

ECON 382
Business Economics
Illinois Institute of Technology
Stuart School of Business

Instructor Information

Name: Professor Liad Wagman
Office: Downtown Campus (565 W Adams), 4th Floor, Office 412
Telephone: 1-773-980-9883
Email: lwagman@stuart.iit.edu
Office hours: Before class, anytime by email, and by appointment
URL: <http://lwagman.org>
TA Information: Yidan Sun, ysun100@hawk.iit.edu
Course Page: Available on blackboard.iit.edu

Course Information

Course Goal: To introduce fundamental topics in microeconomic analysis and industrial organization, and the analytical tools used to study them; to provide economic intuition and to strengthen understanding of a variety of market conditions and market forces.

- Why are markets commonly believed to be the best way of allocating resources and organizing economic activity?
- Why do governments intervene in markets and regulate them in fundamental ways?

This course will answer these two critical questions while examining their implications for pricing, price leadership, capacity management, market entry and exit, and other key business strategies. Importantly, we will demonstrate that competition is fundamental to understanding why markets may function well, and hence business strategy must account for the impact of competition if a business is ever to be profitable. We will also demonstrate when to expect governments to intervene in markets because markets fail or because the government had been persuaded to intervene by some key stakeholders. Businesses require the ability to understand, forecast and influence government intervention in their respective industries. More specifically, by the time you complete this course:

1. You will execute a fact-based, logically grounded *analysis of major strategic bets in hypercompetitive markets*.
 - We will develop the concepts of *short-run and long-run supply curves* and relate them to the cost structures of firms.
 - This will allow you to make educated conjectures about the path of prices in such markets, predict the range and magnitude of price fluctuations, and conduct

- financial evaluation of strategic decisions such as capacity expansion or new market entry.
2. You will *identify the costs categories* that are relevant for critical business decisions such as supply, capacity abandonment and exit, and new market entry.
 - The typical costs of a business fall into numerous categories, and mistakes in identifying which of these categories truly matter for a decision at hand can lead to outcomes that impair a business's competitiveness and destroy profitability.
 3. You will recognize how the interplay between cost and demand fundamentals *determines profit-maximizing pricing decisions*.
 - We will demonstrate a framework for profit-maximizing pricing choices. Pricing is a critical business decision and an understanding of the role of economic fundamentals can translate directly into more profitable pricing choices.
 4. You will appraise when *markets fail*.
 - We will introduce the key concept of *externalities* and study how it underlies everything from global warming to national defense to technology adoption. You will recognize how business strategy in such environments can influence the evolution of the entire market and create and capture significant value.
 - We will define and explore the key concept of *market power* and why it may require government intervention.
 - You will conduct a normative analysis of the welfare losses that may result when markets fail.
 5. You will recognize and even forecast how *government interventions* help shape prices and the distribution of value in competitive markets.
 - We will demonstrate that *taxes and subsidies* can be used to increase total societal value from trade when there are market failures. You will recognize how and why a government might intervene in your industry.

We will also demonstrate that there is *government failure* and government intervention can reduce value and create winners and losers in the marketplace. This can help you spot opportunities for using institutions in the non-market environment of your business to capture additional value or prevent the capture of value at your expense by others.

Business Economics focuses on the application of economic principles to key decisions within organizations. It provides guidance to increase value creation and solidifies intuition for understanding the business environments in which organizations operate. It is a way of thinking about problems, issues, and decisions that managers face in each of the functional areas of their organization. It stresses the importance of incentives as determinants of human behavior and performance, and emphasizes the consideration of costs and benefits when making decisions.

Course day and time: Mondays and Wednesdays 3:35PM – 4:50PM

Format: TBD, potentially on Zoom on some days and in-person on others.

Course Learning Objectives:

- Students will demonstrate an understanding of the scientific study of individual and group behavior.
- Students will demonstrate an understanding of fundamental concepts, theory or methods from economics.
- Students will demonstrate critical thinking about human behavior and society to offer meaningful explanations of social and individual behavior.
- Students will be able to frame economic problems broadly in a way that is accessible to the general population.
- Students will demonstrate an understanding of the fundamental topics in microeconomic analysis and industrial organization, and the analytical tools used to study them.
- Students will be able to articulate economic intuition.
- Students will demonstrate an understanding of a variety of market conditions and market forces.

