

# Minnesota State University Moorhead

## SOC 451: Quantitative Methods

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:  
None

Corequisites: None

MnTC Goals: None

The objective of the course is to offer hands-on experience in quantitative research methods and data analysis. Students will design and carry out a research project utilizing quantitative research methods, analyze data using descriptive and inferential statistics, conduct elementary hypothesis testing, and write reports of their findings. Students will gain experience using statistical packages for data analyses on computers.

**B. COURSE EFFECTIVE DATES:** 03/11/2022 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Developing your research question.
2. Introduction to secondary data analysis .
3. Writing a research paper.
4. Using on-line databases.
5. Introduction to SPSS.
6. Descriptive Statistics .
7. Graphs.
8. Transforming data using compute and recode.
9. 9. Developing hypotheses and measures.
10. Chi-squared tests.
11. T-tests.
12. ANOVA.
13. Bivariate Correlation .
14. Linear regression.

### D. LEARNING OUTCOMES (General)

1. To apply logic of social scientific analysis to primary research involving secondary data analysis.
2. To gain hands-on experience in data analysis using a statistical package for the social sciences.
3. To read, analyze, evaluate, synthesize, and integrate appropriately and ethically both information and ideas from diverse sources or points of view in their writing.
4. To conduct informed and critical reading of scientific research reported in scholarly journals.
5. To write a research paper, in the style of published manuscripts in Sociology, through a process that involves selecting a topic, reviewing past research, preparing drafts, receiving feedback, and revising drafts based on feedback.

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted