

Intermediate Microeconomics

The course meets Monday, Wednesday, and Friday from 10:50-12:05 in Seelye 208. Each student **must** attend one of the three sections: Wednesday 9:25-10:15 (McConnell 102), Wednesday 1:20-2:10pm (McConnell B05) or Wednesday 2:45-3:35pm (McConnell B05). The section meetings will provide an opportunity for you to ask questions and practice working through problems. I will also present some new material and extensions of topics covered in lecture during sections.

The one required text for the class is Bowles & Halliday (henceforth CCC), *Microeconomics: Competition, Conflict and Coordination*, Draft Edition (forthcoming with Oxford University Press, 2020). The book is not yet published, but you will be able to obtain a copy of draft chapters online free of charge on Perusall. I will upload the book chapter by chapter. I will also provide notes on Moodle for complementary content not covered in the textbook, e.g. math revision. CCC contains problems at the end of each chapter which are similar to those that you will have to complete for problem sets and exams. You will get access to the draft chapters *free of charge* and I hope to recruit your assistance in improving the book before we submit it for final publication.

Prerequisites

This course has two prerequisites: Introductory Microeconomics (150) and Calculus I (Math 111). Some of you may have met these requirements with AP, IB, or A-level credit, but if you have not met both prerequisites, please see me immediately. The course assumes that you are comfortable with the following math skills: algebraic manipulation of functions, graphing, calculating the slopes of lines, exponents (including fractional and negative exponents), solving systems of equations, differentiating a wide range of functions, and using calculus to optimize functions of one variable. We will be extending the differentiation and optimization techniques used in Math 111 to more complex situations, such as multivariable differentiation, so you need to be comfortable with the basics learned in Math 111. Please see me if you are unsure about your math background.

What ECO250 Does and Where it Fits

Intermediate Microeconomics is probably one of the most challenging courses you will take during your undergraduate degree (at least, many of those who take Intermediate Microeconomics consider it one of the most challenging courses that they take). Why is it challenging? Thinking about social interactions can initially seem counterintuitive, so you need to practice a lot. You probably got your first taste of such thinking when taking ECO150 or an equivalent social science course. Now you need to combine that counterintuitiveness of economic thinking with more advanced mathematical methods: sometimes this combination messes people around. Do not despair! I was once a student of Intermediate Microeconomics too and I feel your pain and anguish.

Intermediate Microeconomics takes some of the topics from ECO150 and shows you some of the fascinating models behind the ideas. We also introduce factors that create problems with (or perhaps even undermine) some of the ideas from ECO150. Do people

only care about money, or do they worry about their families, their friends, or people in distant lands? Do markets work efficiently all the time, or do they break down? If they do break down, do the breakdowns matter?

Here are a few ideas that we might want to think about economic explanations for:

- Oxfam made the point a few years ago that richest 85 people in the world own about as much as the poorest half of the world (about 3.5 billion people). What produces inequality and does it matter for how people interact on a microeconomic scale? ¹
- Many companies try to get their employees to sign non-compete clauses? Why do firms' exercise such power?² What happens if no such clauses exist, but companies coordinate as if they did exist, such as with fast food chains and anti-poaching agreements?³
- Why might managers favor unstable work hours for their employees even when more stable work hours would be better for them and for their employees? Why don't they go for win-win outcomes?⁴
- Why do we have such monopolistic markets in technology?⁵ What can we do about it?⁶

These are the kinds of questions we try to ponder and attempt to answer in ECO250. As such, ECO250 helps to round out your economics education before you take on more advanced 300-level courses in the Economics department. In particular, ECO250 is crucial to taking the seminar that will act as a capstone for your Economics major. Furthermore, ECO250 is a crucial course to complete if you're thinking about graduate school in business or economics. ECO250 will also set you up to engage more readily in dialog with the other social sciences – sociology, anthropology and psychology – that deal with human behavior, institutions, and the structures of society. ECO250 can also guide your thinking

¹Oxfam, 2014, 'Working for the Few', accessible at <http://www.oxfam.org/en/policy/working-for-the-few-economic-inequality>, accessed on 22 January 2014.

