

**Game Theory**  
**Course Syllabus**  
**July 2016 Short Semester**

**Mon 9am-11am, Weds 3pm-5pm, Fri 1pm-3pm @ Tutorial Room 216**

**Instructor:** Dr. Darren Ong

**Office:** 108B

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**Office Hours:** Tues & Thurs, 1pm-3pm

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**“Textbook”:** Ben Polak’s Open Yale Course Game Theory Class

<http://oyc.yale.edu/economics/econ-159>

**Objective:** This course is an introduction to game theory and strategic thinking. Ideas such as dominance, backward induction, Nash equilibrium, evolutionary stability, commitment, credibility, asymmetric information, adverse selection, and signaling are discussed and applied to games played in class and to examples drawn from economics, politics, and elsewhere.

**Homework:** Homework will be assigned and collected every class day. The day’s assignment will be collected at the beginning of the next class (if the next class has a midterm exam, homework is instead due the class after that). You are encouraged to get any help you need to solve the homework problems. However, once you understand how to solve the problem, the write-up should be your own. I will pick a few problems from the homework assignment at random to grade, and your homework grade will depend on those problems. No late homework will be accepted for **any reason**. However, your three lowest homework scores will be ignored when calculating your homework grade.

**Open Courseware:** Instead of a textbook, we will be using Yale University’s Open Course Game Theory class by Professor Ben Polak to supplement the course. Access to the course is available for free in this URL: <http://oyc.yale.edu/economics/econ-159>. This website consists of all the lecture videos, lecture transcripts, and blackboard notes for Yale’s game theory class in 2007. We will not follow the content of his course exactly, but I will be basing our course content on it.

**Class:** I feel that Game Theory is best learned by playing and discussing games, rather than listening to a lecture. Class time will be used for working on problems in small teams. Please ask for help from me or from your team-mates if you don't understand a step from the problem. Please be prepared to help a team-mate who understands less about the problem than you do.

**Tests and Final exam:** There will be two closed book, closed notes, and closed homework in-class tests on **July 29**, and **August 12**. Students will have the entire class time to take the tests. The final exam is a comprehensive exam and will be organized centrally by the university sometime in the week of August 15-20

**Calculator Policy:** This is a course of mathematical ideas and techniques, not a course of mechanical computation. You may use a calculator when working on the homework assignments. In class and when taking exams, a calculator will not be needed and will not be permitted.

**Grading Distribution:**

Homework.....	15%
Tests.....	35%
Final Exam.....	50%

We will use Xiamen University Malaysia's standard grading scale.