Course Method: Each lecture will include a discussion of the current material in the schedule. Often, there will be some outside material distributed so as to elucidate economic concepts and principles. This outside material will form the basis for class discussions and the student is expected to have read and thought about the material as well as the material in the textbook. Class discussions are an important part of the learning process, and students are encouraged to participate. Participation is voluntary, but as explained below, class participation can help raise a student's grade. There will be two midterms, a final, and several homework assignments.

Cases

You are required to read all cases covered in this course. Some cases are preceded by a set of discussion questions that should guide you in your preparation. You do not need to submit answers to these but class discussion will draw heavily on them, and so you are required to thoroughly familiarize yourself with the content of these before coming to class. Each student should go over posted case exercises and prepare either a written sketch of a solution or a written account of the difficulties that prevented you from reaching such solution. *Answers to case exercises will **not** be collected or graded.* Exercises will be posted on Blackboard.

News Items

News readings will provide illustrations of the ideas in class in contemporary cases. They are **OPTIONAL**. They may be referred to in class if time permits, but we will usually introduce additional examples. They are interesting to read after class to see if you understand class concepts.

Required Course Materials

Text:

Essentials of Economics, 6th, 7th or 8th Edition, by N. Gregory Mankiw,

6th Edition: ISBN-10: 0538453087 / ISBN-13: 978-0538453080

or

7th Edition: ISBN-10: 128516587X / ISBN-13: 978-1285165875

8th Edition: ISBN-10: 1337091995 / ISBN-13: 978-1337091992

(Note: older or newer editions are similar, which edition you get is your choice; the chapters in the tentative outline are from the 8th edition)

Course & Instructor Policies

Grades will be based on assignments, 2 exams, a project, and class participation. Some aspects of the assignments will be graded on a rough scale: if you made a thorough attempt to answer all of the problems, you will receive full credit. The second exam is cumulative. Weights are given by: each exam: 25%, project: 25%, assignments: 25%.

Letter grades will be based on a class curve at the end of the course. Should a student's grade be borderline, class participation can be used to raise the student's grade. In other words, class participation can only help raise your grade.

All homework assignments are to be turned in electronically prior to their due dates. All assignments and their due dates will be posted on Blackboard.

Dates for the exams will be announced in class and are tentatively scheduled in the schedule at the end of the syllabus.

There are no make-up exams. All students must take the exams.

Attendance and Class Participation

Attendance, preparation, and participation are expected and represent an essential component of the learning experience. Class participation is evaluated based on the *quality of participation*, not its "quantity." You should provide insights, observations, inferences, or conclusions that not only express your viewpoint, but also defend your analysis. Your comments should be relevant to the topic at hand, and should advance the discussion. A simple opinion or viewpoint is not very valuable without any justification. Valuable comments respond to, elaborate on, lend support to, contradict, or correct a comment by one of your classmates. Counter-productive comments include opinions without a justifying argument, pure repetition of previous points, class interruptions that do not advance the discussion, and rambling, vacuous or disparaging comments.

I may call in class, both to give you an incentive to prepare for class, and to make sure the discussion does not collapse to a handful of students. At a minimum, you should be prepared to provide some answers to the preparation questions handed out in advance.

Missing class: Class attendance not only provides an opportunity to participate in the discussion but to learn fundamental material. **If you miss class or are late more than once, it will lower your class participation grade.** (Exceptions are provided for religious holidays, funeral attendance, and student/dependent hospitalization.) If you must miss class, you should do the readings, prepare, and turn in the assignments on time (late assignments will not be accepted), and arrange to get notes from a friend about what you missed in class. Recall that I will post the class notes (and anything else that I discuss in class) on the course page on Blackboard following each lecture. Excessive absences will affect your final grade even more dramatically.

Disabilities

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources. The Center for Disability Resources (CDR) (located in 3424 S. State St., room 1C3-2, on the first floor), can be reached at ++1-[312 567.5744](tel:3125675744) or at disabilities@iit.edu.

