

**RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
SCHOOL OF SOCIAL WORK
MAIN COURSE SYLLABUS**

**Methods of Social Work Research
19:910:505 OL**

Semester:
Instructor:
Phone:
E-mail:
Office Hours:

I. Catalog Course Description

Introduction to scientific, analytic, approach to building knowledge and skills, including the role of concepts and theory, hypothesis formulation, operationalization, research design, data collection, data processing, statistical analysis, introductory computer skills, and report writing.

II. Course Overview

Research is a critical component of the professional practice of social work. Practice on any level must be based on sound and empirically validated concepts and theory. This course, applying a problem-solving approach, introduces the student to the scientific, analytic approach in social work practice and service delivery. It focuses on its role in knowledge building. This course, seeks to prepare a social work practitioner to: 1) be consumers of research; 2) recognize the importance of evaluating practice; and 3) identify the basics of research and acquire foundational research skills.

The basic course, which takes students through the entire research process, encompasses the following areas: posing a research question; conducting a literature review; generating a hypothesis; identifying the different kinds of variables, ethical and political issues, issues related to race, ethnicity, gender, and sexual orientation, measurement issues, survey construction, sampling, data analysis, and communication of results.

This is not a statistics course, but social workers need to know about statistics, because a substantial portion of today's social work research and research from the allied professions (e.g., medical professions) are based on numbers. Statistics is the science of how groups of numbers do or do not work together. Consequently, when research is based on numbers, it uses statistics. In this class, with workbook exercises, we will demonstrate how statistics is used to generate research findings, across the social and behavioral sciences and beyond. Understanding how statistics generate research findings will allow us to be better consumers of research and to apply that research to our practice.

As Holcomb and Cox note in the workbook:

“One thing to notice about this workbook is that it only presents a small we bite off a small bit of a research article and really chew on it. We do not worry about the full article because you do not have to understand everything in an article to understand anything in an article. We think this is a great way to approach the complexity of statistics in research articles. Take one thing at a time, and stick with it until you get it. We will illustrate this method throughout the book.”
Holcomb, Zealure C.; Cox, Keith S. (Year). *Interpreting Basic Statistics*. Taylor and Francis. Kindle Edition.

As students read through this syllabus, they should also remember to **closely review the School-Wide Syllabus** in Canvas or the Student Handbook to find information on the School of Social Work mission statement and learning goals, school-wide policies (including academic integrity policies and the standardized attendance policy), and student resources and supports.

III. Place of Course in Program

This is the first of two required research courses. The purpose of this course is to introduce all students to the basic components of empirical research and statistics so that students may begin to apply their knowledge to the critical assessment of all their readings in the program and can begin to develop habits of searching the literature and critiquing what they read.

IV. Council of Social Work Educations Social Work Competencies

The MSW Program at Rutgers is accredited by the Council on Social Work Education (CSWE). CSWE’s accreditation standards can be reviewed at www.cswe.org.

In keeping with CSWE standards, the Rutgers School of Social Work has integrated the 2022 CSWE competencies within its curriculum. The competencies assessed in this course include:

- *Competency 4: Engage In Practice-informed Research and Research-informed Practice*

Social workers use ethical, culturally informed, anti-racist, and anti-oppressive approaches in conducting research and building knowledge. Social workers use research to inform their practice decision making and articulate how their practice experience informs research and evaluation decisions. Social workers critically evaluate and critique current, empirically sound research to inform decisions pertaining to practice, policy, and programs. Social workers understand the inherent bias in research and evaluate design, analysis, and interpretation using an anti-racist and anti-oppressive perspective. Social workers know how to access, critique, and synthesize the current literature to develop appropriate research questions and hypotheses. Social workers demonstrate knowledge and skills regarding qualitative and quantitative research methods and analysis, and they interpret data derived from these methods. Social workers demonstrate knowledge about methods to assess reliability and validity in social work research. Social workers can articulate and share research findings in ways that are usable to a variety of

clients and constituencies. Social workers understand the value of evidence derived from interprofessional and diverse research methods, approaches, and sources.

