UNIVERSITY OF WISCONSIN-MILWAUKEE
School of Social Welfare

896-662: Introduction to Social Research

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I. COURSE PURPOSE, CONTENT, AND OBJECTIVES

The basic purpose of this introductory course is to increase awareness of social research methods (as survey research methods are so common in social research, these will be emphasized). To begin achieving this the course commences with a brief discussion introducing: (1) a variety of key terms (concepts, variables, hypotheses, inductive/deductive reasoning, etc.); (2) selected characteristics of knowledge systems, including science; and (3) criteria to assess scientific theories. The dynamic nature of research will be emphasized by means of an illustration stressing the role of theory and how it serves to guide social research, and specification of a step-by-step model (deductive model) spanning the entire research process. The use of scales (questionnaires) in assessing social phenomena will be addressed (at this point in the course) in a rudimentary fashion.

The second phase of the course will emphasize terms and techniques associated with statistical analysis and assessment. Topics will include but not be limited to: levels of data; measures of central tendency; variance, standard deviation, and Z-scores; binomial expansion (probability); Chi-square; correlational tests (several); and t-tests (several). Time permitting, F-tests (analysis of variance) will be discussed.

The third (and briefest) phase of the course will focus on issues associated with: constructing samples; developing, assessing (reliability and validity) and administering scales (questionnaires); performing program evaluations, including single-subject designs; and, time permitting, presenting data in tabular form.
The four sub-objectives of the course are to: (1) Encourage the development or enhancement of analytic and theoretical skills as they relate to social research; (2) elevate awareness of how to conduct a research study involving statistical analysis; (3) facilitate development of an appreciation for the power of social research as a method to guide professional intervention; and (4) increase awareness of the difficulties involved in social investigation. Accomplishment of these objectives should achieve the course's overarching objective of expanding the ability of students to be more critical consumers of research.

II. REQUIRED TEXTS


III. TEACHING METHOD

As determined by faculty of the School of Social Welfare, this course is scheduled to adhere to a lecture/lab format. Thus, some course sessions may be utilized as lab sessions in the sense that students will be free to use these sessions to reflect on course content, to catch up on previously presented material, or to prepare for upcoming exams. Lectures interspersed with question/answer discussion will constitute the basic format of the course.

IV. BASES OF STUDENT EVALUATION

Two or three examinations will be administered during the course of the semester. These examinations will correspond to the phases of the course identified above in the "Course Purpose, Content and Objectives" section. Extra-credit points may be awarded to students who complete class-related exercises. Students may be called on to perform brief statistical computations or solve other short problems at the blackboard. Students will not be called upon prior to the instructor having provided a detailed in-class explanation of the problem to be solved. Student's willingness to participate in class discussion will be noted.

Only the final exam will be counted for credit and a student's performance on this examination will constitute the principal basis upon which a final grade is awarded. About 10% is awarded for class participation (e.g., willingness to ask questions, etc.). Extra-credit points are added to points earned for examinations and participation in class discussion. Exams conducted prior to the final exam are preparatory to the final: Thus students are urged to perform well on these preparatory exams despite their not being counted for grading credit.

The professor reserves the discretion, in awarding a grade, to consider a student's extraordinary work effort, consistent class contributions, and/or unusual improvement in the quality of work.
It is not uncommon for undergraduate students to have had courses wherein an instructor's lectures are duplicitous of assigned reading. Students should be advised that in this course, lectures often will not duplicate the required reading for a topical segment. The implication of this point is that questions appearing on examinations will not be drawn solely from assigned reading: To perform optimally on exams will require knowledge of information obtained from lectures as well as assigned readings.

V. MISSED EXAMS

Students are strongly requested not to miss the examinations. If an exam must be missed, please contact the instructor prior to the scheduled date. Explanations provided after scheduled dates will be considered only if some major event has occurred and can be documented; e.g., automobile accident, unanticipated hospitalization, etc.

VI. PARTICIPATION BY STUDENTS WITH DISABILITIES

Students needing special accommodations in order to meet any of the requirements of this course are urged to contact the professor as soon as possible.

VII. RELIGIOUS OBSERVANCES

Students will be allowed to complete examinations or other requirements that are missed because of a traditional religious observance. Students missing a lecture segment because of a religious observance are encouraged to obtain notes for that lecture segment from a fellow student.

VIII. ACADEMIC MISCONDUCT

Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of the academic endeavors of others.

IX. COMPLAINT PROCEDURES

Complaints may be directed to the head of the academic unit or department in which the complaint occurs.

