

# ECON 1078-002 Math Tools for Economists 1

**MWF 12:00 -12:50 BESC 185**

**Instructor:** Jongheuk Kim

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**Office Hours:** ECON 313, Tuesday 2:00-3:00, Wednesday 2:00-3:00, and by appointment

**Web Site:** <http://sites.google.com/site/jongheuk/teaching>

**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, and matrix. 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:

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

## Grading Scale

We must follow the following suggested scale.

A	93-100%	C	72-75%
A-	90-92%	C-	70-72%
B+	86-89%	D+	66-69%
B	82-85%	D	62-65%
B-	80-82%	D-	60-62%
C+	76-79%	F	-59%

## Problem Sets

For each chapter, a list of problems from the textbook will be suggested. The problem sets will be great practice for 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 set 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	February 13 <sup>th</sup> (Wed.)
Midterm 2	March 20 <sup>th</sup> (Wed.)
Midterm 3	April 17 <sup>th</sup> (Wed.)

## Final Exam

Final exam will be held **from 19:30 to 22:00, May 4<sup>th</sup>, Saturday**. 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. If you do not take this exam, your score will be automatically F.

## Class Behavior

Usage of phone 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
Jan. 14th	Ch. 1.1, 1.2, 1.3	
Jan. 21st	Ch. 1.4, 1.5, 1.6, 1.7	No Class: Jan. 21 <sup>st</sup> , Problem Set 1
Jan. 28th	Ch. 2.1, 2.2, 2.3	
Feb. 4th	Ch. 2.4, 2.5	Problem Set 2
Feb. 11th	Midterm 1	Monday: Review Session, Wed: Exam
Feb. 18th	Ch. 3.1, 3.2, 3.3	
Feb. 25th	Ch. 3.4, 3.6, 3.7	Problem Set 3
Mar. 4th	Ch. 4.1, 4.2, 4.3, 4.4, 4.5	
Mar. 11th	Ch. 4.5, 4.7, 4.8, 4.9, 4.10	Problem Set 4
Mar. 18th	Midterm 2	Monday: Review Session, Wed: Exam
Mar. 25th	No Class	Spring Break
Apr. 1st	Ch. 5.1, 5.2, 5.3	
Apr. 8th	Ch. 5.4, 5.5, 5.6	Problem Set 5
Apr. 15th	Midterm 3	Monday: Review Session, Wed: Exam
Apr. 22nd	Ch. 15.1, 15.2, 15.3	
Apr. 29th	Ch. 15.4, 15.5, 15.6	Last Day of Class: May 3rd
May. 4th	Final Exam	19:30 to 22:00

### **Other Information**

University policies regarding classroom behavior are available at

<http://www.colorado.edu/policies/student-classroom-and-course-related-behavior> and

<http://www.colorado.edu/studentaffairs/judicialaffairs/code.html/>

The Honor Code Council can be contacted by email at [honor@colorado.edu](mailto: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 are 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://www.colorado.edu/policies>