

**ECON 3070-002**  
**INTERMEDIATE MICROECONOMIC THEORY**  
**FALL 2015**

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<b>Instructor:</b>	<b>Xin Wang</b>
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<b>Lecture:</b>	<b>TTH 02:00 PM - 03:15 PM (MUEN E432)</b>
<b>Website:</b>	<a href="https://learn.colorado.edu/">https://learn.colorado.edu/</a>
<b>Office:</b>	<b>ECON 307</b>
<b>Office Hours:</b>	<b>TW 03:30 - 04:30 PM and by appointment</b>

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**COURSE DESCRIPTION**

This course studies the behavior of individual economic agents and their market interactions. 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 name comes as “Intermediate” which indicates this course is designed to provide students with more detailed and thorough theories and techniques beyond an introductory Microeconomics course. After a successful completion of this course, students should be able to: 1). Describe key concepts and models in words as well as in a formal mathematical way. 2). Utilize graphing and mathematical techniques to explain intuitions behind an economic question, and solve microeconomic questions. 3). Apply concepts and models to explain economic behaviors in real world.

The course is roughly composed of four parts. We begin with a basic review of supply and demand. Part 2 studies consumer behavior and market demand. We will show how a consumer may make optimal choices, how individual demands are formed, and how market demand can be derived. Part 3 discusses the firm's technologies, production functions and production costs. We shall see how firms can make the optimal input choices to minimize production costs. This lays the foundation for the study of behavior of firms under different forms of market structure. Part 4 integrates the previous material into models of prices and outputs. A variety of market structures are examined including perfect competition, monopoly, and oligopoly. Topics in game theory and business strategies will be covered.

**PREREQUISITES:**

**Economics:** ECON1000/ ECON 2010

**Math:** ECON 1078 & 1088 or MATH 1300 or MATH 1310 or MATH 1081 or MATH 1080 & 1090 & 1100 or APPM 1350 or equivalent.

In this course we will use calculus intensively. It is assumed that every student has a working knowledge of basic algebra, calculus and graphing skills. Relevant math techniques will be briefly reviewed when necessary, but you are responsible for the math requirements of this course.

## TEXTBOOK

**1. Lecture notes.** I will post INCOMPLETE lecture notes on the course website before each class. You should print them yourself and fill them out during classes.

**2. Besanko and Braeutigam, "Microeconomics", 5th Edition, Wiley. (Other editions are also fine).** It is a highly recommended learning strategy to read relevant chapters in the textbook before each lecture.

## GRADES

Your final grade will be depended on the maximum of the following two calculations:

Method 1		Method 2	
Problem Sets	10%	Problem Sets	10%
Participation	20%	Participation	20%
Two Midterms	40%	Your highest Midterm	30%
Final Exam	30%	Final Exam	40%

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.

## EXAMS (70%)

There will be 3 exams in total: 2 midterms and a cumulative final exam. All exams are held in the regular classroom and the dates are listed below. **There will be absolutely no make-up exam if you missed one!!** You can use a simple calculator for these exams. Graphing calculators and cell phones are **NOT** allowed under any circumstances.

**Note:** If you have 3 or more final exams on the same day, you are entitled to arrange an alternative exam time for the **last** exam scheduled on that day. To qualify for rescheduling final exam times, you must provide evidence that you have 3 or more exams on the same day, and you must make arrangements no later than the 6th week of the semester. For student athletes, if you will be travelling during the semester and have a conflict with the exam schedule, please inform me as soon as possible.

## HOMEWORK (10%)

3 problem sets will be assigned throughout the semester as homework. Each student should turn in their individual assignment. Direct copying of PS is strictly forbidden, and each student involved will receive a 0 on the homework in that case. **No late work will be accepted!**

## ATTENDANCE & PARTICIPATION (20%)

Throughout the semester, I will not take attendance checks every class, but attending lectures are highly recommended. I will distribute in-class practice for each chapter (10 in total). You can form groups (of 3 or 4) to discuss and complete these questions but each of you needs to submit your own work separately. I will collect them at the end of class. **Your answers will NOT be graded but each completed class-assigned work will be taken as your class participation grade.** This means either missing a class or incomplete work will end up with 0 participation grade on that day. I will also have individuals from different teams present their solution to the entire class. There will be no make-up opportunity for team assignments if you miss them, but I will drop your lowest team assignment score at the end of the semester.

