ECO 420K
Microeconomic Theory
Unique #34220, 34225

Professor Gerald Oettinger
Fall 2017

**Course Description**

Economics 420K is a course in microeconomic theory. We will analyze the behavior of individual economic agents (mainly consumers and firms) and the market outcomes that result from the interactions between these individual agents. The course will focus on teaching you the tools and methods of microeconomic analysis and how to apply them. As such, it will involve a lot of problem solving. The analytical skills that you develop will be useful in the subsequent economics courses that you take and also will be helpful in understanding economic issues in the world around you. Strong analytical skills are also highly valued by employers.

**Prerequisites**

- Economics 304K and 304L with grades of at least a C−.
- Economics 329 with a grade of at least a C.
- Mathematics 408C and 408D; or 408K and 408L; or 408N and 408S, with grades of at least C− in each.

No exceptions to the course prerequisites will be made.

**Required Books**

Textbook: *Intermediate Microeconomics with Calculus*, 1st edition, by Hal Varian.
Workbook: *Workouts in Intermediate Microeconomics*, 9th edition, by Theodore Bergstrom and Hal Varian.

The author has a different, but nearly identical, textbook entitled either *Intermediate Microeconomics* (in the 9th edition) or *Intermediate Microeconomics: A Modern Approach* (in the 8th or earlier editions). The main difference between our assigned text and these alternatives is that the use of calculus is integrated into the text rather than put in chapter appendices. But these alternative textbooks would make acceptable substitutes for the assigned book, so long as you don't ignore the math in the chapter appendices. Likewise, recent earlier editions of the *Workouts* workbook would make an acceptable substitute for the 9th edition (so long as no pages are missing). However, one responsibility that **you** assume if you use an earlier edition of the textbook is determining how the chapters that I assign from the 9th edition correspond to the chapters in the earlier editions; not all of the chapter numbers have remained the same across editions because the author has added a few new chapters (discussing more peripheral topics in microeconomics that we will not have time to cover) in the most recent editions of the books.

**Online Course Materials**

Various course materials will be available online through Canvas (https://canvas.utexas.edu), which you can also access via https://my.utexas.edu. In particular, I will post some math review material, a list of suggested workbook problems and answers to workbook problems, some additional problems and solutions, practice exams, and possibly other material. I also may use it for class announcements. Please check it regularly.

**Professor and Teaching Assistant Office Hours**

Professor and teaching assistant office hours, office locations, and contact information will be posted on Canvas.

**Class Meetings**

There are two 75 minute lecture meetings each week, which take place on Mondays and Wednesdays from 9:30-10:45 in BUR 108. These meetings will be devoted mainly to covering new material, but often I will give some brief in-class quiz questions and/or work an example problem (either from *Workouts* or of my own creation).

There are two (identical) 50 minute discussion sections (one associated with each unique number), both held on Fridays. Each discussion section will be led by one of the teaching assistants and usually will be devoted to going over problems in *Workouts*. Attendance is highly recommended, as proficiency in solving economic problems is necessary to perform well on the exams. The location and time of the discussion sections is as follows:

| | | |
|---|---|---|
| Unique #34220: | CLA 1.104 | Friday, 9:00-9:50 |
| Unique #34225: | CLA 1.104 | Friday, 10:00-10:50 |

**Grading**

Your course grade will be determined by your performance on: (i) a large number of brief in-class quiz questions/exercises given during lectures throughout the semester (and described in further detail below); (ii) two midterm exams; and (iii) a cumulative final exam. The weights assigned to these course components in determining final grades are:

| | |
|---|---|
| In-class quizzes/exercises: | 12% |
| Midterm 1: | 24% |
| Midterm 2: | 24% |
| Final Exam: | 40% |

Grading will be on a "curve", by which I simply mean that your grade will depend on your cumulative course points **relative to** the cumulative course point distribution for the entire class. Past history suggests that the final course grade distribution will contain roughly 25%-30% A's, and 60%-65% A's or B's. I will use plus/minus grade categories when assigning final grades (i.e., A, A−, B+, B, …, D−, F).

