ECONOMICS 3110A ADVANCED MICROECONOMIC ANALYSIS Fall 2009 9:35-11:55 TR, IC 109

TIBOR BESEDEŠ

Office: 321 Old CE

OFFICE HOURS: TR 11-12 in IC 109; T 2:00-3:30 in my office; by appointment

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WEB PAGE: T-Square

Course Objectives:

This course expands on the topics of the introduction microeconomics course: the purchasing behavior of consumers and the production and selling behavior of firms. We will analyze consumer behavior and derive consumer's demand. We will rigorously analyze behavior of firms in different market structures. We will then examine economic welfare under different market structures and the effect government policies can have.

In each case, it is shown how behavior that economics predicts can be described by a solution to an optimization problem, or "rational maximization." This class will add an analytical approach to the descriptive approach of the introductory course. You will learn to use mathematical models in modeling of economic concepts. This will enable you to rigorously analyze economic problems and understand discussion of economic concepts and phenomena in the media. This class will also equip you with the required tools to excel in higher level electives.

Specific Learning Objectives:

Knowledge:

- How markets function supply and demand, elasticity
- The consumer's problem preferences, budget constraint, utility maximization, optimal bundle, derivation of the demand curve
- The firm's problem production functions, costs, profit, output decision, derivation of the supply curve
- Analysis of how markets function interventions in the market and resulting distortions
- Market structures perfect competition, monopolistic competition, oligopoly, monopoly
- Pricing strategies for imperfectly competitive firms
- Strategic considerations in firm behavior
- Sources and analysis of market failure imperfect competition, asymmetric information, public goods, externalities

Skills:

- Graphical and mathematical analysis
- Use of low level calculus to solve problems and models

- Problem solving methods as applied to economic theory
- Ability to apply analytical tools to economic concepts and ideas
- Critical thinking and logic

Perspectives:

- Understanding the functioning of markets in a broad context
- Adopt a greater appreciation of firms' and consumers' decision-makings at a fundamental level
- Appreciation for the functioning of competitive markets and the role of government intervention

Textbook:

- 1. Perloff, Jeffrey, Microeconomics, 5th ed., with MyEconLab access, Pearson. (required)
- 2. Perloff, Jeffrey, *Study Guide*, 5th ed., Pearson. (optional)

You can purchase the textbook in paper format or as an e-book. Both bookstores should have both options available. In addition, the e-book can be purchased online at http://www.myeconlab.com/student_wizard.php?kit_type=students.

Whichever version of the textbook you decide to purchase, you *must* purchase access to MyEconLab.

You may choose to purchase the accompanying study guide listed above. The bookstores should have it. The study guide is optional.

Notes:

MyEconLab: All homework will be assigned and graded on MyEconLab. Instructions to register for MyEconLab are on the last page of the syllabus.

T-Square: The main medium of communication will be T-Square. All course announcements, grades, exam solutions, and other information will be posted there.

Prerequisites:

Prerequisites are designed to protect you from taking courses that you are unprepared to successfully complete. You should follow the recommended prerequisites closely. The following courses are prerequisites for this course. You are expected to have mastered the material covered in these courses *before* taking this course.

Principles of Economics (ECON 2100 or ECON 2105 and ECON 2106)

Recommended Prerequisite:

While there is no calculus prerequisite for this class, you should be aware some calculus tools will be used during the semester (primarily ordinary and partial derivatives). Whenever these tools will be used they will be quickly explained. For more in depth coverage, you should look at a calculus textbook.

Grading:

Grades will be based on two exams, a *comprehensive* final exam, and periodically assigned homework. The final exam will be given at the time scheduled by the Institute. If you have a conflict with another final, certain accommodation can be made. Please see me two weeks before the final exam if that is the case. *There will be no make-up exams under any circumstances*. An exam that is missed will be considered an F, unless you have been prevented from taking the exam by forces outside of your control. In such cases (illness, car accident, family emergencies, institute functions) some form of documentation will have to be provided in order for you not to receive an F.

Each homework consists of several problems, which will either be mathematical in nature or will require you to analyze a problem and provide an answer/explanation applying the tools learned in the classroom. All homework will be announced, assigned and, completed through MyEconLab. It will be *your responsibility to check MyEconLab for new homework assignments* and to complete them by the due date. You can ask questions about homework in class, during office hours, via email at any point before it is due. You will have at least a week to complete homework assignments. The lowest homework grade will be dropped.

Exams will consist of up to ten short answer problems. If your answer to an exam problem requires several steps and/or calculations, you need to show your work. An answer without shown work is not sufficient and you will not receive full credit. Exams will be graded and returned within two weeks.

There will be no special extra credit or extra work of any kind for the purpose of raising a grade during or after the course. This is to ensure that everybody has equal opportunities to earn their grade and that grades are based on work during the course. There are typically 10% extra credit points on each exam (on an exam worth 100 points, you can actually receive a maximum of 110, so that you can miss 10 points and still receive the maximum grade of 100).

The final grade is calculated as follows:

Homework	15%
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	35%

Each exam is graded on a curve with a C average. If the average on an exam is better than a C no curve will be applied.

Given that the final exam is cumulative, you will be rewarded if your grade on the final exam improves relative to the two midterm exams. Specifically, you will receive 10% of the relative improvement added to the final grade is calculated. As an example, suppose you received a 70 on the first midterm, a 90 on the second one, and a 90 on the final exam. Furthermore, suppose your homework average is 80. In that case, your final grade would be 80*0.15+70*0.25+90*0.25+90*0.35=83.5. Given you received a higher grade

on the final relative to the first midterm, the bonus points you would receive would be (90-70)*0.1=2. These two points would make your final grade 85.5. Note that in this scenario there are no bonus points relative to the second midterm as that grade is the same as the final exam grade. In case your grade on the final exam is lower than either midterm exam grade, **no** points will be deducted. An excel spreadsheet with the formula to calculate your grade will be made available during the semester.

Final grades are determined using the standard scale:

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A - 90-100\%
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B - 80-89.99%

C - 70-79.99%

D-60-69.99%

F - 0-59.99%

Final grades are **not** rounded up. Hence, 89.89 is a B **not** an A.

If you are taking this class pass or fail, a grade of C or higher is a passing grade. If you earn a D or an F, you will be given a failing grade for the course.

Exam dates are as follows:

Exam 1 – Tuesday, September 22

Exam 2 – Thursday, October 29

Final Exam – Wednesday, December 9, 8:00am – 10:50am

Attendance:

While attendance will not be graded, I strongly encourage you to attend classes, as performance in the class is usually highly correlated with attendance.

Course Rules:

- It is considered common courtesy to include your name when sending me an email. Especially when your email contains a question.
- Please come to class on time. It is disrespectful and disruptive to me and everyone else if somebody strolls into class late.
- If you need to leave early, please inform me before the class begins.
- If you intend to or have a tendency to sleep, read newspapers, do crossword puzzles, check your email or portfolio, surf the net, or entertain yourself in other ways during lectures, STAY AT HOME. Such behavior is disruptive for everyone.
- Please turn off all electronic devices such as cell phones, pagers, and beeping watches.
- Laptop use. You are free to use a laptop or tablet pc for the purpose of **note taking only**, not for any other purpose. You should be warned that this class makes intensive use of graphs. If you are unable to quickly reproduce graphs on your computer you may fall behind during the lecture. In such a case, a laptop as a note taking tool is a disadvantage.

Students with disabilities:

Georgia Tech offers accommodations to students with disabilities. If you need a classroom accommodation, please make an appointment with the ADAPTS office (www.adapts.gatech.edu). If you have an accommodation letter from the ADAPTS office and require accommodations, please see me in my office during office hours or by setting up an appointment with me.

Academic Honesty:

Cheating is **unacceptable**. You are hereby reminded that you have pledged to uphold the honor code as follows:

Having read the Georgia Institute of Technology Academic Honor code, I understand and accept my responsibility as a member of the Georgia Tech community to uphold the Honor Code at all times. In addition, I understand my options for reporting honor violations as detailed in the code.

