Understanding Research
PRE 598 – Spring 2009
Tuesday, 4:30 – 7:00 pm
JRP 204

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Office Hours: Tuesday 3:00 – 4:20, or by appointment

Text


Context of Course within the School of Education Mission

The primary mission of the School of Education is to prepare leaders in education and human services fields. As stated in the School Code:

Within the University, the School of Education serves Kansas, the nation, and the world by (1) preparing individuals to be leaders and practitioners in education and related human service fields, (2) expanding and deepening understanding of education as a fundamental human endeavor, and (3) helping society define and respond to its educational responsibilities and challenges.

The components that frame this mission for our initial and advanced programs are Research and Best Practice, Content Knowledge, and Professionalism. These interlocking themes build our Conceptual Framework.

Purpose of This Course

This course provides an introduction to research techniques used in various fields of study. It also offers students tools to complete a research proposal for the summer research project through the McNair Scholars program. Course topics include research design, proposal development, library and electronic research, research ethics, historical research, ethnographic research, survey research, data cleaning, descriptive research, experimental research, analysis choices, and report writing. Students will also be introduced to data presentation techniques and the use of PowerPoint and SPSS software.
Broad Course Objectives

The main goal for the course is for you to develop an understanding of basic concepts in research methods and to gain proficiency in applying and refining learned techniques. Specific objectives for the course include:

1. Understand the nature and purposes of research
2. Distinguish between qualitative and quantitative research
3. Demonstrate ethical decision making in all aspects of research
4. Review research literature by using a research library and computer databases efficiently
5. Develop and refine an effective research proposal
6. Understand the use of common statistical techniques for data analysis
7. Consider and discuss the concepts and procedures for the following types of research: historical, ethnographic, survey, descriptive, and experimental; and how to choose among research types to answer research questions
8. Learn basic applications of presentation and statistical analysis software
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments Due</th>
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| 1 Jan. 20 | Introductions  
Overview of course  
Ways of knowing (epistemology from a philosophical, scientific, and humanistic perspective)  
Introduction to the research proposal  
Selecting your research topic  
Meet with me during this week to discuss research topic (15 min)                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                |
| 2 Jan. 27 | The use of theory                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Identify broad research topic  
Read chapter 1  
Page 20, Exercise 2  
Read Chapter 3                                                                                                                                                                                                                      |
| 3 Feb. 3  | Review of Literature  
Erin Ellis Co-Head, Reference and Instructional Services (Interim), Coordinator of Instructional Services, Librarian for Applied Behavioral Sciences, Psychology, and Sociology  
Post on Blackboard a brief description about your research topic. Post a question about each classmate’s research topic. Answer the questions about your topic.  
Read chapter 2  
In class assignment                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                |
| 4 Feb. 10 | Writing strategies, Ethical considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Identify your mentor to me.  
Read Chapter 4                                                                                                                                                                                                                                                                                                                                 |
| 5 Feb. 17 | Human Subjects approval  
David Hann, Mary Denning and Susan MacNally, Office of Research Integrity  
Introduction to Research Design  
Read Chapter 5  
Preliminary review of the literature due                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                |
| 6 Feb. 24 | ATP Conference – Class will be led by TA  
Purpose statement  
In class assignment – page 126 (1, 2, or 3)                                                                                                                                                                                                                                                                                                                                                                           | Read Chapter 6  
In class assignment – page 142 (1, 2, or 3)                                                                                                                                                                                                                                                |
| 7 Mar. 3  | Research questions                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Introduction to research proposal is due  
Read Chapter 7  
In class assignment – page 142 (1, 2, or 3)                                                                                                                                                                                                                                                 |
| 8 Mar. 10 | Quantitative methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Read Chapter 8                                                                                                                                                                                                                     |
| 9 Mar. 17 | Spring Break – no class                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                |
| 10 Mar. 24 | Qualitative methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Read Chapter 9                                                                                                                                                                                                                     |
| 11 Mar. 31 | Mixed methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Read Chapter 10                                                                                                                                                                                                                     |
| 12 April 7 | Presenting Research Proposals                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                |
| 13 April 14 | AERA/NCME – No class this night, work on your proposal and presentation                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                |
| 14 April 21 | Q&A on proposals  
CLEOS presentation and activities                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                |
| 15 April 28 | Proposal presentations I  
Final Proposals are due  
Proposal presentations (15 minutes) will be made                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                |
| 16 May 5  | Proposal presentations II  
Proposal presentations (15 minutes) will be made                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                |
| 17 May 12 | Finals day – no class                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                |

Assignments in bold, red, italic are due in class on that day.
Evaluation Activities

Final grades will be based on a composite of participation in class, homework assignments, and a research proposal, weighted as follows:

- Attendance/Participation – 30%
- Assignments – 35%
- Research Proposal – 35%

Letter grades will be assigned according to the following table:

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<thead>
<tr>
<th>Letter</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>95%-100%</td>
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<tr>
<td>A-</td>
<td>90%-94%</td>
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<tr>
<td>B+</td>
<td>85%-89%</td>
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<tr>
<td>B</td>
<td>80%-84%</td>
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<tr>
<td>B-</td>
<td>75%-79%</td>
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<tr>
<td>C</td>
<td>70%-74%</td>
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<tr>
<td>C-</td>
<td>60%-64%</td>
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<tr>
<td>C</td>
<td>65%-69%</td>
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<tr>
<td>D</td>
<td>55%-59%</td>
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<tr>
<td>F</td>
<td>Below 55%</td>
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Your grades will reflect your performance to criterion, not the performance of others in the class. While collaborative problem-solving is a fine learning approach, the work you submit needs to be your own. You may hand write or type offline homework assignments, but all assignments need to be legible. You may complete homework assignments more than once until mastery. Your research proposal (5 parts plus a combined full proposal) will be graded a single time.

