

Data Analysis for Quantitative Social Research (SOSC 1110)

Spring Semester, 2023
LSK 1027; Mon & Wed, 10:30-11:50

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COURSE DESCRIPTION

This entry-level course introduces hands-on techniques for presenting, analyzing, and interpreting quantitative social data, many of which are rarely taught in a regular statistics course. It is designed as complementary to a formal statistics course for first-year undergraduate students in a social scientific discipline. The course covers basic practices of analyzing data for social scientific research, including data management and descriptive analysis. A signature feature of it is devoted computing sessions, in tandem with lectures, which demonstrate how the practices are actually executed with real-world data using a computing tool, *Stata*.

ORGANIZATION

Except for the first few weeks (see schedule below), each week this course consists of a lecture session (usually on Wednesdays) and a computing session (usually on Mondays).

Agenda for a typical computing session (subject to adjustment):

- (1) Recap of lectures
- (2) Discussions/Q & A
- (3) *Stata* demonstration (if applicable)
- (4) In-class *Stata* exercise (if applicable)

COMPUTING

Stata will be used as the major computing tool. You will need to access *Stata* through [Virtual Barn](#) or book a seat (for homework) in one of the [computer barns](#) on campus.

RECOMMENDED READINGS (not required)

Kohler, Ulrich and Frauke Kreuter. 2012. *Data Analysis Using Stata*, Third Edition. Stata Press.

Long, J. Scott. 2009. *The Workflow of Data Analysis Using Stata*. Stata Press.

ASSESSMENT

Your grade will be determined as follows:

- (1) Attendance: 10%

Attendance is required for all face-to-face meetings. One point will be deducted for each missed class without legitimate justification. NOTE: You will fail this course

automatically if you miss three or more face-to-face meetings regardless of reasons.

(2) *Class participation: 50%*

Your class participation will be evaluated in terms of in-class exercises (40%), discussions and other class activities (10% using a 4-level scheme: “Excellent” (=10), “satisfactory” (=7), “unsatisfactory” (=5), and completely fail (=0)).

(3) *Quiz: 10%*

There will be one quiz in the early phase of the course (see schedule below) that accounts for 10% of the final grade.

(4) *Final exam: 30%*

COURSE SCHEDULE (subject to change; updates will be posted on Canvas)

<i>Week</i>	<i>Topic</i>	<i>Date</i>	<i>Note</i>
1	Course Overview	Feb 6	
	Processes of Quantitative Social Research	Feb 8	
2	Correlation and Causation	Feb 13	
		Feb 15	
3	Sampling and Survey Design	Feb 20	
		Feb 22	
4	Surveys in China and the United States	Feb 27	Quiz
	Interface of Stata	Mar 1	
5	<i>Computing Session</i>	Mar 6	
	Variable Management I	Mar 8	
6	<i>Computing Session</i>	Mar 13	
	Variable Management II	Mar 15	
7	<i>Computing Session</i>	Mar 20	
	Data Management I	Mar 22	
8	Data Management II	Mar 27	
	<i>Computing Session</i>	Mar 29	
9	Tables I	Apr 3	
	Midterm break	Apr 5	
9	Midterm break	Apr 10	
	<i>Computing Session</i>	Apr 12	
10	<i>Computing Session</i>	Apr 17	
	Tables II	Apr 19	
11	<i>Computing Session</i>	Apr 24	
	Figures I	Apr 26	
12	<i>Computing Session</i>	May 1	
	Figures II	May 3	
13	<i>Computing Session</i>	May 8	
	Final Exam	TBD	Final Exam