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Section (001): Thursday 1:00-4:00; FCB361
Office Hours: Thursday 12:00-1:00, and by appointment
Course Materials: eCourseware

Course Overview and Objectives
This course is designed for doctoral students who intend to conduct empirical research publishable in scholarly journals. It is focused on understanding, evaluating, conducting, and reporting research in the behavioral sciences. This is not a statistics course, although we will be discussing statistics as tools, and all students should have successfully completed graduate courses in statistics and research methodology.

In essence, research consists of asking important questions and using scientific methods to design and implement ways of answering these questions. There is generally no one right way to approach these issues (although there are definitely wrong ways!); instead, research consists of numerous choices that involve trade-offs. We will begin the semester by addressing the research process (including identifying research questions, philosophy of science, and the scientific method), trade-offs among research designs (e.g. field versus laboratory studies), and the nature and meaning of correlation and causality. We will then turn to measurement and validity issues, which are especially critical in the behavioral sciences. We will also cover several special topics that warrant consideration, such as the accumulation of research results, moderation and mediation, factor analysis, structural equation modeling, and qualitative methods. Throughout, we will spend some time learning about our scholarly profession in terms of the publication process and reviewing research.

For each topic, a set of readings will be assigned. Please note that neither the topics nor the readings covered should be considered to be exhaustive. We simply cannot cover everything in the time allotted. The purpose is to provide a solid foundation in the important issues related to each topic and the field as a whole. The overall goal of the course is to help prepare each of you to scientifically pursue answers to important questions in your field.

Objectives:
- to develop an understanding of research design, methods, and strategies necessary to create new knowledge and publish empirical research in your areas of interest
- to be able to design research studies that appropriately test hypotheses, control for likely sources of error, and contribute to knowledge in a content area, and to recognize how design trade-offs affect research conclusions
- to clearly communicate scientific ideas and questions with colleagues, in both verbal and written form
- to develop skills in interpreting and constructively critiquing existing and new research

Academic Honesty
Students are expected to recognize and uphold standards of intellectual and academic integrity as set forth in the General Catalog, Faculty Handbook, and Undergraduate Co-Curricular Affairs Handbook. Students should refrain from any and all forms of dishonorable or unethical conduct related to their academic work, including but not limited to: plagiarism, cheating on examinations, unauthorized collaboration, falsification, and multiple submissions.
Readings

Required Readings: A list of required readings will be provided for each topic. These readings should be thoroughly read and considered prior to the class period in which they will be addressed, and each student should be prepared to discuss them in class. It is suggested that you prepare a one page summary of the important points gleaned from each reading.

Recommended Texts:

Course Requirements
Grades will be determined by the instructor. One-half of the course grade will be determined by participation and one-half by performance on a final exam.

Participation
Class Participation: This is a seminar: every student is expected to contribute to the class discussion every week, in terms of asking/answering questions, offering opinions on the strengths/weaknesses of different readings, etc. I realize that individuals differ in terms of their natural tendencies to be expressive in these kinds of situations; however, it is vital in our profession to be able to critically exchange ideas and information with colleagues. Thus, it is the responsibility of those who tend to be less expressive to push themselves to participate, and the responsibility of those who tend to be more expressive to actively include others in the discussion. *Important Note: You can’t participate if you’re not here!*

On-line Discussion: Each week during the semester, I will post at least one topic/question/issue for asynchronous electronic discussion on eCourseware. Each student is expected to provide their thoughtful input on the topic at least one time each week. You are of course welcome to provide as much input as you like, and to post your own questions/topics for discussion.

CARMA Webcasts: One of the best ways to learn something is to have to teach it to someone else. Once during the semester, each student is required to watch one CARMA Webcast, and prepare and present a 30 minute lesson to the class about the topic and content of the Webcast. Instead of focusing on the technical details, please focus on the big picture: when would you use it (e.g. for which types of research questions; with what types of data); what are the primary research design considerations (e.g. data collection, measurement, and sample characteristics); and what are the primary strategies for carrying out and presenting publishable research with the approach?
To register with CARMA: http://www.carma.vcu.edu/AddPerson.asp (must use a memphis.edu address)
To download the slides and watch the Webcast: http://www.carma.vcu.edu/VideoLibrary.asp

Final Exam
A final exam will be given near the end of the semester. The exam will consist of questions similar to those found on comprehensive exams, and will be completed in class. The exam is intended to assess knowledge and understanding of course topics, the ability to apply that knowledge to research problems, and the ability to integrate, compare and contrast, and constructively critique. The exam should also provide a preview of what to expect on your Comprehensive Exams.
**Class Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Thursday January 14</td>
<td>Introduction to Course</td>
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<tr>
<td>Thursday January 21</td>
<td>Research Process</td>
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<tr>
<td>Thursday January 28</td>
<td>Research Design</td>
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<tr>
<td>Thursday February 4</td>
<td>Correlation and Causality</td>
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<tr>
<td>Thursday February 11</td>
<td>Sampling, Power, Significance Testing, and Effect Size</td>
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<tr>
<td>Thursday February 18</td>
<td>Measurement</td>
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<tr>
<td>Thursday February 25</td>
<td>Measurement Validity</td>
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<tr>
<td>Thursday March 4</td>
<td>Factor Analysis, Structural Equation Modeling</td>
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<tr>
<td>Thursday March 11</td>
<td><em>Spring Break – no class</em></td>
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<tr>
<td>Thursday March 18</td>
<td>Moderation and Mediation</td>
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<tr>
<td>Thursday March 25</td>
<td>Accumulation of Results</td>
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<tr>
<td>Thursday April 1</td>
<td>Studying Organizational Performance</td>
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<tr>
<td><em>Thursday April 8</em></td>
<td>Qualitative Methods</td>
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<tr>
<td>Thursday April 15</td>
<td>Multi-Level Research</td>
</tr>
<tr>
<td>Thursday April 22</td>
<td><strong>Final Exam</strong></td>
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NOTE THAT THIS COURSE SYLLABUS PROVIDES A GENERAL PLAN FOR THE COURSE. DEVIATIONS MAY BE NECESSARY.
The Research Process
Pedhazur & Schmelkin, chapters 7 and 9


Professional Development Corner
Research Projects that Made an Impact: interview results
**Research Design**
Pedhazur & Schmelkin, chapter 10


**Professional Development Corner**
The Publication Process


**Correlation and Causality**

Pedhazur & Schmelkin, chapters 12, 13, and 14


*Professional Development Corner*

The Publication Process


Sampling, Power, Significance Testing, and Effect Sizes

Pedhazur & Schmelkin, chapter 15


Professional Development Corner
The Publication Process


**Measurement**

Pedhazur & Schmelkin, chapters 2 and 5


*Professional Development Corner*

Getting an Article Published in a Top Journal: interview results
**Measurement Validity**

Pedhazur & Schmelkin, chapters 3 and 4


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**Professional Development Corner**

From original submission to publication

Factor Analysis and Structural Equation Modeling

Pedhazur & Schmelkin, chapters 22, 23, and 24


Professional Development Corner

The Craft of Reviewing


Moderation and Mediation


**Accumulation of Results**


*Professional Development Corner*

Writing a Review
Research on Organizational Performance


Professional Development Corner
Methodological Urban Legends


**Qualitative Methods**


