

SS200 -- Research Methods
Course Outline

Course Description

An introduction to quantitative and qualitative research, analysis and writing for the social and behavioral sciences. This course evenly balances the theoretical with the practical. Students will develop scientific/critical thinking skills, the ability to plan and implement research projects, and the ability to clearly articulate research into writing.

I. Course Objectives

General Objectives

At the end of this course students will be able to:

Demonstrate a deep understanding and appreciation of the scientific process

Demonstrate the ability to plan and undertake general research strategies that utilize the research resources of libraries and the internet in an efficient and effective manner

Demonstrate the ability to construct theories that successfully guide and structure research toward the goal of uncovering causality

Explain the importance of operationalization to the process of scientific research and demonstrate the ability to operationalize their own research

Explain the importance of sampling to the research process and demonstrate the ability to correctly use sampling techniques in their own research

Demonstrate the ability develop indices into scales and to use scales for conducting research

Demonstrate an understanding of the strengths and weaknesses of survey research and the ability to correctly use surveys for their own research

Demonstrate the ability to make accurate observations of social phenomena and to correctly interpret them

Demonstrate the ability to plan and implement a fieldwork component of social and behavioral research

Demonstrate the ability to successfully craft a research paper

Specific Objectives

Unit 1-- introduction to the Scientific Process

Explain Thomas Kuhn's theory of developing and shifting paradigms in science

Describe the truth-seeking methods of falsification, verification and skepticism

Explain the significance of theoretical scope and level of abstraction in scientific thinking

Demonstrate an ability to construct accurate metaphors and analogies

Distinguish between explanation, prediction and speculation

Explain the principle of parsimony and its value to the scientific method

Recognize tautologies and explain how they constrain scientific thinking

Unit 2 - Research Resources

Explain the major advantages and disadvantages of quoting from primary versus secondary sources

Describe the necessary steps for conducting successful library research

Demonstrate the ability to conduct successful library research

Describe the Dewey Decimal and Library of Congress systems of library classification

Demonstrate the ability to take notes efficiently and effectively from library sources

Demonstrate the ability to use abstracts, indexes, books, periodicals, newspapers, government documents, and online internet sources to undertake research

Unit 3 - the Research Problem

Demonstrate the ability to construct variables from concepts

Demonstrate the ability to construct hypotheses from variables

Demonstrate the ability to deduce causation

Demonstrate the ability to construct theories from hypotheses

Unit 4 - Operationalization, Reliability, and Validity

Explain the importance of operationalization to the scientific process

Demonstrate the ability to operationalize variables in their own research

Explain the concept of reliability

Explain the concept of validity of measurements and distinguish between content validity, criterion-based validity and construct validity

Explain the concepts of internal validity, statistical conclusion validity and external validity

Unit 5 - Sampling And The Search For Typicality

Explain the advantages of sampling

Explain the Meaning of "randomness"

Describe the various probability sampling techniques including random sampling, stratified sampling, cluster sampling, multistage sampling, time sampling and event sampling.

Unit 6 – Scaling Subjective Phenomena

Explain the basic rules for constructing subjective indices

Explain the impact which systematic response biases have on the indexing and scaling processes

Demonstrate the ability to develop, use and correctly interpret findings from category rank scales

Demonstrate the ability to develop, use and correctly interpret findings from the Likert scale

Demonstrate the ability to develop, use and correctly interpret findings from the Guttman scale

Demonstrate the ability to develop, use and correctly interpret finding from indirect measures of attitudes including the Rorschach Test and Thematic Apperception Test

Unit 7 - Surveys: Questionnaires and Interviews

Explain the principles for developing good questionnaires and interview schedule designs

Demonstrate the ability to correctly develop open-ended and close-ended questions

Explain the major novice errors and unethical practices in questionnaires

Explain the important of question wording, readability and understandability for the construction of questions

Demonstrate the ability to develop readable and understandable questions

Explain the principles and elements of the structured interview technique

Demonstrate the ability to conduct a structured interview and correctly interpret the findings

Discuss the advantages and disadvantages of survey research

Unit 8 - Research by Observation

Demonstrate the ability to make systematic observations of social phenomena using established principles

Demonstrate the ability to accurately make linguistic and extra linguistic measures, body movement measures and spatial measures

Demonstrate the ability to use audiovisual recording devices to make systematic observations of social phenomena

Demonstrate the ability to make necessary quality controls of observations for reliability and validity

Explain some of the special problems encountered in the analysis of observational data

Unit 9.- Strategies of Field Research

Explain the key features of field research and the ways in which it differs from most other social research methods.