Social workers:

- a. apply research findings to inform and improve practice, policy, and programs; and
 - b. identify ethical, culturally informed, anti-racist, and anti-oppressive strategies that address inherent biases for use in quantitative and qualitative research methods to advance the purposes of social work.
- *Competency 9: Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities*

Social workers understand that evaluation is an ongoing component of the dynamic and interactive process of social work practice with and on behalf of diverse individuals, families, groups, organizations, and communities. Social workers evaluate processes and outcomes to increase practice, policy, and service delivery effectiveness. Social workers apply anti-racist and anti-oppressive perspectives in evaluating outcomes. Social workers understand theories of human behavior and person-in-environment, as well as interprofessional conceptual frameworks, and critically evaluate and apply this knowledge in evaluating outcomes. Social workers use qualitative and quantitative methods for evaluating outcomes and practice effectiveness.

Social workers:

- a. select and use culturally responsive methods for evaluation of outcomes; and
- b. critically analyze outcomes and apply evaluation findings to improve practice effectiveness with individuals, families, groups, organizations, and communities.

[Explore the entire set of 2022 CSWE competencies.](#)

V. Course Goals

By the end of this course, you will be able to:

- Develop skills to become a knowledgeable consumer of quantitative and qualitative research.
- Identify how various forms of research allow social workers to engage in evidence-based practices.
- Identify ethical considerations that arise in social science research and how they impact the research process.
- Assess relevance and validity of research findings and their applicability to diverse groups.
- Develop beginning knowledge and skills to evaluate practice and programs.

VI. Course Evaluation

Rutgers University issues a survey that evaluates both the course and the instructor. This survey is completed by students toward the end of the semester, and all answers are confidential and anonymous. The instructor may also choose to conduct a mid-point evaluation.

VII. Required Textbook

Rubin, A., & Babbie, E. (2016) *Brooks/Cole Empowerment Series: Essential Research Methods for Social Work* (4th d.) Belmont, CA: Brooks/Cole Cengage.

Required Workbook

Cox, K.S. & Holcomb, Z.C. (2021) *Interpreting Basic Statistics: A Workbook Based on Excerpts from Journal Articles* (9th ed.). Routledge. **ISBN-13:** 978-0367561970

Purchase Options:

Both books are available as a hardcover or electronic access.

Other required readings (separate from textbook) are available through the Rutgers University Library “Reading List” that is integrated into your Canvas course. To find your readings:

Click on the “Reading List” tab in the Canvas navigation bar to the left hand side of the course. Please note: this list contains links to articles and other required readings separate from the textbook (if applicable). Please follow the syllabus and/or Canvas Readings and Resources page in each module for more specific required readings and resources for each week (including textbook/media). For further instructions [please click here for a video tutorial](#)

VIII. Course Attendance and Participation Policies

Attendance

Please refer to the school-wide syllabus for the standard attendance policy for classes in on-the-ground (traditional) program, intensive weekend program (IWP), and asynchronous online program.

In order to gain the most from their educational experience, MSW students are expected to attend class regularly. You should arrive to class on time and stay for the entire duration of class. More than 3 late arrivals, early departures or any unexcused absences will result in grade deductions. Because of the amount of instruction, you would miss, more than three absences may result in

the failure of the class. In addition, students are expected to take leadership roles in class discussions and exercises and come to class having completed any readings and assignments. If you do need to miss class or come late, please reach out to me and let me know.

Late Assignments

Late assignments will not be accepted, unless the student has made arrangements prior to the assignment due date. The instructor reserves the right to reduce the letter grade for late assignments.

IX. Assignments and Grading

All written assignments must follow APA format. The professor reserves the right to reduce the letter grade for any assignment that does not confirm to APA format.

Human subjects certification	10%
Assignments/Exercises/Discussions	50%
Midterm exam	20%
Final exam	20%

Meaningful class participation is evaluated using the following scale:

10 points	Student comes to class prepared; contributes readily to the conversation but doesn't dominate it; makes thoughtful contributions; participates actively in all groups.
7 points	Comes to class prepared and makes thoughtful comments when called upon; contributes occasionally without prompting; shows interest in and respect for other's views; participates actively in small groups.
5 points	Student participates in discussion, but in problematic way: talks too much, rambles, interrupts instructor and others, or does not acknowledge cues of annoyance from others.
3 points	Comes to class prepared but only minimally contributes.
0 points	Has not prepared for class or does not contribute to discussion. Displays disrespect to students and/or faculty

Adapted from Bean, J. C. & Peterson, D. (1998). Grading classroom participation. *New Directions for Teaching and Learning*, 74, 33-40.

