

ECON 1078-001
Math Tools for Economists I
Course Syllabus

Instructor:	Mallory Keeler	Office Hours:	ECON 414 (South tower)
Meets:	MWF 1-1:50pm HLMS 211		MW 2:15 - 4:00 PM
Email:	mallory.keeler@colorado.edu		and by appointment
Web:	learn.colorado.edu (D2L)		

Required Text

Kurt Sydsæter, Peter Hammond, and Arne Strom: *Essential Mathematics for Economic Analysis*. 4th Ed., Pearson. Purchase of this edition is highly recommended as ECON 1088 uses the same textbook.

Important Dates

Date	Exam
Friday 9/25	MIDTERM I (Ch. 1-2)
Friday 10/23	MIDTERM II (Ch. 4)
Friday 11/13	MIDTERM III (Ch. 5, §15.1-15.2)
Thursday 12/17	FINAL EXAM (Cumulative)
7:30PM-10PM	Regular location: HLMS 211

Course Description

This course is the first of two important prerequisites that teach key math and logic skills assumed in future economics courses. Topics include algebra, graphs, functions, basic proofs and probability.

Grading

Lecture Participation (15%)

Daily **iClicker** questions and/or short [partner] quizzes will check for understanding and double as attendance calls throughout the semester. Grade category will be based off 85% of points available with a maximum of 100%. There is no need to email me about absences.

Homework (20%)

Ten (10) assignments will be collected throughout the semester, always on Wednesdays. Each must be handwritten with all work shown and final answers boxed where appropriate. Homework can be submitted during class or during office hours (see top right). Late assignments turned in within two (2) school days (by Friday) will be accepted for a possible 80% of full credit. Any assignment received by the last day of class (Dec. 11) will be accepted for 50% credit. Each will be graded for completeness plus a few randomly-chosen problems for accuracy. Your lowest score of the ten will be dropped.

Midterm Exams (15% each; 45% total)

All exams are closed notes and closed book, with a short-answer format. For full credit, writing must be clear and a reasonable amount of work must be shown. Midterms are not necessarily cumulative, but keep in mind that lessons tend to build on those previous. Students need only bring a pencil and a recommended scientific calculator. Paper will be provided. **PHONES AND GRAPHING CALCULATORS ARE NOT PERMITTED ON EXAMS.**

Final Exam (25%)

Cumulative final exam will cover Chapters 1-5, as well as any supplementary sections covered during the semester. You can expect the exam to over-sample from Chapter 3 (material covered after MT3). Format will mix T/F, multiple choice, and short-answer questions.

Email Preferences

Kindly start a new email thread if you want to be sure I notice your message. Please direct correspondence to mallory.keeler@colorado.edu. I will do my best to reply within 24 hours.

Expectations

Students are expected to take notes with their own materials and bring a personal iClicker for in-class exercises. Students who miss a lecture should reference the text or obtain notes from a classmate before consulting instructor. Phones and other electronics are to be silenced and stowed during class in consideration of the shared learning environment. The use of graphing calculators for homework is discouraged and completely prohibited on exam days. Every class participant is under the obligation of adhering to the University Honor Code and Classroom Behavior Policy (see below).

Make-Up Exams and Final Exam Schedule

Students who must miss a midterm because of a university-excused absense must provide documentation of the excuse and promptly arrange to make-up the exam with the instructor. I will do my best to accommodate exceptional circumstances but will hold fairness to other students in highest regard. If in doubt, come see me in office hours or send me an email.

THE FINAL EXAM CANNOT BE MADE-UP AT A LATER DATE. If any student has 3 or more final exams on the same day (not in 24 hours, but on the same day), the LAST exam of the day can be rescheduled. **If this applies to you, it is your responsibility to let me know in writing by October 2nd.**

For the late homework policy, see Grading: Homework. If you feel you may qualify for an extended time allocation or other accommodation during exams, please submit a letter from Disability Services by September 16th. See Additional Information below.