## LAPTOP POLICY

There is to be no laptop usage in this class at any time, for any reason. The only exception to this rule is if disability services mandate that you must be allowed to use a laptop for note taking purposes. In this case, an official letter from disability services is required.

## EMAIL

I will answer emails between 9am and 5pm from Monday to Friday. I will do my best to return emails within 24 hours. I will not answer to those asking questions answered in the syllabus (grading, office hours/location) or available on the course website. If you email me a question about lectures, exams, or assignments I will most likely encourage you to come talk to me about it during my office hours. Please **do not** send me emails on your grades.

## TENTATIVE SCHEDULE

Date	Content	Readings	Notes
25-Aug	Syllabus & Calculus test		
27-Aug	Calculus review & Analytical tools	Chapter 1	
1-Sep	Supply and Demand Analysis	Chapter 2	
3-Sep	Supply and Demand Analysis		
8-Sep	Preference and Utility	Chapter 3	
10-Sep	Preference and Utility		
15-Sep	Consumer Choice	<b>Chapter 4</b>	
17-Sep	Consumer Choice		
<b>22-Sep</b>	The Theory of Demand	Chapter 5	<b>PS 1 Due</b>
24-Sep	The Theory of Demand		
29-Sep	Demand Theory & Midterm 1 Review		
<b>1-Oct</b>	<b>Midterm 1</b>		
6-Oct	Inputs and production functions	Chapter 6	
8-Oct	Inputs and production functions		
13-Oct	Inputs and production functions		
15-Oct	Costs and Cost minimization	Chapter 7	
20-Oct	Costs and Cost minimization		
22-Oct	Cost Curves	Chapter 8	
27-Oct	Cost Curves		
<b>29-Oct</b>	Perfect Competitive Market	Chapter 9	<b>PS 2 Due</b>
3-Nov	Perfect Competitive Market		
5-Nov	Perfect Competitive Market		

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10- Nov	Competitive Market: Application/Midterm 2 Review	Chapter 10	
<b>12- Nov</b>	<b>Midterm 2</b>		
17- Nov	Monopoly	Chapter 11	
19- Nov	Monopoly		
24-Nov	No class		Fall Break
26-Nov	No class		Fall Break
1- Dec	Market structure and competition	Chapter 13	
3-Dec	Market structure and competition		
<b>8-Dec</b>	Game Theory	Chapter 14	<b>PS 3 Due</b>
10-Dec	Review		
<b>17-Dec</b>	<b>Final Exam (1:30–4:00 p.m)</b>		Cumulative

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## ADDITIONAL NOTES

### Students with Disabilities

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200, and <http://www.Colorado.EDU/disabilityservices>.

If you have a temporary medical condition or injury, see guidelines at <http://www.colorado.edu/disabilityservices/go.cgi?select=temporary.html>.

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at <http://www.colorado.edu/disabilityservices>.

### Religious Observance Policy

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. See full details at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html).

### Classroom Behavior Policy

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity, and gender expression, age, disability, 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. See policies at <http://www.colorado.edu/policies/classbehavior.html>

[http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code).

### **Discrimination and Harassment Policy**

The University of Colorado at Boulder Discrimination and Harassment Policy and Procedures, the University of Colorado Sexual Harassment Policy and Procedures, and the University of Colorado Conflict of Interest in Cases of Amorous Relationships Policy apply to all students, staff, and faculty. Any student, staff, or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127, or the Office of Student Conduct (OSC) at 303-492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>.

### **Honor Code**

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](mailto:honor@colorado.edu); 303-735-2273). 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 <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.