Exam dates, which will not be altered, are as follows:

Midterm 1: Monday, October 9
Midterm 2: Monday, November 20
Final Exam: Friday, December 15, 2 PM

Please verify now that you will be able to attend class on all of the exam dates. Missed midterm exams will not be rescheduled and only will be excused without penalty if the absence is due to a verifiable emergency or some other reason that the university explicitly accepts as legitimate. In this case, the weight on the midterm and the final exam will be scaled up proportionately. Exams missed for unexcused reasons will receive a score of zero. All of the exams will be closed-book and closed-note. You may use a calculator but you may **not** use a smart phone on the exams.

Shortly after final course grades are submitted, you will be able to view your grade through the UT Registrar's web page: http://registrar.utexas.edu/students/grades/report.

**Problems in *Workouts***

The *Workouts in Intermediate Microeconomics* workbook contains a large number of problems to help you master the course material. Some of these problems are quite challenging and most of them are useful. You should try to do as many of the problems in the relevant chapters of *Workouts* as possible, except those dealing with sections of the textbook that we explicitly skip. To help you get started, the introduction of each chapter in *Workouts* usually contains one or more solved problems. As a further aid, answers (but not the detailed method of solution) to the even-numbered problems are provided in the back of the workbook and answers to the odd-numbered problems are available on the class Canvas page. Detailed methods of solution for selected problems (both even-numbered and odd-numbered) from *Workouts* will be covered in the discussion sections.

*Workouts* also contains a set of short, multiple-choice quizzes based on each chapter. **After** you have read a chapter in the textbook and have done the problems for that chapter, you should take the corresponding quiz. You can grade it yourself. Answers are given in the very back of *Workouts*.

I cannot overemphasize the importance of doing the problems in *Workouts*. There is no good substitute for solving problems as a way to master the course material, and doing well on the exams will depend critically on your ability to solve problems. Thus, you have ample incentive to do the problems in *Workouts*, even though they do not contribute directly to your course grade.

I encourage you to form a problem solving study group with a small number of your fellow students, but I also highly recommend that you meet to discuss the problems only **after** each student in the group has worked seriously on the problems on his/her own. I also strongly encourage you to keep up with the course. *Workouts* contains a large number of problems and the problems in the later chapters build on concepts developed in the earlier chapters. You likely will find yourself in serious trouble if you postpone working on the problems until shortly before the exams.

**In-Class Quizzes/Exercises**

In many — perhaps most — of our class meetings, I will interrupt the lecture one or more times to administer a brief in-class quiz or exercise. These quizzes/exercises, which cumulatively will account for 12% of the course points, have several purposes: (i) to give you an opportunity to test your understanding of the lecture material in "real time"; (ii) to provide you with an incentive to attend class and actively engage with the course material while there (since points are at stake); (iii) to give me real-time feedback on students' understanding of the course material (since the quizzes will be administered through a classroom response system — described below — that tallies student answers immediately); and (iv) to illustrate, through students' own behavior in these classroom exercises, a number of important ideas in economics (e.g., choices respond to incentives, voluntary trade is beneficial, etc.).

To record student responses in these in-class quizzes/exercises, we will use the Top Hat classroom response system (www.tophat.com). You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center, which outlines how to register for a Top Hat account and provides a brief overview to get you up and running on the system.

An email invitation has already been sent to students enrolled in the class but, if you have not received it, you can register by visiting the Top Hat web page for our course: https://app.tophat.com/e/751723. Note: our Course Join Code is 751723.

Top Hat requires a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing

Should you require assistance with Top Hat at any time, please contact their support team directly by email (support@tophat.com), via the in app support button, or by phone at 1-888-663-5491. Your specific user information will be needed in the troubleshooting process.

