Psych 303 -- Research Methods

Spring 2005 Tues/Thurs 2:00-3:20pm 142 Straub Hall

Instructor: Veronica Perez

Email: vperez@darkwing.uoregon.edu
Office Hours: 320 Straub Hall, 346-4990

Tuesday 10:00-11:30 or by appointment

Textbook: Psychological Research: The Ideas Behind the Methods (Douglas G. Mook)

Blackboard website: blackboard.uoregon.edu

You must have an uoregon edu email account and have access to blackboard to participate in this course!

Teaching Assistants:

Jennifer Tininenko

Lab sections: Wed. 12:00-1:20 Wed. 2:00-3:20 180 Straub Hall

Email: jtininen@darkwing.uoregon.edu

Office hours: Straub 393 Thursday 12:00-2:00pm

Lori Stewart

Lab section: Wed. 4:00-5:20 180 Straub Hall Email: Istewar1@darkwing.uoregon.edu

Office hours: Straub 335 Wednesday 3:00-4:00pm

<u>Course Content:</u> This course aims to provide you with the tools necessary to create, interpret, and evaluate scientific data. Although the course will be focused on research in the field of psychology, the basic concepts that we discuss will be relevant to your understanding of most scientific studies. The topics we will discuss will include: the assumptions of the scientific method, experimental design, critical analysis of existing research, and data analysis.

<u>Course Evaluation:</u> Course grades will be based on 3 midterm exams (55%), the final project report (30%), and performance during lab sections and in-class activities (15%). Failure to complete the final project *or* more than one of the midterm exams will be grounds for failing the course. If you know that you cannot attend class when midterm exams are scheduled, do not take this course. No makeup exams will be administered for any *preventable* schedule conflict. Midterms will focus on the material from the section of the course just prior to them. However, some concepts will necessarily build upon those that were learned in earlier sections.

<u>Late Assignments</u>: The final project in particular will be subject to a very strict deadline (Monday June 6th, 12:00PM). *Late projects will be penalized one letter grade per day, starting immediately after the time when the projects are due.* There will be no exceptions to this rule for any reason.

Exams will cover material in the text *and in lecture*. While there will be substantial overlap between lecture and text materials, we will cover additional material during lectures. So you will need to attend lectures in order to do well in the course.

Research projects will be created and conducted in small groups. Groups will have the opportunity to select the topic of their projects from a selection of options detailed in the *Project Ideas* document on Blackboard. Each group will build their own research experiment, participate in data collection, and perform statistics on the data. The final project report will be written in APA format and contain 5 sections: Abstract, Introduction, Methods, Results, and Discussion. *Each individual member of each group will be responsible for his/her own project reports. Plagiarism will be grounds for failure of the course.

<u>Lab sections</u>: Attendance in lab sections is mandatory, and will be a factor in the course grade. We will use these labs to extend discussion of important concepts, and to provide some hands-on experience and guidance with statistical software and experimental procedures. Students will use this time to learn how to create, conduct, and write-up their research project.

Date	Lecture Schedule	Readings
Mar 29	Introduction	
Mar 31	What is the scientific method?	chap 1 & 2
Apr 5	Basics of Experimentation	chap 3 & 8
Apr 7	More on Experiments & Ethical issues	chap 12 & 13
Apr 12	Measurement: scales of measurement; sampling	chap 5 (chap 3 also relevant)
Apr 14	Measurement: scales of measurement; sampling	chap 5 (chap 3 also relevant)
Apr 19	Midterm 1	
Apr 21	Writing APA research reports	Appendix C
Apr 26	Statistics: statistical power, significance testing null hypothesis testing	chap 3-6
Apr 28	Statistics: statistical power, significance testing null hypothesis testing	chap 3-6
May 3 & 5	Observation, Survey, Correlational Research	chap 4 & 5
May 10	Midterm 2	
May 12 & 17	Experimental design: within vs. between subject designs order effects bias effects floor effects, ceiling effects	chap 6 & 7

May 19	Multiple factor experimental designs: understanding <i>interactions</i> between factors	chap 9
May 24	Multiple factor experimental designs: understanding <i>interactions</i> between factors	chap 9
May 20	No Class	
May 26	No Class	
May 31	Quasi experiments & Small N designs	chap 10 & 11

Reminder: Final Project Papers will be due on Monday June 6th at 12:00 PM in the main office of the Psychology Department (Straub 131).