

University of Massachusetts, Amherst
Department of Resource Economics

RES EC 102
INTRODUCTION TO RESOURCE ECONOMICS
4 credits

Spring 2020
TuTh 1:00 to 2:15 pm
Thompson 102
Updated 1/26/2020

Professor: Dr. Nathalie Lavoie
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Office hours: Monday and Friday 1:30 to 2:30 pm by appointment. Please come prepared with a list of specific questions.

Teaching Assistant: Ms. Juliana Unda Segura (jundasegura@umass.edu)
☆☆☆ You should view Juliana as your primary contact regarding any technology specific questions (i.e., MindTap, Moodle, or iClickers).
Office Hours: Tuesdays, 5:00 to 6:30pm in Flint 210

Course Description and Objectives:

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?

This course bears the Social and Behavioral Science designation of the General Education (Gen Ed) Program. It aims to help students to become proficient in the theories and methods of the social sciences, and to develop critical thinking skills as they apply theories and methods to concrete social situations, and to demonstrate these proficiencies and critical thinking skills in writing. More specifically, in the writing component of the course, students will demonstrate their ability to apply microeconomics concepts to current news and events and in the context of a song, to meet the Gen Ed learning objectives of Critical Thinking, Communication, and Connections.

Lecture Capture

- ☆ Lectures will be video and audio recorded and distributed in Moodle.
- ☆ Do note that there is no guarantee that the recordings will be of a sufficiently good quality as to be audible, clear or useful. Technical malfunctions are likely to occur from time to time. Students are advised to attend lectures rather than rely on the availability of recordings.

Required material:

- 1- This course requires “MindTap for Mankiw’s Principles of Microeconomics 9/e” to access online homework, ebook and study tools. To register for Mindtap (see p.8) you will need a subscription to Cengage Unlimited (you may already have this subscription if you use a Cengage product in another course this semester – you need to purchase it only once).
 - 2- *iClicker2*. This is a personal response system that you will use in class to respond to questions. **Clickers start counting towards your grade on January 28th.**
- ☆☆☆ You cannot share any of the above items.
- 3- Basic Lecture Notes: Available on Moodle and at Campus Design and Copies.

Optional material:

Only basic calculators (no graphing/text-storing calculators, no cell phones) will be allowed during exams.

Other Resource: The Learning Resource Center located on the 10th floor of the W.E.B. Du Bois Library offers tutoring services for various courses. Find out more at <http://www.umass.edu/lrc/>

Grades:

Grades will be calculated according to the following percentages:

	<i>Percentage</i>	<i>When</i>
Online Homeworks	25%	Nearly every week.
iClickers	5% (or 0% if iClickers<Final)	Every lecture.
Writing component: - Microeconomics in the News - Microeconomics Rock!	7% 3%	Three times during the semester. Due on Thursday, April 16 th , 2020.
Midterm 1	Best exam is worth 25%, other one is worth 10%	Thursday, February 20 th , 7:00 – 9:00 pm. Thompson 104.
Midterm 2		Thursday, April 2 nd , 7:00 – 9:00 pm. Thompson 104.
Final Exam	25% (or +5% if iclickers<Final)	Thursday, May 7 th , 10:30 am – 12:30 pm. Totman Phys. Ed. Bldg. Gym.

Note: No extra credit will be given under any circumstance.

The *minimum* percentages needed for course grades are as follows:

	F	D	D+	C-	C	C+	B-	B	B+	A-	A
Course grade	-	60	63	67	70	73	77	80	83	87	90
Grade points	-	1	1.3	1.7	2	2.3	2.7	3	3.3	3.7	4

The “Free Pass” System

- ☆ For the some grading segments of this course you have a certain number of free passes. A free pass entitles you to drop a low score or miss an assignment for any reason.
- ☆ Please use your free passes wisely as I do not offer make-up assignments for any other reasons.
- ☆ If you have not used your free passes, at the end of the semester your lowest score(s) will be dropped automatically.

Online Homeworks:

- ☆ Weekly homeworks will be given over the Internet using MindTap for Mankiw's Principles of Microeconomics 9/e. You can expect between 12 to 14 homeworks during the semester.
- ☆ You can take the homeworks only with a registration to MindTap, see page 8 for how to register.
- ☆ You will usually have 7 days to complete each homework.
- ☆ Avoid procrastinating: failure to complete homework because of computer problems or any other personal reason is not a valid excuse.
- ☆ Problems with MindTap should be reported right away to Customer Support, as well as Nathalie and the TA.
- ☆ An announcement will be made in class and in Moodle when a new homework is out. *It is your responsibility to find out when homeworks are due.*
- ☆ Two free passes.

In-Class Response System: iClicker

- ☆ iClicker is an in-class communication system. It uses wireless transmitters (what I call "clickers") to allow students to send answers in response to questions that I will pose during class. It will allow me to find out how the class grasps the material as a group and generate classroom discussions. It will allow you to check and improve your understanding of the concepts during class.
- ☆ Every class period is weighted equally regardless of the number of clicker questions.
- ☆ For survey-type questions (blue Powerpoint background), you will earn full credit for participating. For other questions (orange Powerpoint background), you will earn 50 percent of the points for the correct answer, and 50 percent to participate. In other words, you earn at least 2.5 percent of your grade just for participating.
- ☆ Clickers are used to help you learn and should improve your grade. However, if your iClicker score is less than your Final Exam score, iClicker will be removed from your grade and its weight will be added to the final exam's weight.
- ☆ To get iClicker credits, you must be present in class and send your response to each question before the time expires (about 30 seconds). Given the nature of these assignments and the weight of each question on your final grade, under no circumstance you will be able to make-up iClicker questions, including for technical problems with your clicker (please monitor the life of your batteries).
- ☆ To obtain credit for iClicker, you must register your clicker in Moodle. See page 7.
- ☆ **Using a classmate's clicker is cheating** and will be treated as (see Academic Honesty section).
- ☆ Three free passes (a pass counts for a class period). These free passes are to be used for absolutely *any reason* you have to miss class, forget clicker, etc.

Microeconomics in the News

- ☆ Three times during the semester you will post an analysis of a news article in the context of concepts covered in class. You will also comment on someone else's post. More details to follow.

Exams

- ☆ Midterm exams will be held from 7 to 9 pm on Thursday evenings. The day of an exam, the lecture will be cancelled, but I will hold an optional question session during class time.
- ☆ All exams will consist of multiple-choice and short answer questions and problems.
- ☆ The final exam is a *comprehensive* exam, but not the midterm exams.
 - ☆ There will be no make-up tests given, except under extenuating circumstances as defined in the Academic Regulations available at <http://www.umass.edu/registrar/sites/default/files/academicregs.pdf> Be prepared to document the reason of your absence and advise me ahead of time if possible **by phone** (413-545-5713, please leave a message with your phone number if I'm not there) **and e-mail**.

Academic Conflict with Exams

I will provide a make-up exam only to eligible students according to the university rules. These rules apply to students for whom midterm exams conflict with another evening exam or class. Please have the Registrar's Office verify the conflict and bring me this verification **at least one week before the exam**.

Exam Protocol

- ☆ Please wait outside the room until we open the doors.
- ☆ Sit yourselves where there is an exam, usually a desk away from the next neighbor.
- ☆ Bring pencils, eraser, straight edge, basic calculator, and your **student ID** to all exams.
- ☆ *Don't bring backpacks or anything that may clutter the rows on exam days.* It makes it difficult for people who want to leave early to do so. Leave your backpacks at home or in the front of the classroom.
- ☆ Go to the bathroom before the exam. If you need to go to the bathroom during the exam, please bring your exam and smartphone to the proctor.
- ☆ No talking is allowed during exams.
- ☆ Anyone not in compliance with the exam protocol will be asked to leave.

Students with Special Needs:

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements.

Academic Honesty:

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent (http://www.umass.edu/dean_students/codeofconduct/acadhonesty/).

Sharing of Material

As a student in this class you will have access to relevant materials including, but not limited to exam questions and solutions, lecture slides, the instructions for Microeconomics in the News and Microeconomics Rock!, and this syllabus. Those materials as well as your notes taken off them are for your personal use only. You are welcome to share them with other students in this class, but any sharing with outside entities without prior permission would be a violation of copyright law.

Civility inside the Classroom

Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, certain basic standards of classroom respect must be adhered to. Respect does not eliminate appropriate humor, enjoyment, or other indications of a comfortable and pleasant classroom community. However, there is an expectation that all participants in this course will:

- Display respect for all members of the classroom community: your instructor, TAs and fellow students.
- Attend and participate in lectures, group discussions, and other classroom activities.
- Avoid unnecessary disruptions during class such as private conversations, reading newspapers, arriving late or leaving early, eating, drinking, and sleeping during class.
- Laptops or tablets should only be used to take notes, and cell phones to do calculations.
- *Please wait for the class to be formally dismissed before packing up your things or getting up to leave.*
- Avoid negative language that is considered racist, sexist, or homophobic or in other ways may exclude members of our campus and classroom community.

Civility outside the Classroom

Please be respectful and use appropriate language when communicating with me and TAs over e-mail. E-mail is appropriate when used to schedule an appointment, notify me of an absence or tardiness, or for short questions to clarify class assignments or specific items from a lecture.

E-mail is not appropriate to deliver the following:

- Messages with inappropriate language.
- Junk mail, internet jokes, chain letters, etc.
- Requests for my lecture notes or asking if you “missed anything” when you miss a class. It is your responsibility to attend class and obtain notes. If you miss a class, obtain notes and other important information from a fellow student.
- Anything you would not be willing to communicate to me in person.

E-mail is frequently not a good substitute for meeting with me. Office visits are the best way to ask questions about course material, and to discuss classroom issues or any other special concerns you may have about your class performance.

Important Dates – RESEC 102 Spring 2020

January 28	i>Clickers start counting toward your grade.
February 3	Last day to Add or Drop with no record.
February 20	Midterm Exam 1, 7:00 to 9:00 pm. Thompson 104.
March 24,	Last day to drop with “W.”
April 2	Midterm Exam 2, 7:00 to 9:00 pm. Thompson 104.
April 16	Microeconomics Rock! project due.
May 7	Final Exam, 10:30 am to 12:30 pm, Totman Phys. Ed. Bldg. Gym.

Tentative Course Outline

I. Introduction

- 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: The Circular Flow
- E) Markets are Magic!

II. Supply, Demand, and Economic Markets: An overview

- 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

- 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
 6. Elasticities and Policy Applications
- B) Marginal Utility and Consumer Choice
 1. Total vs. Marginal Utility

2. The Law of Demand and Marginal Utility

IV. Producer Behavior and Costs of Production

- 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

V. Market for Products

- 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
- C) Welfare Measures
 1. Consumer Surplus
 2. Producer Surplus
 3. Market Efficiency
 4. Welfare: perfect competition vs. monopoly
- D) Public Policy toward Monopoly
- E) Oligopoly
 1. Mutual interdependence and strategic behavior: an example
 2. Tension between cooperation and self-interest
 3. Game Theory

VI. Externalities and Market Failure

- 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

VII. Conclusions

FREQUENTLY ASKED QUESTIONS

I. What is Moodle?

Moodle is a widely-used open source learning management system used to deliver course content and host online learning activities. For details on using Moodle, see:

<http://www.oit.umass.edu/support/moodle/help-students>

II. How Do I Access Moodle?

1. Go to: <https://moodle.umass.edu>
2. Click “Log in with NetID”
3. Enter your NetID (OIT User Name and Password).
4. Under “My Courses” click on: “RES-ECON102-SEC 01 SP20”

III. What is on Moodle?

1. General Course Materials: syllabus and announcements.
2. Lecture notes and lecture capture videos.
3. Forums for Microeconomics in the News.
4. Weekly readings, homeworks, etc.
5. Your grades
6. Web links of interest.

IV. How Do I Register my i>Clicker?

1. Log in to Moodle and navigate to the RESEC 102 course page.
2. Go to the bottom of the right column, under “i>clicker,” click on “Student Registration”
3. Enter your Remote ID (see the picture showing how to locate it).
4. Click “Register”

V. How Do I Access MindTap?

Go directly to <https://www.cengage.com/dashboard/#/login>, or use the link in Moodle.

VI. How Do I Register for MindTap?

See the “How to Access Your MindTap Course” information sheet on the next page.

How to access your MindTap course

RES-ECON 102 Spring 2020

Instructor: Nathalie Lavoie

Start Date: 01/21/2020

What is MindTap?

MindTap empowers you to produce your best work – consistently.

MindTap is designed to help you master the material. Interactive videos, animations, and activities create a learning path designed by your instructor to guide you through the course and focus on what's important. Get started today!

Registration

1. Connect to <https://www.cengage.com/dashboard/#/course-confirmation/MTPNZS6NF5T0/initial-course-confirmation>
2. Follow the prompts to register your MindTap course.

Payment

After registering for your course, you will need to pay for access using one of the options below:

Online: You can pay online using a credit or debit card, or PayPal.

Bookstore: You may be able to purchase access to MindTap at your bookstore. Check with the bookstore to find out what they offer for your course.

Free Trial: If you are unable to pay at the start of the semester you may choose to access MindTap until 11:59 PM on 02/04/2020 during your free trial. After the free trial ends you will be required to pay for access.

Please note: At the end of the free trial period, your course access will be suspended until your payment has been made.

All your scores and course activity will be saved and will be available to you after you pay for access.

Already registered an access code? Bought MindTap at your bookstore or online? Now use the course link from your instructor to register for the class:

<https://www.cengage.com/dashboard/#/course-confirmation/MTPNZS6NF5T0/initial-course-confirmation>

System Check

To check whether your computer meets the requirements for using MindTap, go to <http://ng.cengage.com/static/browsercheck/index.html>

Please Note: the System Check is also accessible in the drop down box next to your name located in the upper right corner of your MindTap page.

Microeconomics Rock!

Due: Thursday, April 16, 2020, 11:00 pm in Moodle.
10 % off per hour late.

The goal of this activity is to stimulate your thinking about microeconomics concepts and principles. Your assignment through the semester is to keep your ears open to songs that explore some of the ideas and concepts of microeconomic theory covered in this course. You must find **one song** illustrating **at least three** concepts of microeconomics. There is no restriction on the music styles; pop, rock, country, jazz, rap, whatever makes you tap your feet!

Your submission must contain the following elements and must be formatted according to the following guidelines.

- **Your name and student ID**
- **Song:** Title of the song and the name of the band/singer.
- **Song Lyrics**
- **Relevant Microeconomic Concepts.** Provide an exhaustive list of the microeconomic concepts, ideas, theories that are either directly or indirectly referred to in the song. Each concept should be accompanied by the **relevant lyrics** and a **short explanation for why** they relate to the microeconomics concept listed. To get full credit you must demonstrate that you have understood the concepts in your explanation and that the song does illustrate the concepts you list. The following format is desired:

<p>Relevant Microeconomics Concepts</p> <p><u>Name of Microeconomic Concept 1</u> <i>“Relevant lyrics illustrating the microeconomic concept 1”</i></p> <p>Explanation for why the relevant lyrics relate to microeconomic concept 1</p> <p><u>Name of Microeconomic Concept 2</u> <i>“Relevant lyrics illustrating the microeconomic concept 2”</i></p> <p>Explanation for why the relevant lyrics relate to microeconomic concept 2</p> <p>Etc.</p>
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You will get **zero** credit if:

1. I find the lyrics offensive (I’m a reasonable person, but don’t push your luck).
2. You use a song that I will have used as an example in class.
3. You use a song written to teach economics.

How to submit in Moodle:

1. In Moodle, go to the Microeconomics Rock! section, and select the “Microeconomics Rock” discussion forum
*** Do note that this forum is set up to be private – only Nathalie and the TA will see your post.
2. Click on “Add a New Topic.”
3. In subject field **enter the title of your song.**
4. Type your post in the “Message” box:
 - **OPTION 1 (preferred method):** Compose your submission in your word processor and then cut and paste it into the message box. This is recommended because it allows you to use features of your word processor such as the spell check and saving.
 - **OPTION 2:** Compose your submission in your word processor and attach it as a file to the message. Attach your file by dragging it and dropping it in the spaced marked accordingly.
 - **OPTION 3:** Compose your submission directly in the message box. This is subject to possible frustration (e.g., computer crashes before you get the message sent, without saving your work) and does not allow you to use the features of your word processor. This is not recommended.
5. **Make sure the body of your submission contains the elements listed on the previous page and is formatted according to the guidelines.**
6. **Select “Post to forum”** when you are done.
7. **Double check that your post does indeed show up in the forum.**