Bowdoin College Economics 1101b: Principles of Microeconomics Spring 2024

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

Time & Location: M, W 11:40-1:05, Hubbard Pickering Room (213)

Professor: Dan Stone, dstone@bowdoin.edu

Office Hrs: T, R, 2:00-4:00 (or by appointment), Hubbard 108.

Learning Assistant (LA): Charlie Apolinsky <apolinsky@bowdoin.edu>; study sessions Mondays

HW weeks 7:00-8:30, Econ library seminar room (Hubbard).

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 study of individual economic agents (consumers, workers, firms) and individual markets. In particular, microeconomists study the *economy* (i.e., the efficiency) of people's choices and market outcomes, whereas macroeconomists study *the economy* as a whole.

Big picture questions we will address in this class include: how do people make choices under scarcity, given budget and other constraints—and how should we? How do markets work: how are prices and quantities of goods determined, and what causes them to change? When and why do markets fail to be efficient and how can public policy help to mitigate resulting problems? More generally, when does the individual pursuit of self-interest benefit the common good, and why does this occur or why not?

This course is traditional in the sense that we will spend most of our time on standard economic theory (aka "neoclassical" economic theory), which assumes that people make optimal choices given their preferences and constraints. But we won't simply accept the mathematical models and assumptions at face value – we'll think critically about their flaws and simplifications, and what we can learn despite these. We will also supplement the standard readings with 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—other course goals are:

- 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;
- to 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);

- to hone your math and logical reasoning skills, and better understand how simple mathematical models can be used to gain insight into real-world situations;
- to help you better understand, and improve, your own economic decision-making how you spend your money, time, and other resources.
- to have fun! Seriously microeconomic theory and applications are really interesting and important, and I hope we all enjoy the experience together.

Readings: Readings are noted in the course schedule below and will all be posted to Canvas. There is no single textbook that I like enough to ask you to buy (given its price) so I am primarily using the following online (open access) sources:

OpenStax, *Principles of Microeconomics*, *3e* https://openstax.org/books/principles-microeconomics-3e/pages/1-introduction

Core-Econ, *The Economy*, https://www.core-econ.org/the-economy/

Marginal Revolution University (MRU). https://www.mruniversity.com/.

Harford, Tim. *The Undercover Economist*. (ebook available via Bowdoin library)

Easley, D. and Jon Kleinberg. *Networks, Crowds, and Markets: Reasoning about a Highly Connected World*.

I also plan to provide supplemental readings from these sources (subject to change):

Banerjee, Abhijit and Esther Duflo. Good Economics for Hard Times. 2019.

Burkeman, Oliver. "Scarcity: Why Having Too Little Means So Much review." The Guardian. 8-23-2013 Clemans-Cope, Eleanor. "Princeton's ECO 100 teaches market mythology over economic reality." The Daily Princetonian. 12-3-2023.

Frank, Robert. "The Economic Case for Regulating Social Media." *The New York Times*. 2-11-2021. Henderson, Rebecca. *Reimagining Capitalism in a World on Fire*. 2019.

Nordhaus, William. "A New Solution: The Climate Club." *The New York Review of Books*. 6-4-2015. Rodrik, Dani. *Economics Rules*. 2015.

Scott Morton, Fiona. "What should we do about big tech?" *Capitalism after Covid Conversations with 21 Economists*. 2021.

Sowell, Thomas. Basic Economics (5E). 2014.

Other recommended resources (we might use some of these or you might want to check these out on your own):

- https://www.kentclarkcenter.org/us-economic-experts-panel/ (polls of econ experts on current issues)
- http://econofact.org/ (econ experts writing on current issues)
- marginalrevolution.com (most popular econ blog)
- https://bensprague.substack.com/ (Maine economy blog with focus on real estate)
- https://www.youtube.com/channel/UC9a V7YbGGmWphAzk8 4LFQ/about (econ youtube videos)
- https://www.reviewecon.com/ (videos, review questions)

Teaching philosophy and methods for this course:

The majority of class-time will consist of "interactive lecture"—me talking through slides and working through examples on the white board, but with a lot of back and forth between us: I'll ask you a lot of questions and hope that you'll do the same to me (and correct my mistakes!).

I will sometimes call on students who haven't volunteered to answer a question—especially those who seem to need a push to be more engaged (or those who seem distracted by a screen or device ©). I'll also use some technological tools to get you directly involved (e.g. clickers) and try to incorporate a variety of interactive activities to mix things up. 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 powerpoint slides to guide lectures (these are my lecture notes) and to link to some relevant multimedia content. I post the slides to Canvas, but the slides are <u>incomplete</u> and intended to be used in conjunction with class notes. The slides will therefore only make sense in conjunction with class notes/experience. If you ever have questions on your notes after class you are very welcome to discuss with me.

Learning this material does require active, independent problem solving. You'll do practice problems on your own in every class (sometimes quick ones with clickers, sometimes longer ones with pencil and paper). You'll also do practice problems on your own outside of class and submit these as homeworks every two weeks or so to keep you on track with the material and help you prepare for the tests. The homework questions and test questions are similar. 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 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 our LA, or other/drop-in LAs (see CTL schedule but usually someone Sun-Thurs, 7-10pm). If you need me to connect you to a classmate for notes, let me know. 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.

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, 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 class, after class (email/office hours), etc!

