Course Description

This course will provide content on the logic of inquiry and the necessity for an empirical approach to practice. The process of formulating appropriate research questions and hypotheses, techniques for testing relationships and patterns among variables, methods of data collection, methods to assess and improve the validity and reliability of data and measures, and the ethics of scientific inquiry will be addressed. This course will help students understand practice through the critical examination of methods associated with decision-making, critical thinking, and ethical judgment. The course content will integrate the core themes related to multiculturalism and diversity; social justice and social change; promotion, prevention, treatment, and rehabilitation; and behavioral and social science research.

Course Content

This course will cover qualitative and quantitative research methods, commonly used statistical procedures, and approaches to the evaluation of practice. Students will learn how to understand and appreciate a scientific approach to building practice knowledge and for evaluating practice. Special emphasis will be placed on increasing one's ability to critique theoretical foundations of research, form research questions, apply research methods, conduct statistical analysis, and interpret research reports. The latest statistical, graphical, and display technologies will be used.

Course Objectives

Upon completion of the course, students will be able to:

1. Frame research questions and develop problem statements that reflect assessment, implementation, monitoring, and outcome issues.
2. Select research designs, methodologies, and measurement strategies used in social work research, and be able to assess the strengths and weaknesses of each, including sensitivity to ethical, multicultural, and diversity issues.
3. Understand ethical issues in the conduct of research and evaluation and their relevance and applicability in working with disadvantaged and disenfranchised populations.
4. Understand research concepts to permit a critical analysis of research and evaluation studies with respect to quality, bias, ethics, and potential applications.
5. Apply research concepts and principles in the development and use of qualitative and quantitative methodologies and analytical approaches.
6. Critically examine the processes by which research and evaluation findings can be used to enhance social justice, social change, promotion, prevention, treatment, and rehabilitation.

7. Construct simple indices, questionnaires, and measures relevant to the evaluation of practice.

8. Use computers to conduct selected descriptive and inferential statistical analytic procedures.

**Course Design**

Many different methods will be used for acquiring knowledge and skills including: discussion, lectures, projects, exercises, and lab work. This course is designed to increase students’ comfort level with research methods and statistical analyses and to increase their appreciation of the relevance of research and evaluation for social work practice.

**Relationship of the Course to Four Curricular Themes**

- **Multiculturalism and Diversity.** This course will include material on methods to improve the cultural inclusiveness and cultural sensitivity of research methods. This content will cover culturally sensitive measures, inclusion of diverse groups of adequate size in sampling, culturally aware interpretations of data, and culturally responsible dissemination of results. The basic purpose of research and practice evaluation will also be analyzed from culturally bound perspectives.

- **Social Justice and Social Change.** Students will gain an understanding of the ways in which research and evaluation have sometimes been used against oppressed groups, for example through unethical practices, distortion of results, or fabrication of data. Examples will be given of ways in which research can be used to empower socially disadvantaged individuals, groups, and communities. These examples will include studies in which the research participants were involved in the study during all of its stages.

- **Promotion, Prevention, Treatment, and Rehabilitation.** Studies reviewed in the course will include examination of projects aimed at enhancing well-being and preventing problems. The methodological and ethical problems unique to studies of promotion and prevention efforts will be described. The social work values consistent with promotion/prevention research will be analyzed.

- **Behavioral and Social Science Research.** The unique challenges in applying social science knowledge and methods to social work settings will be covered. These challenges include the practical and ethical dilemmas of applied research. Emphasis will be placed on the way established theories and methods influence the selection of research questions and methods. Studies will be critiqued for their ability to advance social science theory and knowledge and to improve social work practice.

**Relationship of the Course to Social Work Ethics and Values**

The research and evaluation section of the NASW Code of Ethics will be applied throughout this course. Examples of common ethical dilemmas will be presented. Among the areas of ethics to be covered will be informed consent procedures, protection of research participants from harm, confidentiality, and accurate reporting of results. Emphasis will also be placed on the social workers’ ethical obligation to use scientifically sound practice and to continually evaluate practice and programs.
Course Requirements

A. **Midterm examination (25%)**: There will be an in-class midterm examination covering the content through Session 5. This will be a relatively brief combination multiple choice and short answer exam. The examination will be for one and one half hours. **February 20**.

