#### **Econ 400: Economic Statistics**

Instructor: Dr. Stephen Lich-Tyler Email: swlt@email.unc.edu

Office hours: Gardner 303, Monday & Wednesday 1:00 – 2:00
Section 002: Howell 104, Tuesdays & Thursdays 11:00 – 12:15
Section 001: Howell 104, Tuesdays & Thursdays 12:30 – 1:45

General tutorials: Gardner 001, Monday through Thursday 2:00 – 4:00

Honors recitation: Gardner 106, Wednesday 3:00 – 3:50 (required for all 400H students)

Materials: Newbold, Carlson, & Thorne: Statistics for Business and Economics, 8th ed.

Intercooled Stata (Version 11 or later)

Lich-Tyler: Study Guide for Economic Statistics, Fall 2013 (website)

Background: Introductory economics (101 or equivalent)

Math skills: algebra and basic calculus (derivatives and integrals)

My goal in this course is to provide 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. 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, but I don't monitor attendance formally. Regardless of whether you attend, I expect that you will submit assignments on time and that you know any announcements made in class.

**Announcements:** When I need to make announcements (about due dates, changes to the schedule, or such), I will write them on the board at the start of lecture, or I will email the class. The Sakai website contains handouts, assignments, old exams, and other materials.

**Assignments:** Homework assignments must be turned in at one of two times: either at the end of lecture on the due date or (with permission) at the end of the *next* class. In order to get your homework graded efficiently, your homework should be submitted <u>on time</u> and <u>in order</u> and written <u>clearly</u> with pages <u>attached</u>.

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

Homework assignments (15%)

Quizzes (5%)

First midterm (25%): Tues., Oct. 1 Second midterm (25%): Tues., Nov. 5

Final exam (40%): Tues., Dec. 10, 12:00 – 2:00 for Tu./Th. 12:30 Thur., Dec. 12, 12:00 – 2:00 for Tu./Th. 11:00

I reduce the weight of the lowest exam by ten percentage points. Based on this weighted average, I assign overall grades, using a nonlinear curve. (Individual exams are not curved.) One missed quiz is dropped; if none, then the lowest quiz is dropped. There are no make-up exams; if you miss one for a legitimate reason, your overall grade will depend on the other assignments. The dates of the exams are <u>almost certain</u>.

**Special grades:** I offer two special grades based on your <u>final exam</u> 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 deals, you must have taken both midterms and missed no more than one homework assignment.

**Bonus points:** During the semester, there will be a few opportunities for extra credit. Extra credit will always be announced publicly and available to the entire class.

# **Academic integrity:**

**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.

**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. They may <u>not</u> use calculators of any type.

# 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 001, from 2:00-4:00, 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 303 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:** Only very quick questions can be answered.

**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.

#### How to use technology in the course:

**Laptops:** In the classroom, you should use your laptop to facilitate note-taking or to follow Stata demonstrations. (Please, none of the other stuff.) If convenient, bring it to office hours or the tutorial when you have Stata questions.

**Calculators:** On homework, you should use calculators for simple arithmetic and to evaluation functions like logarithms, exponentials, and such. (You should not use any statistical functions on your calculator, if it has them.) You will <u>not</u> be able to use calculators on exams.

**Phones, texts, emails:** Only for very urgent matters, please.

### **Etiquette suggestions:**

**Trips to bathroom and such:** Especially since the floor in Howell 104 is squeaky, please try to avoid these trips during the lecture.

**Sleeping:** Try taking notes while standing at the back or side of the room instead.

**Talking:** Keep it to a whisper, and restrict it to class-related topics.

**Leaving early:** If you need to leave early for some reason, try to sit close to the aisle at the back of the classroom.

**Externalities:** Avoid the negative ones; try to create positive ones.

**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.