ECON1078-004: Math Tools for Economists I

Instructor: Shea Kennedy
Email: shea.kennedy@colorado.edu
Class Meetings: MWF, 1-1:50 pm, ECON117
Office: ECON14
Office Hours: Wednesdays, 12-1 p.m. & 2-4 p.m.
Course Website: Desire2Learn, https://learn.colorado.edu

Please allow me 24 hours to respond to all emails. If you need help with course material, please come 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
In order to succeed in economics, a student must be well versed in a variety of mathematical concepts. The purpose of 1078 and its counterpart 1088 is to prepare students for the math they will see in future economics coursework. See the tentative schedule at the end of the syllabus for a review of the topics covered in the course.

Course Expectations
I expect students to be respectful. Please arrive on time, silence and put away all electronic devices, and reserve any personal conversations for before and after lecture. I reserve the right to ask students who are disruptive to leave the classroom.

I further expect that if you have any questions about the material that you ask them! I am a firm believer that the only "stupid" question is the one left unasked and, chances are, if you have a question, another student has or will have that same question.

Textbook
Essential Mathematics for Economic Analysis. Knut Sydsaster and Peter Hammond with Arne Strom. 4th edition.

Calculators
I will always try to write exams that will not require a calculator. I will announce, in class, if I think a calculator will be necessary. In these cases, I will allow a simple scientific calculator. **Graphing calculators and cellphones will never be allowed on exams. Use of either will result in a 0 for the exam.** If you are unsure if your calculator is okay, please feel free to ask me before the day of the exam.

Grade Breakdown
10%: Attendance
20%: Quizzes
20%: Midterm 1
20%: Midterm 2
30%: Final Exam (Cumulative)

Quizzes
I will administer quizzes on most Fridays. These quizzes will be based off of suggested practice problems from the book. Math is not a spectator sport. In order to be successful, you must practice by keeping up with assigned homework. Finishing the suggested homework will greatly improve your quiz grades.

There will be no makeup quizzes. However, I will drop your lowest quiz score. You must show work to receive credit.

Test Policy
Similarly, 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 were to miss the first midterm, the final will count as 55% of your grade rather than 35%.) There is no make up policy for the final. If you miss the final, you will receive no credit. No exceptions will be made.

If you have three or more final exams scheduled on the same day, however, you are able to arrange an alternate exam time for the last exam of that day. To qualify, provide me with proof that this is the case no later than the 6th week of the semester.

FERPA
In accordance with the law, I am not allowed to email your grades to you or to distribute them in any way that is identifiable. As such, I will post grades only on D2L, or you may come to office hours to get your grades.

Never ask me to email them or bring them to class; I will not do either.

Cheating
I take academic dishonesty very seriously. At a minimum, cheating will result in a 0 for the assignment in question and may result in failure of the course. All incidents of academic misconduct will be reported to the Honor Code Office.

Tentative Schedule

Week of	Textbook	Topics	Notes
August 22nd	1.1, 1.2, 1.3	Numbers, Powers/Exponents, Rules of Algebra	Pretest
August 29th	1.4, 1.5, 1.6	Fractions, Fractional Powers, Inequalities	
September 5th	1.7, 2.1	Intervals & Absolute Values, Equations	No class: 9/5. (Labor Day) *Deadline to request disability accommodations for midterm 1
September 12th	2.2, 2.3	Equations (Continued)	
September 19th	2.4, 2.5, 4.1	Equations (Continued), Nonlinear Equations, Functions	
September 26th	4.2, Review, Exam	Functions (Cont'd)	**Midterm 1: 9/30** *Last week to provide proof of qualification for alternate final exam
October 3rd	4.3, 4.4, 4.5	Graphs of Functions, Linear Functions, Linear Models	
October 10th	4.6, 4.7, 4.8	Quadratic Functions, Polynomials, Power Functions	
October 17th	4.9, 4.10, 5.1	Exponential Functions, Logarithmic Functions, Shifting Graphs	*Deadline to request disability accommodations for midterm 2

October 24th	5.2, 5.3, 5.4	New Functions from Old, Inverse Functions, Graphs of Equations	
October 31st	5.5, 5.6, 3.1	Distance in the Plane, General Functions, Summation Notation	
November 7th	3.2, Review, Exam	Rules of Sums	**Midterm 2: 11/11**
November 14th	3.3, 3.4, 3.5	Double Sums, Logic, Mathematical Proofs	
November 21st	**Fall Break**		
November 28th	3.6, 3.7, 15.1	Set Theory, Induction, Systems of Linear Equations	
December 5th	15.2, Final Review	Matrices and Matrix Operations	

Final Exam: Monday, December 12th, 4:30-7 pm

Students with Disabilities
If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services at least two weeks before exams so that your needs be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200, and http://www.Colorado.EDU/disabilityservices. If you have a temporary medical condition or injury, see guidelines at http://www.colorado.edu/disabilityservices/go.cgi?select=temporary.html. Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at http://www.colorado.edu/disabilityservices.

Religious Observance Policy Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly 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 the first week of class so that we can make proper arrangements. See full details at http://www.colorado.edu/policies/fac_relig.html. Classroom Behavior Policy Students and faculty each have responsibility for maintaining an appropriate

learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity, and gender expression, age, disability, and nationalities. See policies at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

Discrimination and Harassment Policy The University of Colorado at Boulder Discrimination and Harassment Policy and Procedures, the University of Colorado Sexual Harassment Policy and Procedures, and the University of Colorado Conflict of Interest in Cases of Amorous Relationships Policy apply to all students, staff, and faculty. Any student, staff, or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127, or the Office of Student Conduct (OSC) at 303- 492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at http://www.colorado.edu/odh.

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; 303-735-2273). 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/.