University of Oregon

Research Methods

Psychology 303



<u>Instructor</u>: Scott A. Reed, M.A. **E-mail**: sreed@uoregon.edu

Office Hours: TR 12:00-1:30PM in Straub 349 Class Schedule: TR 4:00-5:20PM in 115 LA

Graduate Teaching Assistants: John Myers, jmyers5@uoregon.edu

Scott Adams, sadams 2@uoregon.edu

Lab Sections: W 8:30-9:50AM in Straub 180

F 2:00-3:20PM in Straub 180

R 10:00-11:20AM in Straub 180

F 4:00-5:20PM in Straub 180

Course Description:

This class is a foundation course for the scientific study of psychology. Throughout the term, you will learn how to test scientific hypotheses, design experiments, evaluate research conclusions, and conduct your own research study. In many psychology courses, you learn *what* human behavior is or *why* it occurs, but this class is much more important, for it teaches *how* to examine human behavior and arrive at those conclusions, and how to think like a psychologist. The material we will cover in this course will not only provide you with the ability to conduct research experiments and reach valid, scientific conclusions, but it will also enable you to evaluate the validity of others' research, which if not properly understood, can often be misleading. Science is often concerned with the pursuit of truth, and in the study of psychology, it is this course that teaches you the correct way to pursue it.

Course Pre-Requisite

Successful completion of Psychology 302 (Statistics) is a pre-requisite for this course. We will review important statistical concepts as they apply to conducting, analyzing, interpreting, and reporting research results, but this should not be 'new' material to you.

Required and Recommended Books

Required Books (1):

Cozby, P. (2007). Methods in Behavioral Research (9th ed.). New York: McGraw-Hill.

The textbook, *Methods of Behavioral Research*, is an excellent book that is very user-friendly. We shall refer to it often in class and the readings will make a thorough supplement to what we discuss in class. We shall set a very steady pace throughout the term, often covering multiple chapters a week, so please keep up with the readings as they will make our discussions in class much more lively and informed. In addition, the publisher of the text maintains an on-line learning center for students with quizzes, flashcards, chapter outlines, exercises, and additional links for relevant concepts. You are encouraged to use the site for supplemental material, studying, and exam preparation. The website can be found at: www.mhhe.com/cozby9

Recommended books (1):

American Psychological Association. (2001). *Publication Manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Course Components

Course Points and Components:

5 Quizzes (20 points each): 100 points

Midterm Exam: 100 points Final Exam: 100 points Lab Homework: 50 points APA paper: 150 points

Total Possible Points: 500

Quizzes:

There will be 5 quizzes throughout the semester. They will consist of 10 multiple choice questions (worth 2 points each) and will be based on both lecture and textbook material. Each quiz will be handed back the following week and please note that if you are absent, quizzes cannot be made up. Be sure to keep the quizzes for later study materials, as some of the quiz questions may appear on exams.

Exams:

There will be two exams throughout the semester, 1 midterm and 1 final. Each exam will cover the textbook chapters listed in the course calendar in addition to the lecture material we covered in class. The exams will consist of multiple choice and short answer questions. Each exam will be worth 100 points and the final exam will be comprehensive. Study guides will be handed out one week prior to the exam date, and exams will be graded and returned to you no later than the following week. You will not need to bring scantron forms.

Lab Homework and APA Term Paper:

The lab component of the course will give you hands-on experience in conducting your own research study. There will be several in-class lab activities and assignments for you to complete throughout the term, but the largest portion of your work in lab (and your lab grade) will consist of working on your research study and APA paper. Early in the term in lab, we will form small groups of 3-4 people and a research topic will be agreed upon. You must find at least 7 peer-reviewed journal articles on your topic and formulate a research hypothesis or question. You will then create or obtain measures of your construct, administer them to your classmates, and analyze the results. You must then type an APA style paper about your study (further instructions and guidelines will be provided in class). The final paper must be 14-16 pages, double-spaced with one-inch margins and 12-point font. It must be formatted correctly in APA style (See the APA Publication manual). The term paper must be completed and turned in by **Tuesday, March 17**th, **2009**. Please note that any plagiarism will result in an automatic 'F' for the course.

Blackboard:

Blackboard will be used in this course as an online resource for the syllabus, powerpoint lectures, handouts, quizzes, assignments, and APA formatting guidelines. Please note that while you may have access to the lecture slides ahead of time, attending both lecture and lab will be crucial to doing well in the course. The blackboard site for this course can be found at: http://blackboard.uoregon.edu.

Grading

All written work in this class will be graded based on the following two criteria:

- 1) Form (40%): Proper APA formatting in terms of titles, citations, references, etc. in addition to spelling, grammar, sentence structure, length, and margins.
- 2) <u>Critical Thinking</u> (60%): This criterion will be based on how well you display knowledge of the material, how well you have analyzed and evaluated the material as opposed to merely expressing an opinion, and how well you creatively apply the information.

Grades will be assigned based on your total percentage points in the course:

A + = 100%	C+ = 78-79%
A = 92-99%	C = 72-77%
A = 90-91%	C = 70-71%
B+=88-89%	$\mathbf{D} = 60-69\%$
$\mathbf{B} = 82-87\%$	F = 59% and Below
B - = 80 - 81%	

Course Expectations

Academic Honesty:

Group discussion outside of class is encouraged. However, all work submitted in this course must be your own and produced exclusively for this course. Copying or paraphrasing information from any source, print or electronic, without citation, is plagiarism. The use of sources must therefore be properly acknowledged and documented. The consequences of academic dishonestly will be taken seriously and are noted on student disciplinary records. If you are in doubt regarding any aspect of these issues, please come and speak with me.

