

UNIVERSITY OF GUELPH
College of Management and Economics

Department of Economics

ECON*3100

GAME THEORY

Winter 2012

Asha Sadanand

McK 717,

x58947

Office Hours: W 8:45 – 11:15

It is your responsibility as a student to be aware of and to abide by the University's policies regarding academic misconduct, e-mail communication, maintaining copies of out-of class assignments, what to do when you cannot meet a course requirement and the drop date for this semester. To better understand these policies, visit:

<http://www.economics.uoguelph.ca/student-responsibilities-policies.asp>

Course Objectives and Description:

The main purpose of this class is to study essentials of conflict of interests and strategic interactions among players, business firms, etc. Game theory is a tool course and is widely utilized in economics, political science, and psychology as well as in engineering and natural sciences. Accordingly, the examples will be based on these fields. Game-theoretic reasoning will provide us understanding of decision making process when an agent/firm (or a group of agents/firms) encounters rivals who have similar objectives.

Textbook: **An Introduction to Game Theory**, by *Martin J. Osborne*, Oxford University Press, New York, 2004

Grading Policy: There will be 5 assignments, one midterm and a final examination with the weighting scheme as follows:

Assignments	25%
Midterm (in class Feb 28 th , 2012)	25%
Final exam: Apr. 12th, 2:30-4:30 pm	50%

Examination Policy: You are expected to be present for each test/examination. *There will be no make-up examinations.* In case of an unavoidable emergency, please contact the instructor (contact person can be you or someone delegated by you) immediately; otherwise expect a grade of zero.

Tentative Course Outline: Chapters are from the textbook.

Games with Perfect Information

Section 1: Chapters 1 – 3. Simultaneous-move games with pure strategies.

Section 2: Chapter 4. Simultaneous-move games with mixed strategies.

Section 3: Chapters 5 – 7. Games with sequential moves.

Games with Imperfect Information

Section 4: Chapter 9. Simultaneous-move games: Uncertainty and information.

Section 5: Chapters 10. Sequential games: Uncertainty and information.

Applications

Section 6: Chapters 14 -16. Some chapters will be selected; there any be additional readings.

IMPORTANT NOTES

* It is your responsibility as a student to be aware of and to abide by the University's policies regarding academic misconduct, email communication, maintaining copies of out-of class assignments, what to do when you cannot meet a course requirement and the drop date for this semester. To better understand these policies, please visit the university webpage.

* You should be ready to follow up on class notes *daily* at home. Advanced reading of material to be covered in the class will assist you in better understanding the material.

* Students with disabilities who require reasonable accommodations to fully participate in course activities or meet course requirements are encouraged to contact me.

* Students who want to appeal a grade should do it in writing, no later than the day after the exam was returned.

Course Evaluation: You will be asked to complete an evaluation of this course at some time during the last two weeks of the semester. **This evaluation will be done in class.** The Department of Economics policy regarding the conduct and use of these evaluations will be found at:

<http://www.economics.uoguelph.ca/course-evaluation.asp>