X. Course Outline

Module 1: Course Overview and Evidence-Based Practice
--

Research is a critical component of the professional practice of social work. Practice on any level must be based on sound and empirically validated concepts and theory. By the end of this module, you will be able to:

1. Explain the key features of the scientific method.
2. Recognize the flaws in using unscientific sources to inform social work practice.
3. Explain the value of research in guiding social work practice.

Readings & Resources

- Rubin & Babbie, Chapter 1: Why Study Research
- Rubin & Babbie, Chapter 2: Evidence- Based Practice

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Student Introductions
- Activity: Essential Relationship Skills for Evidence-Based Practice

Module 2: Ethical and Cultural Issues in Social Work Research

Before social work researchers can implement studies that involve people, they confront questions about the ethics regarding their proposed investigations. By the end of this module, you will be able to:

- Explain ethical guidelines for social work research including the NASW Code of Ethics.
- Describe the role of institutional review boards (IRBs) in ensuring ethical research practices.
- Identify the approaches that researchers use to avoid cultural and gender bias.

Readings & Resources

- Rubin & Babbie, Chapter 5: Ethical Issues in Social Work Research
- Rubin & Babbie, Chapter 6: Culturally Competent Research
- [Annas GJ, Grodin MA. Reflections on the 70th anniversary of the Nuremberg doctors' trial. *American Journal of Public Health* \(1971\). 2018;108\(1\):10-12. doi:10.2105/AJPH.2017.304203](#)
- [Rutgers Student Handbook](#)
- Timeline of Laws Related to the Protection of Human Subjects
 - <https://history.nih.gov/display/history/Human+Subjects+Timeline>
 - <https://history.nih.gov/display/history/Legislative+Chronology?preview=%2F1016866%2F30736589%2Fnuremberg.pdf>
 - <https://history.nih.gov/display/history/Legislative+Chronology?preview=%2F1016866%2F30736546%2Fbelmont.pdf>

- Belmont Report: Read Part B - Basic Ethical Principles
 - <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html>

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Discussion: Reflections Tuskegee
- Assignment: Human Subjects Certification Introduction
- Quiz: Culturally Competent Research

Module 3: Problem Formulation and the Research Process

Research informing social work practice uses various inquiry methods, depending on the purpose of the research. Thus, social workers must first understand how to identify a social, public health, or psychological issue, and then identify the best way to study it. By the end of this module, you will be able to:

1. Recognize the processes involved in problem formulation.
2. Distinguish between different purposes of empirical studies to answer research questions or examine an issue or problem.

Readings & Resources

- Rubin & Babbie, Chapter 3: Quantitative, Qualitative, and Mixed Methods
- Rubin & Babbie, Chapter 4: Factors Influencing the Research Process

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Discussion: Alternative purposes of research
- Submit Human Subjects Certification

Module 4: Developing Research Questions and Conducting a Literature Review

To ensure social workers provide the most effective service delivery and that their clients have the best outcomes, social workers must first ask a research question and then develop a hypothesis. At the end of this module, you will be able to:

1. Identify the purpose of developing research questions and hypotheses for quantitative research.
2. Identify the purpose of developing research questions for qualitative research.
3. Formulate research aims/questions and hypotheses.

Readings & Resources

- Rubin & Babbie, Chapter 7: Problem Formulation

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Discussion: Literature Review
- Workbook Exercises: 1.6: Nominal and Ordinal Measures (*Research in Action*)

Module 5: Sampling, Measures of Central Tendency and Descriptive Statistics

Understanding the needs of the populations that social workers serve becomes feasible by studying a sample of people that represents that specific population. For example, to understand client satisfaction in an agency, a social work researcher would interview a sample of clients to understand what impacts satisfaction. By the end of this module, you will be able to:

- Recognize the relationship between sampling and the generalizability of quantitative research findings
- Differentiate between probability and non-probability sampling and quantitative and qualitative sampling methods.
- Describe and calculate measures of central tendency (mean, median, mode, and range)
- Apply statistics in research methods by recognizing the 68, 95, and 99 % rule.