Academic Responsibility:

Attendance is critical to earning a good grade for the course. I do not take roll, however, it is very important that you show up to class to participate. This class will be guided by University Policies that entails a standard of responsibility, honesty, and integrity for me, your classmates, and the work that you do. This also means that you should do your absolute best to attend every class meeting, and to come to class prepared and ready to participate in our discussions. There will be topics in lecture that may not be in the textbook, and there will be exam questions based on lecture material. In addition, there will be certain things we shall do in class (demonstrations, videos, etc.) to which exam questions will apply, and therefore, you must show up if you wish to do well on the exams. Finally, the quizzes will also be an indirect measure of your attendance and participation, and once again, these cannot be made up. This is a psychology course – a class in which the subject we study will be *ourselves* – and therefore both of us should do our very best to put forth the greatest effort in this course. This course has been designed to comply with the psychology department's guidelines for teaching and learning. Please review these guidelines at http://psychweb.uoregon.edu/guidelines/index.htm

Student Accommodations

Students with Disabilities:

If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me. Also, please request that the Counselor for Students with Disabilities, Molly Sirois, sends me a letter verifying your disability. The phone number for disability services is 346-1155 and the email address is <u>disabsrv@uoregon.edu</u>.

Students for Whom English is Not Their Native Language:

Foreign language dictionaries are permitted during exams. Exams will be designed to take approximately one hour to complete within an hour and twenty minute period; therefore, it is unlikely that you will need additional time. However, if you find that you do need additional time to complete the exam, please make arrangements with me ahead of time to stay after class so you can finish

Learning Objectives, Activities, and Assessment

Learning Objectives	Activities	Assessment
To gain an understanding of how to study psychology.	Lectures, quizzes, readings, in-class activities, group discussions.	Objective exams, short answer essays, quizzes, activity papers, term paper.
To learn how to formulate and test scientific hypotheses.	Lectures, quizzes, readings, group discussions, in-class exercises.	Objective exams, short answer essays, quizzes, term paper.
To learn the basic principles of research design and the observation of behavior, and what conclusions can be drawn from them.	Lectures, reaction papers, readings, in-class activities.	Objective exams, short answer essays, quizzes, activity papers, term paper.
To understand the concepts of reliability and validity and why they are essential to psychological measures and scientific conclusions.	Lectures, quizzes, readings, group discussions, in-class exercises.	Objective exams, short answer essays, quizzes, term paper.
To understand some basic principles of statistical analyses, statistical results, and how to code data.	Lectures, quizzes, readings, in-class activities, group discussions.	Objective exams, short answer essays, quizzes, activity papers, term paper.
To learn the ethical responsibilities of conducting psychological research.	Lectures, quizzes, readings, group discussions.	Objective exams, short answer essays, quizzes, term paper
To understand the limitations and implications in generalizing research results to larger settings and populations	Lectures, quizzes, readings, group discussions	Objective exams, short answer essays, quizzes, term paper

[&]quot;The purpose of psychology is to give us a completely different idea of the things we know best."

Course Calendar for Lecture

Week	Date	Lecture Topic	Chapter Readings
1	January 06	Introduction; Course Overview;	
	January 08	Scientific Understanding of Behavior	СН. 1
2	January 13	Research and Hypotheses; Ethical Research	CH. 2
	January 15	QUIZ 1: Thursday, 1/15 on Chapters 1, 2, & 3	СН. 3
3	January 20	Studying Behavior; Experiments;	СН. 4
	January 22	Independent and Dependent Variables	СН. 4
4 Janua	January 27	QUIZ 2: Tuesday, 1/27 on Chapters 4 & 5	CH. 5
	January 29	Reliability and Validity; Conducting Surveys	СН. 7
5	February 03	MIDTERM EXAM: Tuesday, 2/03	
	February 05	DATA COLLECTION DAY: Thursday, 2/05	
6	February 10	Observing Behavior; Case Studies;	СН. 6
	February 12	Experimental Design; Internal Validity	СН. 8
7 Feb	February 17	Conducting Experiments	СН. 9
	February 19	QUIZ 3: Thursday, 2/19 on Chapters 6, 8, & 9	
8	February 24	Complex Experimental Designs	CH. 10
	February 26	Quasi-Experimental Designs	СН. 11
9	March 03	QUIZ 4: Tuesday, 3/03 on Chapters 10, 11, & 12	СН. 12
	March 05	Description and Correlation; Statistical Inference	СН. 13
10	March 10	Generalizing Results; External Validity	CH. 14
	March 12	QUIZ 5: Thursday, 3/12 on Chapters 13 & 14	
FINALS WEEK	March 16	FINAL EXAM ON MONDAY, MARCH 16 th at 1:00PM in 115 LA	

NO WORK OF ANY KIND WILL BE ACCEPTED AFTER FRIDAY, MARCH $20^{\rm th}$ OF FINALS WEEK

"If I have seen further than others, it is because I have stood on the shoulders of giants."
--- Sir Isaac Newton