²:"The Case Against Non-compete Clauses," *The Economist*, 19 May 2018, <https://www.economist.com/leaders/2018/05/19/the-case-against-non-compete-clauses> accessed 5 September 2018

³"Regulators Investigate Fast-Food Chains' Limits On Whom They Hire", NPR, 10 July 2018, <https://www.npr.org/2018/07/10/627682297/regulators-investigate-fast-food-chains-limits-on-worker-recruitment>, Accessed 5 September 2018

⁴"A Find at Gap: Steady Hours Can Help Workers, and Profits", NY Times, March 2018, <https://www.nytimes.com/2018/03/28/business/economy/gap-schedule-study.html?smid=tw-share>, Accessed 5 September 2018.

⁵"Tech's Titans Tiptoe Toward Monopoly," Wall Street Journal, 21 May 2018, <https://www.wsj.com/articles/techs-titans-tiptoe-toward-monopoly-1527783845>

⁶"A Nobel Prize Winner's Guiding to Taming Tech Monopolies", *Quartz*, <https://qz.com/1310266/nobel-winning-economist-jean-tirole-on-how-to-regulate-tech-monopolies/> and "The Monopoly busting case against Google, Amazon, Uber and Facebook." *The Verge*, 5 September 2018, <https://www.theverge.com/2018/9/5/17805162/monopoly-antitrust-regulation-google-amazon-uber-facebook>

about some of the humanities – history and philosophy – that deal with questions of how society came to be the way it is and about questions of justice and equality.

I hope that you enjoy the course and that you use it as a stepping stone for future engagement with economics and with the wide array of academic topics to which economics relates. Below, I present a list of some important ideas we'll think about:

- How do economic agents – people, firms, communities and governments – make choices?
- What is *economic surplus* (*economic rents*) and how do people create gains from trade, from cooperation?
- Why do people regularly fail to coordinate on mutually beneficial outcomes? And why is social coordination a major aspect of modern economies.
- How do economic rents – the benefits people over their next best alternatives to co-operation or mutual exchange – get *distributed*? Do people distribute them equally or unequally? Does the distribution of economic rents affect how people behave? What do people do when they have a conflict of interest with each other about what to do?
- How do *institutions* – laws, social norms, convention, markets – and how does *power* affect how people, firms, communities and governments interact?
- What do people do when markets are dominated by *imperfectly competitive* firms? What does it mean to compete for rents on markets in the modern economy?
- What do we do when *external effects* (externalities) pervade social interactions? People confer benefits on each other and inflict costs on each other, and our social, working, financial, and political lives are therefore interdependent in crucial ways.
- How has the set of institutions that define *capitalism* presided over dramatic increases in average human well-being as well as big differences (inequality) in how well-being is distributed among people and countries?

Grading

Your grade will have five components:

- 10% Class Participation (including online in Piazza or Slack – the choice of which we'll vote on)
- 10% Moodle Quizzes
- 5% Reading & Commentary on Perusall
- 22.5% Problem sets and other homework
- 30% Evening midterm exams (self-scheduled, 15% each)
- 22.5% Final exam (self-scheduled)

Method of Instruction

ECO250 is lecture-based with weekly discussion section. I will lecture on certain topics, but you will also be expected to engage in collaborative discussions with fellow students, solve problems by yourself during class, and engage in group problem-solving activities (worksheets, multiple choice questions using PollEverywhere, online discussion). I will facilitate this as best I can. I expect students to prepare the readings for each session and to be able to answer questions about the readings to produce a high quality problem-solving, engagement and discussion.

Each student is expected to contribute to the discussion. If you do not contribute, I shall encourage you to do so; if you contribute substantially more than anyone else, then I may ask you rather to encourage the engagement of others. We shall also employ peer evaluation where you recognize the contributions of your peers and consider what feedback might improve their learning. Only the professor will award grades.

Course Policies

Disclaimer: The policies in this syllabus are subject to change. Any changes will be announced to the class and posted on Moodle.

Reading Quizzes

While the course introduces a number of topics and ideas, the central goal of the course is to teach you to apply the concepts in a variety of settings. I try to focus on these applications in class, so it is important to keep up with the readings in your textbook (which are posted on Perusall). There will be regular reading quizzes (roughly one per chapter) on Moodle to provide the appropriate incentive.

The quizzes are multiple-choice or numerical with between 5 and 15 questions. They are open book and open note, but must be completed individually. Discussing answers or questions with a classmate, looking at the quiz on a classmate's computer, or allowing a classmate to look at the quiz on your computer are violations of the the Honor Code.

