# University of Colorado at Boulder Department of Economics Econ 3818-020 - Introduction to Statistics with Computer Applications Instructor - Paulo Saraiva Spring 2012

O ce: Econ 14

E-Mail: paul o. sarai va@col orado. edu

Class Meetings: MWF 1:00pm - 1:50pm, BESC 185 O ce Hours: MW 11:30am - 1:00pm, or by appointment.

**Recitation Sections:** 

Section	Location	Meetings
021	EDUC 132	T 3:30pm - 4:20pm
022	TBA	TH 8:00am - 8:5apm
023	MUEN E114	T 5:00pm - 5:50pm

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 22nd and March 21st)
Final Exam	40 points (May 7th, 1:30pm - 4:00pm)
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

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 over-emphasize how important classes are in order to obtain a passing grade.* Although attendance is not mandatory, you are responsible for any announcement or instructions given in class.

# 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

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 o ce hours or ask during class as the material is being presented. I will not answer any question on an email in which the answer can be found on the syllabus. I do not repeat in class announcements in emails.

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

O ce hours: I will not give away answers to problem sets during o ce hours. During o ce hours I will answers speci c 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 o for each day the work have not been handed in

Enjoy!