ECON 1078 Math Tools for Economists 1
MWF 12:00 - 12:50 CLRE 207

Instructor: Jongheuk Kim, ECON 313, jongheuk.kim@colorado.edu

Office Hours: Monday 14:30-16:30, Wednesday 16:00-17:00, and by appointment.

Textbook: *Essential Mathematics for Economic Analysis*, Knut Sydsaeter and Peter Hammond, 3rd edition.

Web Site:
http://sites.google.com/site/jongheuk/teaching
Syllabus, Lecture Notes, and the Problem Sets will be uploaded on this site.

Prerequisites: We do not need any college level prerequisite course.

Course Objectives
The goal of this course is to provide students with the mathematical fundamentals and techniques required for the future courses in economics and business. We will explore algebra, linear and nonlinear equations, logic, set theory, functions, matrix and vector algebra. We will start each part with definitions, and finish with practices.

Grade Policy
Grade of a student in this course depends on the performance on exams and assignments. The grade will come from the following breakdown:

Six Problem Sets	20 %
Best Two of Three Midterms	40 %
Final (Cumulative)	40 %

Grading Scale
We must follow the following suggested grade distribution by department.

A	93 - 100%	C	73 - 76%
A-	90 - 92%	C-	70 - 72%
B+	87 - 89%	D+	67 - 69 %
B	83 - 86%	D	64 - 66%
B-	80 - 82%	D-	60 - 63%
C+	77 - 79%	F	$\leq 59\%$

Problem Sets
For each chapter, a list of problems from the textbook will be suggested. The problem sets will be great practice for the exams. Each problem set should be handed before starting the class of due date. **NO late submission** will be accepted. There will be **NO makeup problem sets** neither. If you miss one, your problem set grade will be lowered. I do not want you to be perfect in the practice problems. I will check if you show enough work to find the answer in each question. Writing down the right answer is relatively not important at this stage. You could be wrong, but please do your best. Then I will give you a full credit.

Midterm Exams
There will be a total of three midterm exams in this course. In each midterm exam, you will be evaluated your ability to understand important concepts of mathematical fundamentals, and to provide enough skills and techniques to find the answer of a various type of questions. The midterm exams will be taken in the **normal class time and location.** The midterms are **NOT cumulative**. The lowest score among those three midterms will be automatically dropped so that it is not calculated in your final grade. **NO makeup exam is allowed.** The midterm exams will be held in the following schedule:

Midterm 1	September 26th, Wednesday
Midterm 2	October 31st, Wednesday
Midterm 3	November 28th, Wednesday

Final Exam
Final exam will be held **from 19:30 to 22:00, December 18th, Tuesday**. Please be aware of the time and the date of the exam. Final exam is **cumulative.** The format of the exam will be the same with problem sets and midterms. **No makeup final exam will be allowed, and for any reason this exam score cannot be dropped.**

Class Behavior
Usage of cellphone or laptop is not allowed in this classroom. Please turn off the equipments before starting the class. Detection of the usage will harm your grade. If you need to use that kind of electronics, please contact me.

Tentative Course Schedule

Week of	Topics	Notes
Aug 27	Ch. 1.1, 1.2, 1.3	n/a
Sep 3	Ch. 1.4, 1.5, 1.6, 1.7	No Class on Monday
Sep 10	Ch. 2.1, 2.2, 2.3	1st Problem Set due on 14th
Sep 17	Ch. 2.4, 2.5	n/a
Sep 24	Review for Midterm 1	Midterm 1: 26th, 2nd Problem Set due on 28th
Oct 1	Ch. 3.1, 3.2, 3.3	n/a
Oct 8	Ch. 3.4, 3.6, 3.7	n/a
Oct 15	Ch. 4.1, 4.2, 4.3, 4.4, 4.5	3rd Problem Set due on 19th
Oct 22	Ch. 4.6, 4.7, 4.8, 4.9, 4.10	n/a
Oct 29	Review for Midterm 2	Midterm 2: 31st, 4th Problem Set due on Nov 2nd
Nov 5	Ch. 5.1, 5.2, 5.3	n/a
Nov 12	Ch. 5.4, 5.5, 5.6	n/a
Nov 19	No Class	Fall Break
Nov 26	Review for Midterm 3	Midterm 3: 28th
Dec 3	Ch. 15.1, 15.2, 15.3	5th Problem Set due on Dec 7th
Dec 10	Ch. 15.4, 15.5, 15.6	Last Day of Class: Dec 14th
Dec 17	Final Exam	Final: Dec 18th 19:30, Tuesday

Other Information

University policies regarding classroom behavior are available at
http://www.colorado.edu/policies/student-classroom-and-course-related-behavior and at
http://www.colorado.edu/studentaffairs/judicialaffairs/code.html/

The Honor Code Council can be contacted by email at honor@colorado.edu or by telephone at 303-725-2273. Additional information regarding the University Honor Code is available at http://www.colorado.edu/policies/student-honor-code-policy.

University policies regarding disabilities are available at
http://www.colorado.edu/disabilityservices/syllabus.html.Disability Services can be contacted by telephone at 303-492-8671, or in person at the Center for Community, Room N200.

University policies regarding religious practice ate available at http://www.colorado.edu/policies/observance-religious-holidays-and-absences-classes-andor-exams.

University policies regarding Sexual Harassment and Amorous Relationships are available at http://www.colorado.edu/odh/. The Office of Discrimination and Harassment can be reached by telephone at 303-492-2127. The Office of Judicial Affairs can be reached at 303-492-5550.

All campus policies should be accessible at http://colorado.edu/policies