B. **Group Project (35%)**: Each group must formulate one major hypothesis, operationalize it, conduct appropriate statistical analyses, locate relevant research, and present the findings in a class. You will be provided with an SPSS data set for this purpose.

   Each presentation is limited to 20-minutes. Use whatever visuals and heuristic devices necessary to help you present your materials clearly. Be prepared to answer questions about your presentation. Think of this as a conference presentation.

   **NOTE**: Your analyses must explore issues related to gender and race.

   All group members will receive the same grade. However, if a particular member is identified by the group as a nominal participant, I will make a grade adjustment.

   The presentations are scheduled for **April 17**.

C. **Final Examination (40%)**: There will be an in-class final examination in which you will be asked questions about three selected research articles. The three articles must represent three different methodologies – survey, experimental/quasi-experimental, single-case. **You are responsible for selecting the articles**. Pick a subject area of interest to you.

   You may write whatever you want on the margins of the articles, but you cannot bring additional notes. You must bring the articles to the exam since the questions will require you to assess these studies. The articles **must** be submitted to me along with your answers.

   The guidelines in *Some criteria to consider when evaluating articles* – will help you focus on the central issues. **April 24**.

D. All students are expected to attend class and participate in discussions and group activities. If you are unable to attend a particular class for some reason, please let me know ahead of time.

   Class attendance is particularly critical given the group projects – you will be working with you group members every class period.

**Required Texts**

Weekly Outline

Session 1 – January 9: Introduction and overview of class
Introduction to the course. Discuss questions for group projects. Examine codebook for possible questions. Form initial groups.

** introduction to CTools
** download codebook
** introduction to SPSS

January 16: MLK Day NO CLASS

Session 2 – January 23: Theory, research and ethics
Theory, concept, hypothesis, operational definition, cause and effect, inductive/deductive reasoning, ethics, politics.

→ Rubin & Babbie, Chaps. 2,3,4

Group activity:
** develop tentative research questions
** begin preliminary literature search

Session 3 & 4 – January 30 & February 6: Measurement and related issues
Level of measurement, measurement error, reliability & validity, scale construction, measurement strategy

→ Rubin & Babbie Chaps. 5,6,7

Group activity:
** formulate one specific hypothesis
** continue with literature review
** operationalize the hypothesis with particular variables in data set
** submit formal hypotheses to me on October 5th
Session 5 – February 13: Single case designs and specificity
Design options, clinical/statistical significance, defining outcomes, specifying treatment, data analysis, baseline and measurement issues

→ Rubin & Babbie, Chaps. 12, Appendix I (pp.683-690)

**Group activity:**
** more reviews of literature around hypotheses
** elaborate and consider secondary analyses around hypotheses
** discuss statistical options with me

Session 6 – February 20: Midterm examination and data analysis and interpretation
Midterm examination
Introduction to univariate, bivariate, & multivariate analyses, elaboration, selected statistical tests, significance issues, effect size, issues on data interpretation

→ Rubin & Babbie, Chaps. 18,19,20,21

February 27: SPRING BREAK

Session 7 & 8: March 6 & 13: Data analysis and interpretation:
Introduction to univariate, bivariate, & multivariate analyses, elaboration, selected statistical tests, significance issues, effect size, issues on data interpretation

→ Rubin & Babbie, Chaps. 18,19,20,21

**Group activity:**
** begin analyzing the data

Session 9 – March 20: Samples, surveys and culturally competent research
Populations, sampling frames, samples, sampling strategies, survey methods, questionnaire construction

→ Rubin & Babbie, Chaps. 8,9,16

**Group activity:**
** continue analyses
Session 10 – March 27: Experimental and quasi-experimental designs
Design options, internal/external validity, analysis

→ Rubin & Babbie, Chaps. 10,11

**Group activity:**
**continue analyses**

Session 11 – April 3: Qualitative methods
Methods of study, analysis, mixed methods

→ Rubin & Babbie, Chaps. 14

**Group activity:**
**finalize presentations**

Session 12 – April 10: Evaluating programs and writing reports
Politics of evaluation, formative/outcome evaluation, utilization issues, needs assessment, program planning

→ Rubin & Babbie, Chaps. 13,22

Session 13 – April 17: Group presentations:

Session 14 – April 24: Final examination

Be sure to bring your articles with you. The articles MUST be attached to your answer sheets.