ECON-E 321 Section 11364

Intermediate Microeconomic Theory Indiana University Spring 2016

Instructor: Arielle Knudsen
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Office Hours: Tuesday/Thursday 10:00-11:00 am, other times by appointment

Office Location: Wylie 210

Class Times: Tuesday/Thursday 4:00-5:15 pm Class Location: Global and International Studies 1100

Course Description

This course takes what you learn in introductory microeconomics and expands upon it. You will see many of the same ideas, but will now approach problems mathematically. More importantly, I want to emphasize the necessity of learning problem-solving skills. You will learn the tools to address problems analytically, and you will be expected to be able to apply these tools to new problems. Many of you are looking to build marketable skills for jobs after graduation. An economics education provides you with versatility in the types of jobs or continuing education you can pursue, but the most important skills you will need for whatever you choose are problem-solving skills. This class will work on honing your problem-solving skills. Prerequisites: E201 and one of the following: M119, M120, M211, M212, M213. If you do not meet the prerequisites, you must speak with me immediately.

Course Materials

- Textbook: Perloff, Jeffrey, *Microeconomics Theory and Applications with Calculus*. 3rd edition. (The 2nd edition is okay too, but you are responsible for the homework problems that are not in the 2nd edition)
- Basic calculator for exams- no graphing calculators (optional)
- Graphing calculator, or access to computer software, such as Mathematica (available on school computers and IUAnyware) or Wolfram Alpha (free access at www.wolframalpha.com)

Grades

Your final grade will be determined by the following:

Participation: 5% Homework: 10% Abstract: 10%

Quizzes (4): 20% (5% each)

Midterm Exam: 25% Final Exam: 30%

¹ Managing director of the economics consultancy McKinsey & Company, Dominic Barton, cites a McKinsey survey of employers and employees worldwide that found firms believe less than half of the young employees hired have adequate problem-solving skills while nearly 66% of young employees believe they do (see http://www.economist.com/news/21566464-skills-gap-must-be-bridged-if-world-avoid-dire-consequences-argues-dominic-barton). The survey also found "70% of employers say they would pay more for the right talent, if only they could find it."

Exams

You will have a midterm and a final exam. The midterm be taken in-class on the scheduled date. The final exam is comprehensive and **mandatory**. Quizzes are scheduled intermittently between exams and will take 15 minutes at the start of class. Exams and quizzes will consist of short answer questions. The **tentative** exam and quiz dates are as follows:

Quiz 1	Thursday, January 28 th	Quiz 3	Tuesday, March 29 th
Quiz 2	Thursday, February 11 th	Quiz 4	Thursday, April 14 th
Midterm	Tuesday, March 1 st	Final Exam	Tuesday May 3 rd 5:00-7:00 pm

If it is necessary to miss any quiz or exam, contact me as soon as possible. It is your responsibility to contact me and schedule a makeup exam or quiz within a week of the missed assessment. If you do not have medical documentation (or other similar documentation, approved by me) 20% will automatically be deducted from your exam or quiz grade. Any student missing more than one exam or quiz **must** have well documented health reasons for missing the exams or quizzes. Any student missing the **final exam** and not receiving an official excuse from me will receive a grade of zero for the exam.

Abstract

You will write and revise an abstract. The abstract due date is **March 10th at 4pm**. Assignments will be submitted by email in PDF format. Any assignment submitted after 4pm will have points deducted. Please note that there will not be any excuses for late assignments. I will send you a confirmation email so you know I received your assignment. I will return comments to you, and you will have **one week** to submit a revised abstract.

An abstract is similar to a summary of an article- it gives the reader a good idea of the information in the article in just a few sentences. The word limit is between 140 and 160 words. More information on the abstract assignment will be provided at another time, including how to write an abstract, the grading rubric, and an example. The final abstract will be graded on a 0/check-minus/check/check-plus (F/C/B/A) basis.

