Course Syllabus
ECON 7300– Economic Theory and Decisions
Fall Semester, 2017
3.0 Credit Hours

Instructor: Carmen Astorne-Figari, PhD
Office: FCBE 427
Office Hours: By Appointment
E-mail: cmstrnfg@memphis.edu
Teaching Assistant: Jeff Romine
E-mail (TA): jromine@memphis.edu
Class: M 1:30 –4:30pm, at 264 FCB
Course URL: eCourseware (opens in new window)

Course Overview:
This course is designed as a basic exposition of standard consumer and producer theory, with emphasis on optimization. We then consider a brief introduction to welfare economics, exchange economies, decision-making under uncertainty, and finally an introduction to game theory. Our approach to these concepts will use both intuition and math. Economic intuition, graphs and mathematical expressions are all telling the same story, and this should be clear to you by the end of the semester.

Pre-Requisites/Co-Requisites:
My expectation is that students will differ in their prior exposure to microeconomic theory. I will assume that everyone has a certain level of mathematical maturity, meaning that you are comfortable with (or willing to accommodate) mathematical notation and argument. We will employ tools corresponding to an undergraduate calculus sequence. It is crucial that if you lack such skills, you consult the professor as soon as possible. It is also strongly suggested that students have taken, or are concurrently enrolled in, ECON 6810 (Quantitative Economic Analysis). See college catalog or Ph.D. handbook (opens in new window) for more information.

Recommended Texts (and Related Materials):
- Microeconomic Analysis by Hal Varian, ISBN: 9780393957358
Location of Course Materials:

The primary source of material in this course will be your class notes. Problem sets, their solutions, as well as the grade book are located on the eCourseware website (opens in new window).

Course Objectives:

By successfully completing this course, students will be able to:

- Understand the mathematical representation of consumer preferences (i.e. utility functions) and their meaning.
- Understand the consumer utility maximization problem and the derivation of ordinary demand, both numerically and graphically, and understand its properties.
- Understand the consumer expenditure minimization problem and the derivation of compensated demand, both numerically and graphically, and understand its properties.
- Understand and identify the effects of price changes on consumption.
- Comprehend the different monetary measures of welfare.
- Understand borrowing and lending decisions in a simple intertemporal consumption model.
- Understand the mathematical representation of preferences over risky alternatives, the related properties, and their implications.
- Understand the principles underlying a basic general equilibrium model.
- Understand the properties of firm production, cost and profit maximization decisions.
- Identify the different market structures and the profit maximizing behavior that characterizes them.
- Identify strategic situations and represent them formally as games.
- Understand and implement solution concepts for simple two-player one-shot games.
- Understand and implement solution concepts for simple two-player sequential games.
- Apply basic game theory to the analysis of quantity competition in oligopolies.
- Apply basic game theory to the analysis of price competition in oligopolies.

Fogelman College: Learning Outcomes for Your Degree

This course is designed to help you to meet the overall learning objectives for the MA/PhD degree offered by the Fogelman College. You should take the time to become familiar with the overall learning objectives as a student your respective program.

- MA in Economics Program Outcomes (opens in new window)
- PhD Program Outcomes (opens in new window)

Grading and Evaluation Criteria

This section of the syllabus describes the assessed work you will be doing and how overall (final) letter grades will be computed.
Final Course Grades

Final course grades are earned according to the following table:

<table>
<thead>
<tr>
<th>Point Range</th>
<th>Assigned Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100 Points</td>
<td>A</td>
</tr>
<tr>
<td>80-90 Points</td>
<td>B</td>
</tr>
<tr>
<td>70-80 Points</td>
<td>C</td>
</tr>
<tr>
<td>60-70 Points</td>
<td>D</td>
</tr>
<tr>
<td>Under 60 Points</td>
<td>F</td>
</tr>
</tbody>
</table>

Summary of Graded Activities

Both the midterm and the final exams will be in class and closed book, meaning that you may not consult the text, your notes, or any other material, nor may you communicate with each other while taking them. These exams will be based primarily on homework and class notes (rather than on the text or supplemental reading).

