

# Intermediate Microeconomic Theory (Econ 203)

University of Massachusetts Amherst

Spring 2021 – Fully Remote Class

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<i>Lectures:</i> Tu-Th (Asynchronous Online Classes)	<i>Mid-term exam:</i> Mar 22-24 (on Moodle)  <i>Final exam:</i> date TBD (on Moodle)	<i>Discussion sections:</i> see SPIRE for yours.  <i>Instructor office hours:</i> Wed 9:00-11:00am <a href="#">Zoom office hours link</a>
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*Please read every section of this Syllabus fully and carefully before the course starts.*

## I. Course Outline and Objectives

Microeconomics studies social and economic interactions at the *micro* level – that is, starting from the behavior of single economic actors or entities. The material covered in this course will equip you with tools to connect individual goal-oriented behavior with the resulting, sometimes counter-intuitive, social outcomes.

Our journey into microeconomics will start from an age-old challenge: how to coordinate the activities of free individuals, each seeking their own ends, so as to achieve socially desirable results? We will explore this issue using the language and tools of game theory. The framework that we will gradually build can be readily applied to the real-world issues which inspired many of you to take a course (or a major) in economics, including market competition, economic development, inequality and environmental sustainability.

During the course, we will explore in depth the relation between conflict and coordination, and think about questions of efficiency and fairness. The course will also help you deconstruct the role of power, communication and bargaining in economic interactions. All these ideas will be explored with a strong foundation in actual behavioral tendencies of people. Our approach will make it clear that the insights of other disciplines – including history, sociology, law and anthropology – are an integral part of economics.

Here's a list of some of the ideas that we will go through during the course:

- How do economic agents – people, firms, communities and governments – make choices? What social outcomes should we expect as a result of these choices?
- When does the pursuit of self-interest by all individuals lead to socially efficient outcomes? When does it lead to outcomes that no one likes?
- How does trade generate economic gains? What determines the distribution of these gains among different individuals and groups? Are they distributed equally or unequally?
- Why and how do institutions (the ‘rules of the game’) and power affect the way people, firms, communities and governments interact?
- How does the labor market work? What determines the wage level? Why is there some unemployment in all capitalist economies?

## II. Pre-requisites

Prerequisites: ECON 103 or RES-ECON 102, *and* one of the following courses - MATH 127, MATH 128, MATH 131, MATH 132, ECON 151, or ECON 152.

### *Math pre-requisites*

There are good reasons why having completed a math course is required in order to enroll in intermediate microeconomics. To do well in this course, you need some basic math skills. You should feel comfortable interpreting and graphing simple mathematical functions. You should have a working knowledge of basic calculus – this involves calculating slopes of functions, taking derivatives, and mathematical optimization (maximizing and minimizing functions). You should also feel comfortable solving a simple system of linear equations.

#### **TIP 1: Revise your math – now!**

This course will be more exciting and insightful (and easier) to you if you feel comfortable with the math pre-requisites. I'm not saying this to turn you away from the course – and it is actually true of any intermediate microeconomics course. I am saying this so you go back and revise some of the math as soon as you get the chance. Doing it at the very beginning will make things much easier for you.

In the Moodle page of the course, you will find a “Math Review” section, with materials covering the main essential math pre-requisites. We will not discuss these in class (as they are pre-requisites to the content of the course, that you are supposed to already master), but you can go back to them whenever you feel like you need a math refresh.

### III. Course Organization and Materials

#### A. Textbook

Samuel Bowles & Simon Halliday, *Microeconomics: Competition, Conflict and Coordination* (2020, Oxford University Press)

A PDF copy of the textbook will be uploaded on Moodle at no cost for students.

#### **TIP2: Reproduce the graphs and the math!**

The best way to feel comfortable about the graphs and the math that you encounter in the textbook and class slides is to reproduce what you see and read. You can look at the book/slides as you do this, and talk to yourself about what you're drawing as you go. Also, you could talk to a friend and discuss what you learned.

#### B. Moodle

Moodle will be used to upload materials (including lecture videos and notes), make announcements and administer assignments and quizzes.

#### C. Online teaching mode

As you know, this course is currently fully online due to the ongoing COVID pandemics. Classes will be asynchronous. That means that I will post video lectures on the Moodle page, that you can watch at a time of your convenience. You are required to watch each lecture by the end of the day when the lecture is scheduled. For example, our first class is scheduled on Tuesday Feb 2. I will post the lecture video 2-3 days in advance. You will have to watch the lecture video before the end of day on Tuesday Feb 2.