Should you be caught cheating in this class you will be prosecuted according to the honor code and policies and procedures established by the Honor Advisory Council. Should you have any questions about this do not hesitate to contact me.

Collaboration policy:

Homework - Since homework is a learning tool you are allowed and encouraged to work together with other students as long as you write up and turn in your own solutions.

Exams – Exams are given to evaluate your understanding and command of the material. They are an assessment tool. As such they must reflect your own knowledge, and not that of students sitting around you or things written on cheat sheet and other cheating tools. During the exam, mind your own work and do not look in other students' exams. Should you be found guilty of cheating on an exam you will be penalized. Exam is **not** a collaborative effort.

General Information and Disclaimers:

I plan to cover as much as possible during the course of this class. While I will mostly follow the textbook, I may add some material that is not contained in it. In that case, your lecture notes will contain all the relevant information that you will need on exams. If you are having trouble with the material you are strongly encouraged to come see me during office hours. I strongly encourage you to work on the problems assigned in class as well as others in the textbook and study guide. This will not only help you come exam time but also enable you to truly understand the material.

The course outline below is a provisional one and subject to change. The topics included on each exam will depend on how quickly we cover the material. Hence exams can include more or less material than what is stated below. Exam dates may change under extraordinary circumstances only and if changed will be properly communicated to you in class and via announcements on T-Square.

The syllabus is subject to change should one become necessary and should the whole class benefit from it. In such a case, you will be properly informed in class and on T-Square. Syllabus changes are as likely as Atlanta receiving 2 feet of snow.

COURSE OUTLINE AND READING ASSIGNMENTS

August 19 – September 17 Supply and Demand – Ch 2-3

Consumer Behavior – Ch 4-5

Uncertainty – Ch 17 (time permitting)

September 22 Exam 1

September 24 – October 27 Production – Ch 6

The Cost of Production – Ch 7 Competitive Model – Ch 8-9

General Equilibrium – Ch 10 (time permitting)

October 29 Exam 2

November 3 – December 3 Monopoly – Ch 11

Pricing with Market Power – Ch 12

Monopolistic Competition and Oligopoly - Ch 13

Strategy – Ch 14 (time permitting)

December 9 Final exam, 8:00am – 10:50am



Registering for MyEconLab

How to Register and Enroll in Your MyEconLab Course

Welcome to MyEconLab! Your instructor has set up a MyEconLab course for you.

Textbook: Perloff: Microeconomics, 5e

Course Name: ECON 3110 Advanced Micro, Fall 2009

Course ID: XL0C-G1R1-501Y-8GE2

To join your instructor's course, please complete the following **two** steps:

1. **REGISTER** for MyEconLab, and, 2. **ENROLL** in your instructor's course

To register, you will need:

1. A valid e-mail address, and, 2. The **access code** that came with your MyEconLab Access Kit If you don't have an access kit, you can purchase access online at http://www.myeconlab.com. You will have the choice to purchase access with or without a full etext. Once enrolled in your professor's course, you will also have the option to purchase a discounted version of your text.

Step 1: Register for MyEconLab

- 1. Go to http://www.myeconlab.com and click the **Students** button, in the Register section.
- 2. Follow the on-screen instructions for choosing author and title.
- 3. Choose **Register with an Access Kit/Code** if an access kit was included with your book. If you need to purchase access online, click **Purchase Access**.
- 4. Follow the instructions to set up your login and password and register for your course.

Step 2: Enroll in your instructor's course

- 1. Log in to MyEconLab at http://myeconlab.com with your newly created Login Name and Password
- 2. Enter your Course ID: XL0C-G1R1-501Y-8GE2

If you purchased access, visit the **Student Center** inside your Instructor's Course for additional purchase options.

Note: If you are taking two MyEconLab courses simutaneously you will need two seperate login accounts.

Need Help? For assistance, please visit http://www.myeconlab.com/support.