

Saint Leo University
SOC 321
Methods of Social Research I: Quantitative Research

Course Description:

The first of two courses in the research methods sequence. This course covers techniques and methods of quantitative social research as they relate to sociological theory construction: hypothesis testing, research design, measurement, quantitative data collection methods (surveys), statistical data analysis. This course also covers descriptive and inferential methods of statistical analysis emphasizing measures of central tendency and dispersion, construction of graphs and tables, univariate, bivariate, and multivariate analysis including tests of statistical significance. Students will use SPSS to apply statistical techniques. 3 credits.

Prerequisite:

MAT 131 or Higher

Textbook(s):

Babbie, Earl R., William Wagner, and Jeanne Zaino. 2018. *Adventures in Social Research Using IBM SPSS Statistics*, 10th ed. Thousand Oaks, CA: Sage.
BN-13: 978-1506362779

SPSS software

This course requires the use of SPSS Software. This is now available for download from the my.saintleo.edu portal. Your instructor will provide more access info during Module 1 of the course.

Learning Outcomes:

1. Build a hypothesis or research question
2. Select and apply statistical techniques for a given research question
3. Produce descriptive and inferential analysis of social science data using SPSS
4. Design a quantitative survey questionnaire.

Core Value:

Integrity: The commitment of Saint Leo University to excellence demands that its members live its mission and deliver on its promise. The faculty, staff, and students pledge to be honest, just, and consistent in word and deed.

Evaluation:

Grade Percentage:

- A Exceptional 94% to 100%
- A- Superior 90% to 93%
- B+ Excellent 87% to 89%
- B Very Good 84% to 86%
- B- Good 80% to 83%
- C+ Above Average 77% to 79%
- C Average 74% to 76%
- C- Below Average 70% to 73%
- D+ Marginal 67% to 69%
- D Poor 60% to 66%
- F Failure Below 60%

Discussion: (10%) Students are responsible for all material covered and all announcements made in class. Because the nature and content of the course is cumulative and because a significant portion of the students' grades will be based on discussion participation.

Examinations: (45%) There will be two exams, including one mid-term exam and a comprehensive final exam. All exams will weigh approximately the same in the final grade. Tests will stress the application and understanding of concepts and definitions of terms as well as computations. Examinations will be a combination of problems to be solved through the use of specific statistical computations and the 3 interpretation of those results; situations in which you must propose the proper statistic for a given problem and justify its use; questions concerning statistical concepts, questions concerning research methods and the research process, and questions regarding the use of SPSS. For exams, you will be allowed to use your textbook.

SPSS Lab report: (25%) Students will be asked to complete an analysis of secondary data from the General Social Survey (GSS), in preparation for a qualitative research project to be completed in SOC 320 (Qualitative Research Methods for the Social Sciences). At the beginning of the semester, they will be asked to think of a topic for this project. Then, they will design a hypothesis, select variables from the GSS, run a statistical analysis using SPSS, and write up their analysis. The report will be divided in five (5) take-home assignments each worth 5% of the final grade for a total of 25%.

Survey questionnaire: (20%) Students will be asked to design a short survey questionnaire (no more than 2 pages) that they could use if they were using a survey design for their research project. The survey questions should focus on their topic of

interest, and include questions that could be used as independent variables for the analysis.

Assessment of the Learning Outcomes:

Learning Outcome	Assessment Method(s)
1	Class Participation, SPSS Reports, Exams
2	Class Participation, SPSS Reports, Exams
3	Class Participation, SPSS Reports, Exams
4	Class Participation, Survey Questionnaire, Exams

Course Schedule:

Module 1 The Theory and Practice of Social Research

- Objectives** When you complete this module, you should be able to:
- Formulate research hypothesis and questions.
 - Describe the relationship between theory and research.

Readings Chapters 1, 3, and 4

Assignments

Items to be Completed:	Due No Later Than:
Post an introduction to the class	Thursday 11:59 PM EST/EDT
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT

Module 2 Univariate Analysis with SPSS

- Objectives** When you complete this module, you should be able to:
- Evaluate the reliability and validity of research studies.
 - Compute basic measures of central tendency.
 - Perform a univariate analysis in SPSS including interpreting a frequency variable and identifying the level of measurement of a variable.

Readings Chapters 2 and 5

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit SPSS Lab 1	Sunday 11:59 PM EST/EDT

Module 3 Presenting Data in Visually Appealing, Accurate Ways

- Objectives** When you complete this module, you should be able to:
- Construct and interpret graphs using numeric data.
 - Create composite measures in SPSS.
 - Recode variables in SPSS.

Readings Chapters 6-8

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit SPSS Lab 2	Sunday 11:59 PM EST/EDT

Module 4 Bivariate Analysis, Hypothesis Testing

- Objectives** When you complete this module, you should be able to:
- Identify the dependent and independent variable in a hypothesis.
 - Run and interpret crosstabs in SPSS.
 - Differentiate between association, causation, and inductive and deductive analysis.
 - Create summary tables in SPSS.

Readings Chapters 10-12

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit SPSS Lab 3	Sunday 11:59 PM EST/EDT
Midterm	Sunday 11:59 PM EST/EDT

Module 5 Measures of Association

- Objectives** When you complete this module, you should be able to:
- Select measures of associations for two variables at different levels of measurements.
 - Assess the strength and direction of an association between two variables.
 - Interpret a scatterplot.

Readings Chapters 13 and 14

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit SPSS Lab 4	Sunday 11:59 PM EST/EDT

Module 6 Tests of Significance

- Objectives** When you complete this module, you should be able to:
- Explain the normal distribution and its role in statistics.
 - Compute and interpret statistical tests of significance using SPSS.
 - Determine statistical and substantive significance in the association of variables.

Readings Chapters 15 and 16

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT

Module 7 Multivariate Analysis

- Objectives** When you complete this module, you should be able to:
- Analyze the association between variables, controlling for a third.
 - Determine that the recoded variables are the correctly level of measurement.
 - Design a crosstab recoding of one or more variables.

Readings Chapters 17 and 18

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
SPSS Lab 5	Sunday 11:59 PM EST/EDT

Module 8 Survey Design

Objectives

When you complete this module, you should be able to:

- Explain how to design a survey using response categories that are mutually exclusive and exhaustive.
- Assess the strengths and weaknesses of surveys and quantitative research methods.

Readings

Chapter 21 and Appendix: SPSS Survey Tip

Assignments

Items to be Completed:	Due No Later Than:
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Survey Design Assignment	Sunday 11:59 PM EST/EDT
Final Exam	Sunday 11:59 PM EST/EDT