



Rotman Commerce UNIVERSITY OF TORONTO

Course Outline

RSM 482H1F

Game Theory for Business Strategy

Fall 2014

Course Meets: Monday / 4:00pm ~ 6:00pm / Location: WW 126 (Woodsworth College)

Instructor: Byung Soo Lee. RT 8018.
E-Mail: byungsoolee@rotman.utoronto.ca
Webpage: <http://portal.utoronto.ca>
Phone: 416-978-5261 (E-mail is the preferred method of contact)
Office Hours: Friday / 2:30pm ~ 4:00pm
Teaching Assistant: TBA

Course Scope and Mission

In many business situations, the profitability of any particular decision or strategy depends on what decisions or strategies others adopt. That is, many business situations are ones of strategic interaction or games. Often in strategic settings we think of the game as being fixed and decision making as being a matter of simply choosing the “right” strategy. This course takes a different approach and looks at the game itself as something over which you have some influence. The course uses insights from game theory to think about how you can “design the games” in which you operate in ways that are advantageous to you. It also examines how your “design decisions” depend on the environment in which you operate: who you interact with, the information you have available, what commitments are enforceable, what alternatives are available to you. Applications will range across various areas of firm decision making: marketing, economics, strategic management finance and accounting.

Course Prerequisites

ECO204Y1/ECO206Y1

Required Readings

There is no required text for this course. Class notes will be distributed after each lecture. Other reading material will be posted on the portal. If you would like a book that contains a more formal treatment of the game theory issues discussed in class, I recommend *Games and Information: An Introduction to Game Theory* by Eric Rasmusen. The chapters of the book are available in PDF and will be posted on the portal. In the syllabus below, chapters and page numbers refer to the PDF version.

Evaluation and Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has command of the course materials.

<u>Work</u>		<u>Due Date</u>
Team Case Analysis I	10%	See Schedule
Team Case Analysis II	30%	See Schedule
6x Homework	60%	See Schedule

COURSE FORMAT AND EXPECTATIONS

For Written Assignments:

Please note that clear, concise, and correct writing will be considered in the evaluation of graded material requiring written text. That is, you may lose points for writing that impedes communication: poor organization, weak paragraph development, excessive wordiness, hard-to-follow sentence structure, spelling mistakes and grammatical errors. Students who require additional support and/or tutoring with respect to their writing skills are encouraged to visit the Academic Success Centre (www.asc.utoronto.ca) or one of the College Writing Centres (www.writing.utoronto.ca/writing-centres). These centres are teaching facilities – not editing services, where trained staff can assist students in developing their academic writing skills. There is no charge for the instruction and support.

For Group Work:

Team Case Analyses I and II require students to work in teams of **3–5**. You must inform me of your team no later than class #4. The two team cases will be posted on the portal at least 10 days prior to the due date.

Learning to work together in teams is an important aspect of your education and preparation for your future careers. That said, project-based teamwork is often new to students and you are therefore reminded of the following expectations with respect to behaviour and contributions to your team project.

1. Read the document entitled, “*Working in Teams: Guidelines for Rotman Commerce Students*” which is available on the RC portal under the Academic Services tab.

2. When working in a team, Rotman Commerce students are expected to:

- Treat other members with courtesy and respect;
- Honour the ground rules established by the team;
- Contribute substantially and proportionally to the final project;
- Ensure enough familiarity with the entire contents of the group project/assignment so as to be able to sign off on it as original work;
- Meet the project timeline as established by the team.

3. Resolving differences:

Conflicts can – and do – occur. Conflicts are part of the team’s process of learning how to work together effectively and can actually generate exciting debate and creative solutions – if managed appropriately.

Student teams are collectively expected to resolve disputes or misunderstandings as soon as they arise (and prior to submission of the final project). In cases where teams are unable to reach a mutually agreeable solution, the entire team must meet with the Rotman Commerce Team Coach** as soon as possible. The Coach will listen to the team and help develop options for improving the team process. All members of the project team must commit to, and, utilize their action plans.

** The Rotman Commerce Team Coach, Nikoleta Vlamis, may be reached at nikoleta@nikoletaandassociates.com for an appointment. Nikoleta is an expert in team dynamics

and facilitation. Note that Nikoleta's role is to provide guidance, support and advice on team matters – not to formally evaluate or assess teamwork for academic purposes.

Weekly Schedule

Session	Date	Topic	Readings
1	Sep 8	Strategic-form games	Rasmusen Ch. 1
2	Sep 15	Extensive-form games	Rasmusen Ch. 2, pp. 42-56
3	Sep 22	<i>Homework 1</i> Commitment	Rasmusen Ch. 4, pp. 117-126 Rasmusen Ch. 5, pp. 140-152
4	Sept 29	<i>Homework 2</i> Repeated games	
5	Oct 6	<i>Homework 3</i> Reputation	
X	Oct 13	Thanksgiving Day	No Class
6	Oct 20	Information games	Rasmusen Ch. 2, pp. 56-66 Rasmusen Ch. 7, pp. 194-197 Rasmusen Ch. 11 Rasmusen Ch. 9, pp. 261-279
7	Oct 27	<i>Presentations/Case I</i>	
8	Nov 3	<i>Homework 4</i> Signaling	
9	Nov 10	<i>Homework 5</i> Adverse selection	
X	Nov 17	Fall Break	
10	Nov 24	<i>Homework 6</i> Principal-agent problem	Rasmusen Ch. 7 Rasmusen Ch. 10
11	Dec 1	Contract design	
12	Dec 3 (make-up)	<i>Presentations/Case II</i>	

POLICY AND PROCEDURE

Missed Tests and Assignments (including midterm examinations)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may submit a request for special consideration. Provided that notification and documentation are provided in a timely manner, and that the request is subsequently approved, no academic penalty will be applied.

In such cases, students must notify Rotman Commerce on the date of the missed test (or due date in the case of course work) and submit supporting documentation (e.g. [Verification of Student Illness or Injury form](#)) to the Rotman Commerce Program Office within **48 hours** of the originally scheduled test or due date. Students who do not provide Rotman Commerce or the instructor with appropriate or sufficient supporting documentation will be given a grade of 0 (zero) for the missed test or course deliverable.

Note that the physician's report must establish that the patient was examined and diagnosed at the time of illness, not after the fact. Rotman Commerce will not accept a statement that merely confirms a report of illness made by the student and documented by the physician.

Late Assignments

All assignments are due at the beginning of class on the date specified in the course outline. If the assignment is not received on the specified date and at the specified time, it may be submitted at the beginning of the next class and penalized by 20%. Any later submissions will receive a mark of zero.

Students who, for reasons beyond their control, are unable to submit an assignment by its deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or <http://www.accessibility.utoronto.ca/>.

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarships at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the UofT degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

The University of Toronto's Code of Behaviour on Academic Matters

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm> outlines the behaviours that constitute academic misconduct, the process for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.

- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to), medical notes.

All suspected cases of academic dishonesty will be investigated by the following procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any question about what is or is not permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other UofT resources such as College Writing Centres or the Academic Success Centre.

Email

At times, the course instructor may decide to communicate important course information by email. As such, all UofT students are required to have a valid UTmail+ email address. You are responsible for ensuring that your UTmail+ email address is set up AND properly entered on the ROSI system. For more information please visit <http://help.ic.utoronto.ca/category/3/utmail.html>

Forwarding your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

Blackboard and the Course Page

The online course page for this course is accessed through Blackboard. To access the course page, go to the UofT Portal login at <https://portal.utoronto.ca/> and log in using your UTORid and password. Once you have logged in, look for the My Courses module where you'll find the link to all your course websites. If you don't see the course listed here but you are properly registered for the course in ROSI, wait 48 hours. If the course does not appear, go to the Information Commons Help Desk in Robarts Library, 1st floor, for help, or explore the Portal Information and Help at www.portalinfo.utoronto.ca/students and review the Frequently Asked Questions.

Recording Lectures

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission, and may not do so unless permission is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Blackboard materials, etc.

If permission is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in anyway. It is absolutely forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.