Economics 3818-030 Office: Room 108 Professor Donald Waldman waldman@colorado.edu

Welcome to Econ 3818. This is a first course in probability and statistics, with an introduction to econometrics. Applications will be taken from topics in economics, and other areas. Both simulated and real data will be used in these examples.

Please read this carefully--there is a lot of information here to help you navigate this course. In particular, the final grade for this course depends on weekly quizzes and problem sets that must be completed in a timely manner.

Donald M. Waldman Professor



waldman@colorado.edu Tuesday, 2:00 - 3:00, Wednesday, 11:00 - 12:00, and by appointment

Lauren Schechter Ph.D. Student



Office: Econ 108 Office hours:

Danny Kurban Ph. D. Student



Office: Econ 306 Office hours:

Donald Waldman is a professor in the Economics Department. Both his teaching and research concentrate on statistical methods (econometrics) and applied microeconomics (environmental economics, nonmarket valuation, labor economics, industrial organization). He has taught this course many times.

Lauren and Danny are advanced graduate students in the Economics Department. Both have completed the Ph. D. level course requirement in statistics in the Economics Department.

The most important background to bring into this course is ability to think abstractly. In addition, students will find it easier if they have a good understanding of algebra at the level of high school Algebra II; differential and integral calculus play a smaller role in this course, but they will be used. Calculus will be reviewed during the course.

The course prerequisites are *one* of the following:

ECON 1078 and 1088; MATH 1300; MATH 1310; MATH 1081; MATH 1080, 1090, and 1100; APPM 1350.

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- Please read Caniglia (the course textbook), Chapter 2.
- If you are not already comfortable with Microsoft Excel, try it out. The University has a site license to the MS Office package, so you can get it for free. It is often included in Windows PCs and some Macs, and it is available on all computers in the CU computer labs. If you want help installing it on your personal computer, go to bugbusters or see

http://www.colorado.edu/oit/services/messaging-collaboration/microsoft-office-365/help/proplus

• Statistics is the study of data (resulting from either the physical or social world) that is subject to randomness. The # t er Ç vives ro \$ There will be two lectures weekly, meeting Tuesday and Thursday from 12:30 to 1:45 p.m. in GOLD A2B70 (Gold Biosciences) room A2B70.

In lecture I will cover most (but not all) of the material that is in the textbook, but in

- Tree diagrams
 Independence and mutual exclusivity
 Bayes' law
 Urn problems
 Bayes' Law for partitions
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material of this course, the quiz must be completed by so by 12:30 pm.

- The weekly problem sets will be available on Thursday as well, and are due in class the following
- The three, in-class midterm exams are scheduled for

Midterm I:

Midterm II:

Midterm III:

The midterms will be composed of questions from the text, quizzes and problem sets, as well as additional questions.

• The final exam is cumulative, to be given on

Additional notes on the problem sets:

• You must answer all exercises, but not all will be graded.

• On some problem sets, there will be an Extra Credit problem or problems. These are truly extra credit: they can only raise your grade. To be clear, at the end of the term I will calculate grades for every student without regard to the extra credit problems. Then I will return to my assessment spreadsheet and raise the grades of students who have tried and at least sometimes successfully attempted some or all of the extra credit problems.

• Like many courses but unlike, perhaps, a "topics-in something" course, this course is sequential in nature. That is, Thursday's material will likely be unintelligible unless Tuesday's material has been mastered. Therefore, to make understanding material easier, answers to quizzes and problem sets will be made available shortly after their due date and time.

• The lowest problem set score and the lowest quiz score will be dropped. Given this policy, the fact that solutions will be posted immediately after the assignment is due, and the importance of keeping up on the material in this course,

Successful students in this course have generally followed this study/assignment regime:

- review your notes sometime after lecture (but not more than 24 hours after);
- work first on the problem set, again shortly after Thursday's lecture, take the online, timed quiz by Tuesday's lecture; finish the problem set by Thursday's lecture.

Note: you may work together on problem sets, I encourage this. However, each student must hand in the written problem set solutions.

Notice for students with disabilities:

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and www.Colorado.EDU/disabilityservices

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at www.colorado.edu/disability services

expression, veteran status, political affiliation or political philosophy. Individuals who