Discuss the advantages and disadvantages of field research

Explain the processes of fieldworker recruitment & self-recruitment

Explain the processes of fieldworker entry and socialization

Discuss the advantages and disadvantages of informants

Explain the logistical considerations of successful fieldwork

Demonstrate the ability to accurately observe and record observational and interactional data

Unit 10 - Writing Research Reports

Demonstrate the ability to extract meaning from factual data

Demonstrate the ability to clearly articulate theoretical narrative

Demonstrate the ability to efficiently and effectively take and organize research notes.

Demonstrate the ability to paraphrase

Demonstrate the ability to write first, second and final drafts

Demonstrate the ability to correctly cite sources of research data

II. Course Contents

Unit 1- Introduction to Social Research

The ideal scientific process

The scientific process in practice
paradigms and Science

Crisis and revolution in science

Accidents and Intuition

Falsification, Verification & Skepticism

Scope and abstraction

Metaphor & Analogy

Explanation & Prediction

Parsimony

Tautology

Unit 2 - Research Resources

Dictionaries, Encyclopedias, Statistical sources

Newspapers and other mass media

Library classification systems

Government documents

Abstracts and indexes

Interlibrary loan

Computers and online searches

Unit 3 - Formulating the Research Problem

Constructing variables from concepts

Constructing hypotheses from variables

Deducing causation

Constructing theories from hypotheses

Unit 4 - Operationalization, Reliability & Validity

Operationalization

Reliability

Validity of measurements

Validity of findings

Unit 5 - Sampling and the Search for Typicality

Advantage of sampling

Random sampling

Stratified sampling

Cluster sampling

Multistage sampling

Time sampling

Event sampling

Unit 6 -- Scaling Subjective Phenomena

Basic rules for constructing subjective indices

Systematic response biases

Types of subjective measuring instruments

Indirect measures of attitudes

Sociometric and other interpersonal perception measures

Unit 7 - Surveys: Questionnaires and Interviews

Open-ended and close-ended questions

Common novice errors

Question wording and readability

Structured interviews

Quality control of survey and interview data

Unit 8 - Research by Observation

Linguistic measures

Extra linguistic measures

Body movement measures

Spatial measures

Using audio and visual recording devices

Quality control of observational data

Unit 9 - Strategies of Field Research

Fieldworker recruitment and self-recruitment

Fieldworker socialization

Fieldworker interactions

The use of informants

Fieldwork logistics

Interpreting field gathered data

Unit 10 - Writing Research Papers

Extraction of meaning

Theory-based narrative

Note taking

Paraphrasing

Drafts
Citation of Sources

III. Required Textbook: Hoover, K., Elements of Social Scientific Thinking 6th Edition, 1994, Worth Publishing

IV. Required Course Materials - None

V. Reference Materials

Dowden, B., Logical Reasoning, 1993, Wadworth Publishing

Harnack, A., Writing Research P1994, Greenhaven Press

Hessler, R. Social Research Methods, 1992, West Publishing Company

Patton, M., Qualitative Evaluation Methods, 1980, Sage Publishing Company

Paul, R., Critical Thinking, 1993, Foundation for Critical Thinking

Smith, H., Strategies of Social Research: The Methodological Imagination, 1991, Holt, Rinehart & Winston

Stanovich, K., How To Think Straight About Psychology, 5th Ed., 1998, Longman

VI. Instructional Cost -- None

VII. Method of Instruction - Lecture, discussion, research laboratory

VIII. Method of Evaluation

Theoretical (Unit Tests) - 50%

Practical (Unit Tasks) - 50%

Grading Scale

90-100% = A

80-89% = B

70-79% = C

60-69% = D

59% and below = F

IX. Attendance Policy

The standard COM-FSM attendance policy applies to this course.