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Psychology 303  
Fall Term, 1991  
University of Oregon

## RESEARCH METHODS

### Course Syllabus

<u>Date</u>	<u>Readings</u>	<u>Lecture Topic</u>	<u>Quiz/Homework</u>
September 24 September 26	Chapter 1	Overview and Introduction Psychology and Science	
October 1 October 3	Chapter 2 Chapter 3	Ethics Descriptive Research	Quiz 1 HW 1
October 8 October 10	Chapter 4	Concept of Cause Experimental Research	Quiz 2 Quiz 3
October 15 October 17	Chapter 5 Chapter 6	Formalizing Research Questions Independent/Dependent Variables	HW 2 Quiz 4
October 22 October 24	Chapter 7 Chapter 8	Control of Confounding Influences I Control of Confounding Influences II	Quiz 5 Quiz 6
October 29 October 31	Chapter 9 Chapter 10	Experimental Research Design Quasi-experimental Research Design	Quiz 7; HW 3 Quiz 8
November 5 November 7	Chapter 11 Chapter 12	Single-subject Research Designs Data Collection	Quiz 9; HW 4 Quiz 10
November 12 November 14	Chapter 13	Hypothesis Testing and Statistics	Quiz 11 HW 5
November 19 November 21	Chapter 14 Chapter 15	External Validity Reporting Results	HW 6 Quiz 12
November 26 November 28	Report Preparation	Presentations Thanksgiving Holiday (no class)	
December 3 December 5	Report Preparation	Presentations Presentations	All Written Reports Due

### Required Readings:

Christensen, L. B. (1991). Experimental Methodology (5<sup>th</sup> Edition). Needham Heights, MA: Allyn and Bacon.

## COURSE DESCRIPTION AND INFORMATION

The purpose of the course is to provide the student with a basic understanding of research methods in contemporary psychological research. The underlying principles and many issues covered will be generalizable to scientific research conducted in most other scientific disciplines (e.g., sociology, medicine). Specifically, the student will (1) acquire an appreciation of the process of research for developing a systematic knowledge base and informed theories in psychology; (2) learn “critical thinking skills” for evaluating the quality of research studies; (3) gain “hands on” experience in critiquing research studies; and (4) conceptualize a research question, design a study addressing the question, conduct the research, analyze the data, and report the findings both orally in class and in written form at the end of the course.

Although there is considerable factual information that the student must assimilate to understand research methods, much of the meaning of the information only becomes of interest and apparent in the context of active engagement with the material. The most important part of the course—the development of critical thinking skills for evaluating research—requires the student to directly critique the thinking behind research and to appraise the inferences one can draw from the study’s findings. Consequently, the course embodies two components. First, there is the traditional readings and lecture topics to convey some of the structure, definitions, and guidelines used in research methods. Since earlier ideas and information are essential for understanding later topics and issues, it is crucial that students do not fall behind in the readings. To ensure progressive mastery of the essential information, we will have frequent quizzes. Second, and most importantly, there will be extensive involvement in discussing, debating, and evaluating different types of research. To provide the necessary experiences for this component of the course, we will have several in-class and homework assignments. The culminating exercise for the course will be the actual conducting of research and reporting of results by the student.

There are several components that determine the final course grade: (1). There will be a total of 12 multiple choice quizzes. These will be relatively short and are designed to provide you with ongoing feedback about your mastery of the coursework. Each quiz covers the preceding material from the textbook that has not been previously tested. Only 10 of the quizzes will be used to determine the final grade. Consequently, you may miss 2 quizzes for any reason or drop the lowest 2 scores for the final grade. (Note: given this permissive structure, there will be no make-up quizzes.) (2). There will be 6 homework assignments due at the beginning of class (5 point penalty per day late). These are designed to provide the student with experience in different aspects of understanding and conducting psychological research. (3) At the end of the course, each student will conduct a study, make a short presentation, and submit a manuscript prepared in the American Psychological Association publication style.

My office hours will be on Tuesdays and Thursdays, 2 P.M to 3 P. M. We have 2 graduate teaching assistants for the course, David Caulton and David McCone, who will also have separate office hours.

The grading will be determined according to the following:

Quizzes (10 @ 12 points each)	120
Homework Assignments (6 @ 30 points each)	180
Class Presentation	50
Final Research Report	150
<b>Total</b>	<b>500</b>

Grading will be done on a curve, but no more stringent than:  
90%—A, 80%—B, 70%—C, 60%—D, and < 60%—F.