Sexual Harassment and Misconduct Information:

Our school encourages anyone experiencing sexual harassment/misconduct to speak with someone about what happened, so they can get the support they need and the school can respond appropriately. Many areas of the University are required to report incidents of sexual harassment/misconduct and thus cannot guarantee confidentiality.

If you wish to speak confidentially about an incident you believe falls under sexual harassment/ misconduct, please contact the school's **Confidential Advisor service** at (773) 907-1062.

If you want more information about filing a report, or have questions about the school's sexual harassment policies and procedures you may contact:

- Virginia Foster the Title IX Coordinator at (312) 567-5725 foster@iit.edu
- Katherine Stetz the Dean of Students at (312) 567-3081 dos@iit.edu
- To **file an online complaint** go to iit.edu/incidentreport

For a list of **resources** go to the University's Title IX office website:
<https://web.iit.edu/hea/resources>

Copyright/Plagiarism/Academic Integrity Rules on Plagiarism and Academic Integrity

Plagiarism and other violations of academic integrity are strictly prohibited and subject to penalty as defined by the University. Information about the Illinois Tech Code of Academic Honesty can be found at:

<https://web.iit.edu/student-affairs/handbook/fine-print/code-academic-honesty>

The Code of Academic Honesty is one of several standards outlined in the Illinois Tech student handbook (<https://web.iit.edu/student-affairs/handbook>). Other parts of the handbook contain other rules that apply to all students. Students will be expected to conform to the rules and procedures set forth in the handbook.

What is Plagiarism?

Often there is some confusion as to what constitutes plagiarism. Plagiarism is the act of passing off someone else's work as your own. To assist in providing an understanding of the types of writing that constitute plagiarism, three types of are each discussed below. Also discussed below is the problem of "string citations." String citations are not plagiarism, but many professors will reject string citations because they are not the student's original work.

Word for Word copying: The use of any phrase or excerpt from another source requires the use of quotation marks around the copied material, or if the material is more than a few lines, the copied material should be placed in its own indented paragraph. A citation in proper form is always required to identify the source.

Plagiarizing by Paraphrase: When a writer uses a source, substitutes words and sentences, or even changes the order but keeps the meaning of the original, a citation is required. In the example given below, the original is on the left. The paraphrase in the right box constitutes plagiarism.

<p><u>Original:</u> It is not generally recognized that at the same time when women are making their way into every corner of our work-world, only one percent of the professional engineers in the nation are female. A generation ago, this statistic would have</p>	<p><u>Paraphrase:</u> Few people realize now that women are finding jobs in all fields, that a tiny percentage of the country's engineers are female. Years ago this would have surprised no one, but now it seems incredible.</p>
--	--

raised no eyebrows, but today, it is hard to believe.	
---	--

The writer could avoid plagiarism here by acknowledging the source and providing a proper citation.

Mosaic Plagiarism: Here the writer lifts phrases and terms from the source and embeds them in his own prose. An example follows in which the lifted phrases are underlined:

The pressure is on to get more women into engineering. The engineering schools and major corporations have opened wide their gates and are recruiting women zealously. Practically all women engineering graduates can find attractive jobs. Nevertheless, at the moment, only one percent of the professional engineers in the country are female.

Mosaic plagiarism is sometimes caused by careless note taking. However, it looks dishonest and is judged as such. The use of quotation marks around the original wording and citation avoid the problem of plagiarism. Often a better approach is to use paraphrase or to quote directly (with appropriate citations).

Plagiarism can be avoided by providing citations for the sources of any material, including *ideas, phrases, or sentences* that you have used in your paper. A number of different systems are available for providing citations. The key to all of them is that the writer must clearly identify for the reader the sources of all material (including ideas) that have come from somewhere else.

String Quotation Problem: Sometimes a student will write a paper consisting of a string of quotations. It is usually much better for a student to provide his or her own analysis and write the paper in his/her own words. Many professors will reject a paper consisting primarily of material quoted from other sources because they do not view such a paper as the student's own work. Prior to writing your paper, be sure to understand your professor's view with respect to string quotations.

