

## Economics 459: Games and Economic Behavior, Fall 2009

**Section:** 500, TR 1:30-2:45PM

**Classroom:** ALLN 1004

**Instructor:** Lucas Rentschler

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**Office:** 3047 Allen Building, Bush Library Complex (ALLN 3047)

**Office Hours:** Tuesday 11:30AM-1:00PM

Thursday 11:30AM-1:00PM

Or by appointment; please feel free to schedule an appointment!

### Text:

An Introduction to Game Theory, Martin J. Osborne

ISBN: 0195128958

### Course Description:

In this class we will study situations in which the well being of economic agents depends on the behavior of other economic agents. We will study the equilibrium behavior of rational agents in such situations. Applications we will study include oligopoly, auctions, and contests. This course will give you a solid foundation from which you can thoughtfully and intelligently examine the economic issues that we all face in our everyday lives.

### Grading:

Your grade in this course will be calculated as follows:

Exam 1	25%
Exam 2	25%
Comprehensive Final	40%
Homework Average	10%

The grade distribution will be as follows:

A	90%-100%
B	80%-89.99%
C	70%-79.99%
D	60%-69.99%
F	0%-59.99%

I reserve the right to curve the grading distribution upwards as needed.

**Attendance:**

Attendance is not used as part of the grading process of this class. However, students who attend regularly will find it much easier to excel. As such, I strongly encourage you to attend class. Please, as a courtesy to me and your fellow students, be punctual.

**Homework:**

We will have several homework assignments throughout the semester. I will give you at least a week to complete each assignment. You are encouraged to work in groups, but each of you must turn in your own work.

**Exams:**

There will be two midterms, and a comprehensive final. You are permitted to bring a non-programmable calculator. Programmable calculators will not be permitted under any circumstances.

The schedule for these exams is as follows:

Midterm Exam #1: October 1<sup>st</sup> (in class)

Midterm Exam #2: November 5<sup>th</sup> (in class)

Final Exam: December 16<sup>th</sup>, 8:00AM – 10:00AM

**Makeup Exam Policy:**

You must provide me with a university-authorized excuse to be eligible to take a makeup exam. Otherwise a missed exam equals zero points. Makeup exams will not be the same exam the rest of the class takes, and may not follow the same format. The rules governing what constitutes a university-authorized excuse can be found at:

<http://student-rules.tamu.edu/rule7.htm>

**Students with Disabilities:**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life/Services for Students with Disabilities, in Cain Hall. The phone number is 845-1637.

**Aggie Honor Code:**

“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

**Keys to Success:**

- Read the chapters before you come to class. Lectures will be much more valuable if you have already been introduced to the materials. You can then reread the chapters later as well.
- Take good, well-organized, and detailed notes.
- Work through as many problems as you can. Spend a good deal of time working through the assignments on the Myeconlab website.
- Make sure that you are working through problems and studying each and every week. Do not try to “cram” in this class.
- Come in for help as soon as you have difficulties. Do not allow problems to grow too large before coming for help.

**Topics and Reading Assignments:**

Below is a list of the topics that will be covered in this course.

1. Pure Strategy Nash Equilibrium
2. Mixed Strategy Nash Equilibrium
3. Backwards Induction
4. Subgame Perfect Nash Equilibrium
5. Bayesian Games
6. Repeated Games
7. Auctions
8. Cournot Duopoly
9. Bertrand Duopoly
10. Imperfectly Discriminating Contests

**Last Thoughts:**

1. Cheating will not be tolerated. There will be severe penalties for any student caught cheating.

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2. I reserve the right to make changes to this syllabus. If any changes occur, they will be announced in class.