

**Georgia State University**  
**ECON 8100: Applied Microeconomic Analysis**  
**Fall Semester 2008-2009**  
TR 4-5:15, Aderhold 305

**Instructor:** Jon Rork (jrork@gsu.edu)

**Office:** AYSPS 430

**Phone:** 404-413-0253

**Office Hours:** For purposes of the bureaucracy, my official office hours are Tuesdays from 12:30 pm to 1:30 pm, and Wednesdays from 10 am to 11:30 am. Realistically, if you swing by my office and I'm in and not too swamped at that moment, I'm more than willing to talk. If you'd rather make appointments instead, that's fine by me as well. In addition, I try to make it a point to respond to e-mail within 24 hours when I'm in town, so you can always ask questions that way instead. Regardless of how you choose to do so, **DO NOT BE AFRAID TO USE ME AS A RESOURCE**. I'm more than happy to help, but you have to ask.

**General Overview:** This course is designed for PhD students who plan to take the entire microeconomic theory core sequence at GSU (Econ 8100, Econ 8120 and Econ 9070). This course provides comprehensive coverage of microeconomic topics by analyzing the applications to the theory. Topics include consumer theory, production and cost analysis, as well as a basic introduction to game theory.

**Prerequisites:** ECON 6030 or an equivalent intermediate microeconomics course as well as multivariate calculus.

**Requirements:** Problem sets will be assigned approximately every week. While they do not count towards your grade, you can hand them in to me for comments. That choice is entirely yours, and you will not be judged based on that decision. Be warned, however, that I do expect that you will have worked through all problem set questions as preparation for your exams.

The final for this course is on **December 11** and counts for 100% of your grade. Should you fail to take the exam at the scheduled time, you will receive a 0. There is, however, a midterm that I have scheduled for **Thursday, October 9**. Upon return of your exam, you have the option of having the midterm count for 40% of your final grade, thereby reducing the weight on the final to 60%. You must notify me via email within 3 days of my returning the graded exams to the class what your choice is; failure to do so results in me making the choice for you.

Per AYSPS policy, grading will be done using the +/- option.

**Academic Honesty:** All students are expected to know the university's policy on Academic Honesty (<http://www2.gsu.edu/~wwwfhh/sec409.html>)

**ULearn:** Despite my attempts at reconciliation, ULearn and I do not get along. Nevertheless, I will try to post problem sets and answers on ULearn. Whatever you do, please **DO NOT EMAIL ME THRU ULearn**. I tend not to check it, and you won't get a response from me. Email me directly.

**Book:** There are two books for the course: Robert Gibbons, *Game Theory for Applied Economists*, and Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*. There are no other required texts, although feel free to utilize other texts that you find helpful.

You are ultimately responsible for what is covered in both lecture and the text. My goal is to make the two supplement each other, thus there may not be perfect overlap.

**Course Outline:** This course syllabus provides a general plan for the course; deviations may be necessary. I'll update you as we go along.

**August 18 thru September 25:** Game Theory Basics. Gibbons, Chapters 1-4

**September 29 thru October 28:** Consumer Theory. Nicholson, Chapters 3-6

**November 4 thru December 6:** Producer Theory. Nicholson, Chapters 7-10.

**Course Learning Outcomes:** The main learning outcome of the course is that students will describe the basic tools of both game theory and microeconomic theory. Specifically:

1. The student should be able to create and differentiate between normal and extensive forms of games.
2. The student should be able to define and calculate Nash equilibria for most types of games.
3. The student should be able to define and calculate various Nash refinements for games.
4. The student should be able to read and comprehend formal mathematical presentations of games and microeconomic theory.
5. The student should be able to solve consumer optimization problems.
6. The student should be able to define and understand duality theory as it applies to consumer theory.
7. The student should be able to solve producer optimization problems.