

**Syllabus**  
ECON 8817  
Fall 2015

Contact Info:	Professor
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<b>Office Hours</b>	By appointment
<b>Lectures</b>	Tue & Thu 12:35–01:55 in Smith Lab 1150
<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. Each will be due one week after assignment. The will receive a score of ‘check’, ‘check plus’, or ‘check minus’.

**Homework:** Homework problems are problems I come up with during lecture. You should work on these at home and figure them out, but you are not required to turn them in.

**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	T	08/25	Choice under uncertainty
01	R	08/27	Choice under uncertainty
02	T	09/01	Choice under uncertainty
02	R	09/03	Iterated solution concepts & rationalizability
03	T	09/08	LIT REVIEW PRESENTATIONS: DAY 1
03	R	09/10	LIT REVIEW PRESENTATIONS: DAY 2
04	T	09/15	Correlated & a Posteriori equilibrium
04	R	09/17	Correlated & a Posteriori equilibrium
05	T	09/22	Common knowledge & no-trade theorems
05	R	09/24	Aumann & Brandenburger (1995)
06	T	09/29	Bayesian games: Bayes-Nash equilibrium & purification
06	R	10/01	Bayesian games: Type spaces & epistemic type spaces
07	T	10/06	Bayesian games: Complete type spaces
07	R	10/08	Extensive form: behavior strategies & multi-stage games
08	T	10/13	Extensive form: subgame perfection & common strong belief in rationality
08	R	10/15	<b>CLASS CANCELED</b>
09	T	10/20	Extensive form: subgame perfection & common strong belief in rationality
09	R	10/22	Repeated games: folk theorems
10	T	10/27	Repeated games: folk theorems
10	R	10/29	Extensive form w/ incomplete info: PBE vs sequential equilibrium
11	T	11/03	Extensive form w/ incomplete info: reputations & imperfect monitoring
11	R	11/05	Trembling hand perfection & Quantal response equilibrium
12	T	11/10	Learning dynamics
12	R	11/12	Supermodular games
13	T	11/17	Cooperative game theory
13	R	11/19	Nash implementation
14	T	11/24	Nash implementation
14	R	11/26	<b>THANKSGIVING BREAK – NO CLASS</b>
15	T	12/01	PROJECT PRESENTATIONS: DAY 1
15	R	12/03	PROJECT PRESENTATIONS: DAY 2
16	T	12/08	PROJECT PRESENTATIONS: DAY 3
F	12/11–12/17		<b>FINALS WEEK (No Final)</b>