## Yiqing Xie

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## ECON 3070-001

## Spring 2010

Intermediate Microeconomics 3070-001, TR 12:30-1:45pm, HLMS 267
Yiqing Xie

## Administrative Details

Webpage: webfiles.colorado.edu/xiey/www
Text: Besanko and Braeutigam, "Microeconomics ", 3rd Edition, Wiley. Office: Economics 414
Hours: Tue and Thurs 10:00-11:00am or by appointment Phone: (303) 492-7709 but the strongly preferred method of contact is: e-mail: Yiqing.Xie@.colorado.edu

## Content:

This course introduces the theoretical framework for analyzing the economic behavior of individual decision-makers, such as consumers, workers, firms, and managers. The techniques presented in this course are used by almost every economist and can be applied to several fields including international economics, environmental economics, labor economics, and industrial organization.

The course is divided into five sections. We begin with a basic review of supply and demand. In Section 2, we examine consumer behavior and market demand by constructing a model of consumer choice and using the model to derive individual and market demand. In Section 3, we turn our attention to the other side of the market and analyze the behavior of firms and market supply. We construct a model to demonstrate how each firm decides what combination of inputs it should use to produce its output and what quantity of output to produce and bring to market. The model is then used to derive the firm's supply curve and the market supply curve. In Section 4, we bring the two sides of the market together to show how price and output are determined by the market. A variety of market structures are examined including perfect competition, monopoly, and (if time permits) oligopoly.

## Prerequisites:

The prerequisites for this course are
Economics Prerequisites: ECON 1000 or 2010
Mathematics Prerequisites: ECON 1078 \& 1088 or MATH 1300 or MATH 1310 or
MATH 1081 or MATH 1080 \& 1090 \& 1100 or APPM 1350 or equivalent

The models covered in this course require calculus. It is assumed that every student has a working knowledge of calculus, and there will be no formal review of calculus techniques. As such, the mathematics prerequisites will be strictly enforced.

## Grading:

I have an unusual and complicated (but extremely fair!) grading system. There will be two midterms and a comprehensive final. On each exam enough points are added to everyone's bring the median (or mean which is lower) score up to 75. NOTE: it is points that are added not questions. So, for example, if the median for a particular exam is 68,7 points will be added to each person's exam. Hence, doing well on a difficult exam, say getting a 96 when the median was 68 enables you to get over 100 points, in this example receiving a 103. Should the median for an exam be above 75, I do not subtract (such an outcome indicates either that you are part of an unusually smart or studious class or--more likely?--that I made the test too easy, hence it is my problem). After these adjustment points are added, I will calculate your course test grades as the largest number arising from the following alternative calculated scores:
"Score 1 ": . 25 (1 st Mid Grade) $+.25(2$ nd Mid Grade) +.30 (Final Grade) +.20 (Problem Sets)
"Score 2": .30(2nd Mid Grade) +.50 (Final Grade) +.20 (Problem Sets)
"Score 3": .30(1st Mid Grade) +.50 (Final Grade) +.20 (Problem Sets)
Hence if you "mess up" (or miss) either of the midterm exams (but not both), that test will automatically be dropped, and the comprehensive final is weighted more heavily in this case. There will be no early exams or make-up exams, since they are difficult to make comparable and this system does not penalize you for missing one exam in any event.

The final exam date is: May $51: 30-4: 00 \mathrm{pm}$ (Wednesday). The exams are in our usual classroom. This information is repeated at the end of the syllabus...there are no make-ups...Do not make plans (airline tickets, etc.) that involve leaving early.

The University of Colorado does not allow me to award even the best of you with an "A+," hence there is (unfortunately) little incentive to really learn the material of any course, in particular this one. To overcome this difficulty since I believe in creating an incentive to excel - I let anyone with an adjusted 96 or higher average on the two midterms out of the final! [Note: even if you personally do not get out of the final, you should cheer for those that do, since the median will be lower on the final, causing more points to get added to
everyone's score on this important test!]. I do require that those getting out of the final continue coming to class for the remainder of the semester. NOTE: the first midterm is nearly half-way through the course and second midterm comes very late in the course; this is to be sure that those getting out of the final are tested over most of the material.

