

**Instructor:** Benjamin Zhang (pronounced j-ah-ng)

**Office:** Economics 401

**Email:** Benjamin.Zhang@colorado.edu

**Course website:** Canvas

**Office Hours:** Thursday 11:30 - 2:30 PM and by appointment.

**Course materials:**

**Textbook:** Knut Sydsaeter, Peter Hammond, Arne Strom and Andres Carvajal, *Essential Mathematics for Economic Analysis*, Pearson, 5th ed., 2016 (3rd or 4th edition are also acceptable).

**Outside material:** 3Blue1Brown's Essence of Calculus series.

**Prerequisites:**

1. ECON 1078 or equivalent from another institution.

**Course Description:** This class is the second of a two course sequence. It is a continuation of ECON 1078 which builds upon the basic foundation developed in that course. We will study derivatives, optimization, and integrals. These are Chapters 6, 7, 8, 9, and 11 in the textbook. These tools will help you better understand the mathematical framework on which economics models are based and help prepare you for more advanced economics.

**Grading Policy:** Your course grade is composed of seven parts.

Pre-test - 2%

Lecture attendance - 8%

Weekly problem sets - 20%

Exam 1 - 15%

Exam 2 - 15%

Exam 3 - 15%

Cumulative final exam - 25%

**Grading Scale:** Standard ten-point scale with plus or minus (A+ not given)

**Lectures:** Class meetings will be devoted to lecture and practice, notes will be posted on Canvas selectively. Attendance of the first two classes is mandatory, and non-attendance may result in being administratively dropped from the course. After the first two weeks, I will randomly take roll counting towards your lecture attendance.

**Weekly Problem Sets:** Every Wednesday (starting 1/23), I will assign a problem set due Wednesday of the following week, at the beginning of lecture. They will be graded on completeness and randomly selected problems each week. Late assignments will not be accepted.

**Exams:** A pre-test assignment due in the first week of class will check your ability to use prerequisite material. This assignment is graded only for completion.

Three midterms will be given during lecture time. You must notify me with documentation of your accommodation at least one week before the first exam in order for it to apply. **I do not give makeup exams or exams early, if you miss an exam, you will receive a zero.**

If you have three or more final exams scheduled on the same day, you are entitled to arrange an alternative exam time for the last exam or exams scheduled on that day. Also, if you have two final exams scheduled to meet at the same time you are entitled to arrange an alternative examination time for the later course. To qualify for rescheduling final exam times, you must provide evidence that you have three or more exams on the same day or two exams meeting at the same time, and arrangements must be made with your instructor no later than the late drop deadline.

**Office Hours:** These are for your benefit, take advantage of them. It is an excellent opportunity to get individual or small group help to clarify concepts from class. If my office hours do not work for you due to another class or work, please email me and we can arrange a time to meet.

**Email:** Please use email wisely. I will do my best to respond to emails in a timely fashion, usually less than 2 hours - keep in mind your instructors also have lives, do not expect a fast response out of regular business hours (M-F 8-5). If your question has to do with clarification, it may be difficult to explain fully over email, so I will suggest coming to office hours. If I feel the entire class could benefit from the clarification, I will do so in lecture. *Finally, I will not answer emails if your question can be answered by the syllabus. ie when is exam 3?*

**Extra Help:** Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. You also may want to consider the free tutoring lab offered by the department, they do a wonderful job helping students! If you want to hire a graduate student tutor (for a fee), you can find a list of such people through the department website.

**Important Dates:** <https://www.colorado.edu/academics/academic-calendar>

**Tips for Success:** Things that I think generally help you do well in my class:

- 1) Read the book chapter before class. This will greatly increase what you get out of lecture, and improve recollection of the material for the exam.
- 2) Skim the book chapter again after class. Recall the concepts which seemed difficult prior to class, those that are still difficult, and those that seem easy.
- 3) Do the homework as we cover the material in class. Do not wait until the day/day before the exam. If you work as we go, the homework will naturally build from lecture materials, and won't take as long as if you wait to tackle it at midnight.
- 4) Use office hours effectively. This means coming prepared with specific questions either from lecture, homework or other sources.
- 5) Use the tutoring lab, and/or hire a private tutor.
- 6) Come to class. This seems like a no-brainer, but it always amazes me how many students skip every lecture, only to be lost come exam time.
- 7) Don't be afraid to ask questions, or to ask for help!
- 8) Finally, don't cheat. If you don't know the material, own up to it, and take the grade you earn.

**University Policies:**

**Disability Policy:** If you qualify for accommodations because of a disability, please submit a letter from Disability Services to me 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 <http://www.Colorado.EDU/disabilityservices>

**Religious Observance Policy:** Campus policy regarding religious observances requires that faculty make every effort 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 semester so we can make proper arrangements.

**Code of 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 have 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 students 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 the appropriate changes to my records.

**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 and Harassment Policy:** The University of Colorado at Boulder policy on Discrimination and Harassment (<http://www.colorado.edu/policies/discrimination.html>, the University of Colorado policy on Sexual Harassment, and the University of Colorado policy on Amorous Relationships applies to all students, staff, and faculty. Any student, staff, or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status 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 regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>