

## Syllabus for Math Tools for Economists I (Econ 1078)

**Instructor:**

Mariya Burdina

**Class Meeting Times:**

TR 12:30 PM - 1:45 PM, HUMN 1B80

**Final Exam**

Monday, May 5<sup>th</sup> 7.30 – 10 am, HUMN 1B80

**Office Location:**

Econ 401 (3<sup>rd</sup> Floor of the Economics Building)

**Email:**

[burdina@colorado.edu](mailto:burdina@colorado.edu)

This is the best way to contact me, if you won't get a reply within 24 hours please assume that I didn't get your email and resend it.

**Class Website:**

<http://ucsu.colorado.edu/~burdina>

This is instructor's web page. Relevant material to the course will be posted here. Specifically, recommended homework problems.

<http://www.colorado.edu/economics/courses/ECON1078/1078home.html>

This is the web page developed by all Econ 1078 instructors. You can find homework and exam problems from previous semesters there.

**Office Hours:**

Monday 1pm- 2 pm

Tuesday 1.45 pm – 2.45 pm

Wednesday 12pm- 1 pm

Office hours are held for your benefit. You are highly encouraged to come to my office hours with prepared questions. As it is seen from my experience students who come to the office hours usually do better in course.

<sup>nd</sup> edition, by Knut Sydsater, and Peter

Hammond. .

**Calculator Note:**

As this is a course designed to teach mathematical techniques you will need a calculator that can do basic mathematical functions. These include exponentials, logarithms, radicals, and factorials (log, ln,  $e^x$ ,  $n^x$  and  $x!$ ). Any basic scientific calculator will perform these functions. While a graphing calculator may be useful in doing some of the homework problems, **you cannot use a graphing calculator on the exam.**

**Grading:**

The scores for the course will be based on the standard scale:

93-100%	A	73-76%	C
90-92%	A-	70-72%	C-
87-89%	B+	67-69%	D+
83-86%	B	63-66%	D
80-82%	B-	60-62%	D-
77-79%	C+	below 60%	F

Your grade will come from the following breakdown:

- 15% - Quizzes (Top 4 out of 5 scores)
- 5% - In-Class Assignments
- 25% - Midterm 1 (February 13<sup>th</sup>)
- 25% - Midterm 2 (April 2<sup>nd</sup>)
- 30% - Final (Monday, May 5<sup>th</sup> 7.30 – 10 am)

## Quizzes

There will be a total of five quizzes given during the semester. The lowest of your quiz scores will be dropped. *There will be no makeup quizzes given.*

## In-Class Assignments

Randomly throughout the semester I will assign problems for you to work on in class, which you will hand in to me before you leave. These problems are intended to provide practice and will be similar to problems you will see on quizzes and exams. As with the quizzes, the lowest of your in-class assignment scores will be automatically dropped. *There will be no makeup assignments given.*

## Exams

There will be a total of three exams in this course. The midterm exams will be held on Thursday February 14<sup>th</sup> and Thursday April 3<sup>rd</sup>. These exams will be held during the normal class time. If you miss a midterm exam, the weight of that exam will carry over onto the final. The final exam will be held on Monday, May 5<sup>th</sup> 7.30 – 10 am, HUMN 1B80. The final exam will be cumulative.

### Tentative Course Schedule:

Week of	Course Material	Topics	Quiz/Exam
1/14	1.1, 1.2, 1.3, 1.4	Algebra Basics	
1/21	1.5, 1.6	Fractions and Inequalities	Quiz 1 (Thursday 1/24)
1/28	1.7, 2.1, 2.2	Simple Equations	
2/4	2.3, 2.4, 2.5	Radicals, Equations in One Variable	Quiz 2 (Thursday 2/7)
2/11	Midterm 1	Midterm Review	Midterm 1 (Thursday 2/14)
2/18	3.1, 3.2, 3.4, 3.5	Summation, Logic	
2/25	3.6, 3.7, 4.1	Set Theory, Induction, Functions of One Variable	Quiz 3 (Thursday 2/28)
3/3	4.2, 11.1, 4.3, 4.4	Linear Function, Functions of Two Variables	
3/10	4.5, 4.6, 4.7	Quadratic and Polynomial Functions	Quiz 4 (Thursday 3/13)
3/17	4.8, 4.9, 4.10	Power, Exponential, Logarithmic Functions	
3/24	-	No Class (Spring Break)	
3/31	Midterm 2	Midterm Review	Midterm 2 (Thursday 4/3)
4/7	5.1, 5.2, 5.3	Shifting Graphs, Inverse Functions	
4/14	5.4, 5.5, 5.6	Graphs, Distance, General Function	
4/21	6.1, 6.2, 6.3	Slope of Curves, Derivative	Quiz 5 (Thursday 4/24)
4/28	Final Review	Review for Final Exam	
<b>Final Exam on Monday May 5<sup>th</sup> 7:30-10:00 a.m.</b>			

**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/>

**Expectations of Classroom Behavior:**

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which students express opinions.

See policies at

<http://www.colorado.edu/policies/classbehavior.html> and at [http://www.218.600.edu/studentaffairs/jalaffairs/code.html#student\\_code](http://www.218.600.edu/studentaffairs/jalaffairs/code.html#student_code)

**Absences:**

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. Please notify me as soon as possible 11 Tw -20