

*New Jersey Institute of Technology*

**Econ 265-001 Microeconomics**

Semester: Fall 2016

Instructor: Dr. Porchiung Benjamin Chou

Days/Times: Wednesday 01:00 pm – 02:25 pm and Friday 01:00 pm – 02:25 pm

Classroom: CKB 315

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**Course Description:**

This is an introductory course that provides a broad range of models in microeconomics. It covers not only the materials in the textbook, but also some topics beyond the textbook, such as game theory, time value of money, and economics of uncertainty and information. As this is a core course for MT-SOM and actuarial students, it is a demanding one that is not suitable for other students who intend to take it as an effortless elective. Students need to attend each class, preview each Chapter, complete the online assignments before each class, and keep up with the readings all the time.

**Prerequisite:**

**Math 135** or above, and some familiarity with high school algebra

**MATH 135. Calculus for Business. 3 credits.**

Intended for students with major offered by MT-SOM. Prerequisite: [MATH 107](#) with a grade of C or better or [MATH 110](#) with a grade of C or better or NJIT placement. An introduction to mathematics of business, principles of differential and integral calculus, and optimization.

**Aplia and the Required Textbook:**

We use the combination of Aplia and *Microeconomics for Today*, 9th edition, by Irvin Tucker, South-Western Cengage Learning. As Aplia already includes a digital version of the textbook, students do not need to buy the physical textbook unless they want one.

Students need to register for Aplia and complete the online assignments in a timely manner. There are online assignments due before each class. Students have up to three attempts for each question. The score of each question is the average of all three attempts.

# How to access your Aplia course

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Econ 265-001 Fall 2016

## What is Aplia?

In just 10 years, more than one billion answers have been submitted through Aplia, the premier online assignment solution. Millions of students use Aplia to better prepare for class and for their exams. Join them today!

## Registration

1. Connect to <http://login.cengagebrain.com/course/37AC-MT8C-LQ84>
2. Follow the prompts to register for your Aplia 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 Aplia at your bookstore. Check with the bookstore to find out what they offer for your course.

**Free Trial:** Your course enrollment includes a free trial period of up to **three weeks**. 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.

If you already registered an access code or bought Aplia online, the course key to register for this course is: **37AC-MT8C-LQ84**

## System Check

To check whether your computer meets the requirements for using Aplia, go to <http://www.aplia.com/support/sysreq.jsp>

For any questions about the prices of the bundled packages, please contact the publisher representative Rachael at [rachael.scardelli@cengage.com](mailto:rachael.scardelli@cengage.com).

### **Supplemental Materials:**

Student can also watch Tomlinson Videos at <http://tomlinson.swlearning.com/>, or Jodi's videos for relevant topics at [http://www.youtube.com/user/jodiecongirl?feature=results\\_main](http://www.youtube.com/user/jodiecongirl?feature=results_main), with the focus on Microeconomics 101. Although most of these videos are optional, students should watch the important ones specified in the syllabus. If classes are cancelled due to bad weather, more videos will be assigned as the substitutes for lectures. Additional information can also be posted in Moodle. It is the responsibility of students to make sure that their email addresses listed in Moodle are the ones they actually use.

### **Exams:**

There are three exams – two midterms and the final exam. The materials in the exams are not cumulative, but the early topics may become the bases for the later ones. If a student must miss an exam due to unavoidable reasons, the student needs to contact me as soon as possible *before* the exam. If I do not hear from the student in advance, there can be penalty for the make-up exam if it is granted.

### **In-class Quiz, Class Attendance, and Online Assignments:**

In most of the classes, there will be an in-class quiz of multiple choices and calculation questions. These questions test students the materials covered in both the previous class and the current class. To do well in the quiz, students need to review the materials covered in the previous lecture, pay attention to the current lecture, and *preview* the new materials, including the quiz questions at the end of each chapter. Although make-up quizzes are usually allowed before quizzes are returned, if a student misses more than *five* quizzes, the students will lose the privilege to make up for any more missed quizzes. When there is no quiz in the class, I might circulate the Attendance Sheet in the class. In most of the classes, I will cover materials beyond the textbook, which will also be tested in the exams. To make sure that students preview the materials before and after each class, there are online assignments due before every class. Therefore, students are required to attend every class, pay attention to the lectures, preview the chapters, and complete the online assignments before coming to the classes.

