

Geog 360 Quantitative Geography

Instructor: Professor Yifei Sun
Telephone: (818) 677-3529
Email: yifei.sun@csun.edu
Office: SH 130-E
Meeting room: Sierra Hall 103

Textbook

An Introduction to Statistical Problem Solving in Geography, 2nd edition by J. Chapman McGrew, Jr. and Charles B. Monroe. McGraw-Hill, 2000

Course Goals and Outcomes

Goals

This is an intro-level course and we will introduce the basics of statistics and their applications in geographic research. Topics covered in this course include data sampling, classification, description, analyses and interpretation.

Outcomes

After finishing this course, students are expected to be able to know how to collect data, choose the appropriate statistical techniques and analyze the data according to their research questions. They should feel confident and comfortable to take further advanced courses in quantitative geography.

Since this is a three-credit course with a “2+1” split between lecture and lab, it is necessary to have some degree of flexibility in lecture/lab combinations. Lecture and labs will not be separated completely. Lab time is allocated to get students familiar with the software package (SPSS) and work on their exercises. The instructor will be in the lab to answer your questions during lab time. If you cannot finish your work during the designated time, you need to find your own time to finish the assignments.

Tentative Lecture Schedule

Week	Topics	
1	Introduction	(Chapter 1)
2	Geography Data	(Chapter 2)
3	Sampling	(Chapter 6)
4	Descriptive statistics	(Chapter 3)
5	Spatial Descriptive Statistics	(Chapter 4)
6-7	Probability	(Chapter 5)
8	Review and exam 1	
9	Estimation in sampling	(Chapter 7)
10-11	Hypothesis testing	(Chapter 8)

Geog 360 Quantitative Geography

Professor Yifei Sun

12	Two sample difference test	(Chapter 9)
13	Bi-variate relationship testing	(Chapter 12)
14	Correlation	(Chapter 13)
15	Simple regression	(Chapter 14)
16	Final exam: December 8 at noon (Scheduled at 12:45)	

Grading Policies and Requirements

The lecture and lab will be combined for grading and the students will receive the same grade for the lecture and lab.

1) Grading items

Exam 1	30%
Exam 2	35%
Exercises	25%
Attendance	10%

2) The grading system:

A	≥ 93
A-	88 – 92
B+	85 – 87
B	82 – 84
B-	78 – 81
C+	75 – 77
C	72 – 74
C-	68 – 71
D+	65 – 67
D	62 – 64
D-	60 – 61
F	0 – 59

Final grade will depend on the students' absolute performance. In other words, the students' scores will not be curved. Therefore, there is no limit of "A"s. However, to pass the course, all students **MUST** complete the two exams. Otherwise, the students will be assigned a grade "I".

3) Exams

The format for the first two exams will include combination of the follows: short answers, short essays, and problem solving. The exams will be **non-cumulative** and the tentative exam dates are provided in the schedule. All the exams **must** be taken to pass this course. Missing either one may lead to a grade of "I".

4) Exercises

Geog 360 Quantitative Geography
Professor Yifei Sun

Students should complete their assignments by the deadline specified, and each assignment will be graded from 0 to 10. Late submission will get deduction: each day of delay will get 5% deduction from 10. The total of the exercises will count 25 percent of the final degree. Exercise one week or more late will not be acceptable.

5) Attendance and participation

Students need to come to class on a regular basis and each student is allowed 3 absences without approval, after which the 10 points will be deducted from the final grade. It is extremely important to attend and participate in the class! If you do come to the classes as required, you are going to see the difference. The approval absences are only granted when the instructor is notified and agrees in advance.

6) Make-ups

Students are anticipated to take both the exams and makes-ups are only granted in situations out of the students' personal control and the instructor is notified and approves. In case make-ups are allowed, and they should be taken as soon as possible after the scheduled time.

7) Academic Honesty

Each student is expected to work independently, and any cheating on exams or exercises could lead to a grade "F".

Note: this syllabus is tentative and it is subject to change. It is the students' responsibility to be aware of all the changes that are announced in class.