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Date</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam</td>
<td>October 9</td>
<td>33.3%</td>
</tr>
<tr>
<td>Final</td>
<td>December 11</td>
<td>33.3%</td>
</tr>
<tr>
<td>Problem Sets</td>
<td>See Below</td>
<td>33.3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100 %</td>
</tr>
</tbody>
</table>

I will not offer a makeup exam. Valid excuses for missing the exam include a verified illness or special family circumstances (e.g. death of a member of the immediate family). To be excused from the exam, you must notify me via university email before the exam begins. If you are excused, your course grade will then depend on your homework grade and on your performance on the other exam.

The homework will consist of 5 problem sets, which you are required to turn in at the beginning of class on the due date, and which will be graded. These must be typed. The preferred document preparation tool is LaTex, a typesetting code protocol that is considered the standard for academic papers. However, you are free to use any other software such as Lyx, Scientific Workplace, Scientific Word, etc. All problem sets (and solutions) will be posted on the class website. These are designed to challenge and may be time intensive, with the goal of providing you with some essential tools for graduate school.

On homework (and exams), focus on the completeness, clarity and logical structure of your solutions. You must provide a written answer to each question; numbers or calculations with no explanation will not be satisfactory. In other words, your answers should not only directly answer the question, but also provide to a reader an explanation of how you arrived at that
answer. As is usually the case in graduate school, you are encouraged to work together. However, each student must turn in his or her own write-up of the solutions in a timely manner. Failure to do so will result in a loss of credit.

Tentative due dates are the following:

<table>
<thead>
<tr>
<th>Problem Set</th>
<th>Tentative Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sept 18</td>
</tr>
<tr>
<td>2</td>
<td>Oct 2</td>
</tr>
<tr>
<td>3</td>
<td>Oct 30</td>
</tr>
<tr>
<td>4</td>
<td>Nov 13</td>
</tr>
<tr>
<td>5</td>
<td>Dec 4</td>
</tr>
</tbody>
</table>

Course Topics:

1. Consumer Theory
2. Intertemporal Choice
3. Decisions under Risk
4. Introduction to General Equilibrium in an Exchange Economy: the Edgeworth Box
5. Producer Theory
6. Market Structures
7. Basic Game Theory and Applications: Oligopoly

Final Exam Schedule

The final exam for this class will be scheduled according to the Registrar’s academic calendar website (opens in new window).

Course Policies

E-MAIL:

All students are required to maintain and access their University of Memphis (@memphis.edu) email account. You will receive all official course correspondence at this email account. Any inability to receive incoming mail in a timely fashion (e.g., not regularly checking your email, having a “full mailbox” condition, etc.) is the student’s responsibility.
Attendance:

As this is a graduate class, the assumption is that you all have the drive and intention to attend all class lectures. Thus, formal attendance will not be taken. Your full engagement in the class begins on the first day of the semester and should be maintained until the last assignment is submitted. For students receiving funding, any lack of engagement in the course may potentially impact access to funding in the future. Students are responsible for all the material covered in class, even if they are unable to attend.

Adding / Dropping:

If you have questions about adding or dropping classes, please refer to this page on the Registrar’s website (opens in new window).

Academic Integrity:

The University of Memphis has clear codes regarding cheating and classroom misconduct. If interested, you may refer to the Student Handbook section on academic misconduct for a discussion of these codes. Note that using a “Solutions Manual” is considered cheating. Should your professor have evidence that using a “Solutions Manual” has occurred, he/she may take steps as described on the campus’ Office of Student Conduct website (opens in new window). If you have any questions about academic integrity or plagiarism, you are strongly encouraged to review the Fogelman College's Website on Academic Integrity (opens in new window).

Inclement Weather:

In the event that inclement weather requires the cancellation of classes at The University of Memphis, local radio and television media will be immediately notified. Additionally, The University of Memphis has established an Inclement Weather Hotline at 678-0888 as well as TigerText (opens in new window), an emergency alert text messaging service to students, faculty and staff. This optional service is used in the event of an on-campus emergency, an unscheduled university closing, or a delay or cancellation of classes due to, for instance, inclement weather. Additional information on TigerText (opens in new window).

Syllabus Changes:

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

Student Services

Please access the FCBE Student Services (opens in new window) page for information about:

- Students with Disabilities
- Tutoring and other Academic Assistance
- Advising Services for Fogelman Students
- Technical Assistance