I view attendance at my lectures and the homework problem sets as highly desirable, so the homework problem sets part is $20 \%$ of your final grade which cannot be dropped. I do want you to emphasize on each problem set because they are closely related with your midterms and final. There is going to be 6 problem sets in total for this semester among which you can drop the one with the lowest grade. At the beginning of the semester, I am going to take attendance for the first three classes, if you miss any of them, I will take an administrative drop. During the semester, I am going to take attendance for FIVE times. Among these 5 times, if you do not miss a single class, your grade will be bumped up when it is on the margin. If you only miss one lecture, there will be no change to your grade. If you miss two lectures, you grade will be moved down when it is on the margin. That is, you can have an 89 (normally a $\mathrm{B}+$ ) and get either an $\mathrm{A}-$, a B , or stay at a $\mathrm{B}+$; similarly, you could have a 91 (normally an A-) and get either an A , a $\mathrm{B}+$, or stay at an A -. If you miss three lectures among these five, your grade will be moved down by one level no matter you are on the margin or not. That is, you get a B and you miss three lectures, you will end up with a B-. If you miss four lectures, you grade will be moved down by two levels, say from B to C. And so on...

A tentative guide to topics we will cover:

| Date | Content | Note |
| :--- | :--- | :--- |
| 12-Jan | Analyzing Economic Problems |  |
| 14-Jan | Supply and Demand Analysis; Math test | Attendance 1 |
| 19-Jan | Supply and Demand Analysis; Math test Review |  |
| 21-Jan | Preferences and Utilities |  |
| 26-Jan | Preferences and Utilities | Attendance 3 |
| 28-Jan | Consumer Choice |  |
| 2-Feb | Consumer Choice | PS1 due |
| 4-Feb | The Theory of Demand |  |
| 9-Feb | The Theory of Demand till 5.4 |  |
| 11-Feb | Inputs and Production Functions | PS2 due |
| 16-Feb | Inputs and Production Functions |  |
| 18-Feb | Inputs and Production Functions | PS3 due |
| 23-Feb | Midterm 1 Review |  |
| 25-Feb | Midterm 1 |  |
| 2-Mar | Costs and Cost Minimization |  |
| 4-Mar | Costs and Cost Minimization | PS4 due |
| 9-Mar | Costs and Cost Minimization |  |
| 11-Mar | Cost Curves |  |
| 16-Mar | Cost Curves |  |
| 18-Mar | Perfectly Competitive Markets |  |
| 23-Mar | Spring Break! |  |
| 25-Mar | Spring Break! | PS5 due |
| 30-Mar | Perfectly Competitive Markets |  |
| 1-Apr | Perfectly Competitive Markets | 1:30 --4:00pm |
| 6-Apr | Perfectly Competitive Markets - Applications |  |
| 8-Apr | Monopoly |  |
| 13-Apr | Monopoly 11.1, 2, 5, 6 |  |
| 15-Apr | Market Structure and Competition |  |
| 20-Apr | Midterm 2 Review |  |
| 22-Apr | Midterm 2 |  |
| 27-Apr | Game theory and strategic behavior |  |
| 29-Apr | Review -- to be determined |  |
| 5-May | Final Exam |  |

## University Policies

## Students with Disabilities

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services by September 11th so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. University policies regarding disabilities are available at www.colorado.edu/disabilityservices. Disability Services can be contacted by telephone at (303) 4928671 or in person at Willard 322.

## Religious Observances

Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or required attendance. If you have a conflict due to a religious obligation, please see me at least one full week in advance so that alternate arrangements can be made. Policies regarding religious practice are available at www.colorado.edu/policies/fac relig.html.

## Classroom Behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their students express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. Polices regarding classroom behavior are available at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html\#student code.

## Discrimination and Harassment

The University of Colorado Policy on Sexual Harassment and the University of Colorado Policy on Amorous Relationships applies to all students, staff, and faculty. Any student, staff or faculty member who believes $s /$ he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at (303) 4922127 or the Office of Judicial Affairs at (303) 492 5550. Information about the ODH and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at http://www.colorado.edu/odh.

## Academic Misconduct

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor

Code Council (honor@colorado.edu, (303) 725 2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at www.colorado.edu/policies/honor.html and at www.colorado.edu/academics/honorcode.

