



University of Manitoba
Faculty of Arts
Department of Economics

COURSE DETAILS

Course Title & Number:	ECON 4010 - Advanced Microeconomic Theory
Number of Credit Hours:	3.0
Class Times & Days of Week:	1:30 pm - 2:20 pm, MWF
Location for classes:	TIER 504
Pre-Requisites:	A grade of "B" or better in ECON 3010 or ECON 2461 or the former ECON 2460 (018.246) or the former ECON 3700 (018.370)

Instructor Contact Information

Instructor Name:	Pinaki Bose
Office Location:	509 Fletcher Argue
Office Hours:	Mondays and Wednesdays, 2:30 – 3:30, 509 FA, or by appointment.
Office Phone No.	204-474-9364
Email:	<i>Pinaki.Bose@umanitoba.ca</i> I usually respond to e-mails within 48 working hours.
Contact:	You are welcome to see me in person during my office hours. Outside class and office hours, the best way is to contact me is by e-mail or by calling my office phone. If necessary, you may also contact the Economics Department office, in person, or by phone (204-474-9207), to leave a message for me.

Course Description

An intensive study of advanced microeconomic analysis using optimization techniques involving multivariate calculus. Topics will include consumer theory, producer theory, general equilibrium, intertemporal choice, risk and insurance markets, and asymmetric information (moral hazard and adverse selection).

It is very important that the student be proficient in the use of multivariate calculus and the basic optimizing techniques in economics. This is an honours-level rigorous course in Microeconomic Theory with a predominantly analytical and mathematical content.

General Course Information

In the outline below, "Text" is the **required textbook**: Walter Nicholson and Christopher Snyder: MICROECONOMIC THEORY, BASIC PRINCIPLES AND EXTENSIONS, 11th edition, South-Western Cengage Learning.

COURSE OUTLINE:

1. Review of Mathematical Applications and Techniques

Optimization (unconstrained and constrained) of multivariate functions, Chain Rule, Envelope Theorem, comparative statics, application of Matrices and Determinants to first and second order conditions.

Text: ch 2; my handout on comparative statics.

2. Consumer Behaviour and Choice

Brief review of utility functions and indifference curves, utility maximization, indirect utility, expenditure function.

Text: ch 3, 4

3. Demand, Income and Substitution Effects, and Consumer Surplus

Income and substitution effects, demand functions, comparative statics, compensated demand, consumer surplus, substitutes and complements.

Text: ch 5, 6

4. Production, Cost, Profit maximization, Competitive markets and supply functions

Isoquants and cost minimization, cost functions, elasticity of substitution, profit maximization, short and long run competitive equilibrium, comparative statics

Text: ch 9, 10, 11 and 12

5. General Equilibrium

Text: ch 13 and handout – we will focus on solving general equilibrium models

Mid-Term I: October 14, 2016, in-class, 40% of grade

6. Monopoly

Brief review of simple monopoly; price discrimination covered only if time permits.

Text: ch 14

7. Game Theory

Static and Sequential Games, Mixed Strategy, Oligopoly

Text: ch 8 and 15; my handout on game theory

Mid-term II: November 11, 2016, in-class, 40% of grade

8. Risk and Insurance

Text: ch 7

9. Asymmetric Information (if time permits)

Text: ch 18

Test/quiz: December 9, 2016, 20% of grade

WHAT TO EXPECT

Tests are non-cumulative – each covers only the material taught after the previous test. I will not test you on what was not covered by (or related to) either the class lectures, or the problem sets and class exercises.

My lectures are very important. I do not post lecture notes. If you have missed a class, you are responsible for acquiring comprehensive and accurate class notes from someone. It is very important that you study (and understand) not only my lectures, but also the coverage of the relevant, and similar, material in the text and my handouts. The other important items are my problem sets, and the exercises I often introduce and cover in class. You are not required to submit the answers to the problem sets; these are not assignments that count towards your grade. But it is very important that you do your best to find solutions to the exercises and problems that I prescribe as you will face similar (but not exactly the same) problems in the tests. Only by attempting to solve these problems *on your own* will you develop the understanding and expertise in solving the exercises that you will encounter in my tests. The same applies to exercises that I introduce in class.

Thus, a clear understanding of the material taught, and the capability to apply this understanding in solving microeconomic problems, is the learning that this course intends to impart. The slides provide only broad guidance, and are not supposed to be comprehensive.

I do not distribute my slides ahead of time, and discourage excessive reliance on them as a learning tool.

I reserve my right of selective coverage of the material in each topic. I also reserve the right to reschedule, or carry over, all or part of a topic to the next test for the sake of better time management of its coverage. **Any such changes in scheduling of topics /readings will be announced in class.**

There is no final examination for this course.

Course Goals

This course aims to give the student a mature understanding of the material, and a “near-graduate” capability in using microeconomic theory and its mathematical tools to analyze economic phenomena. Consequently, the course will emphasize the development of the problem solving and “modeling” abilities of students using the concepts taught in class. The problem sets and class exercises are especially important in this respect.

This course is also useful for those intending to pursue further studies and research in economics.

Using Copyrighted Material

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the *Copyright Act* applies or written permission has been confirmed. For more information, see the University's Copyright Office website at

<http://umanitoba.ca/copyright/> or contact um_copyright@umanitoba.ca.

Recording Class Lectures

The instructor, Dr. Pinaki Bose and the University of Manitoba hold copyright over the course materials, presentations and lectures which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without written permission from Dr. Pinaki Bose. Course materials (both paper and digital) are for the participant's private study and research.

Textbook, Readings, Materials

Be aware of copyright laws when using readings.

Required textbook

Walter Nicholson and Christopher Snyder: MICROECONOMIC THEORY, BASIC PRINCIPLES AND EXTENSIONS, 11th edition, South-Western Cengage Learning. Copies available at the University Bookstore.

Supplementary/optional readings:

- (i) **Microeconomic Analysis** by Hal R. Varian (3rd ed.; Norton).
- (ii) **Microeconomics** by Hugh Gravelle and Ray Rees (3rd ed.; Prentice Hall)

These will be occasionally referred to. These supplementary texts are also in the library.

Course Technology

It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner. The student can use technology in classroom setting only for educational purposes approved by instructor and/or the University of Manitoba

Disability Services. Student should not participate in personal direct electronic messaging/posting activities (e-mail, texting, video or voice chat, wikis, blogs, social networking (e.g. Facebook) online and offline “gaming” during scheduled class time. If student is on call (emergency) the student should switch his/her cell phone on vibrate mode and leave the classroom before using it. Otherwise, cell phones should be switched off.

Class Communication

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit:

[http://umanitoba.ca/admin/governance/media/Electronic Communication with Students Policy - 2014 06 05.pdf](http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students_Policy_-_2014_06_05.pdf)

Please note that all communication between myself and you as a student must comply with the electronic communication with student policy

[http://umanitoba.ca/admin/governance/governing_documents/community/electronic communication with students policy.html](http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html)). You are required to obtain and use your U of M email account for all communication between yourself and the university.

My Expectations

I expect you to be attentive in class and participate in discussion. You can use a laptop to take notes. Please behave in a way that does not disturb others during class. This includes not coming late to class, and not engaging any activity that may be disruptive to others.

I expect you to be seated a few minutes before that start of my lectures. I will treat you with respect and would appreciate the same in return.

I refer you to the University’s [Respectful Work and Learning Environment Policy](#).

Academic Integrity:

I do not tolerate any violation of academic integrity and will strictly enforce the University’s regulations regarding plagiarism, cheating and impersonation found in Section 8 of the General Academic Regulations in the online Academic Calendar and Catalog and the Faculty of Arts regulation. Students should acquaint themselves with the University’s policy on plagiarism, cheating, exam personation, and duplicate submission by reading the documentation, and the penalties for academic dishonesty, available at the following at the following links:

http://umanitoba.ca/faculties/arts/student/student_responsibilities.html

http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html

Ignorance of the regulations and policies regarding academic integrity is not a valid excuse for violating them.

The VW date for Fall 2016 is November 18. Please also familiarize yourself with the **Important Dates and Deadlines** for Fall 2016, and for this course at:

<http://umanitoba.ca/student/records/deadlines/>

Students Accessibility Services

Student Accessibility Services

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services <http://umanitoba.ca/student/saa/accessibility/>

520 University Centre

204 474 7423

Student_accessibility@umanitoba.ca

Course Evaluation Methods

In-class tests:

Date:	Assessment Tool	Value of Final Grade
1:30 pm, Friday, Oct 14, 2016	Mid-Term I	40%
1:30 pm, Friday, Nov 11, 2016	Mid-term II	40%
1:30 pm, Friday, Dec 9, 2016	Test/quiz	20%

Each test will be marked within two weeks, and the answers will be discussed in class.

Students who miss a test will be allowed a make-up only if there is a significant, and well-documented, medical or compassionate reason that justifies this exception.

Grading

Grading scale:

Letter Grade	Percentage out of 100	Final Grade Point
A+	95-100	4.5
A	85-94.9	4.0
B+	78-84.9	3.5
B	68-77.9	3.0
C+	62-67.9	2.5
C	55-61.9	2.0
D	45-54.9	1.0
F	Less than 45	0

Students who wish to appeal a grade given for term work must do so within 10 working days after the grade for the term work has been made available to them. Uncollected term work will become the property of the Faculty of Arts and will be held for four (4) months from the end of the final examination period for the term in which the work was assigned. At the conclusion of this time, all unclaimed term work will be destroyed according to FIPPA guidelines.

For appeal of FINAL GRADES, please visit the following link:

<http://umanitoba.ca/student/records/grades/691.html>

Other Important Links to University Policies and Student Advocacy:

http://www.umanitoba.ca/student/resource/student_advocacy/term_work_grade_appeal.html

<https://umanitoba.ca/student/advocacy/>

<http://umanitoba.ca/student/sexual-assault/index.html>

Useful Student Resources

- The *Learning Assistance Centre*: Advisors provide a wide range of services focused on improvement of academic learning skills.
- The *Virtual Learning Commons* is a unique learning and social networking site at the University of Manitoba. Students can access Writing Tutors and a variety of Learning Assistance Centre resources on-line at www.umanitoba.ca/virtualllearningcommons.