Web/communication: All course documents and grades will be posted to Canvas or emailed to you. I'll at times email you announcements etc, but will try not to flood your inbox. **You are welcome to email me brief questions**. If you want to talk in person, please drop by during office hours (i.e., drop-in hours – no need to arrange anything in advance). If you have a conflict with my office hours you can email me to set up an appointment for another time to meet. You can provide anonymous feedback to me anytime here: https://bowdoincollege.qualtrics.com/jfe/form/SV_0cwrZqkrkflFOV8.

Assignments, grading, accommodations, accessibility: Your class numerical grade will be a weighted average of assignment grades with these weights:

Homework	15%
Quizzes	5%
Midterm 1	25%
Midterm 2	25%
Final	30%

You may work on the HWs with others and/or get help from our LA or me, but the answers you submit should be your own. You can drop your lowest homework score (which could be a HW you skip altogether) but late homeworks aren't accepted. I want to encourage you to get assignments done on time, and give the homeworks to our homework grader immediately after class, and it would be difficult to get him assignments submitted late (I grade the tests but we have a student grader for homeworks). If you have not finished a homework at the start of class you should turn in what you have and get partial credit. 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. You can drop your lowest quiz score but there are no make-up quizzes without documentation of 2+ unavoidable absences.

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.

I use a 10 pt grading scale for the course letter grade with 3 pt ranges for +/- (>=93.0 is A; >=90.0 and < 93.0 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.

It is my goal to create a learning experience that is as accessible as possible. If you anticipate any issues related to accessibility, please meet with me outside of class so we can explore potential options to facilitate your learning experience.

Course schedule and readings (subject to change; please do readings before corresponding class noted on schedule)

Part I: Fundamental concepts and tools

- Jan 22 Syllabus, intros. What is Economics? What is microeconomics? How do economists think about choices?
- Jan 24 Choice ctd. (Sowell, ch 1; Frank Micro & Behavior p.3-11; p.19-20 (Positive/Normative and Micro/Macro).
- Jan 29 The PPF and a simple model of trade: Why do people trade? Who gains from trade? (Acemoglu et al ch 8, 171-182; Rodrik ch 2, up to "When Standard Intuition..." p. 56)
- Jan 31 PPF ctd. Start supply & demand if time. Quiz 1
- Feb 5 Supply & demand: What determines prices and quantities of goods sold in competitive markets? (CORE, ch 8 through 8.2)
- Feb 7 Consumer & producer surplus. S and D changes (CORE 8.5-7). How much value do markets deliver? Do they maximize value? If so, why, if not, why not? Can we predict changes in prices/quantities? If we observe changes in prices and quantities can we know what caused them? **HW1 due**
- Feb 12 Taxes (Core 8.7) and elasticity: How responsive are supply and demand to price changes? (OpenStax, Ch 5) **Quiz 2**
- Feb 14 Elasticity: How responsive are supply and demand to price changes? (OpenStax, Ch 5) **HW 2 due**
- Feb 19 Catch-up/review
- Feb 21 Midterm 1

Part II: Consumer and producer theory

- Feb 26 Consumer theory: How should consumers make choices given their tastes and budget constraints? (MRU ch 16; OpenStax Appendix B up to "Responses to Price Changes")
- Feb 28 Consumer theory ctd (labor supply; present discounted value, OpenStax Appendix C) and start producer theory if time.
- Mar 4 Producer theory: What are the different types of producer costs? (OpenStax 7.2-7.5)

 Quiz 3
- Mar 6 (pls bring laptop for Excel exercise); HW 3 due

Spring break (!)

- Mar 25 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? (OpenStax, 8.1-2; don't worry about figure 8.2)
- Mar 27 Deriving long-run supply in a competitive mkt: What are responses over time to demand changes? (OpenStax 7.1, yes go back to this, 8.3-4)
- Apr 1 Monopoly: How does a firm behave with no competition? (OpenStax, ch 9); Quiz 4
- Apr 3 Monopolistic competition: What happens when there are lots of similar firms--but they are all somewhat distinct? OpenStax, 10.1 **HW 4 due**

Apr 8 Catch-up/review; Scott Morton reading;

Apr 10 Midterm 2

Part III: Game theory and market failure

- Apr 15 Game theory: What is game theory? How should 'players' make choices in games? What are the connections to economics? Harford ch 7, Easley readings
- Apr 17 Oligopoly and anti-trust regulation: How do firms behave in markets with a small number of competitors? OpenStax, ch 10.2 & 11 up to 11.2
- Apr 22 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? CORE, 12.1-4, Nordhaus; **Quiz 5**
- Apr 24 Public goods and common resources: Why does economic theory support things like public financing of schools and roads and strict regulation of fisheries? (CORE, 12.5; Harford ch 4); **HW 5 due**
- Apr 29 Poverty and inequality: how and why have these changed over time? What does econ 101 have to say about these topics? (Burkeman, end of Harford ch 3, Duflo and Banerjee ch 11)
- May 1 Information: What happens if buyers don't know how good the widget they're buying is? Do markets still 'work' in this case? (CORE, 12.6; Harford ch 5); **Quiz 6**
- May 6 Behavioral economics: What are common, predictable ways that consumers deviate from rational choice model? Readings tbd
- May 8 Socially responsible capitalism (ESG, CSR, B Corps), Henderson reading; Catch-up/review **HW 6 due** (Sowell ch 8)

Final exam: TBD