

Psych 303 -- Research Methods

Winter 2005

Mon/Wed 10:00-11:20

105 Esslinger

Instructor: **Veronica Perez**

Email: vperez@darkwing.uoregon.edu

Office Hours: 320 Straub Hall, 346-4990

Wednesday 11:30-12:30 or by appointment

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

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:

Christina Sheppler

Lab sections: Mon. 2:00-3:20 Mon. 4:00-5:20 180 Straub Hall

Email: cnewman1@darkwing.uoregon.edu

Office hours: Straub 325 to be announced

Sharon Tang

Lab section: Mon. 12:00-1:20 180 Straub Hall

Email: stang@darkwing.uoregon.edu

Office hours: Straub 448 Thursdays 4:00-6:00pm

Course Content: 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.

Course Evaluation: 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.

Late Assignments: The final project in particular will be subject to a very strict deadline (Friday March 11TH, 3:30PM). *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.

Lab sections: 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.

Lecture Schedule		
Date	Topic	Readings
Jan 3	Introduction	
Jan 5	What is the scientific method?	chap 1 & 2
Jan 10	Basics of Experimentation	chap 3 & 8
Jan 12	More on Experiments & Ethical issues	chap 12 & 13
Jan 17 & 19	Measurement: scales of measurement; sampling	chap 5 (chap 3 also relevant)
Jan 24	Midterm 1	
Jan 26	Writing APA research reports	Appendix C
Jan 31	Statistics: statistical power, significance testing null hypothesis testing	chap 3-6
Feb 2	Statistics: statistical power, significance testing null hypothesis testing	chap 3-6
Feb 7 & 9	Observation, Survey, Correlational Research	chap 4 & 5
Feb 14	Midterm 2	
Feb 16 & 21	Experimental design: within vs. between subject designs order effects bias effects floor effects, ceiling effects	chap 6 & 7
Feb 23 & 28	Multiple factor experimental designs: understanding <i>interactions</i> between factors	chap 9
March 2	to be announced	
March 7	Quasi experiments & Small N designs	chap 10 & 11
March 9	Midterm 3	

Reminder: Final Project Papers will be due on Friday March 11th at 3:30 PM in the main office of the Psychology Department (Straub 131).