The Stuart School of Business Student Etiquette Code

Students are expected to respect the following **Code of Student Etiquette** at all times:

- **Punctuality and Behavior.** Class meetings will start on time. **In the event of class meetings via Zoom, each student's camera is expected to be on.** All homework assignments and exams are to be completed and submitted on time. Late or improper behaviors are unprofessional and will not be tolerated.

- **Class Engagement.** Attendance, preparation, and participation are expected and represent an essential component of the learning experience. Engagement is evaluated based on the *quality of participation*, not its “quantity.” You should be prepared to provide insights, observations, inferences, or conclusions that not only express your viewpoint, but also defend your analysis. Your comments should be relevant to the topic at hand, and should advance the discussion. A simple opinion or viewpoint is not very valuable without any justification. Valuable comments respond to, elaborate on, lend support to, contradict, or correct a comment by one of your classmates. Counter-productive comments include opinions without a justifying argument, pure repetition of previous points, class interruptions that do not advance the discussion, and rambling, vacuous or disparaging comments.
- **Academic Integrity.** All students are expected to act with utmost civility and personal integrity; to respect other students’ dignity, rights and property; and to help create and maintain an environment in which all students can succeed through the fruits of their own efforts. Academic integrity includes a commitment to not engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty include cheating or copying, plagiarizing, submitting another person’s work or efforts as one’s own, using sources without citation, having another student take your exam, tampering with the work of another student, and facilitating other students’ acts of academic dishonesty. Sanctions for breaches in academic integrity range from a fail grade in an assignment or test to a fail grade in the course, as well as severe disciplinary sanctions up to and including suspension or expulsion.

When interacting with fellow students in online discussions and in other web-enabled activities, students are further expected to respect the following **Online Code of Conduct** at all times:

- Do not dominate any discussion. Allow others the opportunity to join in the discussion.
- Do not use offensive language. Present your ideas appropriately.
- Be cautious in using Internet language. Do not capitalize all letters or rely heavily on acronyms.
- Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation.
- Never make fun of someone’s ability to read or write.
- Share tips with other students.
- Keep an “open-mind” and be willing to express your opinion. Respect minority opinions.
- Reread your posting and edit before you push the “Send” button.
- Do not hesitate to ask for feedback.
- Using humor is acceptable. Do not use sarcasm as a form of humor as it is easily misinterpreted.

TENTATIVE Course Outline

Students are expected to spend about 3 hours every week preparing for class by going over the suggested readings and course content. Aside from class meetings, class assignments and projects are expected to take an average of 4.5 hours every week over the course of the semester.

WEEK 1 (January 20 – Note: Tentatively, this class meeting will be on Zoom):
Introduction, Prisoner’s Dilemma, Consumer and Producer Surplus, Markets

Learning Objectives:

- Explain the basics of supply and demand curves.
- Classify the main forms of government intervention.

Readings:

- Al-Najjar, N.I. and D. Besanko, “Note on Consumer Surplus.”
- Besanko, D., “Note on Producer Surplus.”
- Besanko, D., “Note on Economic Profit.”

Chapter 1: Ten Principles of Economics.

Chapter 2: Thinking Like an Economist.

Chapter 3: Interdependence and the Gains from Trade.

Practice Set 0

Note: Some class meetings may continue to be on Zoom, depending on restrictions.

WEEKS 2 and 3 (January 25, 27; February 1, 3): **FREE MARKETS** -
Hypercompetitive Markets, Cost Fundamentals, and Business Strategy in the Short-Run and the Long-Run

Learning Objectives:

- Define short-run and long-run supply curves.
- Identify the equilibria of competitive markets.

Homework 1 & 2 due (specific due dates will be posted on Blackboard)

Case Study:

Besanko and Copelevitz, “Capacity Expansion in the Global Aluminum Industry”.

Readings:

- Baliga, S. and N. Persico, “Note on the Microeconomics of Cost.”

Exercises:

- Running regressions in Microsoft Excel
- Constructing a global market supply curve in Microsoft Excel

Chapter 4: The Market Forces of Supply and Demand.

