RESEARCH METHODS

Course Syllabus

<u>Date</u>	Readings	Lecture Topic	Quiz/Homework
September 29 October 1	Chapter 1	Overview and Introduction Explaining Behavior and Science	
October 6	Chapter 3	Research Design Overview	Quiz 1
October 8	Chapter 2	Developing Ideas & Library Research	Homework 1
October 13	Chapter 4	Observation & Measurement	Quiz 2
October 15	Chapter 5	Research Subjects & Ethics	Quiz 3
October 20	Chapter 6	Non-Experimental Design I	Homework 2
October 22		Non-Experimental Design II	Quiz 4
October 27	Chapter 7	Survey Research	Quiz 5
October 29	Chapter 8	Between-Subjects Designs I	Homework 3
November 3	Chapter 9	Between-Subjects Designs II	Quiz 6
November 5		Within and Combined Designs I	Homework 4
November 10	Chapter 10	Within and Combined Designs II	Quiz 7
November 12		Single Subject Design	Quiz 8; Homework 5
November 17	Chapter 11	Hypothesis Testing and Statistics	Quiz 9
November 19	Chapter 12		Quiz 10
November 24 November 26	Chapter 14	Reporting Research Results Thanksgiving Holiday (no class)	Quiz 11; Homework 6
December 1	Chapter 16	Theory & Research	Quiz 12
December 3	Report Prep	Presentations	
December 8	Report Prep	Presentations	Written Reports Due
December 10	Report Prep	Presentations	

Required Readings:

Bordens, K. S., & Abbott, R. B. (1991). <u>Research Design and Methods</u> (2nd Edition). Mountain View, California: Mayfield Publishing Company.

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 issues covered will be generalizable to scientific research conducted in many related 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 engagment 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 are 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 inclass discussions and demonstrations, as well as six 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, short answer quizzes. These will be relatively short and are designed to provide ongoing feedback about 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. Please note that given this permissive structure, there will be no make-up quizzes. (2). There will be 6 homework assignments due at the beginning of class one week after they are distributed (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, 1 P.M. to 1: 30 P.M. There are 3 graduate teaching assistants for the course: Crystal Dehle (Straub 142, Tuesdays-Thursdays, 2:30 P.M. to 3: 30 P.M.), Brian Goff (Straub 142, Monday-Wednesday, 3:30 P.M. to 4: 50 P.M.), and Donna McKeown (Straub 490, Monday-Wednesday, 11:00 A.M. to 12: 00 P.M.).

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	<u> 150</u>
-	
Total	500

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