ECON 3620-001:

Mathematics for Economists

Spring 2020

Chomchak Amonvatana

MoWe / 01:25PM-02:45PM, GC 2660

chomchak.amonvatana@utah.edu

Office: GARDNER COMMONS, RM 4100 (My desk is located at section 1)

Office hours: By appointment (at my office)

Course Description

This course will introduce students on how economists use mathematics as a main tool in their analyses in order to understand, and sometimes apply, economic theory. It is intended to cover several important mathematical concepts that will be studied in the context of their applications to economics. Also, it is aimed to develop students' abilities to use mathematical techniques to solve problems in economics. At the end of this semester, students would be expected to understand basic mathematical techniques used in economics such as linear algebra, derivative, differential, optimization with and without constraints, and matrix algebra. However, students should be aware that the real use of mathematics in economics is far more advanced than what they will see in the class; therefore, the course is merely designed to be the first step for those who are interested in mathematical economics.

Course Outcomes

1. Students will be able to recognize components of functions.

2. Students will be able to integrate Math skills in solving Economic problems.

3. Students will be able to build confidence in using Math skills to help complete advanced economic classes.

4. Students will be able to recognize how Math and previously learned theories integrate in academic journals or contemporary researches.

5. Students will be able to think about and develop strategies for learning Math, e.g., to solve problems, and develop good study habits and skills.

Prerequisites

College Algebra, ECON 2010 and ECON 2020

Required Textbooks

Edward T. Dowling. (2011). *Schaum's Outline of Introduction to Mathematical Economics.*3rd Edition. Publisher: Mcgraw Hill.

The grading scheme is

In-class assignments	10%
Four Homework assignments	20%
Two Midterms	40%
Final	30%

Course Policies

1. Assignment

- For in-class and homework assignments, you are allowed to work in a group (limit to 3 members)

- You can either submit homework assignments as a hard copy or submit scanned homework assignments on Canvas.

- Late assignments will not be accepted.

2. Attendance: "The University expects regular attendance at all class meetings. Instructors must communicate any particular attendance requirements of the course to students in writing on or before the first class meeting. Students are responsible for acquainting themselves with and satisfying the entire range of academic objectives and requirements as defined by the instructor." PPM, Policy 6-100III-O)

Tentative Course Schedule

Week	Date	Themes	Date	Themes	Announcement
1	1/6/2020	Chap 1	1/8/2020	Chap 2	
2	1/13/2020	Chap 2	1/15/2020	Chap 3	
3	**1/20/2020**	**Martin Luther King Jr. Day**	1/22/2020	Chap 3	
4	1/27/2020	Group Discussion	1/29/2020	Chap 10	HW 1 is due on Wed, January 29
5	2/3/2020	Chap 10&11	2/5/2020	Chap 11	HW 2 is due on Fri, February 7
6	2/10/2020	Review HW 1&2	2/12/2020	Review Study guide	
7	**2/17/2020**	**Presidents Day**	**2/19/2020**	**Midterm 1**	
8	2/24/2020	Chap 4	2/26/2020	Chap 4	
9	3/2/2020	Chap 5	3/4/2020	Chap 5	
10	**3/9/2020**	**Spring break**	**3/11/2020**	**Spring break**	
11	3/16/2020	Chap 6	3/18/2020	Chap 6	
12	3/23/2020	Group Discussion	3/25/2020	Review HW 3& Study guide	HW 3 is due on Tue, March 24
13	3/30/2020	**Midterm 2**	4/1/2020	Chap 12	
14	4/6/2020	Chap 12	4/8/2020	Chap 13	
15	4/13/2020	Chap 13	4/15/2020	Review HW 4	HW 4 is due on Tue, April 14
16	4/20/2020	Review Study guide	4/22/2020	No class	
17	4/27/2020	No class	**4/29/2020**	**Final**	

Note:

- For more details in each chapter, please see *Schaum's Outline of Introduction to Mathematical Economics.*

- Midterm will be held in the regularly scheduled classroom (during class time).

- Final will be held in the regularly scheduled classroom on Wednesday, April 29, 2020 from 1:00 – 3:00 pm.

Important Dates

Last day to add without a permission code: Friday, January 10

Last day to add or drop: Friday, January 17

Last day to withdraw from classes: Friday, March 6

Grades

Letter grades will be earned using roughly the following scale:

93-100 = A 90-92.99 = A-

87-89.99= B+ 83-86.99= B 80-82.99= B-

77-79.99= C+ 73-76.99= C 70-72.99= C-

67-69.99= D+ 63-66.99= D 60-62.99= D-

Below 60= E

University Policies

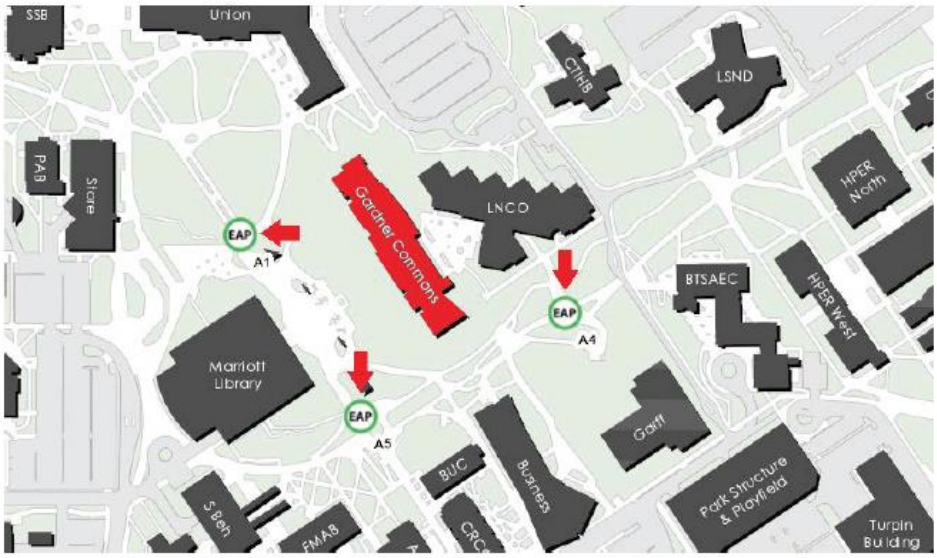
1. The Americans with Disabilities Act. The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

2. University Safety Statement. The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

3. Addressing Sexual Misconduct. Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Note: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements.

CSBS EMERGENCY ACTION PLAN



BUILDING EVACUATION

EAP (Emergency Assembly Point) – When you receive a notification to evacuate the building either by campus text alert system or by building fire alarm, please follow your instructor in an orderly fashion to the EAP marked on the map below. Once everyone is at the EAP, you will receive further instructions from Emergency Management personnel. You can also look up the EAP for any building you may be in on campus at http://emergencymanagement.utah.edu/eap.

CAMPUS RESOURCES

U Heads Up App: There's an app for that. Download the app on your smartphone at alert.utah.edu/headsup to access the following resources:

- **Emergency Response Guide:** Provides instructions on how to handle any type of emergency, such as earthquake, utility failure, fire, active shooter, etc. Flip charts with this information are also available around campus.
- **See Something, Say Something:** Report unsafe or hazardous conditions on campus. If you see a life threatening or emergency situation, please call 911!

Safety Escorts: For students who are on campus at night or past business hours and would like an escort to your car, please call 801-585-2677. You can call 24/7 and a security officer will be sent to walk with you or give you a ride to your desired on-campus location.

College of Social and Behavioral Science
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