Homework and Participation

Learning solution algorithms requires practice solving problems. Homework problems from the textbook will be assigned at the end of each chapter and will be due the following class day at the start of class. Late assignments will have points deducted. Homework problems will be graded on completion. *All work submitted must be your own work.* In most cases, I will provide you with the final answers to problems in advance so you can check your work. Full solutions will be posted after assignments are turned in.

In order to receive full participation credit, you need to show up to class, avoid distractions (class time is not the time to take a nap, surf the internet, chat with friends, etc- put away your phone and computer for just 75 minutes a day), and be actively engaged.

Grading	Scale

A	92-100	B-	78-81	D+	64-66
A-	89-91	C+	75-77	D	60-63
$\mathbf{B}+$	86-88	C	71-74	D-	56-59
В	82-85	C-	67-70	F	Below 55

The last day to withdraw from the class and receive an automatic "W" is Sunday, March 13th. This is also the last day to get a withdrawal slip signed without a special petition. After this date, you can obtain a late withdrawal from a course only by receiving special permission from the dean. University rules specify that permission for late withdrawals is "given only for urgent reasons relating to extended illness or equivalent distress" to a student who is "passing the course on the date of withdrawal." If you feel you have some form of distress that is severely impacting your performance in the course, you should talk to me as soon as possible. Waiting until after the automatic W deadline or until the end of the course is too late!

Miscellanea

If you desire classroom/testing accommodations for a disability, contact me outside of class. Present the written supporting memorandum of accommodation from the Office of Disability Services for Students (www.indiana.edu/~iubdss). Requests for accommodations must be made **no less than two weeks in advance of need**. No accommodation should be assumed until authorized by me.

Indiana University guidelines are followed on issues of academic dishonesty. Academic dishonesty includes, but is not limited to, cheating on exams and facilitating another student's breach of academic integrity. Incidents will be reported to the Dean of Student's Office. Potential punishments for academic dishonesty include receiving a zero on the assignment, quiz, or exam, or receiving an F in the class.

Course Topics

Introduction to course

Math topics: Algebra, Derivatives, Partial derivatives, Total derivatives

Chapter 2: Supply and Demand

- 2.1 Demand
- 2.2 Supply
- 2.3 Market Equilibrium
- 2.4 Shocking the Equilibrium
- 2.5 Elasticities

Chapter 3: A Consumer's Constrained Choice

- 3.1 Preferences
- 3.2 Utility
- 3.3 Budget Constraint
- 3.4 Constrained Consumer Choice

Chapter 4: Demand

- 4.1 Deriving Demand Curves
- 4.2 Effects of an Increase in Income
- 4.3 Effects of a Price Increase

Chapter 16: Uncertainty

- 16.1 Assessing Risk
- 16.2 Attitudes Toward Risk

Chapter 6: Firms and Production

- 6.1 The Ownership and Management of Firms
- 6.2 Production
- 6.3 Short-Run Production
- 6.4 Long-Run Production
- 6.5 Returns to Scale

Chapter 7: Costs

- 7.1 Measuring Costs
- 7.2 Short-Run Costs
- 7.3 Long-Run Costs
- 7.4 Lower Costs in the Long Run

Chapter 8: Competitive Firms and Markets

- 8.1 Perfect Competition
- 8.2 Profit Maximization
- 8.3 Competition in the Short Run
- 8.4 Competition in the Long Run

Chapter 11: Monopoly and Monopsony

- 11.1 Monopoly Profit Maximization
- 11.2 Market Power and Welfare

Chapter 13: Game Theory

- 13.1 Static Games
- 13.2 Dynamic Games

Chapter 14: Oligopoly and Monopolistic Competition

- 14.3 Cournot Oligopoly Model
- 14.4 Stackelberg Oligopoly Model

Chapter 10: General Equilibrium and Economic Welfare

- 10.1 General Equilibrium
- 10.2 Trading Between Two People
- 10.3 Competitive Exchange