

Bowdoin College
ECON 1101: Principles of Microeconomics, Fall 2021

"Economics is the art of making the most out of life" – Gary Becker

Time & Location: M, W 1:05-2:30, Sills 205

Professor: Dan Stone, dstone@bowdoin.edu

Office Hrs: M-F, 3:00-4:00, schedule a meeting (1-4 students): <https://calendly.com/dstone-bowdoin/15min>, Hubbard 108 or zoom, or drop in (but meetings prioritized).

QR Tutor: Dylan Sloan; study sessions Monday 7:30-9:00pm, econ library, on weeks HW is due.

Prerequisite: Math 1050 or equivalent (algebra, geometry, other basic math like ratios, percentages). No rocket science, and no prior knowledge of economics necessary, but you should be enthusiastic about—or at least interested in, and open-minded about—mathematical analysis.

Course description and learning goals: This course is an introduction to microeconomic theory—the economic study of choice, primarily in markets, and social outcomes that result from these choices. Big picture questions we aim to address are: how do people make economic (and other) choices and how should they? How do markets work: how are prices and quantities of goods determined, and what causes them to change? In what sense are market outcomes good—perhaps even optimal—for society? If markets “fail,” how can public policy help to mitigate any problems? More generally, when does the individual pursuit of self-interest benefit the common good, and why does this occur or why not?

While this course is traditional in the sense that we will spend most of our time on standard economic theory (aka neoclassical theory), which assumes that people make optimal choices given their preferences and constraints, we will make an effort to be aware of, and question, the simplifying assumptions made for the sake of facilitating the analysis. We won't just accept the mathematical models at face value – we'll think critically about their flaws/simplifications, what we can learn despite the flaws, and how to be careful not to be misled by flaws. We will also supplement the textbook with various additional readings, including some alternative perspectives, and analysis of policy issues.

Besides learning textbook introductory economic theory—the foundation of the material you would study in upper-level courses—the course also hopes to:

- help you better understand real-world economic outcomes and issues—why prices for some goods are high and others low, why some goods are plentiful and others scarce, how changes in one market affect outcomes in other markets, economic policies like minimum wage, etc;
- give you economic literacy (learn the language of economics), which is useful even if you don't continue to study economics. Economic terms and methods come up often in a wide range of other contexts (business, the news, many other academic disciplines);
- hone your math and logical reasoning skills, and better understand how simple mathematical models can be used to gain insight into real-world situations;
- help you better understand, and improve, your own economic decision-making – how you spend your money, time, and other resources.

Readings: Taylor, T., *Principles of Microeconomics, 5/e* is the required textbook. You can order it here- <http://www.textbookmedia.com/pr/Principles-of-Microeconomics/4719/9780996996327>. Our course will follow the book's organization but the textbook is largely supplemental. We'll also use some fun supplemental

readings from Tim Harford's *The Undercover Economist* (online version available via library). (Most) other readings on the course schedule, which I'll provide to you, are as follows:

Akerlof, George A., & Robert J. Shiller. *Phishing for phools: The economics of manipulation and deception*. 2015.
Burkeman, Oliver. "Scarcity: Why Having Too Little Means So Much by Sendhil Mullainathan and Eldar Shafir – review." *The Guardian*. 8-23-2013
Coyle, Diane. *Cogs and Monsters: What Economics Is, and What It Should Be*. 2021.
Easley, D. and Jon Kleinberg. *Networks, Crowds, and Markets: Reasoning about a Highly Connected World*.
<https://www.cs.cornell.edu/home/kleinber/networks-book/networks-book.pdf>
Frank, Robert. "The Opportunity Cost of Economics Education." *The New York Times*. 9-1-2005.
Friedman et al. "Rethinking the Social Responsibility of Business." *Reason.com*. 10-1-2005.
Khan, Lina. "Amazon's Anti-trust Paradox." *Yale Law Journal*. 2017.
Nordhaus, William. "A New Solution: The Climate Club." *The New York Review of Books*. 6-4-2015.
Philippon, Thomas. "US only pretends to have free markets." *The Atlantic*. 10-29-2019.
Rodrik, Dani. *Economics Rules*. Norton, 2015.
Thiel, Peter. "Competition is for losers." *The Wall St Journal*. 9-12-2014.