Readings & Resources

- Rubin & Babbie, Chapter 11: Sampling: Quantitative and Qualitative Approaches
- Rubin & Babbie, Chapter 17, Unit 3: Descriptive Univariate Statistics
- Holcomb & Cox, Unit 1: Basic Description of Data
- Video: Census and Sampling

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Quiz: Sampling Concepts
- Workbook Exercises: Practice descriptive statistics by creating percentiles and histograms (*Research in Action*)
 - Required Workbook Exercises: 2.3, 2.5
 - Optional/Practice Workbook Exercises: 2.4, 3.2

Module 6: Measurement Instruments

Operational definitions translate concepts (e.g., client outcomes, or mezzo [program] or macro [policy] level factors) into observable terms. Observations can be obtained from surveys, interviews, direct observations, or repurposing data collected for other aims (e.g., agency administration and operations) or from other studies. By the end of this module, you will be able to:

- Recognize the importance of using conceptual and operational definitions in research.
- Differentiate between categorical (nominal) and numeric (ordered/interval/ratio) variables.
- Identify the preferred method for visualizing and summarizing data according to the scale of measurement
- Identify the correct statistical approach according to the scale of measurement used to operationalize the independent variable.

Readings & Resources (e.g., Class Participation, Quizzes, and Short Assignments)

- Rubin & Babbie, Chapter 8: Measurement in Quantitative and Qualitative Inquiry
- Video: Scatterplots
- Video: Correlation

Other Activities

- Discussion: Measures of Discrimination
- Workbook Exercises: Choosing statistical approach based on the scale of measurement (*Research in Action*)
 - a. Required Workbook Exercises 4.6, 5.2
 - b. Optional/Practice Workbook Exercises: 5.4

Module 7: Measurement Error, Reliability and Validity

Quantitative measurement instruments typically used in social work practice come from the behavioral and social sciences. These instruments are vulnerable to errors, and their accuracy depends on the context. It is virtually impossible to avoid all types of measurement errors. Thus, social workers should aim to use a measurement instrument that is the least prone to errors. At the end of this module, you will be able to:

- Define measurement error.
- Define and describe types of reliability and validity.
- Recognize potential sources of error for each measurement instrument distinguish between random error and systematic error (i.e., bias in measurement).
- Assess the consistency (i.e., reliability) and accuracy (i.e., validity) of measurement instruments.

Readings & Resources

- Rubin & Babbie, Chapter 9: Quantitative and Qualitative Measurement Instruments

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Workbook Exercises: Statistical applications demonstrating reliability and validity of instruments used in social work research (*Research in Action*)
 - Required Workbook Exercises 4.1, 7.2
 - Optional/Practice Workbook Exercises: 7.1, 7.3, 7.4

Module 8: Surveys and Survey Instruments

The most common way of collecting data from clients is through surveys and interviews. Thus, learning about surveys and survey instruments is critical for social work practice. At the end of this module, you will be able to:

1. Critically appraise quantitative and qualitative survey instruments.
2. Recognize different types of surveys.
3. Compare survey approaches.

Readings & Resources

- Rubin & Babbie, Chapter 10: Surveys
- Video: Survey Design Essentials
- Video: Survey Fatigue
- Video: Personal Interviews

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Discussion: Surveying Homeless Veterans
- Assignment: Critically Appraise Survey Instruments

Module 9: Midterm

Module 10: Approaches for Assessing Effectiveness of Programs and Practices

Different scientific approaches bear on a social worker's ability to conclude whether an intervention—and not some alternative explanations—is responsible for client outcomes. Scientists refer to this as internal validity. By the end of this module, you will be able to:

1. Compare different scientific approaches: pre-experimental (i.e., observational), quasi-experimental, and experimental designs.
2. Identify whether the cause of a particular client's or client population's outcome is related to the intervention or an alternative explanation.
3. Identify threats to internal validity in different scientific approaches and contexts.

