# ECONOMICS S115E INTRODUCTION TO MICROECONOMICS (ONLINE)

## **SYLLABUS**

Summer A & B 2024 Tolga Koker

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## **COURSE DESCRIPTION**

The objective of this course is to develop the main methods of systematic economic reasoning. Topics covered in the course will include the theories of consumer behavior; the economics of uncertainty and information; theories of the firm and market structure; factor markets (labor and capital) and selected topics in general equilibrium and welfare economics. Although quite a few numbers of economic models and their applications will be discussed in the course, you will soon discover that these models are basically repeated applications of the methods of **constrained optimization** and **equilibrium analysis**. These techniques will be covered in the context of problems relating to consumers, business firms, and workers. These are among the techniques necessary to understand the consequences of phenomena such as price rises and collusion among firms as well as the effects of government competition policies such as regulation, environmental preservation, and agricultural price supports. The course also pays attention to limitations of the standard rational choice model, especially to the cognitive biases and the interdependencies among individual decisions that influence economic decision-making.

N.B.(1) Open to both freshmen and sophomores. Limited enrollment. Basic calculus background required!

N.B.(2) Students placed in Math 118 or Math 120 are preferred. Students who have taken Math 115 are also welcome.

N.B.(3) Students placed in Math 110, Math 112 need instructor's permission.

## **OBJECTIVE**

Learn how to think like an economist. Improve economic intuition and have a solid background in optimization techniques.

## **READINGS**

Robert H. Frank, <u>Microeconomics and Behavior</u>, 10<sup>th</sup> ed. McGraw Hill, New York, 2021. ISBN 10: 1259394034 & ISBN 13: 9781259394034

P.S. The 10<sup>th</sup> edition is just out!. The 9<sup>th</sup> edition or older, or an international edition is perfectly OK. The Yale Bookstore priced the 9<sup>th</sup> edition as follows: Print, new: \$286.35, Print, used: \$214.75 Print, new rental: \$194.70, Print, used rental: \$134.60, eBook, Buy: \$196.85, eBook, rent (for 130 days): \$153.90. Here is a link to buy online from the bookstore: <a href="https://tinyurl.com">https://tinyurl.com</a>.

Also selected articles (all available in the Yale Library electronic resources or online).

#### ANCILLARY RESOURCES AND READINGS

Students may get some extra help from <u>Study Guide for use with Microeconomics and Behavior by Frank</u>, 10<sup>th</sup> ed. McGraw Hill, 2021 and/or the textbook's website at:

http://highered.mheducation.com/sites/0078021693/student\_view0/index.html

This site provides a variety of supplementary materials for the text, including key terms, chapter summaries and practice quizzes. **The free on-line Study Guide is highly recommended at:** 

http://highered.mheducation.com/sites/0078021693/student view0/study guide.html

Students are also advised to follow at least one of the three following newspapers: *the New York Times, the Wall Street Journal,* or *the Financial Times* as well as *the Economist.* 

Students may consult the following books for further references. (Note that the order of books is from simple to more rigorous treatment of topics):

William J. Baumol and A. Blinder, <u>Microeconomics</u>, any ed. Thomson.

Robert H. Frank and B. Bernanke, <u>Principles of Microeconomics</u>, any ed. McGraw Hill.

Jeffrey M. Perloff, Microeconomics, any ed. Pearson.

Robert Pyndyck and D. Rubinfeld, Microeconomics, any ed. Prentice Hall.

Walter Nickholson and C. Synder, Intermediate Microeconomics, any ed. Dryden.

Hal Varian, Intermediate Microeconomics, any ed. Norton.

Some good online resources to supplement the text and lectures are as follows: Prof. Jon Gruber's micro course "Principles of Microeconomics" on MIT's OpenCourseWare. (Course number: 14.01SC). A more advanced and also helpful course is Prof. David Autor's Microeconomic Theory and Public Policy, also on MIT's OpenCourseWare, (Course number: 14.04.) Jon Gruber's course includes video lectures while David Autor's class does not.

## **ECONOMIC RESEARCH**

This course relates to material covered in lectures to the economic research, especially the ideas awarded by Nobel Prizes in Economics. In order to create interest in economics I added supplementary and inspirational readings, which are not required. However, they are very useful especially for those who want to excel in their majors. The course also summarizes the recent research on the topic covered in lectures. Students may also check the following data resources and podcasts:

Data Resources and Economics Podcasts:
Our World In Data <a href="https://ourworldindata.org/">https://ourworldindata.org/</a>

Global Income Distribution since 1980 <a href="https://jackblun.github.io/Globalinc/">https://jackblun.github.io/Globalinc/</a>

Opportunity Insights <a href="https://opportunityinsights.org/">https://opportunityinsights.org/</a>

NPR's Money Talks <a href="https://www.npr.org/sections/money/">https://www.npr.org/sections/money/</a>

Trade Talks <a href="https://piie.com/trade-talks">https://piie.com/trade-talks</a>
Freakonomics <a href="http://freakonomics.com/trade-talks">https://piie.com/trade-talks</a>
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#### **TECHNOLOGY POLICY & THE MODE OF DELIVERY**

While certain technology enhances learning, some impair it. Recent research also shows that laptops are no good in taking notes. So, no laptop, yet tablets are OK. While taking notes, use a regular or electronic pen in summarizing the topics being taught in your own words. Simultaneous listening, visualizing and writing maximize learning effectiveness. Period. Accordingly, power point presentations are less effective. So, the instructor will rarely use it. No cellphone and no texting during online sessions.

The course also utilizes technology as its integral part. The previously recorded lecture videos will be available online before each lecture for those students to master the topics. They are essentials to follow the live online zoom sessions. The videos are not substitutes for live lectures. Please note that attendance to live sessions is mandatory and there is a heavy penalty if you miss a session more than once. Please see the course webpage at Canvas for details.

## **REQUIREMENTS**

The most important requirements for the course are mastering lecture videos and attending live sessions after completing the readings as assigned. Attendance and constructive participation will contribute to your final letter grade. Your understanding of microeconomics will be enhanced through exposure to different types of material, which are cumulative. For this reason, the attendance is mandatory, and you should keep up with the readings. Otherwise, you are most likely be overwhelmed at exam time and lost in space in class. The requirements for the course also include a midterm and a final exam with four problem sets. The exams are open book, open notes with no access to internet sources. Students are encouraged to work with fellow classmates on problem sets, but each must submit his/her own solutions.

All the information pertaining to this course, including the problem sets and their answer keys plus due dates for the assignments will be posted at: <a href="https://canvas.yale.edu/">https://canvas.yale.edu/</a> No late problem set will be accepted. It is your responsibility to periodically check the web site.

The (tentative) exam dates are as follows:

Midterm: The fifth Live Session on Tuesday Final: The last Live Session on Thursday

N.B. These dates will not be changed for any student, and there will be <u>absolutely</u> no make-up exams. All students are expected to take every exam and submit their solution to the problem sets. If a student misses the midterm due to documented grave illness, family catastrophe, or reasons of public security that cause a student to miss the midterm, his/her grade will be weighted based on his/her final exam only after s/he hands in written Dean's Excuse to the instructor. Every student must take the final exam in order to get a letter grade. No student will be given special privileges that are unavailable to other students.

#### **GRADING**

The midterm and the final will account for 80%, (each for 40%), and the problems sets for 20% (each 5 %). Grades will be curved. Depending upon attendance and class participation, the instructor has the sole authority to change a student's grade only by half letter grade at his discretion.

N.B. Academic Dishonesty Prevention Policy: Any attempt to cheat means failing this course in addition to other penalties the College may levy.

## **ONLINE HELP**

We provide extensive online help. In addition to pre-recorded lectures, you will have direct access to the instructor and the TA who will hold regular online office hours via Zoom. Please see the course webpage at Canvas for details. Please drop by or send us e-mail(s) if you are having problems with the material. Often a difficulty with a problem set can be easily resolved during online office hours. I am also willing to give some hints.

## **ONLINE ETIQUETTE**

In order to maintain a professional online atmosphere in our virtual class, basic etiquette and common courtesy are required for engagement among participants like in any group meetings. Namely, but not limited to; no phones, no texting and e-mail messaging; punctual attendance; no side discussions; no disruptive online behavior such as eating and drinking. Students are expected to dress appropriately to sit in a table ready to take notes.