X. GRADE APPEAL PROCEDURES

A grade may be appealed on the grounds that it is based on a capricious or arbitrary decision by the professor. Appeals must follow the established procedures adopted by the School of Social Welfare. These procedures are available in writing from the Director of Social Work Programs. Students should be aware, however, that the U. S. Supreme Court has ruled that the assessment of student performance depends on largely subjective standards and expert review [Mathews v. Eldridge, 424 U.S. 319; 96 S. Ct. 893 (1976)]. The Court also has emphasized in other cases that subtlety and expertise are involved in academic decision making with respect to grades [Board of Curators v. Horowitz, 435 U.S. 78 (1978)]. Due to
the inherent subjectiveness and need for skilled expertise in grading student performance, so long as a professor has acted in good faith when awarding a grade, professors have a complete defense, even if the grade was awarded in error (cf: Mathews v. Eldridge). Thus, an "arbitrary" decision and a subjective decision are not the same thing. Professors have not been allowed to waive their responsibilities to make subjective assessments of student performance based on their skilled expertise.

XI. RACIAL DISCRIMINATION AND SEXUAL HARASSMENT

Racial discrimination and sexual harassment are reprehensible and will not be tolerated by the university. They subvert the mission of the University and threaten the careers, educational experience, and well-being of students, faculty, and staff. The university will not tolerate behavior between or among members of the university community that creates an unacceptable working environment. Similarly, the professor will tolerate neither racial discrimination nor gender discrimination between or among students enrolled in this course.

XII. INCOMPLETES

An "incomplete" may be awarded to a student who has carried a subject successfully until the end of the semester but who, because of illness, or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination, or some other limited amount of term work.

XIII. COURSE CONTENT

A. Selected Research Terms and Characteristics of Knowledge Systems

A number of terms will be defined in this discussion. These include, but will not be limited to, the following: independent, dependent, intervening, continuous and discrete variables; inductive and deductive reasoning; concepts; operational definition; etc.

Additionally, criteria by which to judge the quality of theories will be discussed. The method used to specify terms and criteria involves a brief discussion of the characteristics of knowledge systems: mystical, magical, religious, and scientific. The lesser aim of this segment is to familiarize students with important research terminology. The broader aim of this segment is generate thought about the nature of knowledge, specifically with regard to the strengths and weaknesses of knowledge derived from different systems, including science. Students should be able to think in more refined ways about the way knowledge is generated following this discussion (1 to 2 sessions, approximately).

Required Reading


**The Glossary in the back of Rubin and Babbie should be helpful to you.**

B. Theory Formulation (and Reducing Concepts to Empirical Terms)

The utility of theory as a framework by which social phenomena are understood, and the role of theory in guiding research efforts is emphasized. Pertinent issues including problem selection, developing hypotheses, defining concepts operationally (developing and utilizing scales), etc., are discussed in detail (2-3 sessions, approximately).

A case illustration, spanning the deductive model, of a theoretical framework will be presented during this segment. The purpose of this discussion is to familiarize students with an ideal model for conducting social research studies. Thus, for examination purposes, students are advised to be knowledgeable of the sequencing and processes of the model, not the specific theoretical framework used to illustrate the model. The theoretical framework presented in this discussion is merely the vehicle used to illustrate the model and the utility of theory in guiding scientific inquiry.

Following presentation of the framework, one session may be used for an in-class exercise wherein students will work individually or in teams to define operationally one or more difficult concepts.

During this lecture segment, students should note whether or not they enjoy the kind of thinking (constructing in-depth ideas, analytical reflection, etc.) that is crucial to developing theory. Those finding such thinking to be tedious or those concluding that such thinking is less pleasing than the step-by-step "practical how do you do it" information often offered in many professional schools (such as social work and criminal justice) should consider that the failure to be conceptually "playful" may sharply limit one's potential to become a research-oriented professional. This is because one's ability to be a critical consumer of research and/or competent practitioner is affected adversely: One should be able to judge the efficacy and logical consistency of theories being used to guide the social research that is being reviewed and/or the social intervention one is engaging in as a practitioner.

Although information pertinent to the theoretical framework presented in this lecture segment is available in the literature, students will be served best by reading other important material that will not be covered in lecture discussions (But will be covered on the exam). Remember, knowledge of the sequencing and processes of the model, not the theoretical framework itself, is the key learning objective. Sufficient information regarding the deductive model will be presented in class; thus, it is not necessary to seek out additional literature (neither of your texts adequately discuss this model). Finally, you will be unable to locate any reference that details the conceptual steps necessary to reduce to their empirical referents concepts that are truly difficult to define (Our in-class exercise will help you here). References are available, however, that provide examples of numerous concepts that have been defined operationally (by means of scales, i.e, questionnaires, i.e, instruments...
The three terms are synonymous as used here. The thinking underlying these operational definitions, for the most part, is implicit upon reviewing the instruments. Students wishing to review instruments constructed as operational definitions of various concepts are referred to the optional reading suggested below (which may be located in the reserve wing of the library under the instructor's name).

