

Economics , [Faculty of Liberal Arts & Professional Studies](#), York University

Fall 2009 Course Outline

COURSE #:AP/ECON 4130-GS/ECON 5320 3.0.AF

**COURSE TITLE: INTRODUCTION TO GAME THEORY IN
ECONOMICS**

IMPORTANT LINKS

[2009-2010 Undergraduate Calendar](#) | [Important Dates](#) | [Enrol Here](#)
[York Courses Web Site \(for Course Timetable / Schedule \)](#) | [Current Students Web Page](#)

1. Course Instructor Contact:

Bernard Lebrun

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Office hours: Tuesday and Thursday 4:00-5:00

2. Course Description (prerequisites/co-requisites):

Game theory studies the interactions between decision makers. It is used in political science, law, biology, and, especially, economics. In this course, we will introduce the basic tools of game theory and focus on economic applications.

A tentative course outline is as follows:

Nash Equilibrium: Theory (Chapter 2, in the textbook)

Nash Equilibrium: Illustrations (Chapter 3)

Mixed Strategy Equilibrium (Chapter 4)

Extensive Games with Perfect Information: Theory (Chapter 5)

Extensive Games with Perfect Information: Illustrations (Chapter 6)

Extensive Games with Perfect Information: Extensions and Discussion(Chapter 7)

Coalitional Games and the Core (Chapter 8)

Bayesian Games (Chapter 9)

Extensive Games with Imperfect Information (Chapter 10)

Strictly Competitive Games and Maxminimization (Chapter 11)

Rationalizability (Chapter 12)

I will post announcements about the course, the slides I use in class, and the exercises I

suggest at <http://www.econ.yorku.ca/econ/blebrun> The office hours and E-mail address of the teaching assistant will also be posted on this Website.

Prerequisites: AP/ECON 1000 3.0 and AP/ECON 1010 3.0 and AP/ECON 1530 3.0 and AP/ECON 1540 3.0 or equivalents.

3. Required Course Text / Readings:

Martin J. Osborne (2004): An Introduction to Game Theory. Oxford University Press, ISBN: 0-19-512895-8. The author maintains a web site for the book at <http://www.economics.utoronto.ca/osborne/igt/> Solutions to many of the exercises can be found on this site. I will place the textbook and a copy of these solutions, the slides, and the old examinations at the Scott Library reserve.

4. Weighting of Course:

There will be two examinations: one mid-term and one final. The mid-term examination will be held in class time on Tuesday October 27. It will cover the material seen up to and including Thursday October 22.

The final examination will be held during the exam period from December 10 to December 23. The University will announce its precise date, time, and place. It will cover the whole material.

Your mark on the final examination will be your total mark for the course if it is higher than your mark on the mid-term examination. Otherwise, your mark on the mid-term examination will count for one third of your total mark and your mark on the final examination for two thirds.

5. Additional Information:

Lecture schedule: Tuesday and Thursday 10:00-11:30 in ACE-002

Last Date to Enroll Without Permission: September 24

Last Date to Drop Without Receiving a Grade: November 6

IMPORTANT COURSE INFORMATION

The Senate Committee on Curriculum & Academic Standards (CCAS) provides a [Student](#)

Information Sheet that includes:

- [York's Academic Honesty Policy](#) and Procedures / [Academic Integrity Web site](#)
- [Access/Disability](#)
- [Religious Observance Accommodation](#)
- [Student Code of Conduct](#)

Additional information:

- [Academic Accommodation for Students with Disabilities](#)
- [Alternate Exam and Test Scheduling](#)
- [Grading Scheme and Feedback Policy](#)
The Senate Grading Scheme and Feedback Policy stipulates that (a) the grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) be announced, and be available in writing, within the first two weeks of class, and that, (b) under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for 'full year' courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade.
- **"20% Rule"**
No examinations or tests collectively worth more than 20% of the final grade in a course will be given during the final 14 calendar days of classes in a term. The exceptions to the rule are classes which regularly meet Friday evenings or on Saturday and/or Sunday at any time, and courses offered in the compressed summer terms.
- Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles.