



**University of Manitoba
Faculty of Arts
Department of Economics**

COURSE DETAILS

Course Title & Number:	ECON 7732 A01 - Advanced Microeconomic Theory II
Number of Credit Hours:	3.0
Class Times & Days of Week:	2:30 pm - 3:45 pm, TR, Winter term 2019
Location for classes:	ST. PAUL'S COLLEGE Room 258
Pre-Requisites:	Satisfactory completion of ECON 7722 or its equivalent, proficiency in basic algebra and calculus.

Instructor Contact Information

Instructor Name:	Pinaki Bose
Office Location:	509 Fletcher Argue
Office Hours (2019W):	Wednesdays, 1:00 – 2:30 p.m., 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

A study of advanced microeconomic theory using optimization techniques involving multivariate calculus. We shall cover selected topics in game theory 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 a graduate-level rigorous course in Microeconomic Theory with a predominantly analytical and mathematical content.

The course will consist of my lectures on static, dynamic games of complete information, games of incomplete information and Principal Agent. I reserve the right of selective coverage of the course material, and of adding to the topics or readings (with adequate notice). I may also refer you to departmental seminars that are relevant to your course work. The problem sets for this course are very important and essential for mastering the material and preparing for the exams. While I do not mark your solutions to the problem sets, I shall go over the answers of selective problems in class.

The mid-term and the final will be in-class exams. I shall explain the specific nature and details of each exam in class at least two weeks prior to that exam.

General Course Information

In the outline below, “Gibbons” and “Varian” refer to the respective required textbooks, “Dutta” to the optional text.

COURSE OUTLINE:

1. Games of Complete Information:

- (i) **Static Games:** normal forms, pure and mixed strategies
- (ii) **Dynamic Games:** extensive forms, sequential moves and the game tree, subgame perfection, imperfect information games and sequential equilibrium
- (iii) **Repeated Games** (if time permits)
Gibbons, handouts, Dutta.

2. Games of Incomplete Information:

- (i) Static games and Bayes-Nash equilibrium

- (ii) Perfect Bayesian equilibrium
- (iii) Adverse Selection, signaling and screening models, refinements.
Gibbons, Varian, handouts.

3. Principal Agent Analysis:

Full insurance outcome with complete information, moral hazard with hidden actions and risk-averse agents, risk-neutral agents and limited liability.

Varian, handouts

My handouts and lectures are based on Gibbons and Varian.

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 for everything that I have covered in class. But everything covered in class is relevant course material. 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 and exams. 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.

The slides provide only broad guidance, and are not supposed to be comprehensive. I do not distribute my slides/handouts/notes ahead of time, and discourage excessive reliance on them as a learning tool.

I reserve my right of selective coverage of the material in the syllabus and within each topic. I also reserve the right to reschedule, omit 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.**

Course Goals

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 emphasis of this course will be on developing the problem solving and “modeling” ability of students in the area of microeconomic theory using the concepts taught in class. The problem sets are especially important in this respect.

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

Required textbooks

Game Theory for Applied Economists by Robert Gibbons, (Princeton University Press).

Microeconomic Analysis by Hal R. Varian (Norton)

In addition, I shall be circulating my handouts and notes on selected topics.

The following text (optional) may be referred to for certain topics:

Strategies and Games: Theory and Practice by Prajit Dutta (MIT Press)

This may be occasionally referred to. The supplementary text is 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

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). 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.

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.

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

Date:	Assessment Tool	Value of Final Grade
Thursday, February 14, 2019	Mid-Term	40%
Date (following end of classes) to be scheduled and announced later	Final Exam (2 hours)	60%

The mid-term test will be marked within two weeks, and the answers will be discussed in class. I reserve the right to change test dates (with advance notice), and do not commit to providing evaluative feedback by the voluntary withdrawal deadline.

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.

The VW deadline for Winter 2019 is March 20. Please also familiarize yourself with the **Important Dates and Deadlines** for Winter 2019, and for this course at:

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

Grading

Grading scale:

Letter Grade	Percentage out of 100	Final Grade Point
A+	93-100	4.5
A	84-92.9	4.0
B+	75-83.9	3.5
B	68-74.9	3.0
C+	61-67.9	2.5
C	53-60.9	2.0
D	45-52.9	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>

FURTHER INFORMATION (Please be familiar with the information below)

Schedule "A"

A list of academic supports available to Students, such as the Academic Learning Centre, Libraries, and other supports as may be appropriate:

Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at:

<http://umanitoba.ca/student/academiclearning/>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tJ0bB4>. In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <http://bit.ly/1sXe6RA>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage: www.umanitoba.ca/libraries.

Section (b) A statement regarding mental health that includes referral information:

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

Student Counselling Centre

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. *Student Counselling Centre*:

<http://umanitoba.ca/student/counselling/index.html>

474 University Centre or S207 Medical Services

(204) 474-8592

Student Support Case Management

Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off

campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

Student Support Intake Assistant <http://umanitoba.ca/student/case-manager/index.html>

520 University Centre
(204) 474-7423

University Health Service

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.

University Health Service <http://umanitoba.ca/student/health/>

104 University Centre, Fort Garry Campus
(204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness

Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

Health and Wellness Educator <http://umanitoba.ca/student/health-wellness/welcome.html>

Katie.Kutryk@umanitoba.ca

469 University Centre
(204) 295-9032

Live Well @ UofM

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site:

<http://umanitoba.ca/student/livewell/index.html>

Section (c) A notice with respect to copyright:

All students are required to respect copyright as per Canada's *Copyright Act*. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community.

Visit <http://umanitoba.ca/copyright> for more information.

Section (d) A statement directing the student to University and Unit policies, procedures, and supplemental information available on-line:

Your rights and responsibilities

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what

the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The [Academic Calendar](http://umanitoba.ca/student/records/academiccalendar.html) <http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.

While all of the information contained in these two sections is important, the following information is highlighted.

- If you have questions about your grades, talk to your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form <http://umanitoba.ca/registrar/>
- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the Academic Integrity regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support <http://umanitoba.ca/academicintegrity/> View the Student Academic Misconduct procedure for more information.
- The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected conduct yourself in an appropriate respectful manner. Policies governing behavior include the:

Respectful Work and Learning Environment

http://umanitoba.ca/admin/governance/governing_documents/community/230.html

Student Discipline

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

Violent or Threatening Behaviour

http://umanitoba.ca/admin/governance/governing_documents/community/669.html

- If you experience Sexual Assault or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The Sexual Assault policy may be found at: http://umanitoba.ca/admin/governance/governing_documents/community/230.html More information and resources can be found by reviewing the Sexual Assault site <http://umanitoba.ca/student/sexual-assault/>

- For information about rights and responsibilities regarding Intellectual Property view the policy
http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-_2013_10_01.pdf

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site
<http://umanitoba.ca/faculties/>

Contact an Academic Advisor within our faculty/college or school for questions about your academic program and regulations <http://umanitoba.ca/academic-advisors/>

Student Advocacy

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.

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

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student_advocacy@umanitoba.ca