Intermediate Microeconomics

Instructor Information

Dr. Fidel Gonzalez
Assistant Professor
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Sam Houston State University

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Class Web Page: http://www.shsu.edu/~fxg001/index_files/IntermediateMicroeconomics.htm
Phone: (936) 294-4796
Office: SHB 237J
Office Hours: TUTH 11.00 - 12.15 or by appointment. Send me an email if you cannot make it to my office hours to set an appointment.

Course Information

Meeting Place: UNIVERSITY CENTER TU 6.00-8.50 PM
Course Number: ECO 367-05
CID: 2472

Course Content

Microeconomics is the study of basic economic theory of individuals and firms. The main idea of the course is to provide you with the tools and knowledge the world around. This is a conceptual class, that you will be taught main laws and characterizations of the microeconomic activity. The course will teach you theories and applied techniques that you can use for many years. You will develop economic intuition and think like an economist. Topics include the basics of supply and demand, elasticity, taxes, production costs, perfect competition, monopoly, oligopoly, monopolistic competition, public goods and externalities. Some calculus is needed and I will teach it at the beginning of the semester.

At the end of the semester you will be able to:

A) Consumer Behavior: Economics is the study of the best allocation of scarce resources to meet unlimited wants. Understanding how consumers choose different amount or goods is essential to economics reasoning.

B) Understand marginal cost and marginal benefit: in order to make good decisions to achieve the optimal allocation of resources it is essential to understand marginal cost and marginal benefits.
C) Understanding the free markets: prices and the market system act with very little intervention to coordinate the production and consumption decisions of thousands of firms and millions of consumers. An understanding of the market system is fundamental for good decision making, in business and in life.

**Required Textbook**


**Assignments and Grading**

Grading will consist of the following three categories only: review exam, quizzes, exams, and homework.

**Review Exam:** the first two weeks of the class will be a review of mathematical concepts and principles of microeconomics. This is done to refresh concepts you learned before and to give you the mathematical tools we will use in the class. The review test represents 10% of the final grade.

**Exams:** there will be three partial exams. The highest grade represents 30% of your grade, the second highest grade 20% and the third highest grade 15%. I will try to post in the class website a practice test with its answer key before each partial exam. All exams with the respective answer key will be posted on the class website few days after the exam day. There are no make-up exams. If you cannot take an exam for some reason you should talk to me BEFORE the test. If you do not take an exam then the final will have a higher weight. However, I only allow this if you get ill AND you cannot take the test or in situations that I considered extreme such as a verifiable accidents. Falling asleep or having family troubles does not qualify as a valid excuse. If you miss the test you will get a zero. In any case, do not hesitate and talk to me about it.

The exams will be taken during the first hour and 15 minutes of the class and then you will get 15 to 20 minutes of break and then we will continue with the last part of the class.

**Homework:** there will be five homework sets. All homeworks will be posted on the class website shown in the first page of this syllabus (NOT ON BLACKBOARD) on the date shown in the calendar below. I will send an email as soon as the homework is posted. The homework set will be similar to the midterms. The homework will be collected at the beginning of class and **I will not grade homework turned in after class or sent by email.** Homework will be graded from 0 to 100. If you do not turn in the homework you get zero. When calculating your final grade, I drop the lowest homework grade and then calculate the homework average. You can work in groups when solving the homework but I will only grade individual homework. If a homework is turned in with more than one name, those students will get zero in the assignment. If you work in groups it is important that you make sure that you understand the material. The answer key for each homework will be posted on the class website right after the due date.
**Quizzes**: there will be a total of six quizzes in the semester. Quizzes will take place during first 5 minutes of some classes (see the chart below for the specific days). If you do not take a quiz you get zero. Quizzes represent 10% of the final grade. Each quiz consists of one or two easy question about the most important topics of the previous class. You may want to review your notes before class. Also, when calculating the average quiz grade I will drop your lowest quiz grade.

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<thead>
<tr>
<th>Math Review Test</th>
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<tbody>
<tr>
<td>Highest Midterm Grade</td>
<td>30%</td>
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<tr>
<td>Second Highest Midterm Grade</td>
<td>20%</td>
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<tr>
<td>Third Highest Midterm Grade</td>
<td>15%</td>
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<tr>
<td>Homework</td>
<td>15%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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**Final Numerical and Letter Grade.**

The final numerical grade is calculating as follows:

\[
\text{Final Numerical Grade} = (\text{Homework Average without the lowest grade}) \times 1.5 + (\text{Quiz Average without the lowest grade}) \times 1 + (\text{Math Review Test}) \times 1 + (\text{Highest Midterm Grade}) \times 3 + (\text{Second Highest Midterm Grade}) \times 2 + (\text{Third Highest Midterm Grade}) \times 1.5
\]

Once I obtain the final numerical grade I add extra points obtained through attendance and then I will assign a letter grade using the following table. Please note that there is no curve in the final numerical grade.

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<tr>
<th>Final Numerical Grade+ extra attendance points</th>
<th>Final Letter Grade</th>
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<td>85 to 100</td>
<td>A</td>
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<td>75 to 84</td>
<td>B</td>
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<td>65 to 74</td>
<td>C</td>
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<td>55 to 64</td>
<td>D</td>
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<td>Less than 55</td>
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**Attendance and Class Time Structure**

Since the class lasts about three hours, we will have class from 6 to 7.15 pm we will take a 10-minute break and then continue with the rest of the class from 7.25 to 8.50 pm.

In order for your presence to count as attendance you have to stay for 6 to 8.50 pm. If you leave early then it is counted as an absence.

I will take attendance starting on the first day of class by university regulations. However, attendance for extra points will start on Tuesday January 29th 2008.