You can take the quiz as many times as you want up until it is due and only the highest score will count. I will drop your two lowest quiz scores and the average of the remaining quizzes will be worth 10% of your course grade. Barring truly exceptional circumstances, there will be no make-up quizzes. If you wait until the last minute to take the quiz the first time, you may not have time to take it again if you are unhappy with your score.

There will also be a math skills quiz included in your reading quiz score.

Moodle

I will use Moodle as the basic Course Learning Software along with support from Perusall and one of Slack/Piazza (We'll vote on which of these you prefer. I realize this is a lot of software, but each has uses the others does not. I will post a variety of documents on Moodle:

- Problem Sets

- Reading Quizzes
- Additional (short) readings for discussion sections
- Select solutions to problem sets (just prior to exams)

Perusall & the Textbook

The textbook is being published in 2019 by Oxford University Press. But, you will get the draft chapters free of charge and I will provide you access to them through the password-protected Perusall website. Perusall also encourages you to *participate* in the reading of the book through highlighting, commenting, and responding to comments of other students who are in your Perusall Group. I will occasionally review your participation in your Perusall group as part of your participation grade. To access the book, go to <https://perusall.com> and use the Course Code: HALLIDAY-5GETS to get access to the first chapters of the book (I shan't provide them all at once).

In-class Participation

We will regularly do problems in class, some that appear in the textbook and others that do not. You will often work with other people when solving these problems and you will be asked to speak about your solutions to the rest of the class. I expect you to participate fully in trying to solve problems, to support your peers in their attempts to solve problems, and in your engaging broadly with the class when asked to do so.

Missed exams

Please check the dates of the exams in the schedule and come and see me by the end of the add/drop period if you have any unavoidable conflicts. If a genuine emergency arises, notify me as soon as possible.

Problem Sets

There will be six problem sets in the course. These are due at 5:00pm on the date indicated (unless otherwise noted on the problem set) in the mailbox *outside my office* (Wright Hall 234). I will drop your lowest problem set score. **If you have to miss class or you cannot hand in at the customary time, please contact me in advance to arrange an alternative.** I will deduct points for significantly late hand-ins or give zero points if no work materializes.

The problem sets are designed to be learning experiences, giving you practice working with and applying the concepts from class. The questions are intentionally challenging and not simply examples from class with different numbers. In many cases, you may need to think about a problem for a while before you will see how to answer the question.

Work in groups on the problem sets! Don't try to do it all by yourself.

That said, each student must prepare and submit her own answers after group work. The problems are designed so that they would be **very challenging** for someone to solve by

themselves. Copying your answers directly from another student or allowing a classmate to copy your problem set are violations of the Honor Code. If you have any concerns about what constitutes independent work, please discuss them with me prior to the due date of the problem set. Note that the final problem set will be your **report** and a **course story** (reflective writing).

Report

You will write one “microeconomic report” this semester later in the semester. You will iterate on your report. I’ll provide guidelines as we proceed. The main idea is that you *identify* an economic fact about the world and then you write a *theory* to explain why that fact may be true. Your idea could also be inspired by policy or other concerns. As inspiration, I recommend some books:

- Seabright, Paul, 2010, *The Company of Strangers* (locating the economics of co-operation, conflict and information into the context of human history and evolution) **Available as a Five College e-book** Amazon: <https://amzn.to/2wLGm20>
- Roth, Alvin, 2014, *Who Gets What and Why* (Roth won the Nobel prize in economics in 2012 for his work on market design in kidney exchanges, schooling and other matching markets; this is the popular exposition of his theoretical work) **(one copy at Smith, another at AC)** Amazon: <https://amzn.to/2M1M0qn>
- Thaler, Richard, 2015, *Misbehaving* (behavioral economics written in the mode of a memoir by one of the field’s luminaries - Thaler has been at the forefront of behavioral economics for decades) **Copies available at MHC, AC, and UM** Amazon: <https://amzn.to/2NQBH5o>
- Lowrey, Annie, 2018, *Give People Money: How a Universal Basic Income Would End Poverty, Revolutionize Work, and Remake the World*. Lowrey is a writer for *The Atlantic* and this is her most recent book where she attempts to grapple with what a UBI could do to alleviate poverty. Amazon <https://amzn.to/2oKNR52>
- Hyman, Louis, 2018, *Temp: How American Work, American Business, and the American Dream Became Temporary*. Hyman is a professor of history interested in work, and this is his attempt to grapple with phenomena like Uber, TaskRabbit, etc in the modern economy. Amazon: <https://amzn.to/2PHkU1J>
- Putnam, Robert D., 2016, *Our Kids: The American Dream in Crisis*. How has inequality changed in the United States since the 1950s? What effects does inequality have on peoples’ everyday lives now versus a couple of generations ago? Amazon: <https://amzn.to/2wNx2tB>
- Desmond, Matthew, 2017, *Evicted: Poverty and Profit in the American City*. Poverty and inequality play out in diverse and horrific ways in housing and rental markets in the US. Desmond details the ways in which government regulation has failed and how landlords exploit regulation to their own benefits. Amazon: <https://amzn.to/2wP2LKS>

