University of Colorado at Boulder
Department of Economics
Econ 3818-030 - Introduction to Statistics with Computer Applications
Instructor - Paulo Saraiva
Fall 2011

O ce: Econ 14
E-Mail: paulo.saraiva@colorado.edu
Class Meetings: MWF 3:00pm - 3:50pm, HUMN 1B80
O ce Hours: MW 4:00pm - 5:30pm, or by appointment.
Recitation Sections:

Section	Location	Meetings
031	KTCH 120	M 4:00pm - 4:50 pm
032	Econ 2	M 5:00pm - 5:50pm
033	HLMS 104	W 8:00am - 8:50 am

There is no recitation during the rst 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 (Feb 16th and March 16th)
Final Exam	40 points (May 3rd, 7:30pm - 10:00pm)
Problem Sets	10 points

Midterm dates are subject to change. I will substitute your lowest midterm grade by your recitation grade, provided that this improves your nal 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.

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 di erentiation and integration.

Optional textbooks:

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

Ashenfelter, O., P. Levine & D. Zimmerman (2006) *Statistics and Econometrics: Methods and Applications*. John Wiley & Sons, New York, NY.

Students are required to acquire at least on of the above textbooks.

Other helpful textbooks:

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.

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