Economics 120A: Econometrics A, Fall 2012 UCSD-Department of Economics

Lecture 1 (#754879): MWF 2:00 to 2:50 PM in RBC AUD Lecture 2 (#754876): MWF 3:00 to 3:50 PM in RBC AUD

Instructor: Heather L.R. Tierney *Office:* Economics 109

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Office Hours: Mondays, Tuesdays, and Wednesdays 12:00 Noon to 1:00 PM

Course Description: The course introduces students to the science of statistics, building student skills in the analysis of data and introducing the formal methods used by statisticians to learn about the real world from data. As a building block, students will be introduced to basic probability theory with the intent of gaining an understanding of the collection of data and the problems and opportunities this affords. Students will be expected by the end of the course to understand the foundations of modern statistical analysis in preparation for 120B and 120C, which will concentrate on developing methods of statistical analysis extending the concepts covered in this class.

Prerequisites: Econ 1 (Principles of Microeconomics) and one of the following:

Math10C (Calculus III) or Math 20C (Calculus & Analytical Geom/Sci & Eng)

or Math 31BH (Honors Multivariable Calculus)

Textbook: "Introductory Statistics for Business and Economics" by T.H. Wonnacott and R.J. Wonnacott, Fourth Edition, John Wiley and Sons: New York. There is also a custom version of the book made for UCSD students that is available at the UCSD bookstore. This book is exactly the same as the non-custom version but it is less expensive.

Problem Sets: Problem sets that correspond to the class lectures will be posted on TED. In order to understand the course material, it is imperative to be able to do the problem sets by the due date even though they will not be graded. The problem sets will be a very good way to test your understanding of the course material as well as being a very good way to prepare for the exams.

Software: All of the statistics in this course can be done using the Microsoft Excel spreadsheet program, which is available in the computer laboratory in Econ 100. You may use other econometric or statistical software. Data, problem sets and solutions will also be available from the class webpage.

Course Outline:

Chapter 1: The Nature of Statistics (Introduction)

Chapter 2: Descriptive Statistics (Also Chapter 11.1 and Chapter 11.2)

Chapter 3: Probability (Chapter 3, which pertains to some basic probability results, will be only partially covered in class. Please read through this chapter, even though most of it is not directly examined, especially since the remaining chapters use probability results.)

Chapter 4: Probability Distributions.

Chapter 5: Two Random Variables.

Chapter 6: Sampling (Will also include Data Generation)

Chapter 7: Point Estimation.

Chapter 8: Confidence Intervals

Chapter 9: Hypothesis Testing

Class Webpage: http://ted.ucsd.edu. Please check TED regularly for the course lectures, problem sets, class announcements, and other course-related material. Please also see TED for the TA's office hours.

Exam Policies: You will be tested on the chapters listed in the section of the syllabus entitled "Course Outline" as well as any other material covered in class, which will be reenforced in the discussion sections. You may use a calculator, a simple one is enough (phones, PDA's and other devices with messaging capabilities are not allowed). When requesting a re-grade, this re-grade must take place within one week from when the exam is returned. The deadline for re-grades will be given in class and noted on TED. If the deadline is missed, **no re-grades will occur**. There will be no re-grading of exams written in pencil or in erasable pen.

Grading: Your course grade will be based upon two midterms and the final exam.

Midterm 1 (25% of the final grade): Friday, October 19th, 2012 Midterm 2 (25% of the final grade): Friday, November 16th, 2012 Final (50% of the final grade): Day and Time decided by the Registrar. Lecture 1 (#754879-MWF 2:00 to 2:50 PM)-12/12/2012 at 3:00 to 5:59 PM Lecture 2 (#754876-MWF 3:00 to 3:50 PM)-12/14/2012 at 3:00 to 5:59 PM

Curve: Only the final score will be curved and *only if* necessary. Each class will be curved independently.

Discussion Sections In the discussion sections, TAs will review material covered in class and go over some of the more difficult problems on the problem sets, which will be beneficial in understanding the course material better as well as being an excellent way of preparing for the exams. There are two sections a week for each class lecture and the same material will be covered is exactly the same manner in all of the discussion sections. The first meeting for TA discussion sections will be on Monday, October 8.

Administrative Issues:

- 1. If you have a documented disability, please come to talk to me as soon as possible so that I can make suitable accommodations for you. If you believe that you have a disability and desire accommodation, please register with the Office for Students with Disabilities.
- 2. Students found guilty of academic dishonesty will earn a failing grade for the course. In addition, the Council of Deans of Student Affairs will impose a disciplinary penalty. For more information on academic integrity, please refer to the following website: http://students.ucsd.edu/academics/academic-integrity/index.html.
- 3. If you need to miss a midterm for a *verifiable* medical/legal reason, the rest of the exams will be reweighed so they account for 100% of your grade. Failure to notify me promptly that you must miss a midterm will result in a zero grade for that midterm. Unexcused absences will also result in a zero.
- 4. Because each class has different exams that are curved independently, you must take each midterm and final with the class you are enrolled in.