

ECON*3710 Advanced Microeconomics F15

0.50 credit weight

Asha Sadanand Office Hours: M 3:00 – 4:30, W 10:00 am – 11:30 McK 717, x58947

Course Outline

This course provides an in-depth mathematical treatment of consumer and producer theory, theory of the firm, game theory, general equilibrium and welfare economics. The course material offers a basic background in microeconomics that is extremely useful in 4th year economics courses. It also provides you with the ability to understand the issues involved in allocating resources in society, and allows you to appreciate the complexity of those issues.

Required Textbook

Microeconomic Theory: Basic Principles and Extensions, 11th edition, W. Nicholson and C. Snyder, Dryden Press, 2012.

PREREQUSITES

ECON*2310 and ECON*2770: These are important prerequisites, and the materials from these courses should be carefully reviewed.

COURSE REQUIREMENTS

There will be two midterm exams, three assignments, and a final exam. The dates and relative weights of these requirements are as follows:

Assignments (10% each)	Assignment 1 — Oct.6 th Assignment 2 — Nov 3 rd	as in course learning outcomes below
Midterm Exams (20% each)	$\begin{array}{c} \text{Midterm 1} &\text{Oct 15}^{\text{th}} \\ \text{Midterm 2} &\text{Nov 19}^{\text{th}} \\ \hline \end{array}$	as in course learning outcomes below
Total Term Work (60%) Final Exam (40%)	Dec 11 th 11:30 am — 1:30 pm	as in course learning outcomes below

Students are required to visit the course website regularly: Announcements will be posted there.

Students are expected to be aware of all announcements made on this website.

The main method of teaching will be in-class lectures. It is imperative you have a complete set of notes. They will not be available on Courselink.

Class attendance is very important

Communication and Office Hours

I am available for students during my office hours. If my office hours are inconvenient for you, you can make an appointment. Appointments have to be made ahead of time.

I will respond to emails within a reasonable time.

I do not accept or answer emails that do not come from a *uoguelph.ca* account and do not have "Econ 3710" in the subject line. Since this is NOT a distance education course, I expect you to make good use of my office hours and will not respond to long e-mails that require a detailed response especially on technical and mathematical arguments.

Assignments, Midterms and Final

Assignments are due in class, at the beginning of class. If you hand your assignment in, anywhere else, at any other time, I may not find it, and it will be considered late. Assignments over 24 hours late, will **NOT** be accepted. Late assignments, less than 24 hrs late, have a 10% penalty. Assignments submitted via e-mail will **NOT** be accepted. The final exam will be cumulative.

Missed Exams and Time Conflicts

A student who has a time conflict with the final exam should not enroll in the course.

If the final exam is missed, the course is not completed.

You should not make any travel plans or appointments that conflict with the final exam or a midterm exam.

If you miss a midterm exam, you get 0% on the exam, unless a verifiable and legitimate reason is presented.

If you have a verifiable and legitimate reason, the weight of the midterm will be shifted to the final exam or the second midterm (where applicable).

It is the student's responsibility to inform the instructor of an existing conflict with a midterm exam.

Other Important Notes

1. Final exam: If your final exam grade is better than your term work, I will change the weighting to: Term work 30%, Final 70%. However, you should not become complacent about the course during the semester. Midterms and assignments cover far less material than the final; students generally do better in the term work than the final exam.

2. Mathematics Review: Although all the material from ECON*2770 is important for this course, the most relevant sections, and ones that I would highly recommend that you review, are discussed in Ch. 5, 6, 11, 12, 13, and 14 of *Mathematics for Economics* by Hoy, Livernois, McKenna, Rees and Stengos (Addison--Wesley, 1996). The review questions are useful in testing yourself on this material. **TRY THE REVIEW QUESTIONS!** Review any material with which you are having difficulty.

3. Assignments: The assignments will be a mixture of online problems and regular problems to be turned in. Assignments will be made available one week prior to their due date. Problems to be turned in are to be submitted at the beginning of class. There will be a 10% penalty for problems submitted one day late. Problems submitted more than one day late will not be accepted. A randomly selected part of the problems submitted will be graded; all of the online problems are automatically graded online.

4. Assignments are VERY important! Professor Hoy has done some computations correlating midterm performance with completion and achievement on his assignments.

-	Average	Fail Rate
Overall	62.5%	18%
did all assignments	70%	7%
did no assignments	55%	30%

5. Extra problems: Besides reading the text and studying your lecture notes, it is also **extremely important** for you to try extra problems. Extra problems will be assigned and some of them will be covered in the labs. It is beneficial for you to try to do even more problems.

6. Labs: Lab attendance is critical. It permits you to ask questions, see where you went wrong and see how we work through problems. Midterms will be taken up in the labs. The first lab will be on Friday September 11, 2015 in Macs 311a. If you have a laptop computer, please bring it to the first lab. The labs for the remainder of the semester will be in the regularly scheduled classroom.

7. Final Exam: The final exam will be at a higher level of difficulty than the midterms because it covers more material. Also, both the midterms and the final may contain problems that you have never seen before. These problems can be solved with a good understanding of the concepts learned, and the problems solved in class and in the labs.

3

UNIVERSITY POLICIES

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for Academic Consideration:

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: <u>https://www.uoguelph.ca/registrar/calendars/undergraduate/2015-2016/</u>

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: http://www.csd.uoguelph.ca/csd/

Course Evaluation Information

Please refer to: https://www.uoguelph.ca/economics/course-evaluation

Drop date

The last date to drop one-semester courses, without academic penalty, is November 6, 2015.

For regulations and procedures for Dropping Courses, see the Academic Calendar: https://www.uoguelph.ca/registrar/calendars/undergraduate/2015-2016/

COURSE LEARNING OUTCOMES

Learning Objectives

Skills

a) Numerical Problem Solving:

Students will *learn* basic techniques of optimization and comparative statics used in microeconomics: implicit function theorem, Envelope Theorem, etc. They will also learn to how to find the Nash equilibria of games. This will be tested on assignments, the midterm, and final.

b) Analytical Problem Solving:

The course will use algebraic and graphical *analysis to demonstrate and interpret* various economic models, including the demand and supply model, game-theoretic models, etc. This will be tested on assignments, the midterm, and final.

c) Problem Solving in a Real World Context:

Students will *apply* the microeconomic principles learned in this course to critically *examine* every day economic events such as the role of increasing returns in socio-economic phenomena, strategic behavior and its effect on social outcomes, pricing policies of firms. This will be tested on assignments, the midterm, and final.

Knowledge

a) Mathematical Methodology:

Students will *apply* mathematical concepts and tools, such as algebra, differential and integral calculus.

b) Understanding of Specific Markets:

Specific markets will be *analyzed* in this course, including goods, housing labour, and credit markets.

OUTLINE AND READINGS

Additional required readings may be distributed from time to time.

1. Introduction and Review

Nicholson, Ch. 1, 2 (You should review this material carefully to ensure that you understand it.)

2. Consumer Behaviour and Demand Theory

Nicholson, Ch. 3, 4, 5, 6

3. Firm Behaviour and the Theory of Supply

Nicholson, Ch. 9, 10, 11

4. Market Equilibrium under Perfect Competition

Nicholson, Ch.12

5. General Equilibrium and Welfare Economics

Nicholson, Ch.13

6. Choice under Uncertainty, Game Theory and Information Economics

Nicholson, Ch. 7, 8

7. Market Imperfections

Nicholson, Ch 18, 19