ECON 1078-001
Math Tools for Economists-I
Fall 2010

Instructor:	Youngho Kang
Class Meetings:	MWF 2:00-2:50, CLRE 207
E-mail:	youngho.kang@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 resent it.
Final Exam:	**Mon. Dec 13 1:30p.m-4:00p.m**
Office:	Econ 401 (4th Floor of the Economics Building)
Office Hours:	Tuesday 3:00-5:00 p.m and by appointment
	Office hours are held for your benefit. You are highly encouraged to come to my office hours with prepared questions.
Course Websites:	On CULearn
	Relevant materials to the course will be posted here.

Course Description and Objectives:
The goal of this class is to provide students with the mathematical tools needed for future courses in business and economics. We will cover rules of algebra, polynomials, functions, solving systems of equations, logic, probability, and differentiation.

Textbook:
Essential Mathematics for Economic Analysis, 3rd edition, by Knut Sydsaeter, and Peter Hammond is technically "required". Economics 1088 (Math Tools II) uses the same textbook. This is a very good reference book, which you may use in the future to refresh your knowledge of algebra and calculus. I will highly recommend that you have this book (or the 2nd edition) but I will not assign problems to be turned in. The practice problems that I will suggest come from the 3rd edition.

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. 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 exams or quizzes. You also cannot use a cell phone calculator on quizzes or exams.

Grading:
The grades 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)
15%-Homework
20%-Midterm 1
20%-Midterm 2
30%-Final

About makeup and attendance policy:
 There will be no makeup quizzes and midterm exams given. Regarding attendance, if your attendance rate throughout the semester is less 80%, your final grade will be F automatically.

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**.

Homework

Whenever the section is finished, I will assign problems for your practice. Since the textbook provides the solution of problems, you should show your work in your homework. These problems will be similar to problems you will see on quizzes and exams.

Exams

We will take a total of three exams in this course. The midterm exams will be held on September 22nd (Wed.) and November 3rd (Wed.) in class. 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 is scheduled for December 13th (Mon.) from 01:30 to 04:00 pm. in our normal classroom .. The final exam will be cumulative. **If you have three final exams scheduled for this day, and this is the last of your exams, you can take the final on another day**.

Tentative Course Schedule:

Week of (Month/date)	Course Material	Topics	Quiz/Exam (Month/data)
Aug. 23	1.1, 1.2, 1.3, 1.4	Algebra Basics	
Aug. 30	1.5,1.6	Fractions and Inequalities	Quiz 1 (Fri. 9/3)
Sept. 6	1.7, 2.1, 2.2	Simple Equations	
Sept. 13	2.3, 2.4, 2.5	Radicals, Equations in One Variable	Quiz 2 (Fri. 9/17)
Sept. 20	Midterm 1	Midterm Review	Mid1 (Wed. 9/22)
Sept. 27	3.1, 3.2, 3.4, 3.5	Summation Logic	
Oct. 4	3.6, 3.7, 4.1	Set Theory, Induction, Functions of One Variable	Quiz 3 (Fri. 10/8)
Oct. 11	4.2, 11.1, 4.3, 4.4	Linear Function, Functions of Two Variables	
Oct. 18	4.5, 4.6, 4.7	Quadratic and Polynomial Functions	Quiz 4 (Fri. 10/22)
Oct. 25	4.8, 4.9, 4.10	Power, Exponential, Logarithmic Functions	
Nov. 1	Midterm2	Midterm Review	Mid 2 (Wed. 11/3)
Nov. 8	5.1, 5.2, 5.3	Shifting Graphs, Inverse Functions	
Nov. 15	5.4, 5.5, 5.6	Graphs, Distance, General Function	
Nov. 22		No Class (Fall Break)	
Nov. 29	6.1, 6.2, 6.3	Slope of Curves, Derivative	Quiz 5 (Fri. 12/3)
Dec. 6	Final Review	Review for Final Exam	

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 may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and www.Colorado.EDU/disabilityservices

Religious Observances:
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. In this class, let me know, in advance, if you may have a conflict. Students can see full details at http://www.colorado.edu/policies/fac_relig.html

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 has 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 polices at
http://www.colorado.edu/policies/classbehavior.html
and at
http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

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/

Sexual Harassment:
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 combination 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 Sexual Harassment (OSH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the OSH and the campus resources available to assist individuals who believe they have been sexually harassed can be obtained at:
http://www.colorado.edu/sexualharassment/