Email

I encourage you to email me at shalliday@smith.edu with questions that apply to you **personally**. I will make every effort to respond to your emails as soon as I can, but if I don't get back to you within that time, email me again and I shall respond (like many busy people, I occasionally require prompting). I will not answer detailed conceptual questions about problems sets or course material in emails. If you have such questions, come by my office, speak to the master tutor, or post to Piazza/Slack. In all likelihood, you want to ask a question the answer to which many people will benefit from, which is why I strongly recommend posting to Piazza/Slack. Also, I do not respond to emails that cover content that is already covered by the course syllabus. Notice, too, that I am worried about the effects of email on productivity (your productivity and mine see this NY Times Article), so please be sure that sending the email is the best possible way to communicate what needs communicating.

Facebook, Instagram, LinkedIn and Social Media

I will not accept friend requests from you on Facebook while you are a student at Smith, ditto follow requests on Instagram. I will only accept such requests after you graduate (I'm friends with/follow a bunch of Smith alums & it's a fun way to keep in touch). If you wish to contact me on a professional social network, then look me up on LinkedIn and I'll gladly accept your request to connect until graduation.

Class Attendance

It is virtually impossible to succeed in this course without regularly attending **both** lectures and discussion sections. I will not provide make-up lectures during office hours. If you must miss a course meeting, arrange to get the notes from a classmate and review them carefully. If you have specific questions about the material *after reviewing the notes and the relevant textbook material*, please come see me during office hours. We will also do in-class and in-section activities from experiments to Think-Pair-Share, so if you're not in class, then you won't get the participation grade for those activities.

Academic Honesty

As in any other course at Smith, you are required to adhere to the provisions of the Honor Code. I take academic honesty very seriously and will report any suspected violations of the Honor Code to the Honor Board. The two in-class exams in the course will be unproctored. The use of any unauthorized material or any discussion or copying of answers during exams is, of course, strictly forbidden.

For problem sets, I encourage you to work together and to work through your answers with other people. It is seldom that any economist comes up with ideas by herself and without anyone else affecting her thinking. If anyone ends up providing you with a lot of help or affects your thinking a lot, then make a point to **acknowledge** them explicitly in your work: list the people who have helped you (and in turn who you have helped too!). Doing this does not diminish the work that you do, rather it recognizes the contribution that someone else has provided to your work. The person need not have provided this

assistance face-to-face, if someone provided you with help on Facebook or elsewhere, then make a point of recognizing their help.

Getting Help

There are many resources available to you for getting help in this course if you need it.

Office Hours

Mondays 1:30-3:30pm and Fridays 9:30-10:30am, Wright Hall 234. I am also available by appointment at other times. Furthermore, please consider using Google Hangouts through your Smith email address to contact me - I will be happy to chat or speak to you.

Spinelli Center for Quantitative Learning

The Spinelli Center is located on the 2nd floor of Seelye and can be a valuable resource for you in the course. Juliana Lacerda Pyrrho is the master tutor assigned to the course (jlacerdapyrrho@smith.edu). She will have regular hours in the Center that will be posted on Moodle once the schedule is finalized. Feel free to ask her for general help explaining concepts from the course and for help on problem sets. She will not give you the answers to the problem sets but can help point you in the right direction.

Additional Help

Use Piazza/Slack. Use Perusall. Use your friends & colleagues. If you feel that you need help, please make an appointment to come and see me.

