# Fall 2015 ECON3818 – Introduction to Statistics with Computer Applications

### Syllabus/Course Information

# **Course Description**

Econ 3818 is a first course in the theory and methods of statistics, and is required for Economics major. This is basically a math class and we will study probability theory before the first midterm (around early October –can be changed) and will focus on statistics after we have finished the first test. In statistics part, we will think about what discrete and continuous random variables are and will also learn its related distributions. Furthermore, we will think about descriptive and inferential statistics including estimation and hypothesis testing. This course will be highly centered on theory rather than application using Excel.

#### **Instructor Info/Schedule**

Instructor: Doyoung Park Class Meetings: MW 3:00 pm – 4:15pm at MUEN E417 Office: ECON 401 & Office Hours: Tuesday 10:00 am - 11:00 am / 1:00 pm – 2:00 pm or by appointment Email: dopa3399@colorado.edu Course Website: Desire2Learn

## **Textbook:**

*Caniglia, Statistics for Economics, An Intuitive Approach, Harper Collins Publisher, 1992.* This book is out of print, but available in soft cover at the CU bookstore for \$60. Since there is no disk or key to unlock a publisher web site associated with this book, and since there is only one edition, any used copy is equivalent to a new copy. The text has been used for this course at CU for the last four semesters, so that it is available on all the second hand book sites, at the Colorado Bookstore on College Avenue in Boulder, and other places.

# **Class Organization:**

The class will be normally 50-60 minute lecture (it can be 75 min depends on the material or your understanding). At the beginning, I will write an overview on the board so that you can take a look what you will learn that day. This overview will be helpful to guide you to understand which part we are learning and how all contents are related. I will review the contents again at the end of the class to make sure your understanding. After the lecture, you need to do a group activity. I will give you a short in class worksheet (or write several questions on the board) comprised of the examples (with slight variations) covered in class. The group size will be 2-3. You don't need to hand the answer sheet. You will have about 10 minutes to discuss, ask questions and solve problems and 5 minutes to check out the answer.

#### Grading:

Your total grade in this course will be determined by the following breakdown.

- Recitation (20% of Grade): See your recitation syllabus.
- In Class Group Work (0% of grade)
- 2 Midterms: 1<sup>st</sup> midterm 20%, 2<sup>nd</sup> midterm 25%

• Final (35% of Grade): The final will be cumulative but mainly focus on what you've learned after the  $2^{nd}$  midterm.

## In Detail,

#### **Recitation:**

Attending recitation is a very useful way to review the contents that you have learned in class. Also recitation grade takes 20% portion of your total score, so please do not miss it. I will ask TA to briefly review the class material and mainly focus on doing group/individual activity such as solving numerous problem sets. I will design exams taking all the problem sets you have covered in recitation into account. Therefore the problem sets in recitation is extremely important to get a good grade in this course. TA will explain other grading criteria (e.g., attendance, quizzes etc.) in recitation.

## In Class Group Work:

The class will be 50-60 minute lecture. I will try to give you many examples so that you can figure out how the concepts you just learn can be applied to a variety of questions that you may face in the exam. At the end of the lecture, I will review what we learned in class. After the review, we will have a group activity solving several problems related to the class contents. At this time, I will be your "private tutor" so that you can ask any questions freely.

## Homework?

There will be NO HOMEWORKS! I don't want to keep putting pressure on you. However, we should keep in mind that math/statistics needs a lot of practice to get used to and eventually to get a good grade. All the practice will be done in class by group works and by recitation solving problem sets. If you have any questions about the problems, you are welcome to ask questions! Ask as many questions as you can!

## **Communication:**

If you have questions, you can send me an email. If you are asking for what you can find the answer in the syllabus, I will not answer your email. However, if it is related to the class contents, I will try my best to reply as soon as possible.

## **Test Policy:**

There will be no makeup exams. If you miss a midterm the percentage of your final grade that the missed exam represents will be added to the final exam. For example if you miss the first midterm the final will count as 55% (60% if you missed the 2<sup>nd</sup> midterm) of your grade rather than 35%. There is no make up policy for the final. If you miss the final you get zero, no exceptions. I can't fix the exam date at this point because it depends how fast we cover the class material. I will inform one or two weeks before the event.

The exam is not comprised of multiple-choice questions. This means that you need to show your calculations and everything clearly and neatly. I will value more on the procedure rather than the answer. See below:

## **Grading Criteria:**

- No (Insufficient) procedure & Incorrect Answer: 0% of the total credit
- No (Insufficient) procedure & Correct Answer: 20%
- Procedure with crucial mistakes (subjectively determined) & Incorrect Answer: 50% (same for correct answer)
- Procedure with minor mistakes (subjectively determined) & Incorrect Answer: 80% (same for correct answer)
- Correct procedure & Correct Answer: 100%

All exams and group worksheets and recitation exams will follow this grading rule. Exams will be very similar to problem sets you have solved in recitation and the worksheet you did as group work in class. So tip for preparing exams is to pay attention to those materials!

#### **Calculators:**

You will not be allowed to use graphing calculators on any of this class's exams. On exam days, if you try to use a graphing calculator you will be asked to put it away. However, you can use general calculator during the exam.

#### **Other Notes:**

### **Student 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 determine accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200.

# **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/