Syllabus

Econ 400 - Statistics for Economics
Summer II 2016

Instructor:	Jay Dennis
Email:	jay.dennis@unc.edu
Website:	sakai.unc.edu
Office Hours:	M Tu W Th 1pm-2pm
Office Location:	Phillips Annex 202
Classroom:	Murphey 0115
Meeting Times:	M Tu W Th F 9:45 am - 11:15 am
Prerequisites:	Math 231, Econ 101
Recommended Materials:	Groebner, Shannon, Fry, & Smith. <u>Business Statistics: A Decision Making Approach</u>, 9th ed.
	Newbold, Carlson, & Thorne. <u>Statistics for Business and Economics</u>, 8th ed.
	Hamilton. Statistics with STATA: Updated for Version 12
Required Materials:	Stata, Version 12 or later (see below)
	Laptop for use of STATA during class

Goals of the Course: The goal of this course is to provide an understanding of statistical vocabulary and techniques, the ability to apply statistical and probabilistic methods to real-world situations, and the skills to analyze data and draw conclusions. The course covers the following general topics:

	Approximate Chapters	
Topics	NCT	GSFS
Descriptive Statistics	1, 2	2, 3
Probability Theory	3	4
Random Variables	4, 5	5,6
Sampling Distributions	6	7
Estimation	7, 8	8
Hypothesis Testing	9, 10	9, 10, 11
Regression Analysis	11, 12	14, 15

Attendance: I will not formally monitor attendance, but you are strongly encouraged to attend. Summer courses move through the material quickly, and you are much more likely to succeed if you attend every class (and more likely to not succeed if you miss any classes). Additionally, we will have in-class quizzes which will factor into your grade. Also, if you don't attend, then you won't get to spend any time with your awesome instructor.

Announcements: Check Sakai for announcements.

Assignments: There will a total of eight homework assignments with the lowest homework grade dropped. Four will be regular pen and pencil problem sets, and four will be Stata problem sets. One of each type will be due each week at the beginning of class on Monday. You are permitted to work with classmates on these assignments, but each student must turn in his or her own assignment. While group work is encouraged, copying is strictly prohibited. Late homework will not be accepted.

Quizzes: Short quizzes (5-10 minutes) will be given in class at the end of each unit. Make ups are not permitted. The lowest quiz grade will be dropped.

Exams: There will be one midterm and a final exam. There are no make-ups permitted for the midterm. If the midterm is missed, its weight will be transferred to the final exam. The final exam is mandatory and will only be given at the scheduled time.[1] The final exam is scheduled for 8am-11am on July 25th.

Grading: Grading scale: A (≥ 90), B ($\geq 80, < 90$), C ($\geq 70, < 80$), D ($\geq 60, < 70$), F (< 60)

- In Class Presentation (4%)
- Quizzes (8%)
- Homework (25%)
- Midterm (30%)   in class July 8 (we will finalize the date during the first week of class)
- Final (33%)   8am - 11am July 25

Required Software: STATA is a statistical analysis software that we will use throughout the semester. In class examples will often be completed with STATA. Additionally half of the homework assignments will require the use of STATA. There are three main options for accessing STATA:

(i) You may purchase STATA at a discounted price at www.stata.com/order/ new/edu/gradplans/student-pricing. The Stata/IC options should be selected. It is offered for six-months, one year, and perpetual. You should choose the appropriate options based on your expected future use of STATA.

(ii) The second option is free and provided through the university. Visit help.unc.edu/help/how-do-i-log-on-to-virtual-lab/ for instructions on how to access virtual lab. Once downloaded you can access virtual lab on your computer at virtuallab.unc.edu. Virtual lab can be slower at times, but it is what I have been using since I have been at UNC and works fine.

(iii) Finally, some computers in the undergraduate library have STATA, but remember that we will be doing example together in class.

   Note: I recommend STATA for this class due to its widespread use and being relatively easy to learn quickly. However, if you have previous experience with another statistical package such as R, then you are welcome to use it, as long as you speak with me first.

Etiquette: Please arrive to class on time and stay until class has been dismissed. When you enter a class after it has started or exit before it has ended, you disrupt everyone's focus.

   Please refrain from using phones, computers, or other electronic devices during class unless instructed otherwise. We will be using Stata which means laptops will be in use, but they should be put away when we are not using Stata.

---

[1]In accordance with University and Department policy. See the Economics department chair for exceptions.

Accommodations: Please inform me of any unusual circumstances at your earliest convenience so that I can accommodate them in the most appropriate manner.

Academic Integrity: Copying any quiz or exam material from another student or an undocumented source constitutes an honor violation. In addition, no aids of any sort (cell phones, graphing calculators, computers, etc) are permitted. Academic dishonesty is a serious offense and will be treated accordingly. See honor.unc.edu to learn more about UNC's honor system.