Readings & Resources

- Rubin & Babbie, Chapter 12: Experiments and Quasi-Experiments
- Videos:
 - a. An experiment Guiding Public Policy (*Research in Action*)
 - b. An experimental approach to alleviating global poverty (*Research in Action*)
 - c. \$15 Minimum Wage (*Research in Action*)
 - d. The degree of internal validity when experimentation with human subjects is not possible (*Research in Action*)
 - e. Limitations of Randomized Controlled Trials

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Discussion: Identify Internal Validity Threats
- Assignment: Identify the Design

Module 11: Assessing and Comparing Impacts of Different Interventions

Once the effectiveness of a program or intervention is established, social work researchers calculate the effect-size, which indicates the practical significance of a research outcome. Effect-size is also universal, enabling us to compare findings from different studies. At the end of this module, you will be able to:

- Distinguish between clinical significance and statistical significance.
- Compare and contrast the practical significance of alternative interventions or programs.
- Describe the importance of systematic reviews and meta-analyses in synthesizing research evidence regarding the effectiveness of a particular intervention.

Readings & Resources

- Rubin & Babbie, 17.5: Effect Size
- Rubin & Babbie, Appendix E: Using the Effect Sizes to Bridge the Gap between Research and Practice
- Videos:
 - (1) Z-scores
 - (2) Systematic Reviews
 - (3) Interpreting META analyses

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Workbook Exercises: Meta-Analyses (*Research in Action*)
 - a. Required Workbook Exercises: 5.5, 5.8
 - b. Optional/Practice Workbook Exercises: 5.6, 5.7, 5.9

Module 12: Qualitative Inquiry and Analyses

Qualitative research has been identified as the preferred method for identifying how psychological or sociocultural forces shape organizational processes or the experiences of individuals and groups. This is because qualitative methods allow social workers to obtain thick description that usually cannot be obtained with quantitative data. At the end of this module, you will be able to:

- Describe the standards for evaluating qualitative studies.
- Identify the multiple traditions for conducting qualitative research.
- Comprehend the basics of coding qualitative data.

Readings & Resources

- Rubin & Babbie, Chapter 15: Additional Methods in Qualitative Inquiry
- Rubin & Babbie, Chapter 18: Qualitative Data Analysis
- Alessi, E. J., Cheung, S. P., Sarna, V., Dentato, M. P., Eaton, A., & Craig, S. L. (2022). Experiences of COVID-19 pandemic-related stress among sexual and gender minority emerging adult migrants in the United States. *Stress and Health*, 1–15. <https://doi.org/10.1002/smi.3198> (*Research in Action*)
- Videos:
 - (1) Phenomenology
 - (2) Ethnography
 - (3) Participatory Action Research
 - (4) Constant Comparison Method of Coding Qualitative Data

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Discussion: Validity of Qualitative Studies
- Quiz: Qualitative Methods

Module 13: Use of Research in Evidence Based Practice

Use of research in evidence-based practice involves the ability to formulate empirically answerable questions, locate evidence relevant to those questions, critically evaluate the evidence, and apply it to practice situations. At the end of this module you will be able to:

1. Identify resources that are available within and beyond Rutgers to support lifelong learning and evidence-based practice.
2. Use the Client, Intervention, Alternative Intervention and Outcome (CIAO) framework to search for evidence in the literature.

Readings & Resources

- Rubin and Babbie, Chapter 2: Evidence-based Practice
- Rubin and Babbie, Appendix A: Using the library

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Assignment: Formulating Research Questions with the CIAO Framework and Searching for Evidence
- Assignment: Quick Reference Sheet

Module 14: Practice Excel Applications to Conduct Basic Data Analysis

Social workers collect and report on the data about their practice or programs. These data are usually compiled in a spreadsheet, such as Microsoft Excel. More importantly, social workers can use different functions in Excel to summarize and visualize data, which then allows them to better understand the populations they serve and the impact of their practice or programs. At the end of this module, you will be able to:

- 1) Apply basic quantitative data analysis skills in a spreadsheet program

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Assignment: Excel Practice Activity Part 1
- Assignment: Excel Practice Activity Part 2

Module 15: Final Exam

This module will review major concepts from this course, reflecting on what was learned. The skills you acquired in this class are pre-requisite for Research II: Program Evaluation. Consequently, your final activity is to create your own reference sheet of essential knowledge

and skills that you will use next semester. Instructors will ensure that students have identified all the relevant concepts. At the end of this module, you will be able to:

- 1) Compile essential concepts on research design and statistics from throughout the semester
- 2) Determine which skills and concepts you will need beyond this course

Other Activities (e.g., Class Participation, Quizzes, and Short Assignments)

- Final Exam