Chapter 5: Elasticity and its Applications.

WEEK 4 (February 8 and 10): Elasticity and Demand Estimation**Exercises:**

- Calculating the price elasticity of top mobile apps

Chapters 6, 7: Supply, Demand, Government Policies, and Efficiency

Chapters 12, 13: The Costs of Production; Firms in Competitive Markets

WEEK 5 (February 15 and 17): GOVERNMENT FAILURES and MARKET FAILURES - Public Policy; Winners and Losers from Government Intervention; Influencing Policy**Learning Objectives:**

- Identify the implications of government intervention.
- Formulate welfare analysis.
- Identify market failures associated with externalities.
- Solve for optimal corrective regulatory measures.

Homework 3 due**Case and exercise to prepare for class discussion:**

- Besanko, D. and J. Horner, “The Economic Impact of U.S. Cotton Subsidies.”

Chapters 8, 10: The Costs of Taxation; Externalities**Case:**

- Besanko, D. and J. Horner, “London’s Congestion Charge.”

WEEK 6 (February 22, 24): GDP, INFLATION, and a Nation’s Standard of Living

Chapters 15, 16: Measuring a Nation's Income; the Cost of Living

WEEK 7 (March 1, 3): UNEMPLOYMENT and THE MONETARY SYSTEM

Chapter 20: Unemployment
Chapter 21: The Monetary System
Chapter 22: Money Growth and Inflation

Weeks 6-7 Learning Objectives:

- Identify and classify the primary macroeconomic variables.
- Utilize price/unemployment/growth/monetary indices to make comparisons that control for factors such as purchasing power and labor-force participation.

Homework 4 due

Summary Exercises + Midterm Review

WEEK 8 (March 8): Exam 1 on March 8

Note: No class on March 10. **Project Assignments Distributed.**

WEEK 9-10 (March 15, 17, 22, 24): MARKET POWER, PRICE DISCRIMINATION**Learning Objectives:**

- Identify sources of market power.
- Classify forms of price discrimination.
- Solve for profit-maximizing prices.

Homework 5 due

Chapter 14: Monopoly

WEEK 11-12 (March 29, 31, April 5): OLIGOPOLISTIC COMPETITION and GAME THEORY**Learning Objectives:**

- Identify the dynamics of oligopolistic competition.
- Formulate and sketch best-response curves/reaction functions.
- Distinguish between vertical and horizontal differentiation.

Homework 6 due

Note: No class on April 7

WEEK 13 (April 12, 14): REAL ESTATE ECONOMICS, **Project Submission**

WEEK 14 (April 26, 28): **Project Presentations**

WEEK 15 (April 19, 21): CAPACITY MANAGEMENT and DOUBLE MARGINALIZATION

Case:

- Al-Najjar, N, and D. Besanko, “The California Power Crisis.”

WEEK 16: COURSE RECAP

May 3: Exam 2 Review

May 5: Exam 2

COVID-19 Precautions and Face Coverings (for on-campus classes)

Illinois Tech students are required to wear face masks at all times and maintain social distancing (6 feet between individuals) in traditional classrooms, instructional laboratories, and similar settings. In general, individuals should spend as little time as practicable in closer proximity when doing so is necessary to achieve learning objectives. Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and are expected to stay at home.

Instructors have the right to ask those who are not complying with these requirements to leave class in the interest of everyone's health and safety. In the event that a student refuses to comply with instructor directions regarding face masks and/or social distancing, the instructor has the right to ask the student to leave. A student who refuses to comply with these requirements will be referred to the Office of the Dean of Students for possible disciplinary action under the Student Code of Conduct.

Additionally, as a reminder, following other simple practices such as frequent and thorough hand washing, wiping down desks and seats with disinfectant wipes when possible, not sharing personal items such as pens and cell phones, and avoiding crowded hallways and other enclosed spaces will promote good health in and out of the classroom.

Visit iit.edu/COVID-19 for details on Illinois Tech's response to coronavirus (COVID-19). For information from government authorities, please see the Centers for Disease Control and Prevention website at cdc.gov.