Course Letter Grades

I cannot discuss student grades over email, as per University policy. Grades will be posted securely on the course D2L page. Any questions must be asked in-person, either after class or during office hours.

Pct.	Mark	Pct.	Mark	Pct.	Mark	Pct.	Mark
≥ 93	A	83 – 87	B	73 – 77	C	63 – 67	D
90 – 93	A-	80 – 83	B-	70 – 73	C-	60 – 63	D-
87 – 90	B+	77 – 80	C+	67 – 70	D+	< 60	F

Suggestions for Success

- 1) Read, think about, and ideally *try* every problem in your textbook. Almost every answer is provided, either in the back of the book or online (where marked with SM, for Student Manual). The homework assignments will not be enough practice.
- 2) I hope you will come to view my office hours as free tutoring and homework help. It's what I am there for. If study habits are not paying off, catch yourself early by trying something new and talking out any confusion.
- 3) Lastly, especially helpful points are written in blue in your textbook and the "Notes" in each section tend to explain common mistakes that will really boost your understanding.

Additional Information and University Policies

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/>.

Discrimination and Harassment

The University of Colorado at Boulder Discrimination and Harassment Policy and Procedures, Sexual Harassment Policy and Procedures, and Conflict of Interest in Cases of Amorous Relationships Policy each 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>.

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 status, sexual orientation, gender, gender identity, and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's 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 appropriate changes to my records. See policies at

<http://www.colorado.edu/policies/classbehavior.html> and at

http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

Students with Disabilities

If you qualify for accommodations because of a disability, please obtain and submit to the instructor a letter from Disability Services in a timely manner 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 at the beginning of the term so that we can make proper arrangements. See full details at

http://www.colorado.edu/policies/fac_relig.html.

ECON 1078-001**Tentative Course Schedule****Fall 2015**

Week	Starting	Topics	Homework Due on Weds.
1	8/24	Introduction, 1.1 Numbers, 1.2 Powers, 1.3 Rules of Algebra	
2	8/31	Holiday, 1.4 Fractions, 1.5 Fractional Powers	
3	9/7	1.6 Inequalities, 1.7 Intervals & Absolute Values, 2.1 Simple Equations	PS1
4	9/14	2.2-4 Equations (Quadratic and Linear)	PS2
5	9/21	2.5 Nonlinear Equations, Review, EXAM	PS3
<div> Friday Sept. 25 MT1: Midterm 1 (Ch. 1 & 2) </div>			
6	9/28	4.1-2 Functions, 4.3 Graphing	
7	10/5	4.4-5 Linear Functions, 4.6 Quadratic Functions, 4.7 Polynomials	PS4
8	10/12	4.7 More Polynomials, 4.8 Power Functions, 4.9 Exponential Functions	PS5
9	10/19	4.9 More Exponentials, 4.10 Logarithms, EXAM	PS6
<div> Friday Oct. 23 MT2: Midterm 2 (Ch. 4) </div>			
10	10/26	5.1 Shifting Graphs, 5.2 New Functions, 5.3 Inverse Functions	
11	11/2	5.4 Graphing Equations, 5.5 Distance, 10.1-4 Misc. Finance	PS7
12	11/9	15.1 Linear Systems of Equations, 15.2 Matrix Operations, EXAM	PS8
<div> Friday Nov. 13 MT3: Midterm 3 (Ch. 5, plus Various) </div>			
13	11/16	3.1 Summation, 3.2 Binomial Formula, 3.3 Double Sums	
14	11/23	<<< FALL BREAK 11/23 - 11/27 >>>	No Class
15	11/30	3.4-5 Basic Logic and Proofs, 3.6 Set Theory and Probability	PS9
16	12/7	3.7 Mathematical Induction, Review	PS10
<div> Thurs. Dec. 17 FINAL EXAM: 7:30p-10p in HLMS 211 (Final Exam is Cumulative) </div>			