



ECON*3710
Advanced
Microeconomics
Winter 2025
0.5 Credits

General Course Information

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| Instructor: | Asha Sadanand |
| <i>Email</i> | asadanan@uoguelph.ca |
| <i>Office Location</i> | MCKN 717 |
| <i>Office Hours</i> | MWF 10:30 – 11:30 online or in person; may need to reschedule |
| <i>Department/School</i> | Economics and Finance |
| Class Schedule: | T Th 1:00 – 2:20 lectures F 11:30 – 12:20 Lab |
| Pre-requisites: | ECON*2310, ECON*2770 |
| Restrictions: | |
| TA: | TBA |
| <i>Email</i> | |
| <i>Office location</i> | |
| <i>Office Hours</i> | |

Course Description

This course provides an in--depth mathematical treatment of consumer and producer theory, and concludes with general equilibrium and welfare economics. The course material gives you 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.

Please note that the tools and techniques learned in the prerequisites ECON*2310 and ECON*2770 are absolutely necessary. Please use the course materials in those courses to assess your level of understanding and get help if you feel that it is necessary. I will expect that you know these tools and techniques.

VERY IMPORTANT:

If you email me you must

- Use your U of G email
- Put the **course number in the subject line**

If any of these requirements are not followed, your email **will not be read**, and I am very strict about these rules. Emails get buried in my inbox, and if you don't have these search parameters in your subject line, I will not be able to find your email in a timely fashion.

Moreover, emails are only for administrative questions, or for arranging meetings outside of office hours, or explanation of extenuating circumstances relating to completion of course requirements. **All questions regarding course material are to be covered in office hours and not by email.** I do not provide detailed mathematical explanations by email; it is very clumsy and time consuming to format any math in an email.

Course Learning Outcomes

Upon successfully completing this course, you will have the following skills:

- 1) **Written communication:** Tests and assignments will feature essay style questions in which careful reasoning is to be used to explain various phenomena in plain English. Note that microeconomic theory is built upon a rigorous mathematical foundation. Translating the underlying math into plain English is an unforgiving process. Thus, the precision with which you write will be evaluated.
- 2) **Analytical Problem Solving:** A major objective of the course is to equip the student to solve problems analytically, using rigorous arguments.
- 3) **Problem solving in a real world context:** In keeping with the above objectives, students will be expected to demonstrate the ability to use microeconomic models to analyse real world problems.

Knowledge and Understanding:

- 1) **Mathematical Methodology:** Optimization, comparative statics.
- 2) **Statistical and Econometric Methodology:** Some basic elements of probability theory, including properties of cumulative distribution functions.
- 3) **Microeconomic Modeling:** A little introduction to game theory, adverse selection.

Discipline/Professional and Transferable Skills:

The above knowledge is very transferrable to various disciplines and professions

- 1) **Mathematical Methodology:** Optimization, comparative statics.
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Attitudes and Values:

- 1) **Scientific Method:** understanding the difference between loose intuitive arguments vs airtight mathematical reasoning.
- 2) **Positive and Normative Objectives in Economics:** the first is to accurately describe and predict what is, and the latter is make recommendations based on a minimum of value judgements.

Summary of Course Content and Materials

The Nicholson testbook is not required, only recommended. I give the Chapters from Nicholson only for those of you who plan to have access to the book.

- 1) **Introduction and Review** (You should review the prerequisites material carefully to ensure that you understand all of it.) Nicholson Ch 1, 2.
- 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) **Choice under Uncertainty, Game Theory and Information Economics** Nicholson Ch 7, 8.
- 6) **Market Imperfections** Nicholson Ch 14, 15.
- 7) **General Equilibrium, Partial Equilibrium and Welfare Economics** Nicholson Ch 13.

For details about topics and dates, assignments, and exam dates, please refer to the lectures and class website on courselink (under 'Content'). Please Note: The instructor reserves the right to modify the covered topics and assignments throughout the course.

