

#### **ISS 6317**

# **Social Research Quantitative Methods I**

Section: U01

In Person

Fall Term 2025

# **Course Meeting Information**

Class meeting times		
Day:	Monday	
Time:	11:00 AM - 1:40	
	РМ	
Location:	Graham Center	
	273B	

## **Professor Information**

Qing Lai

**Roles:** Primary Instructor

Email: glai@fiu.edu

Phone: 3053486663

Office Hours: Monday 8:30-10:30 AM

Office Location: SIPA 313

Department or Academic Unit: Global and Sociocultural Studies

## **Course Prerequisites**

Course prerequisites, if any, are listed below.

## **Course Description and Purpose**

This course is designed to introduce basic statistical knowledge and skills in the context of social research. It provides a conceptual understanding of fundamental procedures of statistical description and inference. It also introduces basic skills of data analysis (using Excel and Stata) and results presentation. This course assumes no prior knowledge of statistics and no mathematical knowledge beyond simple algebra.

Students can expect to gain sufficient quantitative literacy to understand and evaluate most research designs and some statistical methods used in social science publications. This course also aims to develop the ability to conduct and publish with basic quantitative data analysis. Finally, this course prepares students for more advanced quantitative method courses offered at GSS which covers linear regression and categorical data analysis.

### **Textbook and Course Materials**

No Textbook Required for purchase

Required/Recommended: N/A

Authors: N/A

Publisher: N/A

**Publication Date: N/A** 

Copyright Date: N/A

**ISBN 10:** N/A

#### **Course Goals**

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## **Student Learning Outcomes/Objectives**

- understand and evaluate basic research designs and statistical methods in social science publications
- conduct and publish with basic quantitative data analysis
- prepares students for more advanced training in quantitative methods

## **Expectations of the Course**

<u>Lecture attendance</u> is required. We will meet face-to-face during the designated class time.

### **Course Communication**

Please use Canvas message for course communications. As GPD I receive dozens of emails every day. If you send emails to <a href="mailto:qlai@fiu.edu">qlai@fiu.edu</a>, there is no telling when you will get a response.

# **Grading**

	Points	Total
Attendance	1 point * 15 weeks	15 points
Assignments	5 points * 9 assignments	45 points
Exams	15 points * 3 exams	45 points

Your final letter grade for the course will be assessed as below--

A 96-105

A- 91-95

B+86-90

B 81-85

B- 76-80

C+ 71-75

C 66-70

D 60-65

F 0-59

# **Assignments**

A total of nine <u>assignments</u> are posted on Canvas. Study groups are encouraged but you must complete all the assignments independently. The assignment keys will be posted after the due dates.

Three timed <u>exams</u> are scheduled on Canvas for 9/29, 10/27, and 12/1. There will be no class meetings on those dates. The online exams will be available for the whole day until 11:59 PM, but once started you have 60 minutes to finish all the questions in one sitting. You should not discuss questions with other people during the exam, but you may consult your notes or the course materials. In the Modules section, you can find a module dedicated to help you prepare for the exams, which consists of three practice exams and prep videos.

All course materials, including lecture notes, lecture videos, assignments, datasets, assignment keys, and online exams are or will be posted on Canvas.

## **Schedule of Topics**

- 8/25 **Lecture 1**: Basic concepts; Frequency distribution; Frequency table; Histogram
- 9/1 Labor Day, not class
- 9/8 **Lecture 2**: Measures of central tendency and variability; **Asg 1 due**
- 9/15 **Lecture 3**: Standardized distribution; Z-score; **Asg 2 due**
- 9/22 Lecture 4: Normal distribution; Sampling distribution; Standard error; Asg 3 due
- 9/29 Exam 1; Asg 4 due (online submission)
- 10/6 **Lecture 5**: Z-test for one mean
- 10/13 Lecture 6: t-test for one mean; Asg 5 due
- 10/20 **Lecture 7**: t-test for 2 independent samples; t-test for 2 related samples; **Asg 6** due
- 10/27 Exam 2; Asg 7 due (online submission)
- 11/3 **Lecture 8 (Part I)**: Confidence intervals
- 11/10 Lecture 8 (Part II): Contingency table; Chi-square test
- 11/17 Lecture 9: Correlation; bivariate regression I; Asg 8 due
- 11/24 **Lecture 9 (cont.)**: Bivariate regression II

- 12/1 Exam 3; Asg 9 due (online submission)
- 12/8 Final Review and Preview of Quant II (attendance optional)

#### **Nondiscrimination Statement**

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