### **Caution:**

Students should *not* take both Econ 265 and Econ 266 during the same semester.

### **Grading:**

Grades are calculated based on the attendance and class participation (about 5%), in-class quizzes (20%), online assignments (20%), the first midterm (20%), the second midterm (20%), and the final exam (20%). Most importantly, all the efforts must be made during the semester.

There is absolutely no extra assignment for students to do to improve their grades after the students take the final exam.

The grade (G) of a student is determined by the sum (S) of all these scores in the following way:

If	$S < 55\%$ ,	G = F.
If	$55\% \leq S < 70\%$ ,	G = D.
If	$70\% \leq S < 75\%$ ,	G = C.
If	$75\% \leq S < 80\%$ ,	G = C+.
If	$80\% \leq S < 85\%$ ,	G = B.
If	$85\% \leq S < 90\%$ ,	G = B+.
If	$90\% \leq S$ ,	G = A.

### **Pre-communication:**

It is important for the students to be proactive and communicative. If you have any question or difficulty in learning the materials, please come to see me as soon as possible. If you cannot make it during my office hours, please e-mail me to make an appointment. At the same time, students should also check whether there are economics tutors available in TLC at KUPF 200.

### **Honor Code:**

All students are bound by NJIT's Honor Code. The students that are caught cheating will be subject to the disciplinary action of the Dean of Students.

### **Approximate Course Outline:** (28 Classes)

TV = Tomlinson Videos

#### Week 1 (September 07 & September 09)

Review of the Syllabus

Chapter 1: Introducing the Economic Way of Thinking

Appendix to Chapter 1: Applying Graphs to Economics

Chapter 2: Production Possibilities, Opportunity Cost, and Economic Growth

#### Week 2 (September 14 & September 16)

Chapter 2: Production Possibilities, Opportunity Cost, and Economic Growth

[TV: 1.4.1](#)

Chapter 3: Market Demand and Supply

[Jodi: Microeconomics 101, #17 \(Horizontal Addition\)](#)

Week 3 (September 21 & September 23)

Chapter 4: Market in Actions

TV: 8.2.1

Chapter 5: Price Elasticity of Demand and Supply

Week 4 (September 28 & September 30)

Chapter 5: Price Elasticity of Demand and Supply

Jodi: #30 (Elasticity Part 4) #44 (General Rules about Taxes Part 1)

Chapter 6: Consumer Choice Theory

TV: 3.1.1, 3.1.2

Jodi: #70, 71, 72, 73

Week 5 (October 05 & October 07)

Chapter 6: Consumer Choice Theory

Appendix to Chapter 6: Indifference Curve Analysis

TV: 3.2.1, 3.2.2, 3.2.3, 3.3.1, 3.3.2, 3.3.3

Jodi: #55 (Introduction to Public Goods, Common Resources, and Club Goods)

Midterm I Part A or Part B

Week 6 (October 12 & October 14)

Midterm I Part A or Part B

Chapter 7: Production Costs

TV: 4.3.3, 4.4.2, 4.4.3

Week 7 (October 19 & October 21)

Chapter 8: Perfect Competition

TV: 5.3.1, 5.3.2

Chapter 8: Perfect Competition

TV: 5.3.3, 5.3.4, 5.4.1

Week 8 (October 26 & October 28)

Chapter 9: Monopoly

TV: 6.1.1, 6.2.1, 6.2.2

Appendix to Chapter 3: Consumer Surplus, Producer Surplus, and Market Efficiency

Chapter 10: Monopolistic Competition and Oligopoly

TV: 6.3.1, 6.3.2, 6.3.3, 6.4.3

Week 9 (November 02 & November 04)

