

# Minnesota State University Moorhead

## SOC 551: 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

This course focuses on the application of quantitative methods of research. Students will design a research project involving secondary data analysis and report their findings. Developing writing skills and the ability to communicate scientific knowledge will be central to the primary course assignment.

### B. COURSE EFFECTIVE DATES: 05/05/2022 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Social science research and writing
2. Secondary and online data bases
3. Statistical Package for Social Sciences
4. Descriptive statistics
5. Transforming data using Compute and Recode
6. Hypothesis testing
7. Chi square, T-tests and ANOVA, Bivariate correlation, creating and interpreting dummy variables, OLS Linear Regression, and Logistic Regression
8. Presentation of research findings

### D. LEARNING OUTCOMES (General)

1. Apply the logic of scientific analysis to research involving secondary data.
2. Analyze data using a statistical package for social sciences.
3. Locate, use, and cite scholarly material from print and electronic resources.
4. Evaluate, synthesize, and integrate information from diverse points of view.
5. Conduct informed and critical reading of scientific research reported in scholarly journals.
6. Consult with others in the production of quality written products.
7. Write a research paper in the style of manuscripts published in social science journals by selecting a topic, reviewing past research, and preparing and revising drafts.
8. Conduct research appropriately and ethically.
9. Create and interpret dummy variables.
10. Understand and use OLS Linear Regression and Logistic Regression

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

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted