Spring 2012 University of Oregon

Research Methods

Psychology 303



Lecture

Instructor: Scott A. Reed, M.A. E-mail: sreed@uoregon.edu

Phone: 346-1585

Office Hours: MW 10:30-11:30 AM in 37 Straub, or by appt.

Lecture: MW 8:30-9:50AM in 221 MCK

Lab

Deniz Tahiroglu

Office: 377 Straub

Office Hours: T 11:00-12:00, W 1:00-2:00PM

Email: dtahirog@uoregon.edu

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

R 12:00-1:20PM in 180 Straub

Robbie Ross

Office: 493 Straub

Office Hours: T 2:00-4:00PM Email: robbier@uoregon.edu

Lab Sections: R 2:00-3:20PM in 180 Straub

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

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 studies. 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 study human behavior and arrive at those conclusions, and how to think like a psychologist. The material we will cover in this course will provide you with the ability to design research studies, conduct proper analyses to test the predictions of a study, and to critically infer what conclusions can be made based on the design and analyses of a study. In addition, this course will teach you how 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-Requisites

In addition to WR 121, 122, 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. (2008). Methods in Behavioral Research (10th 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 both lecture and lab. 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/cozby10e

Recommended books (1):

American Psychological Association. (2009). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Course Points

Lecture (300 points)

5 Quizzes (10 points each): 50 points

5 Activity Assignments (10 points each): 50 points

Midterm Exam: 100 points Final Exam: 100 points

Lab (200 points)

Lab Participation: 10 points Lab Homework: 30 points

Literature Review Paper: 25 points Correlational Study Paper: 55 points Experimental Study Paper: 80 points

Total Points: 500

Course Components

Quizzes:

There will be 5 quizzes throughout the term. They will consist of 10 multiple-choice questions (worth 1 point each) and will be based on both lecture and textbook material. 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.

Activity Assignments:

Five times throughout the term, an in-class activity will be assigned for you to complete. No preparation is required, and each Activity Assignment is due at the end of class that day and will be worth 10 points each. As with quizzes, activity assignments cannot be made up.

Exams:

There will be two exams throughout the term, 1 midterm and 1 final (see Course Calendar for specific dates). 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 Work:

The lab component of the course will give you hands-on experience in conducting, analyzing, and writing up your own research studies. The majority of lab points will be based on successful completion of three papers that are conducted through the term in lab. The first is a literature review paper in which you will review the past research on a topic in psychology, and make predictions about the relevant variables based on your review. The second paper will be based on a correlational study that each lab will conduct using measures of the relevant variables from the first paper. Each student will administer these measures to five people (e.g., friends and family members) and, as a lab, the results will be analyzed and written up in an APA style paper. The third paper will be based on an experimental study that each lab will conduct using similar means of data collection. Again, the results of the experimental data will be analyzed and written up in an APA style paper. In addition to these three papers, points in lab will also be based on attendance and homework assignments. Please see the lab syllabus for further details.

Blackboard

Blackboard will be used in this course as an online resource for the syllabus, powerpoint lectures, lab materials, handouts, assignments, and APA formatting resources. 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

In general, written work in this course will be graded based on <u>form</u> (i.e., proper APA formatting, spelling, grammar, sentence structure, length), <u>critical thinking</u> (i.e., how well you display knowledge of the material, how well you have analyzed and evaluated the material, and how well you effectively communicate the information), and the <u>assignment criteria</u> that are outlined in each assignment (i.e., completing all aspects of the work assigned based on the instructions and guidelines of the assignment).

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

| GRADE | PERCENTAGE | GRADE | PERCENTAGE |
|-------|------------|-------|-----------------|
| A+ | 99-100% | C | 72-77.9% |
| A | 92-98.9% | C- | 70-71.9% |
| A- | 90-91.9% | D+ | 68-69.9% |
| B+ | 88-89.9% | D | 62-67.9% |
| В | 82-87.9% | D- | 60-61.9% |
| B- | 80-81.9% | F | 59.9% and Below |
| C+ | 78-79.9% | | |

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 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, send me a letter verifying your disability. The phone number for disability services is 346-1155 and the email address is **disabsrv@uoregon.edu**.