Chapter 11: Labor Markets

TV: 7.1.1, 7.1.2, 7.1.3

Chapter 11: Labor Markets

TV: 7.2.1

Midterm II Part A or Part B

Week 10 (November 09 & November 11)

Midterm II Part A or Part B

Introduction to Game Theory

TV: 6.3.1, 6.3.2, 6.4.3

Jodi: 68, 69 (Game Theory Parts 1&2)

Week 11 (November 16 & November 18)

Sequential game

<http://www.youtube.com/watch?v=1fIM78Gs0Ak&feature=related>

Finitely Repeated Game

<http://www.youtube.com/watch?v=R-EYyqRazms&feature=relmfu>

The ultimatum game

[http://www.youtube.com/watch?v=xpkxLKV\\_3d0](http://www.youtube.com/watch?v=xpkxLKV_3d0)

Chapter 15: International Trade

TV: 1.5.1, 1.5.2, 1.5.3, 9.5.1, 9.5.2

<http://www.youtube.com/watch?v=zhD--UeRiOI>

Week 12 (November 23) – Designated Friday

Chapter 15: International Trade

Introduction to Financial Economics – Time Value of Money

<http://www.investopedia.com/articles/03/082703.asp>

<http://www.youtube.com/watch?v=BXm5mZqMp6Y&feature=related>

Week 13 (November 30 & December 02)

Chapter 12: Income Distribution, Poverty, and Discrimination

TV: 10.3.4

Jodi: (Macroeconomics 101)

<http://www.youtube.com/watch?v=5-TwYtQ8-6E&feature=relmfu>

<http://www.youtube.com/watch?v=pjeTlgkdXg0&feature=fvwrel>

Week 14 (December 07 & December 09)

Chapter 13: Antitrust & Regulation

TV: 6.2.3

## Chapter 14: Environmental Economics

TV: 8.5.1, 8.5.2, 8.5.3

Jodi: #52, #53, #54 (Cap and Trade Parts 1, 2, 3)

### Week 15 (December 14)

Introduction to Economics of Uncertainty – Risk Aversion and Risk Premium

Introduction to Economics of Information – Moral Hazard and Adverse Selection

TV: 8.3.1, 8.3.2, 8.3.3, 11.4.3, 11.4.4

### Week 16

Final exam as scheduled

#### **Note:**

The course outline is subject to change. Although the sequence of the chapters will not change, some chapters can go longer or shorter than the class times listed above. Because of this, the exam dates are also subject to change, which is announced in the classroom. Students are responsible for showing up in *every* class to obtain the updated information and additional materials beyond the textbook that will also be tested in the exams.

#### **Learning Goals/Outcomes:**

To understand the concept of opportunity cost and sunk cost, and how to apply the marginal analysis to the decision making process to use resources efficiently.

To be able to apply market supply and demand curves to analyze different markets, and understand the differences between the movements and shifts of the demand and supply curves as well as the determinants that cause these changes.

To understand how different elasticities can be applied to the decision/policy making process for the consumers, producers, and the government.

To understand how consumers maximize utility subject to the budget constraints, and how producers maximize profits in the short run and in the long run.

To understand the different characteristics of market structures, namely, perfect competition, monopoly, oligopoly, monopolistic competition, the labor market and monopsony, and their implications.

To understand the basic concepts of cooperative game theory and non-cooperative game theory, and their applications in different contexts.

To understand why free trade is efficient and the perspectives of protectionism.

To understand the concept of time value of money and how it matters to the decision making process in using resources efficiently.

To understand the importance of income inequality or variance and its implications to decision/policy making process.

To understand the history and the development of the anti-trust laws in the USA.

To understand how to apply marginal analysis to the environment, as well as the policy instruments to achieve policy goals.

To understand the concept of risk aversion and decision making under uncertainties.

To understand the issues of asymmetric information, such as moral hazard and adverse selection.