**Getting the Most out of Lectures**

You will find the lectures more useful if you read the textbook chapter and/or view the lecture slides beforehand to familiarize yourself with the main ideas to be developed. You will be able to draw more easily understandable diagrams in your lecture notes if you bring at least two different colored pens or pencils with you to class. I will sometimes go over problems from *Workouts* in lecture so you may find it useful to bring the workbook with you to class so that you can follow along. Finally, you should stay engaged in lecture and don't be shy about asking questions. Doing so will make the course more interesting for both you and me.

**Additional Resources**

On the class Canvas page, you will find a module entitled "Microeconomics Video Tutorials" containing a file named "IMVH Resources". Contained therein are a set of videos on a wide range of microeconomic theory topics (including many that we do not have time to cover in this course), produced by faculty in the UC San Diego economics department. These are high-quality instructional videos and I encourage you to look at them.

**Accommodations for Students with Disabilities**

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities (471-6259, http://diversity.utexas.edu/disability). I cannot provide accommodations without official certification of disability from this office.

**Statement on Academic Dishonesty**

All of your participation and submitted work in this class is expected to be in accordance with the UT Honor Code. Students who violate University rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University.

**Course Schedule**

A **tentative** course schedule is shown below. The topics covered, the time devoted to each topic, and the chapters covered on each exam are only forecasts and may change. If we do not maintain the pace implied by the schedule, the content of the exams will be adjusted to reflect what we have covered.

| **Date** | **Topics Covered or Class Activity** |
|---|---|
| Wed., Aug. 30 | Course Introduction, Math Background (begin) |
| Mon., Sep. 4 | NO CLASS – LABOR DAY |
| Wed., Sep. 6 | Ch. 1 + Mathematical Appendix: Math Background, Optimization |
| Mon., Sep. 11 | Ch. 2: Budget Constraint |
| Wed., Sep. 13 | Ch. 3, 4: Preferences, Utility |
| Mon., Sep. 18 | Ch. 5: Choice |
| Wed., Sep. 20 | Ch. 6: Demand |
| Mon., Sep. 25 | Ch. 8: Slutsky Equation |
| Wed., Sep. 27 | Ch. 8: Slutsky Equation |
| Mon., Oct. 2 | Ch. 9.1-9.4, 12: Endowments, Choice under Uncertainty |
| Wed., Oct. 4 | Ch. 12: Choice under Uncertainty |
| **Mon., Oct. 9** | **Midterm 1** |
| Wed., Oct. 11 | Ch. 14: Consumer Surplus |
| Mon., Oct. 16 | Ch. 15: Market Demand |
| Wed., Oct. 18 | Ch. 19: Technology |
| Mon., Oct. 23 | Ch. 20: Profit Maximization (skip section 20.11) |
| Wed., Oct. 25 | Ch. 21: Cost Minimization (skip section 21.2) |
| Mon., Oct. 30 | Ch. 22: Cost Curves |
| Wed., Nov. 1 | Ch. 23: (Competitive) Firm Supply |
| Mon., Nov. 6 | Ch. 16: (Competitive) Equilibrium |
| Wed., Nov. 8 | Ch. 24: (Competitive) Industry Supply |
| Mon., Nov. 13 | Ch. 32: Exchange and General Equilibrium |
| Wed., Nov. 15 | Ch. 32: Exchange and General Equilibrium |
| **Mon., Nov. 20** | **Midterm 2** |
| Wed., Nov. 22 | NO CLASS – THANKSGIVING BREAK |
| Mon., Nov. 27 | Ch. 25: Monopoly |
| Wed., Nov. 29 | Ch. 26: Monopoly Behavior |
| Mon., Dec. 4 | Ch. 28: Oligopoly (skip sections 28.3-28.4) |
| Wed., Dec. 6 | Ch. 29: Game Theory |
| Mon., Dec. 11 | Ch. 30: Game Applications |
| **Fri., Dec. 15, 2 PM** | **Final Exam (covers entire course)** |