Psychology 400  
Advanced Research Methods in Psychology  
Fall 2014

**Instructor:** Dr. Christine Smith  
**Office Hours:** Tuesday and Thursday 10-11:00, or by appointment.

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**Email:** SmithC@GVSU.edu  
**Telephone:** 331-2424

**Required Readings:**
A set of reading materials will be posted to BB.

**Recommended Text:**
American Psychological Association (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC.: APA. There is no need to purchase this text. There are several copies available at the GVSU’s library, I have a copy in my office, and most of the relevant information can be found online. This is the source you should use for writing your papers.

**Course Content and Objectives:**
The aim of this course is to cover advanced research design and data analysis with emphasis upon the concepts of interaction. Students (working in small groups) will experience the entire research process in that they will design, carry out, analyze, write up, and orally present an original study. The study must include a theoretically meaningful hypothesized interaction between independent variables and at least one independent variable must be manipulated experimentally. Students will gain experience working with the statistical package SPSS for Windows. In addition to carrying out the research project, students will read, analyze, and critique several published research articles related to internal and external validity. I will teach the content of the course primarily through our discussions of these research articles/example studies, therefore, it is extremely important that you come to class each day prepared (i.e., having read the assigned material for the day).

**Course Requirements and Grade Determination:**
Your final semester grade will be based on classroom assignments, one exam, a research proposal, a formal written report of your completed original research project, and an oral presentation of both your proposal and your final project. Detailed descriptions are provided below.
**Class Assignments:** Over the course of the semester we will read and discuss published journal articles, instructional chapters/papers, and critique several studies. Several writing projects, based upon these readings, will be assigned. All written work must be completed and submitted via BB prior to the class discussion. Periodically, in class work will be assigned and collected. *Assignments submitted late will earn no more than half credit, no exceptions.* Given the nature of the in-class work, if missed, it cannot be made up.

**Exam:** There will be one exam given during the course of the semester. The exam will cover the material covered in lecture and will be comprehensive in nature.

**Research Project:** All students will work collaboratively (in small groups) on an original research project. The project must be based upon sound theoretical and empirical rationale, have two independent variables, one of which can be manipulated, and include a hypothesized interaction.

**Proposal:** Each research team will submit a written APA style research proposal describing their project during the first third of the course. The proposal should include references to at least 15 scholarly journal articles/book chapters. Group members will co-present to the class their research proposals.

**Completed Project:** All research teams will submit a formal APA style paper describing the results of their research project. Additionally, group members will co-present to the class the findings of their research. This presentation should be approximately 15 minutes in length and include an overview of the area studied, the methodologies used, results obtained, and a discussion of implications. Presentations should be made in PowerPoint.

**Grading:** The course assignments and their point values are listed below

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<th>Assignment</th>
<th>Point Value</th>
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<td>Written assignments</td>
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<tr>
<td>Comprehensive Exam</td>
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<tr>
<td>Proposal</td>
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<td>Proposal Presentation</td>
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<td>Final Paper</td>
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<td>Final Presentation</td>
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**Grading Distribution:**

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<th>Grade</th>
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<td>A-</td>
<td>93.99-90%</td>
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<td>86.99-84%</td>
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<td>B-</td>
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Course Schedule and Due Dates

Week 1  Introduction to the Course
In the first week I will provide an overview of the course. In addition you will have the opportunity to meet your classmates and choose fellow research group members.
Tuesday: Fill out an “interest” card.
Thursday: Meet with potential group members and form research groups.
Readings for the week: Twenty tips for interpreting scientific claims and Unreliable research: Trouble at the lab (These are posted under the “Readings” tab on BB).

Week 2  Generating Research Questions and Hypotheses
Thursday: Complete hypothesis generation assignment in class.
“Coffee Perks Up Sex” is due by 5:00 Thursday (submit via BB Link)
Readings for the week: Threats to your experiment (BB)

Week 3  Internal Validity
Tuesday: Internal Validity/Threats to Validity Lecture
Thursday: Identify Threats in class exercise and time to work with your research group.
“Ripped from the Headlines” is due by 5:00 Thursday
Readings for the week: Your choice. At this point, you should begin exploring literature relevant to your study.

Week 4  Internal Validity and Experimental Design
Tuesday: Discuss “When common sense goes out the window.”
Questions for “When common sense goes out the window” is due by 5:00 Tuesday.
Thursday: Discuss “The Social Psychology of False Confessions.”
Questions for “The Social Psychology of False Confessions” is due by 5:00 Thursday.
Readings for the week: When common sense goes out the window and The social Psychology of False Confessions.

Week 5  Bias in research

Week 6  Becoming a better consumer of Research
   Reading # 5 posted to BB. Classroom discussion and activities.

Week 7  SPSS and Data Analysis Techniques
   Reading # 6 posted to BB. Classroom discussion and activities.

Week 8  SPSS and Data Analysis Techniques
   Time will be given in class to prepare for data analysis sessions.

Week 9-11  Data analysis of Group Projects
   Groups will make appointments to meet with me to analyze their data.
Week 12  Plan and Discuss Oral Presentations
         Time will be given in class to plan and prepare oral presentations.

Week 13  Presentations

Week 14  Thanksgiving Holiday No Class Tuesday or Thursday

Week 15  Presentations

Week 16  Presentations