 in the following way:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>95–100</td>
<td>A</td>
<td>90–94 A-</td>
</tr>
<tr>
<td>87–89</td>
<td>B+</td>
<td>84–86 B</td>
</tr>
<tr>
<td>80–83</td>
<td>B</td>
<td>77–79 B-</td>
</tr>
<tr>
<td>74–76</td>
<td>C+</td>
<td>70–73 C</td>
</tr>
<tr>
<td>65–69</td>
<td>D+</td>
<td>60–64 D</td>
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<tr>
<td>Below 60</td>
<td>F</td>
<td>Below 60 F</td>
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There will be a total of four assignments in the course:

1. Problem statements and questions/hypotheses [10 points]
2. Literature review and research design [15 points]
3. Research critique (quantitative and qualitative) [20 points]
4. Crafting a research proposal [25 points]
5. Class participation, discussion, and disposition reflection [30 points]

**1. Problem statements and questions/hypothesis [10 points]**
This is a one-two-page statement of your research problem. Your statement should include what the problem is and why you are interested in selecting that particular problem. You should also include your research questions or hypotheses depending on the kind of study you are planning to propose. Any comments or questions provided by the instructor on this assignment should be addressed in your final research proposal.

2. Literature review and research design [15 points]

This assignment consists of two parts: a) Literature Review and b) Research Design.

   a) Literature Review

   Find two to four readings related to your research problem (Assignment 1) and analyze what the authors have reported and how the readings are related to your problem. The literature review should not exceed 2 pages.

   b) Research Design

   For your research design, write one- to two-page description on the following:
   (i) What is your population (research participants/subjects)?
   (ii) How will your sample be drawn or selected?
   (iii) What instrument(s) will you develop or use in collecting your data?
   (iv) What methodology will you adopt?
   (v) How will you analyze your data?

   Remember your research design must be feasible (actually doable). Any comments or questions provided by the instructor on this assignment should be addressed in your final research proposal.

3. Research critique [20 points]

The instructor will assign a research article. You have to critically examine the article and prepare research review based on the criteria supplied by the instructor. The review should not exceed 4 double spaced pages.

4. Crafting a research proposal [25 points]

The research proposal has two major parts. The first part should include a background and statement of the problem, research questions or hypotheses, and key literature in the area. The second part is a detailed research design tailored to answer the research questions. Clarity of the problem statement and fit of the research design to the research questions are central to my evaluation. Students should carefully look at their assignment #1 and #2 and refine their problem statement, literature, and research design in crafting this proposal. Research concepts learned from assignment #3 will also be useful in preparing this proposal. The proposal should not exceed 10 pages excluding title page, references, and appendices.

5. Class participation, discussion, and disposition reflection [30 points]

As a part of class participation and discussion, you also need to reflect on your dispositions in this course. For more detail information, see the disposition reflection rubric at the end of this course outline.
Course Texts


Further readings as assigned by the instructor.

Use of WebCT

Course handouts and reading guides for each chapter can be downloaded from WebCT before class. Questions can be asked via WebCT email. You should monitor WebCT frequently to see any announcement.

Labs

We will learn how to search literature in educational databases, and how to use SPSS to collect data and conduct basic analyses. Lab hours for SPSS learning and literature search of educational databases are specified on the tentative course schedule. The computer lab is located at Science 115.

*If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Office of Disability Services at (860) 465-5573. To avoid any delay in the receipt of accommodations, you should contact the Office of Disability Services as soon as possible. Please understand that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Office of Disability Services. Your cooperation is appreciated.*
### Tentative Course Schedule

The schedule of topics given below is tentative and is subject to change. All changes will always be discussed in class.

<table>
<thead>
<tr>
<th>Session</th>
<th>Course readings/assignments</th>
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| Week 1<br>(Sept 1) | *An Introduction to Educational Research*  
Course introduction. The process of conducting research. Quantitative and qualitative approaches  
Read text chapter 1-2 |
| Week 2<br>(Sept 8) | *The Steps in the Process of Research*  
Identifying a research problem. Reviewing the literature  
Lab for literature search  
Read text chapters 3-4 |
| Week 3<br>(Sept 15) | *The Steps in the Process of Research (Continued)*  
Specifying a purpose and research questions or hypotheses  
Guidelines for problem statement assignment  
SPSS lab  
Read text chapters 5 |
| Week 4<br>(Sept 22) | *The Steps in the Process of Research (Continued)*  
Collecting quantitative data. Analyzing and interpreting quantitative data  
SPSS lab  
Read text chapters 6-7  
Problem statement due |
| Week 5<br>(Sept 29) | *The Steps in the Process of Research (Continued)*  
Collecting qualitative data. Analyzing and interpreting qualitative data  
Guidelines for literature review assignment  
SPSS lab  
Read text chapters 8-9 |
| Week 6<br>(Oct 6)  | *Research Designs*  
Reporting and evaluating research. Experimental designs  
Read text chapters 10-11 |
| Week 7<br>(Oct 13) | Introductory statistics  
Read assigned materials  
Literature review and research design due |
| Week 8<br>(Oct 20) | No Class (NERA conference) |
| Week 9      | Introductory statistics  
|            | Guidelines for research critique  
|            | *Read assigned materials*  
|            | Research Designs continued (Correlational designs)  
|            | *Read text chapters 12*  
| Week 10    | Research Designs continued (Survey design; Grounded theory designs)  
|            | *Read text chapters 13-14*  
| Week 11    | Research Designs continued (Narrative research designs)  
|            | *Read Chapter 16*  
|            | **Research critique due**  
| Week 12    | Research Designs continued (Mixed methods designs; Action Research Designs)  
|            | *Read text chapters 17-18*  
| Week 13    | Thanksgiving Break  
| Week 14    | Preparing research proposals and reports, research proposal workshop (ask questions related to your research proposal and get feedback from the instructor and your peers), conclusions, questions/comments  
| Week 15    | Preparing research proposals and reports (Class ends)  
|            | **Research proposal due via WebCT (December 9)**  
|            | **Disposition reflection due via WebCT (December 9)**  
| Week 16    | **Final Exam Week**  
|
DISPOSITION RUBRIC

At the end of this course, you must submit a 1-2 page reflection describing your strengths and challenges with respect to target or acceptable dispositions as explained in the rubric. Grades will be determined by carefully comparing your reflection with my notes. Although you will write your disposition reflection at the end of the course, you will have opportunities to demonstrate required dispositions throughout this course. If needed, meetings will be conducted with individual student(s) to discuss how dispositions can be improved.

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<tr>
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<th>Target (5)</th>
<th>Acceptable (3-4)</th>
<th>Unacceptable (0-2)</th>
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<tbody>
<tr>
<td><strong>Class participation</strong></td>
<td>Attended every class or missed one, always came on time, submitted all assignments by their due dates, was not distracted, and was actively engaged in group and whole class activities.</td>
<td>Missed two or three classes, almost always came on time, submitted all assignments by their due dates, was not distracted, and was actively engaged in group and whole class activities.</td>
<td>Missed more than 3 classes, often came late, and/or was inactive or distracted in group/whole class activities.</td>
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<tr>
<td><strong>Respect</strong></td>
<td>Displayed professional and ethical behavior in the class discussion, always paid attention to peers and the instructor of the class with respect, and often responded thoughtfully and appropriately to the ideas of peers and the instructor.</td>
<td>Displayed professional and ethical behavior in the class discussion, and always paid attention to peers and the instructor of the class with respect.</td>
<td>Did not display professional and ethical behavior in the class discussion and/or did not pay attention to the ideas of peers and the instructor of the class.</td>
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</tbody>
</table>