Econ 400: Economic Statistics, Fall 2014

Instructor:

Dr. Stephen Lich-Tyler swlt@email.unc.edu

Email: Office hours:

Gardner 202, Monday & Wednesday 1:00 - 2:00

General tutorials:

Gardner 308, Monday through Thursday 3:30 - 5:30

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 2014 (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, you must submit assignments on time and you must 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 on time and in order and written clearly with pages attached.

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

Homework assignments (15%)

Quizzes (5%)

First midterm (25%): Tues., Sept. 23rd Second midterm (25%): Tues., Oct. 28th

Final exam (40%): Tues., Dec. 9, 12:00 – 2:00 for Tu./Th. 12:30 Thur., Dec. 11, 12:00 – 2:00 for Tu./Th. 11:00

The dates of the exams are <u>almost certain</u>. The weight on the lowest exam is reduced by 10 percentage points, unless a students misses an exam. There are no make-up midterms. If a student misses one midterm for a legitimate reason, then the remaining midterm counts for 21% of the grade and the final counts for 34% of the grade. If a student misses both midterms, then the final exam counts for 55% of the overall grade. A student may miss one quiz 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, $81\frac{1}{3}$,...). At the end of the course, your overall score is translated back into a letter grade (B+ is $86\frac{1}{3}$ to 90; B is $83\frac{1}{3}$ to $86\frac{1}{3}$, B- is 80 to $83\frac{1}{3}$, and so forth.)

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 completed all homework assignment.

Bonus points: During the semester, there may be 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.

Late assignments: Students turning in late assignments may <u>not</u> 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 <u>not</u> work together, and they may <u>not</u> receive assistance from other people.

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

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

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 308, from 3:30-5:30, 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: 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 may not use any statistical functions on your calculator, if it has them.) You may use only basic calculators on exams.

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

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.