

ECON 400: Elementary Economic Statistics

Instructor: Dr. Stephen Lich
Email: swlt@email.unc.edu
Office hours: Gardner 202, Monday & Wednesday 1:00 – 2:00
Teaching assistants: Mr. Priyesh Krishnan, Mr. Ryan Leary, Mr. Chunxiao Li, Ms. Hanwei Liu
Lectures (400-002): Murphey Hall 116, Tuesdays & Thursdays 11:00 – 12:15
Lectures (400-001): Murphey Hall 116, Tuesdays & Thursdays 12:30 – 1:45
General tutorials: Gardner Hall, Monday through Thursday afternoons
Honors recitation: Gardner Hall 106, Wednesday 3:35 – 4:25 (required for all 400H students)
Materials: Newbold, Carlson, & Thorne: *Statistics for Business and Economics*, 8th ed.
Intercooled Stata (Version 11 or later)
Lich: *Study Guide for Economic Statistics*, Fall 2015 (on Sakai)
Background: Introductory economics (101 or equivalent)
Math skills: algebra and basic calculus (derivatives and integrals)

Content: This course provides you with an understanding of statistical vocabulary and techniques, the ability to apply statistical and probabilistic “philosophy” to real-world situations, and the skills to analyze data and draw conclusions. At the end of the course, you will have the skills to do basic linear regression and hypothesis testing, for basic statistical analysis. You will also be able to apply your skills to data analysis in other courses. The course covers six general topics:

1. Descriptive statistics
2. Probability theory
3. Random variables
4. Sampling distributions
5. Hypothesis testing
6. Regression analysis

Attendance: I expect regular attendance at lectures, but I do not require documentation of absences. When you are absent, you must submit assignments on the due date, and you must know all announcements and material from class.

Announcements: When I make announcements (about due dates, changes to the schedule, and such), I will write them on the board at the start of lecture, or I will email through Sakai.

Assignments: You must turn in book problems in the classroom at one of two times: either on the due date or (with permission) at the end of the next class. You should not turn any assignment in at my office or the economics department office. You should upload Stata assignments to Sakai as a PDF document.

Grading: Your grade is based on three exams and approximately ten homework assignments:

Homework assignments (15%)
Quizzes (5%)
First midterm (25%): Tues., Sept. 22nd
Second midterm (25%): Tues., Oct. 27th
Final exam (40%): Tues., Dec. 8, 12:00 – 2:00 for Tu./Th. 12:30
Thur., Dec. 10, 12:00 – 2:00 for Tu./Th. 11:00

If you take all three exams as scheduled, I reduce the weight on the lowest exam by 10 percentage points. If you miss a midterm exam — for a legitimate reason — there is no make-up exam. Instead, the weight is distributed across the other exams. The remaining midterm counts for 31% of the grade and the final counts for 49% of the grade. If you miss both midterms, then the final exam counts for 80% of your overall grade. The final exam is given in compliance with UNC final exam regulations and according to the UNC Final Exam calendar. A student may miss one quiz, for any reason, without penalty. If all quizzes are completed, then the lowest grade is dropped.

The points on each exam will be converted to traditional ordinal letter grade (... , B+, B, B-,...). This conversion is not directly based on percentage of correct answers. In calculating your weighted average, I

convert these into numerical values (... , $88\frac{1}{3}$, 85, $81\frac{2}{3}$, ...). At the end of the course, your overall score is translated back into a letter grade (B+ is $86\frac{2}{3}$ to 90, B is $83\frac{1}{3}$ to $86\frac{2}{3}$, B- is 80 to $83\frac{1}{3}$, and so forth).

Special grades: I offer two special grades based on your final exam alone. If your final is in the top 75% of the class, you are guaranteed at least a C in the course. If your final is in the top 5%, you are guaranteed an A. In order to qualify for these special grades, you must have taken both midterms and completed all homework assignments. These special grades are uncommon.

Bonus points: During the semester, there may be opportunities for extra credit. I will always announce extra credit publicly and make it available to the entire class.

Schedule: All lectures will be held at the scheduled time. The dates of the exams are almost certain. Other dates (especially due dates) on the Sakai calendar are tentative. I will announce due dates for assignments at least one week in advance. The last homework assignment will be due at the final exam.

Academic integrity and etiquette:

Homework: Students may consult each other and collaborate on homework assignments. They may seek assistance from the instructor, the teaching assistants, or a tutor. However, each student must do the problems on his or her own, and each student must submit a unique assignment. Students may use calculators, except for their statistical functions.

Late assignments: Students turning in late assignments may not use any resources that were unavailable to their classmates at the regular due date.

Quizzes: Students may use their textbook, the study guide, and their own notes. They may not work together, and they may not receive assistance from other people.

Exams: Students may use appropriate statistical tables and basic calculators.

Archives: Students may not acquire my documents from, or place my documents into, any online or physical archive, other than my course website on Sakai.

Technology: Students may not use laptops, tablets, phones, or similar devices during the lecture, except when I specifically permit them, or when they are prescribed accessibility devices. Disruption behavior violates section II.C.1.k of the Honor Code. (And, for your own sake, it interferes with your learning.)

Externalities: Avoid the negative ones; create the positive ones.

How to use help resources:

Tutorials: You can get homework help and answers to questions at the tutorial sessions. These are held every day in Gardner [TBD], from [TBD-TBD], Monday through Thursday. A teaching assistant will be available. These tutorials are unstructured and completely optional. You are welcome to come to this room simply to work on your assignments, and a teaching assistant will be available to provide help.

Office hours: You can also help and answers during my office hours. I can also address administrative issues or other special situations. I'm always available in Gardner 202 between 1:00 and 2:00 on Mondays and Wednesdays. You may simply drop in, or you may ask for priority at some particular time. I can also arrange to meet at other times.

Email: I can answer quick questions and administrative issues through email, but I cannot provide detailed homework help through email. (My teaching assistants do not provide help through email.)

Before and after class: I can answer only very quick questions.

The Learning Center: The Learning Center has academic counselors who can give general advice about improving your study habits, note-taking skills, and other academic strategies. In some semesters, free peer tutoring is available in Dey Hall. They also maintain a list of private tutors available for hire.

Syllabus changes: The instructor reserves the right to make changes to the syllabus, including due dates and test dates. Changes will be announced as early as possible.