

PSY/SO 316 QUANTITATIVE METHODS
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SPRING 2000
T/TH 11:00-12:20 PM
OFC HRS: M 9-10 AM; Th 3:30-4:30 PM

SD '00
PM

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 developing a survey questionnaire and in conducting the survey through one of three procedures—door-to-door interviews, telephone interviews, or a mail-out, to gain real hands-on research experience.

Quantitative research methods is a "writing intensive" course in the Behavioral Sciences Department. 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 learn to:

1. understand and differentiate the various research methods used in the behavioral and social sciences;
2. understand measurement, the measurement process, and the related issues of reliability and validity;
3. do a literature review around some topic of study;
4. develop a research proposal related to the study of this topic;
5. construct valid and reliable measures of variables;
6. conduct research;
7. statistically analyze the data gathered, in relation to the hypothesis or hypotheses stated in the proposal;
8. communicate research results in a clear and appropriate format.

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.

- 3. 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.

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		35%	
	2 tests	20%		90-100% = A
	Final	15%		80- 89% = B
	Papers		35%	70- 79% = C
	3 papers	15%		60- 69% = D
	Res. Prop.	20%		x < 60% = F
	Needs Project		30%	
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	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 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.**

Community Needs Assessment Survey Project: This is a class project aimed at giving each student actual hands-on experience in conducting survey research as a service learning vehicle. The students are expected to gather resource literature on community needs assessment research; to create a survey instrument to do the assessment; to help implement the survey, through whatever mode of data gathering is deemed most appropriate by the client community organization; and to analyze the results and produce a report. The class will organize itself into a team or teams to accomplish the tasks and objectives.

TEXT: Cozby, P. C.. (1997). *Methods in behavioral research*, 6th ed. Mountain View, CA: Mayfield Publishing Company.

COURSE OUTLINE:

- 1/18-20 Introduction: science & the social research.
Ch. 1
- 1/25-27 Getting started: The research question & library research. Ch. 2
1/25 Sullivan Library orientation; 1/27 **Assignment A** for 2/1:
Working as a team or teams, search for literature (discussions on or actual empirical research illustrating such) on community needs assessment research. Write (typed) a summary of the literature found and attach a references page. Due on 2/1
- 2/1-3 Collect and discuss the 1/27 assignment, in relation to theory, hypotheses, and sources of evidence.
Ethics in research. Ch. 3 Work in class on the needs assessment.
Assignment. 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.
- 2/8-10 Measurement & other research issues. Ch. 4
- 2/15 Test 1 (essay format) Ch. 1-4, lectures**
- 2/17 The research proposal
- 2/22-24 Descriptive methods. Qualitative and Quantitative. Ch. 5
- 2/29-3/2 Ch. 5 Continued. Assess progress on Needs Assessment project.
- Due 3/2 Assignment B. Your Introduction and Literature Review for your own research.**

- 3/7-9 Experimental designs. Ch. 6
3/14-21 Conducting experiments. Ch. 7 Assess progress on Needs Assessment project. Are we data-gathering?
- Due 3/21 Assignment C. Draft of your research proposal.**
- 3/23 **Test 2 Ch. 5-7, lectures**
- 3/27-31 **Spring Break—No Classes**
- 4/4-6 Complex experimental designs. Ch. 8
4/11-13 Quasi-experimental and single-subject designs. Ch. 9
4/18-20 Overview of the relationship between research data and descriptive and inferential statistics. Ch. 10 & 11
- 4/20 **Research proposal paper is due.**
Discuss data analysis for the needs assessment project.
- 4/25-27 Making generalizations. Ch. 12
- 5/2 **Community research paper is due.**
- 5/2-4 Ch. 12 continued: summary and concluding remarks; review.
- 5/10 (Wed.) **FINAL EXAM CH. 8-12, lectures**
8:00 – 10:00 AM
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