#### ECON 3070-008

#### Spring 2011

Intermediate Microeconomics 3070-008, MWF 2:00 – 2:50pm, GUGG 205 Yiqing Xie

### **Administrative Details**

Webpage: webfiles.colorado.edu/xiey/www Text: Besanko and Braeutigam, "Microeconomics", 4th Edition, Wiley. Office: Economics 414 Hours: MWF 1:00 – 1:50pm or by appointment Phone: (303) 492-7709 but the *strongly preferred* method of contact is: e-mail: <u>Yiqing.Xie@.colorado.edu</u>

### **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(1st Mid Grade) + .25(2nd Mid Grade) + .30(Final Grade) + .15(Problem Sets) + .05(In-class activity)

"Score 2": .30(2nd Mid Grade) + .50(Final Grade) + .15(Problem Sets) + .05(In-class activity)

"Score 3": .30(1st Mid Grade) + .50(Final Grade) + .15(Problem Sets) + .05(In-class activity) 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 4 1:30 – 4:00 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 15% 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. 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 B+) and get either an A-, a B, or stay at a B+; similarly, you could have a 91 (normally an A-) and get either an A, a 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:

<b>Week</b> Week 1 (Jan 10, 12, 14)	<b>Content</b> Analyzing Economic Problems Math Review	Note
Week 2	Supply and Demand Analysis	
(Jan 19, 21)	Preferences and Utilities	
Week 3	Preferences and Utilities	
(Jan 24, 26, 28)	Consumer Choice	PS1 due on Jan 28
Week 4	Consumer Choice	5
(Jan 31, Feb 2, 4)	The Theory of Demand	
Week 5	The Theory of Demand	
(Feb 7, 9, 11)	The Theory of Demand	PS2 due on Feb 11
Week 6	Inputs and Production Functions	
(Feb 14, 16, 18)	Inputs and Production Functions	
Week 7	Inputs and Production Functions	PS3 due on Feb 23
(Feb 21, 23, 25)	Midterm 1 Review & Midterm 1	Midterm 1 is on Feb 25
Week 8	Costs and Cost Minimization	
(Feb 28, Mar 2, 4)	Costs and Cost Minimization	
Week 9	Costs and Cost Minimization	
(Mar 7, 9, 11)	Cost Curves	
Week 10	Cost Curves	
(Mar 14, 16, 18)	Perfectly Competitive Markets	PS4 due on Mar 18
Week 11	Spring Break!	
(Mar 21, 23, 25)	Spring Break!	
Week 12	Perfectly Competitive Markets	
(Mar 28, 30, Apr 1)	Perfectly Competitive Markets	
Week 13	PC Markets – Applications	
(Apr 4, 6, 8)	Monopoly	PS5 due on Apr 6
Week 14	Monopoly	
(Apr 11, 13, 15) West 15	Market Structure and Competition	DSC due on Ann 20
Week 15 (Apr 18, 20, 22)	Market Structure and Competition Midterm 2 Review & Midterm 2	PS6 due on Apr 20 Midterm 2 is on Apr 22
Week 16	Game theory and strategic behavior	Midterm 2 is on Apr 22
(April 25, 27, 29)	Review to be determined	
(April 23, 27, 29) May 4	Final Exam	1:304:00pm

# **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) 492 8671 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\_co <u>de</u>.

#### **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) 492 2127 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 <a href="http://www.colorado.edu/odh">http://www.colorado.edu/odh</a>.

#### 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.