Academic Accommodations

If you have a disability and need accommodations in this course, please contact the Office of Disability Services in College Hall 104 or at ods@smith.edu as soon as possible to ensure that we can implement accommodations in a timely manner. Disability is a normal part of life.

Tips

This course will build on concepts you have seen in Economics 150, but will develop the concepts in much more detail and with more mathematical rigor. It can be a challenging course, but it can also be very rewarding. Five keys to doing well in this class are:

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| Keep up | Concepts build on each other and we will move quickly through topics. If you wait until right before a problem set due date or exam to make sure you understand the material, you may find yourself overwhelmed. Start work on the problem sets as soon as they are posted. |
| Recreate | Try to recreate the graphs and examples from lecture and the book without your book or notes. Carefully study the diagram, then close your notes or book and try to recreate the graph. The goal is not to be able to draw from memory, but to understand why each line or curve was placed on |

the diagram and what it tells us. As you draw the diagram, try to think of what would cause the lines or curves in the diagram to move and how they would move.

Practice There is no substitute for working through as many problems as you can. Although they are not assigned, try to work through the problems at the end of the chapters and all the checkpoints interspersed throughout the text. I would recommend that you post your comments on questions to Piazza and interact with your fellow students. I strongly encourage you to work on these problems (and your problem sets) in groups. But, your answers should still be 'your own' - your own explanations of how you arrived at a solution, your own step (or mis-step) when arriving at a mathematical answer, etc.

Ask for help If you find yourself struggling with an idea, ask for help as soon as you can. I'm always available during my office hours. I'm also happy to make appointments outside of office hours or answer questions any other time my office door is open. You can also visit the Spinelli Center or ask your classmates for help. If you can't catch me during office hours or make an appointment, perhaps we can chat or speak online using Hangouts/Zoom/Skype.

Explain Practice explaining in addition to doing problems. To succeed in this course, you need to be comfortable solving specific problems, to understand why your answers are correct, and to apply ideas in different contexts. Practice explaining new ideas and diagrams to your classmates (take turns), your roommates, your friends, your parents or anyone else you can convince to listen. Use the Piazza and Perusall pages to practice. Read in the newspaper, the Economist, economic blogs, or other sources and try to use the models from class to explain the article.

Course Schedule/Topic Outline

The following schedule is **tentative** and subject to change.

Dates	Topic	Chapter	Notes
Fri September 6	Preface & Society	Preface/Notes	Math Quiz
September 9-13	Society	Chapter 1	Ch. 1 Quiz (By Weds)
Sept 16-20	People & Preferences	Chapter 2	PS 1 Due Mon Sept 17
			Ch. 2 Quiz (by Weds)
Sept 23-27	Doing the best you can	Chapter 3	PS2 Due Weds Sept 26
			Ch. 3 Quiz (by Weds)
Sept 30	Revision Session in Class & MIDTERM 1 in the Afternoon & Evening		
Oct 2	Property & Exchange	Chapter 4	PS 2 Due Fri Oct 11
			Ch. 4 Quiz
Oct 4	CLASS CANCELLED (Simon Presenting at Conference at Columbia)		
Oct 7-11	Property & Exchange; Coordination Failures	Chapters 4 & 5	Ch. 5 Quiz (Fri)
			PS 3 due Fri Oct 11
Oct 12-15	Fall Break		
Oct 16-18	Coordination Failures	Chapter 5	
Oct 21-25	Competition & Market Equilibrium	Chapter 9	PS 4 Due Fri Oct 25
			Ch 9 Quiz
Oct 28-Nov 1	Information	Chapter 10	Ch. 10 Quiz
Nov 4	Revision Session in Class & MIDTERM 2 in the Afternoon & Evening		
Nov 6 - 8	Employment	Chapter 11	Report Idea & Plan 5 Nov
Nov 11-15	Employment & Credit	Chapters 11 & 12	PS 5 Due Fri Nov 15
Nov 22	CLASS CANCELLED: Simon Presenting at SEA Conference		
Nov 25	Credit	Chapter 12	
Nov 27-Dec 1	THANKSGIVING BREAK		
Dec 2-6	Risk & Insurance	Chapter 13	
Dec 9-12	Capitalism & Inequality	Chapter 15	Report & Reflection 12 Dec
Dec 13	Revision Session (Voluntary)		
Dec 17-20	Exam Period		