

ECON 3818-020: Introduction to Statistics with Computer Applications

MWF 1:50-2:40 PM

Room: HLMS 199/Meets Remotely/Online Class

Instructor: Sutianjie Zhou (Joe)

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Office: ZoomLink <https://cuboulder.zoom.us/j/92792176048>

Office Hours: MW 10-11 AM & TTH 4-5 PM or 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

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

- Ebook and Homework Package: Sapling Plus for *The Basic Practice of Statistics*. David Moore, William Notz, and Michael A Fligner, access through Canvas, 14-day free trial, then \$ 90.99. Course ID 150095)

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% R 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 Canvas. No late homework will be accepted. The two lowest homework grades will be dropped.

Recitation: Recitation in this semester will also be in a Hybrid form. 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. Refer to the TA's 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 of R-day before they are due. R assignments must be emailed to the instructor no later than the deadline to be graded.

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 and if you miss an exam, the weight of that exam will be added to the final exam.

Tentative Course Outline

Week	Topics	Due
Week 1, Aug 24 - 28	CH 1 CH 2 R day	HW-1 due Aug 30
Week 2, Aug 31 - Sep 4	CH 12 CH 13	R-1, HW-2 due Sep 6
Week 3, Sep 7 - 11	CH 14 CH 3 R day	HW-3 due Sep 13
Week 4, Sep 14 - 18	Distribution Expectation	R-2, HW-4 due Sep 20
Week 5, Sep 21 - 25	CH 8 CH 9	HW-5 due Sep 27
Week 6, Sep 28 - Oct 2	CH15 Review Midterm 1	Midterm 1 on Oct 2
Week 7, Oct 5 -9	Estimation CH 16	HW-6 due Oct 11
Week 8, Oct 12 - 16	CH 17 R day	HW-7 due Oct 18
Week 9, Oct 19 - 23	CH 18 CH 20	R-3, HW-8 due Oct 25
Week 10, Oct 26 - 30	CH 21 R day	HW-9 due Nov 1
Week 11, Nov 2 - 6	Review Midterm 2	Midterm 2 on Nov 6
Week 12, Nov 9 - 13	CH 4 R-day	HW-10, R-4 due Nov 15
Week 13, Nov 16 - 20	CH 6 CH 5	R project due Nov 22
Week 13, Nov 23 - 27	Thanksgiving Break	HW-11 due Nov 29
Week 15, Nov 30 - Dec 4	CH 26 R day	HW-12 R-5 due Dec 6
Week 16, Dec 7	Review	
Final Exam: Thursday Dec 10th, 4:30-7:00 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/>