**Required Reading**


**Optional Reading**


(Time permitting, the session immediately following completion of this phase of the course may be used as "lab" time by students to prepare independently for the exam.)

**TEST #1 WILL BE ADMINISTERED FOLLOWING COMPLETION OF THE ABOVE.**

**C. Selected Statistical Techniques**

(BRING TO CLASSES A SMALL HAND CALCULATOR THAT HAS A SQUARE ROOT FUNCTION)

Measures of central tendency, probability, and selected statistical techniques are discussed. These include, but are not limited to: (1) Levels of measurement, mean, median, mode, variance, standard deviation, Z-scores, normal distribution; (2) chi-squared, binomial expansion, probability, statistical significance; (3) Pearson's r, Spearman's Rho, Kendall's rank and Kendall's partial (6) correlation coefficients; (4) and T-tests for differences between sample means and matched pairs. Presentations on these topics will be delivered
with the specific aim of reducing the "fear and trembling" many students experience when required to engage in computation (five to six sessions, approximately).

(1.) Levels of Measurement, Measures of Central Tendency, Variance; Standard Deviation, Z-scores, Normal Distribution (one to two sessions).

**Required Reading**


**Optional Reading**


(2.) Chi-squared (including the Yates' Correction for 2 x 2 contingency tables and collapsing categories when cell entries are insufficient for proper computation), binomial expansion, probability, statistical significance, assumptions for selecting appropriate statistical tests (one to two sessions).

[The binomial expansion will be discussed as it provides one of the most straightforward methods for presenting the concept of probability in easily understandable terms. Neither of your texts discuss the binomial expansion (nor the Yates' Correction). Students wishing to consult literature describing the expansion are urged to consult an elementary algebra text: However, it is unlikely that an algebra text will describe the expansion in terms that explicitly elucidate the concept of probability].

**Required Reading**


**Highly Recommended Optional Reading**

(3.) Selected Correlational Techniques: Pearson's r, Kendall's tau, Kendall's Partial Rank Correlation Coefficient, Spearman's rho (one session).

[Your text discusses Pearson's r and the other correlational techniques but not the Yates' Correction. Students wishing additional information on the tests (and on the Yates' Correction) beyond that supplied in the lecture are urged to consult the optional reading listed below, which may be located under the instructor's name in the reserve wing of the library.]

Required Reading


Optional Reading


(4.) t-tests: Independent samples, Related Samples, Student's t (One session).

[Your text discusses the t-test for Differences Between Two Sample Means (independent samples), Students' t (used to determine whether or not a sample mean differs significantly from the mean of the population from which it was drawn), and t for dependent samples (used for matched pairs or when before/after observations are taken from the same set of individuals). Student's wishing information beyond that supplied in the lecture are urged to consult the Weinberg/Schumaker reference listed below under "optional reading," which may be located under the instructor's name in the reserve wing of the library.]

Required Reading


Optional Reading

D. Problems

Certain problems that typically plague social researchers will be specified. Areas of concern include: (1) Constructing samples and sampling problems, general measurement problems, generalizability of findings, and selected threats (history, maturation, testing, instrumentation, regression, selection, mortality, and bias); (2) content, wording, and ordering of questions, among other issues, are addressed with regard to the construction of questionnaires -- measurement reliability and validity will be discussed in detail; and (3) scaling techniques, e.g., Likert and Thurstone methods, also will be discussed. Some discussion will focus on data collection problems associated with special groups such as minority group members, women, and homosexuals (two to three sessions, approximately).

(1.) Constructing samples, problems, selected threats

Required References


(2.) Constructing questionnaires, reliability, validity


(3.) Likert and Thurstone scaling techniques


Time permitting, the session immediately following may be used as lab" time by students to prepare independently for the exam. **THE FINAL EXAM WILL BE ADMINISTERED FOLLOWING COMPLETION OF THE ABOVE. BRING YOUR CALCULATOR.** Three additional topics, indicated below, will be covered, presuming there is sufficient time and interest. If the topics are discussed, content from the presentations will appear on the final exam.

E. Evaluative Research
Program evaluation models including times-series designs will be discussed briefly (one session).

Required Reading


F. Tabular Presentation of Data

Required Reading


Optional Reading


G. Analysis of Variance

Required Reading