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.

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

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Learning Objectives, Activities, and Assessment

| Learning Objectives | Activities | Assessment |
|---|--|---|
| To gain an understanding of how to conduct research in psychology and how to write APA style papers. | Lectures, readings, lab activities, group discussions, lab research projects. | Exams, quizzes, lab homework, term papers. |
| To learn how to formulate and test scientific hypotheses. | Lectures, readings, group discussions, in-class exercises, lab research projects. | Exams, short answer essays, quizzes, term papers. |
| To learn the basic principles of different research designs, and what conclusions can be drawn from them. | Lectures, group discussions, readings, in-class activities, lab research projects. | Exams, short answer essays, quizzes, activity assignments, term papers. |
| To understand the concepts of reliability and validity and why they are essential to psychological measures and scientific conclusions. | Lectures, readings, group discussions, in-class activities. | Exams, short answer essays, quizzes, lab activities. |
| To understand some basic principles of statistical analyses, statistical results, and how to code data. | Lectures, readings, group discussions, lab activities and term papers. | Exams, quizzes, term papers. |
| To learn the ethical responsibilities of conducting psychological research. | Lectures, readings, in-class activities, group discussions. | Exams, short answer essays, quizzes. |
| To understand the limitations and implications in generalizing research results to larger populations. | Lectures, readings, group discussions. | Exams, quizzes. |

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

--Paul Valery

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Course Calendar for Lecture

| Week | Date | Lecture Topic | Chapter Readings |
|----------------|-----------------------|---|----------------------|
| 1 | M ~ April 2 | Introduction; Course Overview | |
| | W ~ April 4 | A Scientific Understanding of Behavior | CH. 1 |
| 2 | M ~ April 9 | Theories and Hypotheses | CH. 2 |
| | W ~ April 11 | Ethical Research ACTIVITY 1 : What is Ethical? (4/11) | СН. 3 |
| 3 | M ~ April 16 | QUIZ 1: Mon., 4/16 on Chapters 1, 2, & 3 Studying Behavior; Correlational Studies | CH. 4 (65-76) |
| | W ~ April 18 | Reliability and Validity ACTIVITY 2 : Facilitated Communication (4/18) | СН. 5 |
| 4 | M ~ April 23 | QUIZ 2: Mon., 4/23 on Chapters 4 (65-76) & 5 Conducting Surveys | СН. 7 |
| | W ~ April 25 | Description and Correlation; Midterm Review | СН. 12 |
| 5 | M ~ April 30 | MIDTERM EXAM: Monday, 4/30 | |
| | W ~ May 2 | Observing Behavior; Case Studies ACTIVITY 3: Observing Behavior (5/2) | СН. 6 |
| 6 | M ~ May 7 | Experiments; Types of Validity ACTIVITY 4 : Evaluating Internal Validity (5/7) | CH. 4 (76-89) |
| | W ~ May 9 | Experimental Designs | CH. 8 |
| 7 | M ~ May 14 | CLASS CANCELLED: Correlational Paper Work Day | |
| | W ~ May 16 | Conducting Experiments | CH. 9 |
| 8 | M ~ May 21 W ~ May 23 | QUIZ 3: Mon., 5/21 on Chapters 4 (76-89), 6, & 8 Complex Experimental Designs | СН. 10 |
| | ,,, iiii, 20 | Quasi-Experimental Designs ACTIVITY 5 : In-class Experiment (5/23) | СН. 11 |
| 9 | M ~ May 28 | OBSERVED HOLIDAY: NO CLASS | |
| | W ~ May 30 | QUIZ 4: Wed., 5/30 on Chapters 9, 10, & 11 Statistical Inference | СН. 13 |
| 10 | M ~ June 4 | Generalizing Results; External Validity | СН. 14 |
| | W ~ June 6 | QUIZ 5: Wed., 6/6 on Chapters 13 & 14 Review | |
| FINALS WEEK | F ~ June 15 | FINAL EXAM ON FRIDAY, JUNE 15 th at 10:15AM in 221 MCK | |

NO WORK OF ANY KIND WILL BE ACCEPTED AFTER FRIDAY, JUNE 15^{th} OF FINALS WEEK