

# ECON 3818: Intro to Statistics with Computer Applications

MWF 1:00-1:50

Room: MUEN E131

**Instructor:** Nicole Mundt

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**Office:** ECON 414

**Office Hours:** Monday 12:00-12:50 , 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 or viewing the department's private tutor list: [http://www.colorado.edu/econ/undergraduate/tutor\\_list.pdf](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** exercises through the **RStudio** interface.

## Grading:

10% Homework	20% Midterm 1
10% Recitation	20% Midterm 2
10% <b>R</b> Project & Exercises	30% Final Exam

## Grading Scale:

Grade	Percentage	Grade	Percentage
A	$93 \leq x$	C	$73 \leq x < 77$
A-	$90 \leq x < 93$	C-	$70 \leq x < 73$
B+	$87 \leq x < 90$	D+	$67 \leq x < 70$
B	$83 \leq x < 87$	D	$63 \leq x < 67$
B-	$80 \leq x < 83$	D-	$60 \leq x < 63$
C+	$77 \leq x < 80$	F	$x < 60$

**Homework:** There will be weekly homework assignments assigned through the Sapling website. These will be due by 11:59 pm on **most** Sundays. You can access assigned homework problems through <http://www.saplinglearning.com/ibiscms/> 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 Youngeun Choi, refer to her syllabus to see how recitation grades are determined.

**R Project & Exercises:** There will be five simple **R** assignments and one data project throughout the semester. The R project will be worth 5% while the R assignments will be worth the other 5%. We will work on these assignments in class the week before they are due. R assignments must be physically handed in to be graded. If you are absent the day an R assignment is due, you must email me a copy before class starts **and bring in a hard copy the next lecture you attend**. I will *only* grade hard copies of the assignments.

**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, Jan 14	CH 1, 2	R day on Fri
Week 2, Jan 21	CH 12, 13	No class Mon, R assign 1 due Fri
Week 3, Jan 28	CH 14, 3	R day on Fri
Week 4, Feb 4	Expectation & CH 8, 9	R assign 2 due Wed
Week 5, Feb 11	<b>Midterm 1 on Friday</b>	
Week 6, Feb 18	Estimation & CH 15	
Week 7, Feb 25	CH 16, 17	R day on Wed
Week 8, March 4	CH 18, 20	R assign 3 due Wed, R day on Fri
Week 9, March 11	<b>Midterm 2 on Friday</b>	R assign 3 due Wed
Week 10, March 18	CH 20, 21, 22	
Week 11, March 25	<b>Spring Break</b>	No Classes
Week 12, April 1	CH 23, 4, 6	
Week 13, April 8	Data cleaning on Mon	No Class Wed/Fri – meetings
Week 14, April 15	CH 6, 5	
Week 15, April 22	CH 26	R project due Mon 5 pm, R day on Fri
Week 16, April 29	Review	R assign 5 due Wed
Finals Week	<b>Final Exam</b>	Mon, May 6th 1:30-4:00 pm

**Bring laptops on R days!**

### 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/>