EDCP 690: RESEARCH IN PSYCHOLOGY I
SPRING 2010

INSTRUCTOR: Matthew J. Miller, Ph.D.
OFFICE: ED 3234
EMAIL: mmille27@umd.edu
COURSE TIME & ROOM: Wednesday 1:00-4:00; ED 3236
OFFICE HOURS: Wednesday 12:00-1:00pm

COURSE DESCRIPTION: This is a doctoral-level course in research methods designed to develop skills for conceptualizing and evaluating research. The purposes of this beginning research seminar are threefold. The first goal of this seminar is to deepen and widen your knowledge and understanding of psychological research – its methodology, issues, etc. A second goal of the course is to help facilitate your interest and engagement in research, experience a sense of efficacy about yourselves as researchers, and assuage “science anxiety” that you might be experiencing. Third, in keeping with the history of this seminar, a basic objective is to facilitate your developing a research proposal, either a master’s thesis or a non-thesis project. The primary focus will be on appropriate research design and selection of statistical procedures rather than on statistical or psychometric theory per se.

REQUIRED TEXTS:


Additional required readings can be accessed through the university library research portal.

CLASS STRUCTURE: Class time will be divided between lectures, discussion of the readings, and exploration of your developing ideas and projects. We shall also devote some time to providing critiques of published and unpublished (e.g., doctoral dissertations) studies. Regarding readings, it is important that all of us do all of the readings. Read actively, and come up with ideas that you would like to have us discuss during the class.

You will need to settle on a research topic very quickly. That will not be too much of a stretch, since you have been pondering this during the first semester. You should have plenty of time to explore this idea during our class, and to refine it in conjunction with your advisor.

You are of course aware that seminars are discussion oriented. It seems to me that the trick in pulling off a truly excellent seminar is for instructor and students alike to do the
readings, take some risks in class, and learn to be critical of ideas without being critical of people. As we listen and present, we need to develop a balance between being supportive and intellectually challenging, while at the same time never making each other feel personally diminished. So those are the challenges and tasks ahead of us.

**COURSE REQUIREMENTS:**

1. **SELECTION OF RESEARCH TOPIC AND ADVISOR.** Both should be accomplished by the third week of class. You should meet with your advisor regularly during the semester to discuss the development of your project.

2. **REVIEW OF TWO EMPIRICAL STUDIES.** You are to read two articles (central to your research topic if possible) and provide the following information: Brief summary (no more than one paragraph or 250 words), a methodological critique, and some thoughts about how the study might be improved. You will present one 10-minute oral critique of an EXPERIMENTAL OR QUASI-EXPERIMENTAL study in class (3/10/10) and turn in one written critique of a QUANTITATIVE or QUALITATIVE study toward the end of the semester (4/21/10).

3. **TWO-STUDY RESEARCH PROPOSAL.** Students are required to develop a two-study research proposal. One study must test a causal hypothesis; the second study can examine causal and/or descriptive hypotheses/questions. An outline of the proposal is due April 14 and the final draft is due by May 12. Everything you turn in must be presented in APA format. Expectations for this paper will be discussed in class. Please check our program manual for the sections that make up a proposal.

4. **RESEARCH PROPOSAL PRESENTATION.** Toward the end of the course, each of you a formal presentation of your proposed study. You will each have a 50 minute class period, although the presentation itself should take approximately half of that. Remaining time will be taken up with discussion of the study.

5. **FINAL EXAM.** The final exam covering all readings and class discussion. The exam will likely consist of essay questions. Items will come from both the readings and class discussion.

**EVALUATION CRITERIA:** Your grade will be based on a combination of the requirements noted above, in addition to your class participation. The weightings will be something like 30% exam, 60% other written and oral presentations, and 10% participation beyond formal presentations. Except for extreme circumstances (approval of instructor required), late assignments will not be accepted.

**ACADEMIC INTEGRITY:** It is expected that your work will be characterized by academic integrity and honesty. You are expected to be familiar with the University policy on academic dishonesty, as this policy applies to our class as well as to others. One aspect of this expectation is that your work will be referenced and documented appropriately. If you have any questions about proper documentation or any other issues
pertaining to academic integrity, please consult appropriate resources (e.g., APA Publication manual).

**ACADEMIC ACCOMMODATIONS:** In compliance with and in the spirit of the Americans With Disabilities Act (ADA), I would like to work with you if you have a disability that is relevant to your work in this course. If you have a documented disability and wish to discuss academic accommodations, please do not hesitate to contact me.