Attendance is important but not required, if you do not miss any classes, you will receive a bonus of 4 points out of 100 in your final grade. If you only miss one class you will receive a bonus of 3 points out of 100. If you miss more than two classes you will not get any bonus points.

The only valid excuse for an absence not to be counted is to present a doctor’s note saying that you were ill during the days of the class.

Finally, you will also get extra points for NOT coming to class. If you only come to two classes or less you will get 3 extra points out of 100. Not coming to class implies not showing up at all. If you come and leave early then it is counted as an absence but it is not counted as “not coming” to class. If you come to class and refuse or do not sign the roster sheet it will be considered cheating and a drop of one letter grade in your final letter grade will follow for each time it is done.

If you miss class or leave early you do so in the understanding that you are waving your right to ask me questions about the lecture you missed.

**Important Dates**

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<th>Event</th>
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<tr>
<td>Math Review Test</td>
<td>February 5th</td>
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<td>Exam I</td>
<td>March 4th</td>
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<tr>
<td>Exam II</td>
<td>April 15th</td>
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<td>Exam III</td>
<td>May 13th from 8 to 10 pm</td>
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**Recommended study time and other issues.**

In order to pass this class you will most likely need to devote at least 60 minutes of studying per week, not including homework time. IT IS NOT ENOUGH TO COME TO CLASS, you also need to study on your own during the week. Attendance is a necessary but NOT a sufficient condition to pass the class.

In order to prepare for the exams you need to do the homeworks, solve the practice tests, and study the class notes and the textbook. Please, note that it is NOT enough to ONLY study the textbook.
Email Policy
During the semester I will be sending emails to the students in the class. The emails are sent to your SHSU account, it is YOUR responsibility to make sure that you have a working SHSU email.

I am always glad to receive email from my students. When you send me an email please help me by:

1) Putting your first and last name, class name and class meeting time.
2) If you are asking a question about a topic covered in class try to be very specific. Do not ask me to email you the whole lecture.

Finally, I will try to answer emails as soon as I can but you have to understand that sometimes I am unable to do so (especially during weekends).

Office Hours
You are welcome to stop by my office to ask questions about the lecture. However, make sure that you stop by during my office hours posted outside my office, in the first page of this syllabus and on the class webpage. If you cannot make it to my office hours, send me an email to schedule an appointment. If you show up at a time different than my office hours without an appointment I may not be able to talk to you. The previous also applies to my office phone number.

Classroom Behavior
Disrespectful and disruptive behavior toward me or classmates will not be tolerated at all. Please use common sense by silencing your cell phones, do not text message or play games, etc. If you leave the classroom before the lecture is over it will be counted as an absence. I want to create a class environment that promotes learning where everyone feels comfortable. Therefore, please be patient and courteous to other students when they ask a question or make a statement, even when the subject may be obvious to you. Do not answer questions from other student during the lecture, I know it is tempting to do it but this is highly disruptive. Finally, try not to use bad words unless it is strictly necessary. If you do not follow these simple rules remember that I can ask you to leave the classroom or lower your grade.
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<th>Tuesday February 12</th>
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<td>First Day of Class</td>
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<td>Review Exam</td>
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<td>Quiz 2</td>
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<td>Tuesday April 1</td>
<td>Tuesday April 8</td>
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Outline.

Topic I. Essential Mathematical Concepts

1. Basic Notation
2. Logarithms
3. Functions
4. One independent variable derivatives
5. Functions of two or more independent variables

Readings

Handout
Chapter 1

Topic II. Review of Microeconomic Principles

1. Law of demand
2. Law of Supply
3. Changes and movement along the demand and supply curve
4. Market Equilibrium
5. Government Intervention
6. Elasticity
7. Taxes

Chapter 2

Topic III. Preferences

1. Consumer preferences
2. Assumptions about preferences
3. Indifference curves
4. Marginal Rate of Substitution

Chapter 3

Topic IV. Utility

1. Cardinal utility
2. Constructing utility functions
3. Marginal utility and marginal rate of substitution

Chapter 3

Topic V. Budget constraint

1. Two goods
2. Budget Sets
3. Changes in the budget line

Chapter 3

Topic VI. Consumer Choice

1. Optimal choice
2. Consumer demand
3. Estimating utility functions

Chapter 3
**Topic VII. Demand**  Chapter 4

1. Normal and inferior goods
2. Income offer curves and Engel curves
3. Ordinary and Giffen goods
4. Price offer demand curve and the demand curve
5. Income and substitution effect.
6. Substitutes and complements
7. Elasticity of demand
8. Consumer’s surplus

**Topic VIII. Technology**  Chapter 6

1. Inputs and outputs
2. Marginal product
3. Technical rate of substitution
4. Diminishing marginal product
5. Long and short-run
6. Returns to scale

**Topic IX. Costs**  Chapter 7

1. Different types of costs
2. Short and long run
3. Cost minimization

**Topic X. Profit Maximization**  Chapter 8

1. Profits
2. Fixed and variable factors
3. Profit maximization in the short and long run
4. Returns to scale and profit maximization
5. Supply curve

**Topic XII. Analysis of Competitive Markets**  Chapter 9

1. Consumer, producer and total surplus
2. Efficiency of markets
3. Taxes and quotas

**Topic XIII. Monopoly**  Chapter 10

1. Maximizing profits
2. Mark-up
3. Deadweight loss of monopoly
4. Monopoly causes
Topic XIV. Monopoly Behavior

1. Price discrimination
2. Monopolistic competition
3. Product differentiation

Chapter 11

Topic XV. Monopolistic Competition and Oligopoly

1. Oligopoly strategy
2. Quantity and price leadership
3. Cournot equilibrium
4. Collision

Chapter 12

Topic XVI. Game Theory

1. Dominant strategies.
2. Nash Equilibrium
3. Repeated Games
4. Sequential Games

Chapter 13