

Research Methods for the Social Sciences Certificate (15 credit hours)

Overview:

In this certificate program, you will develop broad and specialized skills in research methods applicable to the social sciences and relevant to many career paths.

On completion of the RMSS Certificate students will be able to:

- Identify appropriate use of qualitative, quantitative, and mixed or applied methods
- Apply knowledge of appropriate methods and ethical practices to independent research or research scenarios
- Communicate research findings in multiple formats

To complete this certificate, you must complete a minimum of 15 credits.

1 Foundations of Research course,

4 Research Methods courses, from at least two of the method groups

While there are prerequisites listed for many of the courses below, the departments have agreed to consider waiving these for students completing this certificate. Work with the Director of Undergraduate Studies in Sociology to contact the department for any courses requiring prerequisites that you do not have.

Foundations of Research (1 course)

ANTH:400 Introduction to Anthropological Data (3 credits)

Prerequisites ANTH 101, ANTH 105, and ANTH 110

This course focuses on the characteristics of anthropological evidence through hands-on activities and examination of the uses of data in published works.

COMM:384 Communication Research (3 credits)

Prerequisites: COMM 101 with a grade of C or better

Fundamental concepts of communication research methods, and the analysis, application, and interpretation of data in communication and media operations.

EMHS: 340 Disaster Research Methods

Introduction to scientific method and processes, research ethics, and qualitative and quantitative methods. Use of research for appropriate decision making.

PHIL:464 Philosophy of Science (3 credits)

Prerequisite: Completion of one course in philosophy with a grade of "C" or higher.

Nature of scientific inquiry, types of explanation, laws and causality, theoretical concepts and reality. Also considers critics of hypothetical-deductive view of science, e.g., Hanson and Kuhn.

POLIT:301 Introduction to Political Research (3 credits)

Prerequisites: 3 credits of Mathematics (MATH) or Statistics (STAT)

Introduction to the research process in political science through an introduction to the logic of social science inquiry and contemporary techniques of analysis.

SOCIO:301 Social Research Design (3 credits)

Prerequisites: SOCIO 100 and 3 credits of Mathematics (MATH) or Statistics (STAT)

The basis of this course is learning to apply course material to improve thinking, problem solving, and decisions in conducting research design and data gathering techniques.

Interdisciplinary Research Methods

(Required to complete a total of 4 courses from at least two categories below)

1. Qualitative

ANTH:460 Field Methods in Cultural Anthropology (4 credits)

Prerequisite: ANTH:150 or permission of instructor.

Community-based research and service-learning course in which students design and undertake a project.

Addresses ethics, data collection, management and analysis in collaboration with community partners.

CHFD 250: Observing and recording children's behavior

Prerequisite: CHFD:265

Develops observing and recording skills, evaluates multiple methods of assessment for children's development and behavior. (field hours required)

SOCIO: 414/514: Qualitative Research

Prerequisite: SOCIO: 301 or permission

Survey of theory, ethics and methods in qualitative research. Students will learn to apply and interpret a range of methods using qualitative approaches.

SOCIO:365 Special Topics in Sociology (1-3 Credits)

Prerequisite: Permission.

Special topics of interest to sociology major and non-major not covered in regular course offerings.

2. Quantitative

GEOG:405 Geographic Information Systems (3 Credits)

Prerequisite: GEOG 305

Introduction to the principles and concepts underlying geographic information systems (GIS) and their application in professional practice and academic research. Laboratory.

POLIT 440 Survey Research Methods (3 Credits)

Prerequisites: POLIT: 301

Study of survey research methods as applied to the analysis of public opinion, political behavior, and public policy formation.

PSYC:110 Quantitative Methods in Psychology (4 credits)

Prerequisite or corequisite: PSYC:100

Presentation of data, descriptive statistics, correlation, hypothesis testing and introduction to statistical methodologies in psychology, including computer applications.

SOCIO:302 Data Analysis (3 credits)

Prerequisites: POLIT: 301 or SOCIO: 301

Essential objectives of this course are developing expression skills in writing and learning fundamental principles in statistics. Other key topics include quantitative techniques and application to sociological data.

STAT:262 Introductory Statistics II (2 Credits)

Prerequisite: STAT 261 or equivalent. Parametric and nonparametric methods of statistical inference for paired data and two-sample problems; one-way ANOVA, simple linear regression and correlation. Computer applications.

3. Specialized and Applied**ENGL:222** Technical Report Writing (3 Credits).

Prerequisite: ENGL 110 or ENGL 111 or equivalent.

Prepares students to write the types of reports most often required of technicians, engineers, and scientists. Includes types of reports, memoranda, and letters; techniques of research, documentation and oral presentations.

EXLC 490: Special Topics in Community Engagement

Prerequisites: Permission

Selected topics or subject areas of interest in community engagement. Students will apply community engagement principles and practices to real-world problems in collaboration with a community partner.

SOCIO:401 Applied Research Methods (3 credits)

Prerequisites: POLIT 301 or SOCIO 301

Applied topics of interest in social research methods not covered in regular course offerings. Typically involves a project to address the needs of a community partner.

SOWK:442 Social Work Research (3 credits).

Prerequisites: Social Work major or permission

Overview of scientific inquiries in the research process as it applies to social work. Emphasis is placed on various social worker roles in relation to research. The focus will be on research concepts including contents on the evaluation of practice outcomes and data analyses.

STAT:470 Biostatistics and Epidemiology (3 Credits)

Prerequisite: STAT:261 and STAT:262 or STAT:461, or equivalent.

Biostatistics and Epidemiological methods for biological and medical studies, including ANOVA, analysis of repeated measures, disease-related measures, log-linear models, and clinical trials.