

## Syllabus

### ECON 8817

### Autumn 2013

Contact Info:	Professor
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<b>Phone</b>	614-247-8876
<b>Office Hours</b>	By appointment
<b>Lectures</b>	Tue & Thu 12:45–02:05 in Scott Lab E0103
<b>Course Website</b>	<a href="http://carmen.osu.edu">http://carmen.osu.edu</a>

#### Required Text:

- *Game Theory*, by Fudenberg & Tirole. The encyclopedic text of game theory.

#### Recommended Texts:

- *Notes on the Theory of Choice*, by Kreps.
- *Game Theory*, by Myerson.
- *A Course in Game Theory*, by Osborne & Rubinstein.

**Presentations:** Each student will give two presentations. The first presentation will be approximately  $150/n$  minutes long, where  $n$  is the number of students enrolled in the class. It must be a literature review of a topic of interest. This will be in the fourth week of the semester. The goal here is to get you to read a literature extensively, figure out what the important contributions are, where there are holes, and how research in that area is normally conducted (ie, what types of models are typically used, how things are proven, etc.)

You must also turn in a written literature review, typed in  $\text{\LaTeX}$ . I recommend you create a  $\text{\BIBTeX}$  database in doing this; it will be useful later.

The second presentation will last  $225/n$  minutes. In this, you will present an original research idea, focusing mainly on the theory aspects of it. Since time is short, you will be *strictly* limited to 60 seconds of introduction and motivation.

**Problem Sets:** There will be a few problem sets during the semester. The will receive a score of ‘check’, ‘check plus’, or ‘check minus’.

**Grades:** You will get a grade at the end of the semester based on your overall performance throughout the class.

**Academic Dishonesty:** It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct: [http://studentaffairs.osu.edu/resource\\_csc.asp](http://studentaffairs.osu.edu/resource_csc.asp).

**Disability Services:** Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Tentative Schedule:

Week	Day	Date	Tentative Plan
01	R	08/22	<b>NO CLASS</b>
02	T	08/27	Choice under uncertainty
02	R	08/29	Choice under uncertainty
03	T	09/03	Iterated solution concepts
03	R	09/05	Existence of Nash equilibrium
04	T	09/10	LIT REVIEW PRESENTATIONS: DAY 1
04	R	09/12	LIT REVIEW PRESENTATIONS: DAY 2
05	T	09/17	Correlated equilibrium
05	R	09/19	Extensive form: backwards induction
06	T	09/24	Extensive form: bargaining & timing games
06	R	09/26	Refinements
07	T	10/01	Bayesian games
07	R	10/03	Repeated games: perfect monitoring
08	T	10/08	Repeated games: perfect monitoring
08	R	10/10	Repeated games: reputations
09	T	10/15	Repeated games: imperfect/private monitoring
09	R	10/17	Extensive form w/ incomplete info
10	T	10/22	Extensive form w/ incomplete info
10	R	10/24	<b>NO CLASS</b>
11	T	10/29	Adaptive algorithms
11	R	11/09	Supermodular games
12	T	11/05	Knowledge & common knowledge
12	R	11/07	Epistemic game theory: Aumann & Brandenburger (1995)
13	T	11/12	Epistemic game theory
13	R	11/14	Nash bargaining & the core
14	T	11/19	PROJECT PRESENTATIONS: DAY 1
14	R	11/21	<b>NO CLASS</b>
15	T	11/26	PROJECT PRESENTATIONS: DAY 2
15	R	11/28	<b>THANKSGIVING BREAK – NO CLASS</b>
16	T	12/03	PROJECT PRESENTATIONS: DAY 3
F		12/05–12/11	<b>FINALS WEEK (No Final)</b>

Nash bargaining