**MULTICULTURAL STATEMENT:** The Counseling Psychology Program is committed to creating a multicultural training environment, which is broadly defined as a place where diversity and opinions are respected. All faculty members strive to integrate multicultural and diversity issues in their courses in ways that are relevant to course content and process. It is hoped that students will contribute their unique perspectives to this effort by considering and raising issues related to multiculturalism and diversity and respecting others’ worldviews throughout this course.

**COURSE EVALUATIONS:** As a member of our academic community, you as a student have a number of important responsibilities. One of these responsibilities is to submit your course evaluations each term through CourseEvalUM in order to help faculty and administrators improve teaching and learning at Maryland.
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<th>Date</th>
<th>Course Schedule*</th>
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| 1/27  | Course intro; ways of knowing; student interests  
|       |  
|       | - Readings: HKW 1 & 3 (review chapter 2)  
| 2/3   | Validity issues in research: Statistical conclusion validity, statistical significance, effect size and power  
|       |  
| 2/10  | Validity issues in research: Internal validity  
|       |  
|       | - Readings: HKW 5 pp. 90-97  
|       | - Illustrative study: Fouad et al. (2009)  
| 2/17  | Validity issues in research: construct validity and external validity  
|       |  
|       | - Readings: HKW 5 pp. 97-107; Anderson et al. (1999); Mook (1983);  
|       | - Assignments: Student presentation of research questions or hypotheses: 5-10 minute presentation of basic idea (design specifics not required at this point)  
| 2/24  | **Experimental** designs and issues  
|       |  
|       | - Readings: HKW 7; Krause & Howard (2003)  
|       | - Illustrative study: Kratochwill et al. (2009)  
| 3/3   | **Quasi-experimental** designs and issues  
|       |  
|       | - Readings: HKW 8  
| 3/10  | Independent and dependent variables  
|       |  
|       | - Readings: HKW 12 & 13  
|       | - Illustrative study: Lechuga (2008)  
|       | - Assignments: In-class review of experimental or quasi-experimental study (10 minutes)  
| 3/17  | NO CLASS – Spring break  
| 3/24  | Critiquing a study  
|       | Presentation (1)  
|       |  
|       | - Readings: JCP reviewer guidelines  
|       | - Illustrative study: Rancer et al. (1997)  
| 3/31  | **Quantitative** descriptive designs  
|       |  
|       | - HKW 10; Martens (2005); Quintana & Maxwell (1999)  
|       | - Illustrative study: Wang (2009)  

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<td>4/7</td>
<td>Moderation and mediation</td>
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<td>- HKW pp. 244-255; Frazier et al. (2004)</td>
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<td>- Illustrative study: Ludwikowski et al. (2009)</td>
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<td>4/14</td>
<td><strong>Qualitative</strong> approaches</td>
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<td>- Readings: HKW 11; Hill et al. (2005); Hoyt &amp; Bhati (2007)</td>
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<td>- Illustrative study: Chang &amp; Berk (2009)</td>
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<td>- Research proposal outline due</td>
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<td>- Q &amp; A for proposals</td>
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<td>4/21</td>
<td>Ethical issues, writing for publication</td>
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<td>Presentation (1)</td>
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<td>- Readings: HKW 6 &amp; 22; APA pp. 9-86; 225-243</td>
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<td>- Assignments: written critique of quantitative or qualitative study due</td>
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<td>- Q &amp; A for proposals</td>
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*schedule and/or topic subject to change

References


Requirements for Research Proposal

This written product should provide an adequate description of the plan for a plausible TWO-STUDY research project. One study must test a causal research hypothesis via experimental or quasi-experimental methods; the second study can employ experimental, quasi-experimental, quantitative descriptive, and/or qualitative methods. The proposal should contain the following:

• An abstract.
• A summary of relevant prior research and the practical or theoretical context that establishes
• the importance of the research question(s) the research is planned to answer, including an account of
• the main pertinent findings and important limitations of prior research.
• A clear statement of the research question(s) to be addressed.
• An account of the methods to be used in the planned research.
• A discussion of limitations of the research and of expected practical or theoretical implications.
• A reference list of literature cited.
• Figures, if appropriate

This product should not be longer than a manuscript to be submitted to a journal such as Journal of Counseling Psychology or Journal of School Psychology.

The following spells out what should be in each section in more detail:

1. The abstract should provide up to a 250 word summary of the paper, describing the research questions, the intervention (if applicable), the method, sample size, potential conclusions, and limitations. Be sure to include keywords.
2. The account of prior research and practical or theoretical context should not be longer than 10 double-spaced manuscript pages. It should include the following:
   a. a brief statement of the general practical, scientific, or historical context that provides a background for the planned research
   b. a description of the principal methods and findings of landmark studies that have been conducted in this area that set the stage for the planned research
   c. an explanation of one or more practical or theoretical gap(s) in current knowledge.
   d. This review should provide an adequate conceptual framework for both studies
3. The statement of research questions should not be longer than a page. It should formulate one or more clear, explicit research question(s) and an explanation of how obtaining the answer to the question(s) will advance science or practice. If the paper involves a plan to evaluate an intervention the participant has designed, the specific questions about the effectiveness of this intervention should be specified. One study must involve causal questions. That is the questions should
be about the *effects* of some intervention, situation, experience, or condition on one or more *outcomes*. A research plan that is limited to questions about relationships among variables, the simple estimation of rates or percentages, or the determination of whether groups differ is ordinarily *not* responsive to the requirement of this assignment.

4. **The account of research methods** should ordinarily not be longer than about 15 manuscript pages, and for a straightforward project *may be shorter*. It should include the following:
   a. a description of the population to which the research is intended to generalize and of the sample to be employed, including sampling procedures and sample size
   b. how the sample will be recruited and (if the plan involves longitudinal research or the collection of data at more than one point in time) retained
   c. how informed consent will be obtained from any human participants in the research, including a descriptions of risks of participation in the research (this bullet point may be covered in a separate appendix to the extent that it would not ordinarily be included in a manuscript for a journal article, and these appendix pages will not count against the page limit)
   d. a description of the research design and how it will be implemented (e.g., how as a practical matter random assignment to experimental conditions will be accomplished, how a comparison group will be established if random assignment is not feasible)
   e. a description of the intervention or naturally occurring phenomenon to be studied
   f. how independent variables (predictors or interventions) and dependent variables (criteria or outcomes) will be measured including a defense of the measures selected (or an account of how these measures will be assessed)
   g. the data analysis methods to be used

5. **The discussion** section should not be longer than 4 to 6 pages. It should include an account of the following:
   a. limitations in terms of threats to internal validity, generalizability, statistical conclusion validity, and validity of the independent and dependent (predictor and criterion) variables
   b. other limitations (if appropriate)
   c. virtues of the research in light of existing research or knowledge
   d. implications of the anticipated results for research, practice, or theory.
   e. The discussion should focus on the implications of the methods used in the proposed research, the likely results of the proposed research, and the limitations and implications of the potential findings of the proposed research, and it should not speculate much beyond the likely outcomes of the proposed research. This section should be limited in length to the length of a discussion section in a manuscript to be submitted to a journal such as the *Journal of Counseling Psychology* or the *Journal of School Psychology*. 
6. The reference list should provide complete bibliographic references for all primary literature or secondary accounts cited.

All sections should conform to the style described in the American Psychological Association’s style manual. This includes ALL aspects of the manuscript: Title page, pagination, running headers, seriation within paragraphs, seriation of paragraphs, headings, abbreviations, citation form, and form for tables and figures. Strong preference should be given to reading and citing original literature, and reliance on secondary sources should be avoided. With the exception of appendix material (if appropriate) the length of the written product should be about the length of a manuscript submitted to a scientific journal. If the participant has developed an intervention the efficacy of which is to be examined in the proposed research, it may be appropriate to include a fuller description of the intervention in an appendix. Excessively lengthy, redundant, or poorly written products will not be acceptable.

**Requirements for the Outline of the Research Proposal**
The purpose of the outline is to help organize thinking about the proposal and to spell out in an abbreviated and preliminary way the anticipated content of the proposal. It provides a basis for getting feedback from the instructor and fellow students on the planned research design and methods; research questions; and understanding of the practical, theoretical, and empirical background for the planned study. The outline should cover the same topics as spelled out above for the draft proposal. Key reference citations should accompany the outline. Naturally, as it is completed at an earlier stage, individuals are likely to include (or exclude) material in the eventual proposal not included (excluded) in the outline.