

Syllabus

Introduction to Statistics with Computer Applications

Econ 3818-100

Summer 2014 - Term A

Instructor: Dustin Frye

Office Location: Econ 307

Office Hours: Monday through Friday 8:30-9:15am and by appointment

Email Address: Dustin.Frye@Colorado.edu

This is the best way to contact me outside of office hours. Please allow me 24 hours to respond.

Class Meeting: Monday through Friday 9:15-10:50

TA: Alexander Cauley

Class Website: [Desire2Learn](#)

Course Description

This course will provide a solid foundation in probability and statistics for economists and other social scientists. We will emphasize topics needed for further study of econometrics. The main topics include probability, discrete and continuous probability distributions, sampling and sampling distributions, confidence intervals, hypothesis testing, correlation and basic regression analysis. In this course you will get a chance to improve your quantitative and analytical skills as well as obtain a solid background for more advanced courses. More importantly, you will have a more informed understanding of statistics in your everyday lives and future careers.

Prerequisites

Economics Prerequisites: ECON 1000 or ECON 2010

Math Prerequisites: ECON 1078 & 1088 or MATH 1300 or MATH 1310 or MATH 1081 or MATH 1080 & 1090 & 1100 or APPM 1350 or equivalent

It is assumed that every student has a working knowledge of basic algebra, calculus and graphing skills. Relevant math techniques and economic concepts will be briefly reviewed when necessary, but you are responsible for the math and econ requirements of this course.

Required Textbook/Materials

Statistics for Economics: An Intuitive Approach, by Caniglia. The book is out of print but it is available at the CU bookstore. I recommend reviewing the previous days notes and reading the relevant chapters in the textbook before each lecture.

Grading Structure¹

Problem Sets (10%)
Team Project (15%)
Recitation (20%)
Two Midterm Exams (30%)
Final Exam (25%)

Your Score	Your Grade	Your Score	Your Grade
95%-100%	A	73%-76%	C
90%-94%	A-	69%-72%	C-
87%-89%	B+	64%-68%	D+
83%-86%	B	60%-63%	D
80%-82%	B-	<60%	F
77%-79%	C+		

What Goes Into Your Grade

Problem Sets

Each Monday I will assign a problem set from the prior week that will be due the following week in recitation. I strongly encourage you to devote a lot of time to the problem sets as these are your primary method of practicing and learning before the midterms. I also encourage you to work with other people in the class. In fact, the problem sets can be submitted for groups with up to three members.

Team Project

The team project is going to be your opportunity to apply all the skills you learn in this class to a real world problem. Notice this is a team project and you are REQUIRED to work in teams of two. So be on the lookout this week for a potential team member because you will need to tell me who your partner is by the end of the second week. I will provide more details, including my expectations, during the second week of class.

Recitation

Recitation is a big part of this course. Attendance is mandatory and it will be nearly impossible for you to do well in this course if you're not actively participating in recitation. Alex will decide how your recitation grade will be determined. Alex is an extremely valuable resource for you to use. Please go to his office hours and as much as possible if you have questions.

Midterm Exams

There will be two midterm exams during the semester. The first midterm is scheduled for Friday June 13th; the second midterm is on Friday June 27th. I will not give any early exams or make up exams and no exams will be dropped.

¹ I reserve the right to curve the grades for any individual assignments or the course overall if need be.

The format of the exams will be multiple choice and short answer questions. Please bring a #2 pencil and a calculator to every exam. Midterm exams will not be cumulative, but the material builds upon itself, so it is important to understand each concept along the way. Any material covered in lecture and/or in the assigned readings is fair game for the exams.

Final Exam

The final exam is scheduled for July 3rd during the regular class time. The final will be cumulative.

Late Work Policy

Assignments are due at the beginning of recitation, not at the end or later that day. You are welcome to make up any assignment late but each day the assignment is late it reduces the potential score by 30%. Assignments turned in after the beginning of recitation are considered one day late. In order to submit an assignment you must be present at the beginning of recitation and stay through the entire class.

Hardware and Software

You'll notice that the course title includes a segment about "computer applications." To cover this aspect of the course we will be using Microsoft Excel. There are many excellent Excel manuals available and this crazy thing called the internet that has all sorts of tutorials and examples. Excel is supported in all of the campus computer labs, including the lab in the basement of the Economics building. I strongly encourage you to get familiar with Excel because the data analysis part of the project will require it.

Calculators

Neither graphing calculators nor cell phone calculators will be allowed during exams!!!

Do not ask me to use either type on an exam; I will not make an exception and the answer will be a definitive "No." Please be sure to obtain an acceptable calculator type (any type of calculator other than a graphing calculator or cell phone calculator) to use for exams.

Laptop/Tablet and Cell Phone Policy

Laptops in class are a negative externality. Besides this, much of the notes you will be taking will involve graphs and/or math, which you can do much easier with pen and paper than on a computer. If you wish to take your notes using your computer you are free to do so but you must sit in the last couple rows of room to ensure you are not distracting your fellow students.

Likewise for cell phones – do not have them out and put them on silent. I reserve the right to kick anybody out of class for inconsiderate use of cell phones or laptops, as well as penalize points if necessary.

Other Stuff

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 may 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/disabilityservices.

Religious Observance Policy

Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or required attendance. If you have a conflict, please contact me at the beginning of the term so we can make proper arrangements.

Classroom Behavior Policy

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty has the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their students express opinions.

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_cod.

Honor Code

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.

Discrimination & Harassment Policy

The University of Colorado Policy on Sexual Harassment applies to all students, staff and faculty. Sexual harassment is unwelcome sexual attention. It can involve intimidation, threats, coercion, or promises or create an environment that is hostile or offensive. Harassment may occur between members of the same or opposite gender and between any combinations of members in the campus community: students, faculty, staff, and administrators. Harassment can occur anywhere on campus,

including the classroom, the workplace, or a residence hall. Any student, staff or faculty member who believes s/he has been sexually harassed should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH and the campus resources available to assist individuals who believe they have been sexually harassed can be obtained at: <http://www.colorado.edu/odh/>.