University of Colorado at Boulder
Department of Economics
Econ 3818-100 - Introduction to Statistics with Computer Applications
Instructor - Paulo Saraiva
Summer 2011 - Term A

Office: Econ 14
E-Mail: paulo.saraiva@colorado.edu
Class Meetings: M-F 9:15am - 10:50am, Econ 117
Office Hours: M-F 11:00am - 12:30pm, or by appointment.
Recitation Sections:

Section	Location	Meetings
101	Educ 132	MW 11:00am - 12:20 pm
102	Educ 132	TR 11:00am - 12:20pm

There is no recitation during the first week of class.

General:

Economics 3818 is a one-semester course in statistics, required of economics majors. We will study basic probability and probability distributions, especially the normal distribution; and estimation and inferential statistics. This course will use R (if you do not wish to use R you may use Excel, however, Excel will not be covered in class).

Evaluation:

Evaluation	Points
Two Midterm Exams	25 points each (June 8th and June 1th)
Final Exam	40 points (July 1st)
Problem Sets	10 points

Midterm dates are subject to change. I will substitute your lowest midterm grade by the average of your recitation and lowest midterm grade, provided that this improves your final grade. Letter grade will be assigned as follows, according to overall course score:

<60	60-67	67-70	70-73	73-77	77-80	80-83	83-87	87-90	90-93	93+
F	D	D+	C-	C	C+	B-	B	B+	A-	A

Grades and problem sets are to be posted on CULearn.

Attendance:

Attendance is not mandatory, however, it is highly recommended. I will not follow the textbook as closely as in some other courses, therefore it is important to come to class and participate in order to get a good grade in this course.

Lectures are sequential in this course, so missing class and not studying the missed material before the next lecture is a recipe for disaster. *I cannot overemphasize how important classes are in order to obtain a passing grade.*

Prerequisites:

Econ 1000, or 2010 and 2020 and either Econ 1078 and 1088 or equivalent math courses. The latter prerequisites are strictly enforced, if you are listed as not meeting the course prerequisites, you must show me that you have the appropriate math equivalent.

We will be using differentiation and integration.

Textbook:

- Amemiya, T. (1994) *Introduction to Statistics and Econometrics.* Harvard University Press, Cambridge, MA.

Students are required to acquire the above textbook.

Other helpful textbooks:

- Ashenfelter, O., P. Levine & D. Zimmerman (2006) *Statistics and Econometrics: Methods and Applications.* John Wiley & Sons, New York, NY.
- Bradley, T. (2007) *Essential Statistics for Economics, Business and Management.* John Wiley & Sons, New York, NY.
- Johnson, R. & G.K. Bhattacharyya (2010) *Statistics: Principles & Methods* (6th edition). John Wiley & Sons, New York, NY.
- Spanos, A. (1999) *Probability Theory and Statistical Inference: Econometric Modeling with Observational Data.* Cambridge University Press, New York, NY.
- Chiang, A. & K. Wainwright (2005) *Fundamental Methods of Mathematical Economics.* McGrall-Hill, New York, NY.

Course outline:

- Probability and random variables (about 2/3 of the course)
- Estimation and Inference (about 1/3 of the course)

Miscellaneous:

- **Hardware and Software:** R will be used for some data analysis. Although not required, there are many excellent R manuals available. R is supported in many of the campus computer labs, including the lab in the basement of the Economics building. R is an open source program which can be downloaded in `http://cran.r-project.org/`. You may use other softwares, such as Excel, however, I will not cover Excel in this class. In addition to this you will need a calculator for the exams.

  Visit `http://webdata.colorado.edu/labs/map/` for a list of computer laboratories and available software.

- **Special accommodations:**

  Refer to `http://www.colorado.edu/disabilityservices`.

- **E-Mail Policy:** I will not answer questions about statistics via email. Those emails with questions about statistics will be ignored. If you should have any questions, please come to office hours or ask during class as the material is being presented.

- **Participation:** Participation is highly recommended. No question shall be labeled "stupid" and I will not tolerate disrespect to one's question, answer or observation.

- **Office hours:** I will not give away answers to problem sets during office hours. During office hours I will answers specific questions about the material. However, if the question is of the type, "How do I answer this question of the problem set", and you have not yet handed in the problem set, I will not answer it.

- **Make up work:** There is no make up exams.

- **Late work:** Work handed in late will have 30% taken away from it. After that, 10% will be marked off for each day the work have not been handed in.

Enjoy!