

PSY/SO 316 QUANTITATIVE METHODS

SPRING 2002

INSTRUCTOR: Bryan Man, Ph.D.

MWF: 1-1:50 P.M.

OFC/PHONE: BS 113/735-4850

OFC HRS: MF 9-10:30 AM; Th 1-2 P.M.

Or by appointment. E-mail: bman@chaminade.edu

SYLLABUS

COURSE DESCRIPTION: This course is designed to introduce students to research methods and the scientific approach to social and behavioral sciences research. The focus will be on the scientific model of inquiry, the research process, measurement, and the quantitative and qualitative methods of data gathering. Original research will be conducted by each student, according to the principles and techniques learned in the course, and culminating in an end-of-term research report. Students will participate in a service learning component of the course by working with the data gathered in Fall's survey of KG residents. The class will apply descriptive statistics and prepare a report of the research results.

Quantitative research methods is a "writing intensive" course in the Behavioral Sciences Division. Students will have regular written assignments and the quality of writing will be emphasized in evaluating student progress in the course.

OBJECTIVES: Students are expected to:

1. know and understand the science base of research in the behavioral and social sciences;
2. know and understand the research process;
3. understand and differentiate the various research methods used in the behavioral and social sciences;
4. understand measurement, the measurement process, and the related issues of reliability and validity;
5. develop a research proposal related to the study of psychological or social-cultural issue;
6. work and learn in the spirit of a collaborative and collegial community through participation in group projects, such as the service learning component of the course.

WRITING ASSIGNMENTS:

1. **Short paper assignments.** Students will be assigned three short papers (2-5 pages) during the term. The papers will focus on the stages of the research process. The style of writing is expected to become increasingly formal, to reflect familiarity with, and understanding of, behavioral sciences research and reporting. Other written assignments may be made as deemed necessary. The student is required to meet the writing standards set by the university.
2. **RESEARCH PAPER:** The research paper (the proposal) will reflect: a) a proper literature review, b) the principles of valid and reliable measurement and operational definitions, c) method and sampling design and instrument construction, d) identification of appropriate statistical analysis, and e) a references page.

APA style format is required for all papers. See Psych journal articles or the APA Pub. Manual. 5th Edition.

Late papers will lose 10% off the score, for each day past the due date. All papers must be typed and follow the writing standards of Chaminade University.

GRADING: Exams		50%	
2 tests	30%		90-100% = A
Final	20%		80- 89% = B
Papers		40%	70- 79% = C
3 papers	15%		60- 69% = D
Res. Prop.	25%		x < 60% = F
Attendance		10%	

Total:		100%	

EXAMS: The test dates are tentatively scheduled. Any changes to the schedule will be discussed in class at least one week before the scheduled change. Anyone missing the test date, with proper notice-excuse, will have to make up the test **before the next class period. Unexcused absences from a test will automatically lower the test score by 10% for the student, and the test must be made up before the next class period.**

TEXT: Cozby, P. C.. (2001). *Methods in behavioral research*, 7th ed. Mountain View, CA: Mayfield Publishing Company.

COURSE OUTLINE (tentative):

- 1/14-18 Introduction: science & the social research; the research process. Ch. 1
- 1/21 Fr. Chaminade Day—No Classes**
- 1/23-25 Getting started: The research question and hypotheses . Ch. 2
- 1/28-2/1 Ethics in research. Ch. 3
- 2/4-8 Studying Behavior. Ch. 4
- Assignment 1.** Pick a topic, state a research question, identify sources of literature that would relate to your topic and research question. **Type & hand in 2/8**
- 2/11 Test 1 (essay format) Ch. 1-4, lectures**
- 2/13-20 Measurement Process. Ch. 5
- 2/18 President's Day—No Classes**
- 2/22 The research proposal; Introduction & Literature Review.
- 2/25-3/1 Observational methods I. Ch. 6
- 3/4 Assignment 2 is due. Your Introduction. References page required.**
- 3/6-8 Observational methods II. Ch. 7
- 3/11 Test 2 (essay format) Ch. 5-7**
- 3/18-22 Experimental designs. Ch. 8
Method section of the research proposal.
- 3/22 Assignment 3 is due. Your Intro & Literature Review, with references page.**
- 3/23-31 Spring Break**
- 4/1-5 Conducting experiments. Ch. 9 Assess progress on Needs Assessment project. Are we writing the report?
- 4/8-12 Method Section of your research proposal.
Complex experimental designs. Ch. 10

4/12 Assignment 4 is due. Your Intro, Lit. Review, & your Method, plus references page.

4/15-19 Quasi-experimental and single-subject designs. Ch. 11
4/22-26 Overview of the relationship between research methods & data and descriptive and inferential statistics. Ch. 12 & 13
4/29-5/3 Generalizing results. Ch. 14

5/3 Research proposal paper is due.
Summary and concluding remarks; review.

5/7 (Tues.) FINAL EXAM CH. 8-14 & lectures 8-14
10:30 to 12:30
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