ECON 3818: Intro to Statistics with Computer Applications

MWF 11:00-11:50

Room: DUAN G131

**Instructor:** Nicole Mundt

E-mail: nicole.mundt@colorado.edu

Office: ECON 414

Office Hours: Monday 1:00-200, Wednesday 2:00-3:00, and by appointment

Please allow me 24 hours to respond to all emails. If you need help with course material,

please see me during my office hours. If you need more help than can be provided in office

hours, consider visiting the department's undergraduate tutor of viewing the department's

private tutor list: http://www.colorado.edu/econ/undergraduate/tutor\_list.pdf

Course Description: Understanding statistics is an important component of economics,

and life in general. For your economics career, this class will be essential when moving

on to econometrics, one of the most useful applications of economic knowledge.

Required Materials

• Textbook: The Basic Practice of Statistics. David Moore, William Notz, and

Michael A Fligner.

**Prerequisites** 

• Econ 2010 & 2020. Econ 1088 (or an approved similar course). This class requires

algebra and calculus so exposure to these concepts is required.

Computer Application: R is a free programming language that is utilized primarily

for data analysis. We will spend time throughout the course working on R exervises

through the **RStudio** interface.

1

## Grading

| 10% Homework    | 20% Midterm 1  |
|-----------------|----------------|
| 10% Recitation  | 20% Midterm 2  |
| 10% R Exercises | 30% Final Exam |

**Homework:** There will be weekly homework assignments assigned through the Sapling website. These will be due by 5 pm every Friday. You can access assigned homework problems through <a href="http://www.saplinglearning.com/ibiscms/">http://www.saplinglearning.com/ibiscms/</a> and using code "mundt". No late homework will be accepted. The two lowest homework grades will be dropped.

Recitation: Recitation attendance is mandatory. Not only will your grade in recitation account for 10% of your final grade in the course, but there will be material. provided in recitation that is crucial for success in the course. Your TA is PhD student Kevin Starnes, refer to his syllabus to see how recitation grades are determined.

R Exercises: There will be five simple R assignments and one data project throughout the semester. We will work on these assignments in class the week before its due.

**Exams:** There will be two midterms throughout the semester. They will consist of multiple choice questions along with a couple of free response questions. You will be allowed to bring a 3x5" index card with notes to refer to during the exam. Any tables required will be provided by the instructor. There will be no make-up exams, unless there is documentation of a medical or family emergency. If you miss an exam, the weight of that exam will be added to the final exam.

Extra Credit: The only extra credit opportunity will be through iClickers. There will be roughly 2-3 clicker questions per lecture. A maximum of five percentage points will be added to your grade for excellent clicker participation. Make sure to register your iClickers, instructions provided here:

https://oit.colorado.edu/tutorial/cuclickers-iclicker-remote-registration

## **Tentative Course Outline**

| Week                | Content             | Announcements                           |
|---------------------|---------------------|---|
| Week 1, Aug 27      | Chapters: 1, 2      |   |
| Week 2, Sept 3      | Chapters: 12, 13    | No class Monday, R assignment 1 due Wed |
| Week 3, Sept 10     | Chapters: 14, 3     |   |
| Week 4, Sept 17     | Chapters: 8, 9      | R assignment 2 due Wed                  |
| Week 5, Sept 24     | Chapters: 15        | Midterm 1 on Friday                     |
| Week 6, Oct 1       | Chapters: 15        |   |
| Week 7, Oct 8       | Chapters: 16, 17    |   |
| Week 8, Oct 15      | Chapters: 17, 18    | R assignment 3 due Wed                  |
| Week 9, Oct 22      | Chapters: 20        |   |
| Week 10, Oct 29     | Chapters: 20, 21    | Midterm 2 on Friday                     |
| Week 11, Nov 5      | Chapters: 22, 23, 4 | R assignment 4 due Wed                  |
| Week 12, Nov 12     | Chapters: 4, 5      |   |
| Week 13, Nov 19     | Thanksgiving Break  | No class this week                      |
| Week 14, Nov 26     | Chapters: 6, 25     | R project due Friday (5pm)              |
| Week 15, Dec 3      | Chapters: 27, 29    |   |
| Week 16, Dec 10     | Chapters 27, 29     | R assignment 5 due Wed                  |
| Finals Week, Dec 16 |                     | Final Exam: Sun, Dec 16 7:30-10:00      |

## University Policies

**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 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.

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/