Course Assessment

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| Assessment 1: | 5% | Homework 1 Jan 16, due Jan 23 |
| Assessment 2: | 10% | Quiz 1 in class, Feb 6 |
| Assessment 3: | 5% | Homework 2 Feb 13, due Feb 27 |

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| Assessment 4: | 25% | Midterm in class, March 3 |
| Assessment 5: | 10% | Quiz 2 in class, March 25 |
| Assessment 6: | 5% | Homework 3 March 27, due April 3 |
| Assessment 7: | 40% | Final Exam |
| Total | 100% | |

Teaching and Learning Practices

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| Lectures | In class lectures; |
| and Labs | in person labs. |

Course Resources

Recommended Text (not required): \$0 -- \$86.75

Microeconomics Theory: Basic Principles and Extensions (latest edition), W Nicholson, South-Western, Cengage Learning, 2012. (As it is not a required text, and we will not follow it exactly, if you choose to have a copy to follow and cannot get this edition, any edition is fine.)

free ebook: \$0

https://edisciplinas.usp.br/pluginfile.php/4471658/mod_folder/intro/NI_11th%20Edition%20%281%29.pdf

Course Policies

IMPORTANT INFORMATION

1. Final exam: Please check your schedules to ensure that you **do not have a timetable conflict** with the final exam. If your final exam grade is better than your term work I will change the weighting to: Term work 40%, Final 60%. However, you should not become complacent about the course during the semester. Quizzes, 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: Due at the **beginning of class**. There will be a 10% penalty for being one day late, and assignments later than that will not be accepted. A randomly selected part of each problem set will be marked.

Unless you have discussed an extension well ahead of the due date with the instructor, late penalties will apply. Extensions will only be granted on the basis of valid medical or personal reasons and need to be requested via email to the instructor as soon as possible. Late assignments will not be accepted after one day, and certainly not once graded assignments have been returned or solutions posted officially to the class at large, unless circumstances permit, and alternative arrangements have been made.

Students who find themselves unable to meet course requirements by the deadlines or the criteria expected because of medical or personal reasons, should review the regulations on academic consideration in the Academic Calendar and discuss their situation with the instructor, program counselor or other academic counselor as appropriate.

A grade of zero will be assigned if you fail to submit an assignment, unless you are ill or have other compassionate reasons. Please read your Undergraduate Calendar for the regulations regarding illness and compassionate grounds. Please note, vacation travel, moving house, or outside work commitments will not be accepted as valid reasons for missing deadlines.

If you have religious observances which conflict with the course schedule or if you are registered with Student Accessibility Services, please contact the course instructor in order to make arrangements for your assessment if appropriate.

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

| | Average | Fail rate |
|---------------------------|---------|-----------|
| Overall | 62.5% | 18% |
| Did 2 or more assignments | 70% | 7% |
| Did no assignments | 55% | 30% |

5. Extra problems: Besides reading the text (if you choose to have one) 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, if possible.

6. Labs: Attendance at labs is critical. It will allow you to ask questions, see where you went wrong and see how we work through problems. **Quizzes and midterm will be taken up in the labs.**

7. Exams: The exams will be at a higher level of difficulty than the quizzes because they cover more material. Also, both the quizzes and the exams **may contain problems that you have never seen before**, but that can be solved with a good understanding of the concepts learned, and the problems solved in class, and in the labs.

University Policies

Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules.

All University-wide decisions will be posted on the COVID-19 website

(<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g.. final exam or major assignment).

For information on current safety protocols, follow these links:

<https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/>

<https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

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:

<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-consideration-appeals-petitions/>

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 Graduate Calendar:

<https://calendar.uoguelph.ca/graduate-calendar/general-regulations/academic-misconduct/>

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 Student Accessibility Services as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or see the website: <https://wellness.uoguelph.ca/accessibility/>

Course Evaluation Information

Please refer to the [Course and Instructor Evaluation Website](#)

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Drop date

The last date to drop one-semester courses, without academic penalty, is Friday April 4, 2025. For regulations and procedures for Dropping Courses, see the Academic Calendar:

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Equity, Diversity, and Inclusion Statement

At the Lang School of Business and Economics, we are committed to developing leaders with a social conscience, an environmental sensibility, and a commitment to their communities. A core tenet within this vision is that diversity is a strength with which we can experience greater connection and understanding.

As such, we affirm the importance and shared responsibility of our students, faculty, and staff creating and promoting equity and inclusion within our learning spaces. Creating these kinds of learning cultures is a process, not a destination; it requires ongoing willingness on the part of each person to thoughtfully and critically listen, unlearn, learn, and engage as they are exposed to a multitude of perspectives and lived experiences. We encourage dialogues between students and instructors to address and advance opportunities for fostering greater diversity and inclusion in the learning environment. Openness to conversations with each other enables us to reflect and grow as we learn from one another respectfully and holistically.

As a department that is training the professionals of the future, we expect our learning spaces to abide by all institutional policies and guidelines, in particular those outlined by the Office of Diversity and Human Rights and the [University of Guelph Human Rights Policy](#). Discrimination and harassment, as defined by our policies, will not be tolerated. Individuals should inform the appropriate party as per University policies if they experience any such behaviours.