UNIVERSITY OF WATERLOO
Department of Economics
Economics 211– Introduction to Mathematical Economics
Winter 2011 (Section 001)
Classroom: AL 211, Times: 4-5:20 MW

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Instructor's Office Hours: 10-11:30 W

TA: TBA
Office: TBA
E-mail: TBA
TA's Office Hour: TBA

There might be no class on January 5, 2011. Please check UW-Ace for the announcement.

Course Webpage:
www.uwace.uwaterloo.ca
Check announcements in UW-Ace regularly.

Course Description
The objective of this course is familiarizing students with application of mathematics to problems in economic theory. Topics include an introduction to matrix algebra, differentiation, partial derivatives, optimization techniques including constrained optimization -- all developed within the context of economic theory. There is a large amount of material to cover in this course. We will attempt our best to cover as much as our limited time will permit.

Textbook (Optional)
● Simon, Carl P. and Lawrence Blume. 1994. Mathematics for Economists. New York: W.W. Norton.

  ○ It is **not** necessary to purchase the text books.
  ○ I recommend students to read the relevant chapters of the textbook for each lecture, before attending the lecture (this exercise is not mandatory). A tentative list of the relevant chapters is in below. However, this table might be updated as we continue through the term depending on the need of the students.
  ○ This textbook might be a bit complicated for some of you, but we will do our best to make the material in the textbook easy to understand.
  ○ Some copies of the text book are left in the Dana Porter library on reserve.

Assessment
Students will be assessed based on the following activities:
- Assignments (3)   15%
- Midterm 1   20%
- Midterm 2   20%
- Final examination   45%

-Two midterm tests to be held on **Wednesday, February 2** and **Wednesday, March 2** during class time. Subject coverage for both midterms will be specified in class.
-There will not be any midterm question and solution provided after the exam.
-Final exam to be scheduled by the registrar. **The final exam will cover all course material for the term.**
-The Registrar's Office will send a final grade to each student. Neither the instructor nor the Department of Economics will respond to student enquiries regarding final grades.
-This course has three assignments which are due on **Monday, Jan 31**, **Wednesday, March 2**, and **Monday. April 4**.

Policy on Missed Tests and Assignments:
- No make-up tests will be provided. Students who <u>do not</u> have a relevant medical certificate will receive a mark of zero on any missed test and their final grade will be computed in accordance with the specified assessment above. For students who <u>do</u> have a relevant medical certificate, the formula grade for tests will be prorated.
- Medical certificates should be provided in a timely manner (e.g. not after classes are over). If the documentation provided is a doctor's note, it should say that the doctor felt you were unable to write the examination on the date in question. Simply saying you were in a doctor's office is not sufficient. Note, only doctor's notes from recognized doctors will be accepted. Also note, documentation that you signed yourself, or a relative signed, is not acceptable.
- A missed assignment or late submission of the assignment grants mark of zero for that assignment. No doctor's note will be accepted in this case.

Policy on remarking of tests:
If you feel that your test was not marked properly, you must advise the instructor **within 6 calendar days** of the date on which the test is handed back to the class. Any student that submits a test for remarking should understand that the entire test will be remarked and that their grade may improve, remain unchanged or perhaps even decrease as a result of the remarking process.

Topics and Chapters Covered in Simon and Blume:
Topic 1: Review of Basics (Appendix A1).
Topic 2: Single variable calculus and other basic math concepts (Chs. 2, 3, 4, 5, 7).
Topic 3: Matrix Algebra (Chs. 8, 9)
Topic 4: Multivariable Calculus (Chs. 14, 16).
Topic 5: Optimization (Chs. 17, 18).

Super Important *Lecture Notes and Class Attendance:*

- I will post lecture slides before each class on UW-ACE (http://uwace.uwaterloo.ca).
- Some parts of slides are missing, and students need to attend lectures to be able to fill the missing parts of lecture notes.
- Instructor **does not** provide any student with complete notes under any circumstance.
- Aside from missing parts, slides do not contain all the materials covered during lectures.
- **This means just studying the notes and not attending lectures are not enough.**
- **Without class attendance, studying and understanding course notes are very hard.**
- **This implies students have to attend the lectures to get the whole material.**
- Each student is responsible for all material presented in the lecture periods, whether the student choose to attend lectures or not. Thus, if you miss the lecture, it is your sole responsibility to get access to the whole material.
- All the materials covered in lectures either on the posted slides or not are in exams.
- Students may print the slides and bring them to the class.

Note on communication with the instructor:

- Please only e-mail the instructor for administrative purposes and please only email to this address: **mahdiyeh.entezarkheir@gmail.com**.
- When emailing the instructor, the **subject of the e-mail must contain ECON 211**. Otherwise, the email will not be considered.
- I will not answer any questions regarding course materials via e-mail, out of office hours, or out of class time. However, I welcome as many questions as possible during class time and my office hours **only**.
- I do not answer any question via phone.

Note on Recording Lectures, Cell phones, and laptops:

- Instructor prohibits recording her lectures.
- Cell phones should be turned off during lectures.
- In the case of distraction to other students as a result of using laptops, instructor will ask the laptop owner to leave the class.

Note for students with disabilities:

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Academic Integrity:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility.

Grievance:

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4,
http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm

Discipline:

A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline,
http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm

Appeals:

A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals,
http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm