

**ECON 400: Elementary Statistics**  
Summer I 2014  
Syllabus

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**Instructor:** Blanca Berenice Martinez

**Email:** beremtz@live.unc.edu

**Office Hours:** Phillips Annex 207, Monday & Wednesday 1:00-2:00 p.m.

**Classroom:** Gardner 209

**Time:** Monday through Friday from 9:45-11:15 a.m.

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

**Software:** Stata (Version 11 or later). See document on how to get Stata.

**Prerequisites:** Introductory economics (ECON101).

**Goals of the course:** 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:** Regular attendance is strongly encouraged, 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. Remember that this is a summer course where I will be covering new topics everyday therefore your performance in class might be affected from not attending or falling behind.

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

**Assignments:** There will be two kinds of Homework assignments: Problem Sets and Stata Assignments. Problem Sets come from your textbook and must turn in at the beginning of the lecture on the due date. Stata Assignments must be turned in on Sakai by midnight on the due date (I will guide you on how to do this when I assign the first Stata Assignment). In order to get your homework graded efficiently, your homework should be submitted on time and in order and written clearly with pages attached. No hw will be accepted past the end of the class session on the due

date. However, I will drop the lowest grade in your assignments from the final grade.

**Exams:** There will be three exams, two midterms and a final. Refer to Grading for the dates of the exams. If you have to miss a midterm there is no way to make up that exam. Instead, the grade in the Final exam will also count for the missed midterm. The final exam is cumulative; however greater emphasis will be placed on later topics. The final exam is mandatory (University policy). Per UNC rules, you must have a valid excuse from the Dean to take the Final Exam at a time other than the schedule time.

**Grading:** Your grade is calculated on three exams and seven valid homework assignments:

Homework assignments	17%	
Participation	3%	
First midterm	25%	F May 23
Second midterm	25%	F June 6
Final exam	40%	M June 16

I reduce the weight of the lowest exam by ten percentage points. Based on this weighted average I assign overall grades (individual exams are not curved.) The dates of the exams are almost certain.

**Grades:**

A( $\geq 93$ )	C( $\geq 73, < 77$ )
A-( $\geq 90, < 93$ )	C-( $\geq 70, < 73$ )
B+( $\geq 87, < 90$ )	D+( $\geq 67, < 70$ )
B( $\geq 83, < 87$ )	D( $\geq 60, < 70$ )
B-( $\geq 80, < 83$ )	F( $< 60$ )
C+( $\geq 77, < 80$ )	

**Academic integrity:** All students are expected to adhere to the Honor Code.

**Homework:** Students may consult each other and collaborate on homework assignments. They may seek assistance from the instructor, 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 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 not use calculator of any type.

**Etiquette:** From the start of the lecture until its end, please avoid doing anything that would distract your classmates or the lecturer. Unless instructed otherwise, please refrain from using electronic devices during lectures and exams. (These include phones, calculator, computers, MP3 players, and such).

**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.

**Class Schedule:**

<b>Date</b>	<b>Subject</b>	<b>Chapters</b>	<b>Homeworks</b>
May 13	Definitions, Using Stata	1.1, 1.2	
14	Describing Data: Graphical	1.3,1.4,1.5	
15	Describing Data: Numerical	2.1, 2.2, 2.4	
16	Describing Data: Numerical	2.2, 2.4	Stata1
19	Probability	3.1,3.2, 3.3	
20	Probability	3.3,3.4, 3.5	
21	Discrete Random Variables	4.1, 4.2, 4.3	PS 1
22	Discrete R.V. and Continuous R.V.	4.4, 4.5, 4.7, 5.1, 5.2	
23	Exam I (Covers chapters 1, 2, and 3)		
27	Continuous Random Variables	5.3, 5.4, 5.5	Stata 2
28	Sampling Distribution	6.1, 6.2, 6.3	
29	Estimation	7.1, 7.2, 7.3	PS 2
30	Estimation	7.4, 8.2, 8.3	
June 2	Hypothesis testing	9.1, 9.2, 9.3	PS 3
3	Hypothesis testing	9.4, 9.5	
4	Hypothesis testing	10.1,10.2, 10.3	
5	Hypothesis testing	10.3, 10.4	
6	Exam II (Covers chapters 4, 5, 6, 7 and 8)		
8			Stata 3
9	Simple Regression	11.1, 11.2, 11.3	
10	Simple Regression	11.4, 11.5, 11.6	PS 4
11	Multiple Regression	12.1, 12.2, 12.3	
12	Multiple Regression	12.4, 12.5	Stata 4
13	Review Session		
16	Final Exam 8:00-11:00 a.m. (Cumulative but with greater emphasis on ch. 9, 10, 11, 12)		