

University of Massachusetts, Amherst
Department of Resource Economics

RES EC 102
INTRODUCTION TO RESOURCE ECONOMICS

Fall 2011
TuTh 9:30 to 10:45 AM
Melville 112

Instructor: Francesca Colantuoni
Office: 319 Draper Hall
E-mail: fcolantu@resecon.umass.edu

Office hours: Send me an e-mail and we'll set up an appointment.

Course Description and Objective:

Knowledge of economics is essential to anyone who wants to have a better understanding of the world in which we live. Economics is, however, a broad discipline. It covers an extremely wide range of topics and borders on many other fields of study. In this course we focus on one branch of economics---microeconomics.

In microeconomics we study the formation of markets and prices. We examine how economic decisions are made by consumers and producers. We seek to understand how economic markets work. What do they do well? What do they do poorly? What can be done to correct market failures?

In the first part of this course we will study microeconomic theories and models, which describe and explain the behavior of consumers, producers, and markets. In the second part of the course we will examine some of the shortcomings and weaknesses of economic markets. This brings us to a discussion of economic policy in which we will use economic concepts to examine some of the problems facing today's society; for example, how much government regulation of business is "best" and how much should we spend on pollution control?

Required material:

1. A registration to Aplia. Aplia is an online product that contains both a digital version of the textbook and the homeworks that you will be required to do for this course. **Course web page:** www.aplia.com. Please see the registration instructions for Aplia on the last page. An access code is included in the book package if you buy from the Textbook Annex. Alternatively, you can pay \$85 to Aplia (i.e. through the www.aplia.com web-site) by September 27 for access to the online text, practice problems, etc.

The course key is **RKCP-JKR2-6H9W** (you will need that number in order to sign up for the course).

Optional material:

- 1- A physical textbook: You can buy a physical version of the book at the Textbook Annex. The book is bundled with access to Aplia. Book: Mankiw, N. Gregory, 2007. *Principles of Microeconomics, 6th Edition*. (previous editions will also do).
- 2- Basic calculator: Once in a while you will need a calculator in class.

Grades:

Grades will be calculated according to the following percentages:

	<i>Percentage</i>	<i>When and where</i>
On-line Homeworks	20%	Roughly weekly. Aplia web-site.
In class quizzes	10%	3-5 throughout the semester. In class
Class Participation	10%	Although not required class attendance is strongly recommended.
Midterm 1	20%	October 14 th *. In class
Midterm 2	20%	November 23 rd *. In class
Final Exam	20%	Time and location to be announced.

*Please note that the above dates are subject to change.

On-line Homeworks:

- Homework will be assigned on-line through the Aplia web-site, and will be submitted on-line every Sunday at 11pm (unless otherwise instructed). You will have one week to complete each homework.
- You are encouraged to discuss homework problems with others and/or work in groups. However, you are responsible for submitting your own work.
- There are two ways you can go about submitting your problem sets:
 - Submit the problem set by the posted deadline: That will allow you to change your answers as many times as you want. Your last answers on the due date and due time will be the ones that will be graded.
 - “Grade it Now” option: You can try a “Grade it Now” problem up to three times. At the bottom of “Grade it Now” problems, you will see two buttons; Clicking on the “Save and Continue” button saves any work you have done, so you can come back and finish the problem later. When you’re ready to have your work graded and recorded, click the “Graded it Now” button. You’ll get immediate feedback on which questions you got right or wrong. You’ll also see a blue bar labeled “Explanation” below each question. You can click on any of these bars to open a box explaining the answer to the question. After clicking the “Grade it Now” button and reading the explanations, you have two new options: You can continue on to the next problem by clicking the “Continue” button or you can click the “Try Another Version” button to attempt another version of the same question. That version will have the same basic structure as the question you just answered, but with a different setup of different numbers. You can try each question up to three times. The grade that is reported to your instructor is the average score of each of your attempts as of the deadline, including any work you have saved but not submitted for grading. If you earn 1,5,3, the grade would be 3, or the average of all attempts.
- Avoid procrastinating: failure to complete an assignment until the deadline because of any personal reason is NOT a valid excuse.

In class quizzes:

You can expect roughly 3 to 5 quizzes throughout the semester. They will be held at the beginning of class and consist of exercises similar to the ones you will have submitted on-line during the previous Sunday. Quizzes will last approximately 5-10 minutes.

Attendance and Class Participation:

Although class attendance is not required it is strongly recommended. You will be responsible for learning a lot of unfamiliar material in a short amount of time and the worst thing you can do is fall behind.

Exams

- Midterm exams will be held outside of class time.
- All exams will consist of multiple-choice as well as short answer questions and problems.
- Midterm exams will cover the material covered since the previous exam. The final exam is a *comprehensive exam*.
- There will be no make-up tests or make-up homeworks given.

Class Protocol

- This class will start promptly at 9:30 AM and ends at 10:45AM. *Please wait for the class to be formally dismissed before you start to pack up your things or get up to leave.*
- Be courteous to your classmates, and professor.
- Food is not allowed in the class.
- Cell phones and laptops need to be put away during the class.

Exam Protocol

- Bring pencils, eraser, straight edge and calculator to all exams.
- No talking is allowed during tests or exams except to ask me a question.
- Anyone not in compliance with the exam protocol will be asked to leave.

Students with Special Needs:

Students who need accommodation for a learning, physical, or psychological disability should inform me as soon as possible and provide documentation from Disability Services located at 231 Whitmore.

Academic Honesty:

Academic dishonesty will not be tolerated. Any student charged with any form of academic dishonesty in any class assignment/exam will receive a grade of F for the course. The official University Policy will be followed to the fullest extent in such cases where academic dishonesty is suspected. Please read what constitutes academic dishonesty in your Code of Student Conduct available at http://www.umass.edu/dean_students/downloads/CodeofStudentConduct.pdf

Tentative Course Outline

I. Introduction (Chapters 1-2)

- A) What is Economics?
- B) What Do Economists Do?
 - 1. Microeconomics vs. Macroeconomics
 - 2. The Seven Principles of Microeconomics
 - 3. Positive vs. Normative Economics
- C) Economics Models
- D) A Simple Model: Production Possibilities Frontier (PPF)

II. Supply, Demand, and Economic Markets: An overview (Chapter 4)

- A) Demand
- B) Demand Determinants and Shifts in Demand
- C) Supply
- D) Supply Determinants and Shifts in Supply
- E) Market Equilibrium
- F) Changes in Market Equilibrium

III. Consumer Behavior: The Demand for Goods and Services (Chapters 5 and 7)

- A) Elasticities
 - 1. Introduction
 - 2. Price Elasticity of Demand
 - 3. Price Elasticity and Total Revenue
 - 4. Other Demand Elasticities
 - a) Cross-Price Elasticity of Demand
 - b) Income elasticity
 - 5. Supply Elasticity
- B) Marginal Utility and Consumer Choice
 - 1. Total vs. Marginal Utility
 - 2. The Law of Demand and Marginal Utility
 - 3. Consumer Surplus

IV. Externalities and Market Failure (Chapters 10-11)

- A) Externalities
- B) Why do we care?
- C) How to correct for market failure?
 - 1. Creating property rights
 - 2. Pollution tax
 - 3. Enforce standards
- D) Positive externalities and public goods
 - 1. Positive externality and market failure
 - 2. Positive externality and public goods

V. Producer Behavior and Costs of Production (Chapters 13-14)

- A) Overview
- B) Cost of Production

1. Total Fixed Cost
 2. Total Variable Cost
 3. Total Cost
 4. Average Costs
 5. Marginal Cost
 6. Economies and Diseconomies of Scale
- C) Profit Maximization for a Competitive Firm
1. Total, Average, and Marginal Revenue
 2. $MR = MC$ Rule
 3. $MR = MC$ Graphically
 4. Loss Minimization
 5. Short Run Firm Supply Curve
 6. Long-run perfectly competitive equilibrium

VI. Market for Products (Chapters 15-16)

- A) Introduction and Review
1. What is a market?
 2. Market structures
- B) Monopoly
1. Why monopoly arises
 2. Perfect competition vs. monopoly
 3. Relationship between P and MR
 4. Price and quantity determination
 5. Welfare: perfect competition vs. monopoly
 6. Public Policy Towards Monopoly
- C) Oligopoly
1. Mutual interdependence and strategic behavior: an example
 2. Tension between cooperation and self-interest
 3. Game Theory

VII. Conclusions

Instructor: Francesca Colantuoni

Start Date: 09/08/2011

Course Key: RKCP-JKR2-6H9W

You can begin working on your homework as soon as you register!

- In this course, you will use a textbook and Aplia's website.
- In most cases, you can save money if you buy Aplia and your textbook together. See payment options below.
- You will have access to a digital version of your textbook on Aplia through the end of this course.
- Aplia is part of CengageBrain, which allows you to sign in once and access your materials and courses.

Registration

1. Connect to <http://login.cengagebrain.com>.
2. **If you already have an account, sign in.** From your Dashboard, enter your course key (RKCP-JKR2-6H9W) in the box provided, and click the *Register* button.

If you don't have an account, click the *Create an Account* button, and enter your course key when prompted: RKCP-JKR2-6H9W. Continue to follow the on-screen instructions.

Payment

After you register for your course, you will have a variety of payment options. If you choose to pay later, you can use Aplia without paying until 11:59 PM on 09/27/2010.

Option 1: Digital Textbook with Aplia Access

- From CengageBrain: Purchase access to your course from the CengageBrain website for US\$85.00.
- From Bookstore: Purchase an Aplia Access Card from your campus bookstore.

Option 2: Physical Textbook with Aplia Access (also includes digital textbook)

- From CengageBrain: Purchase access to your course for US\$85.00 on the CengageBrain website. On your Aplia Course Home page, you can then purchase a physical book for a discounted price.
- From Bookstore: Purchase a physical book bundled with an Aplia Access Card from your campus bookstore.