## COURSE OUTLINE AND READING ASSIGNMENTS

Appendixes are (mostly) NOT required. The dates are approximate; depending on class discussions, some topics may be covered more quickly or more slowly than anticipated. For the supplementary readings, the Yale Library electronic resources or Google has the links.

<u>DATE</u>	TOPIC	READINGS
	PART I: INTRODUCTION	
Week 1	Introduction: Thinking Like an Economist Math (Calculus) Review	Ch. 1
	Supplementary Reading: Krugman, "The Accidental Theorist."	
	<u>Inspirational Readings:</u> Krugman's Nobel Prize Lecture and Banquet Speech	
Week 1	Supply and Demand (including Appendix)	Ch. 2

# PART II: CONSUMER THEORY

**Rational Consumer Choice** 

Week 1

Week 2	Individual and Market Demand	Ch. 4
Week 2	Applications: A Gasoline Tax & Two-Part Pricing	Ch. 5
Week 3	The Economics of Information	Ch. 6
	Supplementary Reading: Akerlof, "The Market for Lemons: Quality Uncertainty and the Market Mechanism."	
	<u>Inspirational Readings:</u> Akerlof's Nobel Prize Lecture and Banquet Speech	
Week 3	Interdependent Preferences (Quick Overview)	
	Supplementary Readings: Leibenstein, "Bandwagon, Snob, and Veblen effects in the Theory of Consumers' Demand."	
	Galbraith, "Consumer Behavior and the 'Dependence Effect.'"	
	Hayek, "The Non Squitter of the 'Dependence Effect."	
	<u>Inspirational Readings:</u> Hayek's Nobel Prize Lecture and Banquet Speech	
Week 3	Behavioral Economics	Ch. 7
	Supplementary Readings: Tversky and Kahneman, "Rational Choice and the Framing of	Decisions.
	Inspirational Reading: Kahneman's Nobel Prize Lecture and Banquet Speech	
	*** <u>MIDTERM</u> ***	
	PART III: PRODUCER THEORY	
Week 3	Production	Ch. 8
Week 3	Costs	Ch. 9

Ch. 3

# PART IV: MARKET STRUCTURE

Week 4	Perfect Competition	Ch. 10
Week 4	Monopoly	Ch. 11
	Supplementary Reading: Leibenstein, "Allocative Efficiency vs. X-efficiency"	
Week 4	Imperfect Competition: Game Theory	Ch. 12
	Supplementary Reading: John Nash, "Non-Cooperative Games."	
	Inspirational Reading: Nash's Nobel Prize Lecture and Banquet Speech	
Week 4	Imperfect Competition: Monopolistic Competition	Ch. 13
Week 4	Imperfect Competition: Oligopoly	Ch. 13
	PART V: FACTOR MARKETS	
Week 5	Factor Market: Labor	Ch. 14
	Supplementary Reading: Spence, "Job Market Signaling."	
	Inspirational Reading: Spence's Nobel Prize Lecture and Banquet Speech	
Week 5	Factor Market: Capital	Ch. 15
	Supplementary Reading: Shiller, "From Efficient Markets Theory to Behavioral Finance." Shiller, Irrational Exuberance, 3rd ed. Akerlof and Shiller, Animal Spirits	
	Inspirational Reading: Fama's and Shiller's Nobel Prize Lectures	
	PART VI: MARKET EFFICICENY AND MARKET FAILURE	
Week 5	General Equilibrium (Quick Overview)	Ch. 18
	Supplementary Reading: Debreu, Theory of Value (Just scan it)	
	Inspirational Readings: Debrue's Nobel Prize Lecture and Banquet Speech	

Week 5 Externalities, Property Rights and the Coase Theorem Ch. 16

**Supplementary Readings:** 

Coase, "The Problem of Social Cost."

**Inspirational Readings:** 

Coase's Nobel: Prize Lecture and Banquet Speech

Week 5 Government: Public Goods (Quick Overview) Ch. 17

**Supplementary Reading:** 

Olson, *The Logic of Collective Action* (selected chapters—just scan it)

\*\*\* <u>FINAL</u> \*\*\*

Good Luck! Hope we will all ENJOY the course!