Your regular attendance is integral to the evaluation of your participation. Students will form groups by field of study for in-class work, and your absence impacts your group. Attending class faithfully will help you be successful on homework assignments and the research proposal. If you need to miss a class, please e-mail me. It is also your responsibility to keep in regular contact with your mentor and to follow his or her guidance on the project contents or proposal development.

Policies

Cheating: Any student found cheating will be given a 0 for that exam/project/assignment and reported to the Academic Dishonesty Committee.

Assignments: Students are expected to work by themselves. Any use of the ideas of another work must be cited appropriately. Any words of another should be clearly shown as such. Any degree of plagiarism is unacceptable and will be treated as cheating.

Attendance: All students are encouraged to attend class regularly, but attendance is not mandatory.

Accommodations: The staff of Services for Students with Disabilities (SSD), located in Strong 135, coordinates accommodations and services for KU courses. If you want accommodations and have not yet contacted them, please do so as soon as possible. Please also see me privately if you think accommodations are desirable.

Blackboard: I will use Blackboard to share notes and data and create discussion groups.
2009 McNair Summer Research Internship

Part I. Description of Research Question
This is a clarification of your research topic. It is a question, concept or hypothesis which will guide your study. When considering a research topic, you should evaluate whether it meets your interests, is a realistically achievable research project, and serves your application to graduate school. The description of the research question will serve as a solid introduction to your topic.

1. Identify the general subject area that will be addressed in your research.
2. Indicate the significance of your chosen research area.
3. Define the specific research topic you will explore.
4. Make a central assertion or prediction that your research will test and/or defend.
5. Suggest subsidiary questions, concepts or hypotheses that can guide your research by dividing it into steps.
6. Narrow down and identify the scope of your research.
7. In general terms describe the model your research will follow.
8. State the ways in which your project might contribute to research in the field.

Part II: Literature Review
This is the process by which you will begin building an argument for your study. You should search for and gather sources that demonstrate a need for your topic. These sources should define and explain the terminology of your research area and review the work of other scholars in the field. The literature review should also demonstrate how your topic fits within the field (i.e., how it builds upon or expands this area of knowledge).

1. Identify sources of information to be used in the research (e.g. journal articles, government statistics, autobiographies).
2. Describe the general kinds of information to be used in the research (e.g. survey data, economic trends, historical developments, primary sources).
3. Explain how the information gathered from your sources relates to your research question. (Do NOT simply summarize the article or book).

Part III: Methodology
This section comprises the method or methods by which information is to be collected for your research project. In order to complete this section, you must determine the means by which you will collect data, and how the data will be analyzed.

1. Describe how you will collect the data necessary to conduct your research project.*
2. Identify some of the issues or challenges associated with your proposed method of data collection.
3. Explain how you will analyze the data you have gathered.
4. Demonstrate how your methods of data collection and analysis are aligned with traditional methodologies in your field.
Part IV: Timeline
Your proposed timeline should illustrate the schedule by which you plan to conduct and complete your research. It is essential that your timeline is designed in a logical and reasonable fashion. When preparing your timeline, please take into account the following items:

1. The information-gathering methods you plan to use.
2. Unforeseen alterations or changes in the project.
3. Time for completing all research and drawing conclusions from it.
4. Time for writing and revising your research paper.

Part V: Preliminary Bibliography
Your preliminary bibliography should consist of those sources which reflect other scholars' work on your research topic. The sources should all reflect a working familiarity with standard research in the field. Select items which directly relate to your specific research topic as well as 'standard' sources that relate to your field more generally.

Part VI: Coversheet, Presentation and Mentor's Signature
Your finalized research proposal should include a cover sheet which states the following items:

1. Title
2. Name
3. Date
4. Student Department(s)
5. Mentor Name(s)
6. Mentor Department(s)
7. University of Kansas
8. McNair Scholars Program
9. Mentor Signature(s)

• Your mentor's signature of approval is required on the cover sheet of your final proposal.
• You must be prepared to present your proposal in a 15-20 minute presentation.
• This is a suggested format and might not be optimal for some departments; you should defer to your mentor's recommendations.
• If you plan to conduct research involving human subjects, your Human Subjects Research application must be completed by April 28, 2008.

OTHER GUIDELINES
You and your mentor should agree upon an appropriate length for your proposal. However, we suggest 5 - 10 typed (font size: 12 point maximum), double-spaced pages. Remember that portions of your proposal can (and should) be incorporated into your research paper.

Each of you should have, courtesy of the McNair Program, a style manual. If not, or if you choose to adopt a different set of stylistic guidelines, remember that the following works are part of the McNair Resource Library: The Chicago Manual of Style; Kate L. Turabian's A Manual for Writers of
Term Papers, Theses, and Dissertations; the MLA Handbook for Writers of Research Papers; the Publication Manual of the American Psychological Association; and, Strunk and White's The Elements of Style