Other resources: <http://www.igmchicago.org/igm-economic-experts-panel> (great polls of experts on issues); <http://econofact.org/>, marginalrevolution.com (most popular econ blog), <https://bensprague.substack.com/> (Maine economy). Videos: https://www.youtube.com/channel/UC9a_V7YbGGmWphAzk8_4LFO/about, <https://www.mruniversity.com/>. Views from top economists on a wide range of issues the world is currently facing: <https://voxeu.org/content/capitalism-after-covid-conversations-21-economists>. View from the venture capital world on markets: <https://anujabrol.com/the-founders-guide-to-markets-345c8bc2991c>. Great (macro) econ (and other) data: <https://ourworldindata.org/>. Twitter thread on recommended non-technical books: https://twitter.com/ben_golub/status/1154735542699008000. Recommended fun and wise related reading: *Thanks a thousand*, AJ Jacobs.

Teaching philosophy and methods for this course:

Microeconomic theory is counter-intuitive for many people, and more natural for others. And, of course, different students have different learning styles—some learn best by seeing, some by reading, some by doing, some by listening. Still, the method of 'content delivery' that works best for the greatest number in this class is relatively traditional lecture, so the majority of class-time will be spent on this. But I will try to make the lecture interactive, often posing questions to you, and encourage you to speak up with your own questions and comments. I'll also use some technological tools to get you directly involved (e.g. clickers) and include some interactive activities. And I'll do my best to make the teaching environment inclusive and welcoming for all students, and to show the diverse range of applications of economics.

I use ppt slides to guide lectures (these are my lecture notes) and to link to some relevant multimedia content. I post the slides to blackboard, but the slides are intentionally incomplete. The slides will therefore only make sense in conjunction with class notes/experience. I recommend that you take notes as if the slides were not going to be posted, and then just refer to them later only if necessary.

Learning this material does also require active problem solving. I'll try to provide some time for you to work on practice problems in class, especially with clickers, in addition to the homework problems you'll do outside class. You are welcome to work on both types of problems with others, and this is often a great way to learn and improve your understanding of the material. But remember you are ultimately responsible for knowing the material yourself on the tests. Think of in-class problems as practice for homework, and homework as practice for tests, which is ultimately where you'll demonstrate to me what you know. I will try

to include some homework questions on real-world issues. I hope these and the readings will complement the theory that we focus on for most of the class – illustrate the applications of this theory and how it clarifies the analysis of important issues in the real world.

Advice on how to succeed in this course: First and foremost, focus and be engaged in class. Doing this – plus reading the textbook chapter selections before class (and after as necessary), working on practice/homework problems carefully, attending study sessions as necessary, and asking me clarifying questions – should be sufficient for most of you, for learning most of the material and performing well in class overall. If this doesn't seem to be working for you – talk to me and we'll see if we can come up with a strategy that works better for your learning style. If you miss a class, get notes from a classmate, and if they're unclear, ask the classmate; if still unclear, don't hesitate to ask other classmates, me or Dylan (our LA), or other/drop-in LAs (see CTL schedule but usually someone Sun-Thurs, 7-10pm).

Other tips: In general, try to review notes after class and be sure they make sense, and ask others/me if not. Start on HW/studying for tests early. Be sure you can do the practice/HW problems on your own – if not right away, get help, but after that, test yourself with other problems. Note all deadlines and test dates in your calendar at start of term. In general – don't hesitate to ask questions, in/after class, office hours, etc!

Web/communication: All course documents and grades will be posted to blackboard or emailed to you. I'll at times email you announcements, reminders, clarifications, etc, but will try not to flood your inbox.

Assignments and grading: In addition to homework, there will be two midterms and a final exam. You may work on the HWs with others and/or get help from the tutor or me, but the answers you submit should be your own. You can drop your lowest hw score (1 of the 6 assignments), but late hws will not be accepted. If you can't make it to class to turn a homework in, please email it to me, turn it in to me early, or have a classmate turn it in. Make-up finals/midterms will only be given when you are not able to attend for a verifiable reason, with documentation. You should email me as soon as possible if you require a make-up midterm/final or for any accommodations for any assignments. Your class numerical grade will be a weighted average of the assignments, with weights as follows:

Homework	15%
Midterm 1	25%
Midterm 2	25%
Final	35%

I use a 10 pt grading scale for the course letter grade with 3 pt ranges for +/- (≥ 93 is A; ≥ 90 and < 93 is A-; etc) with the possibility of curving up, which happens more often for the lower scores. Following a policy used in other econ classes here, I take class participation/engagement in class into account when deciding on final grades for students whose numerical averages are on the margin between two letter grades.

Course schedule and readings (subject to change; all readings from Taylor unless noted; please do readings before corresponding class; details on non-Taylor readings to come)

Part I: Fundamental concepts and tools

- 1-Sep Syllabus, intros. What is Economics? Microeconomics? How do economists think about choices?
- 6-Sep Choice ctd. Harford ch1, Rodrik, Frank readings. Taylor: ch 1 is *optional*, ch 2 p.23-25 only
- 8-Sep The PPF and a simple model of trade: Why do people trade? Who gains from trade? (ch3, p.35-47 up to "Intra..." section; Rodrik ch 2)
- 13-Sep PPF ctd. Start supply & demand: What determines prices and quantities of goods sold in competitive markets? (ch 4, p.53-57)

- 15-Sep S/D ctd (p.58-p.65 through “The Interconnections”); can we predict changes in prices/quantities? If we observe changes in prices and quantities can we know what caused them? **HW 1 due**
- 20-Sep S/D ctd: How much value do markets deliver? Do they maximize value? If so, why, if not, why not? (finish ch 4: p.65-76)
- 22-Sep Elasticity, ch 7 (p.113-121): How responsive are supply and demand to price changes? **HW 2**
- 27-Sep Finish ch 7 (p.121-13), catch-up/review; https://conversableeconomist.blogspot.com/2021/02/the-minimum-wage-controversy.html?utm_source=dlvr.it&utm_medium=twitter
- 29-Sep **Midterm 1**

Part II: Consumer and producer theory

- 4-Oct Consumer theory: How should consumers make choices? (ch2 p.14-17 (up to “Choosing between...”), ch8 p. 133-135 up to “Choosing..”, Ch 8 Appendix p.353-357)
- 6-Oct Consumer theory ctd: How should you decide how many hours to work at your job? How much you should save versus spend now? (ch 2, p.17-23, ch 8 p.142-150)
- 11-Oct Fall break (!)
- 13-Oct Producer theory: What are the different types of producer costs? (ch9, p.153-159 to “The Structure..”)
- 18-Oct Producer theory ctd (**pls bring laptop for Excel exercise**), ch 9, p.159-165, **HW 3**
- 20-Oct Firms in a perfectly competitive market: How do we use cost curves to derive a single firm’s supply curve in this mkt? The industry supply curve? (ch10, p.167-175)
- 25-Oct Deriving long-run supply in a competitive mkt: What are responses over time to demand changes? (p.176-178 to “Factors..”, p.182 (starting w “Efficiency..”) to p.184), <https://bensprague.substack.com/p/wait-until-next-spring-to-replace>; Harford ch3 to “Efficiency..”
- 27-Oct Monopoly: How does a firm behave with no competition? ch11
- 1-Nov Monopolistic competition: What happens when there are lots of similar firms--but they are all somewhat distinct? (ch 12, p.201-208 to “Oligopoly..”); **HW 4**
- 3-Nov Catch-up/review; Thiel, Philippon, Khan readings
- 8-Nov **Midterm 2**

Part III: Game theory and market failure

- 10-Nov Game theory: What is game theory? How should ‘players’ make choices in games? What are the connections to economics? Harford ch 7, Easley readings
- 15-Nov Oligopoly and anti-trust regulation: How do firms behave in markets with a small number of competitors? (ch 12 p.208-213, ch 13 p.219-221, p.226-228)
- 17-Nov Externalities: What happens when people other than the buyer and seller are affected by a market transaction? Do markets still “work”? If not, what can be done? (ch 14, p.231-242 up to “International Environmental Issues”); Nordhaus reading
- 22-Nov Public goods and common resources: Why does economic theory support things like public financing of schools and roads and strict regulation of fisheries? (ch 15; Harford ch 4); **HW 5**
- 29-Nov Poverty and inequality: how and why have these changed over time? What does econ 101 have to say about these topics? (ch 16, Burkeman, Harford ch 3 starting with “Efficiency vs fairness”)
- 1-Dec Information: What happens if buyers don’t know how good the widget they’re buying is? Do markets still ‘work’ in this case? (ch 18; Harford ch 5)
- 6-Dec Behavioral economics: What are common, predictable ways that consumers deviate from rational choice model? Phishing, Friedman readings
- 8-Dec Catch-up/review; **HW 6**; Coyle reading

Final: tbd