For your convenience, I will break each asynchronous lecture into multiple (usually two) 10/20 minutes videos.

#### D. Weekly readings

Reading regularly is key to success in this course. Approximately every week, you will be assigned a reading, and a reading-based quiz that will test your comprehension of the reading (some detail on these quizzes is given in Section V below). The expected calendar of readings is outlined in Section IV below. The best way to check when the next reading is due is to look at the "Quizzes and assignments" section in the Moodle page, and open the description of the next reading-based quiz, which will indicate what is the reading and when it is due.

#### E. Communications

I will often send you emails and post new materials on Moodle. The remote modality makes communication via email and Moodle even more central. In order to succeed in this course, you will need to stay updated by checking your UMass email and the Moodle page of the course regularly.

F. Discussion Sections

All students are assigned to weekly virtual discussion sections. It is required that you attend the specific discussion section you are enrolled in. Each discussion will be led by a Teaching Assistant (TA). Your TA will give you the details about how discussions will work. TAs will also hold virtual office hours once a week. During the discussion sections, you will review the concepts introduced in the lectures during the week, do hands-on exercises, and go over past quizzes and assignments.

G. Contacting the teaching assistants and the instructor

The best way to reach TAs is to send an email. The TA conducting the discussion section you are enrolled in will let you know their email contact and virtual office hours.

The professor's virtual office hours are on Wednesday between 9:00 and 11:00am. If you can, please send an email before coming to office hours, announcing that you will come and possibly giving me an indication of what it is that you want to meet about.

If you have feedback or concerns, feel free to bring them up with the TAs or with me – we will do our best to address them.

**TIP 3: Feedback – sooner rather than later!**

If you have feedback or concerns, bring them up with me or with a TA sooner rather than later. If there's something that we can adjust right away, I will try my best to do so.

H. Policy about extensions requests for quizzes and assignments

Requests of extensions for take-home assignments must be directed to your TA (not the professor) *before* the deadline and only for extraordinary (and documented) reasons. *Extensions cannot be requested for reading-based quizzes*—the whole point of these quizzes being to incentivize people to do the reading by the deadline. Of course, it can happen to be unable to do a reading-based quiz for health issues or other unexpected reasons: this is why the two worst-graded quizzes (including any missed ones) are not counted.

I. Q&A for course sections

Each section of the course has a dedicated Q&A forum on Moodle. It is found among the section materials. Please do use the Q&A forum to post any question or comment about the section, at any point. A TA or instructor will reply to your question/comment as soon as we can. Of course, you can also ask your questions at office hours, with or without posting them on the Q&A forum. But often your questions will be useful to other students, so I would encourage you to use the Q&A forum every time that you are comfortable with doing so.

## IV. The Plan

Following is a *tentative* schedule for the course. Take it as a broad indication: it is subject to change based on how fast or slow we are able to go as a group. Any change will be announced in advance as much as possible. Please refer to Moodle for an updated schedule and for all course deadlines.

Week	Reading	Tuesday	Thursday
<b>Week 1</b>	-	<i>Feb 2</i> Introduction	<i>Feb 4</i> Society: Coordination Problems and Institutions
<b>Week 2</b>	Preface & Chapter 1 (due Tuesday)	<i>Feb 9</i> Society: Coordination Problems and Institutions	<i>Feb 11</i> Society: Coordination Problems and Institutions
<b>Week 3</b>	Chapter 2 (due Tuesday)	<i>Feb 16</i> People & Preferences	<i>Feb 18</i> People & Preferences
<b>Week 4</b>	Chapter 3 (due Thursday)	<i>Feb 23</i> People & Preferences	<i>Feb 25</i> Doing the best you can: constrained optimization
<b>Week 5</b>	-	<i>Mar 2</i> Doing the best you can: constrained optimization	<i>Mar 4</i> Doing the best you can: constrained optimization
<b>Week 6</b>	Chapter 4 (due Tuesday)	<i>Mar 9</i> Property & Exchange	<i>Mar 11</i> Property & Exchange
<b>Week 7</b>	-	<i>Mar 16</i> Property & Exchange	<i>Mar 18</i> Review Session
<b>Week 8</b>	-	<i>Mar 23</i> Mid-term Exam	<i>Mar 25</i> Coordination Failures
<b>Week 9</b>	Chapter 5 (due Tuesday)	<i>Mar 30</i> Coordination Failures	<i>Apr 1</i> Coordination Failures
<b>Week 10</b>	Chapter 9 (due Tuesday)	<i>Apr 6</i> Competition & Market Equilibrium	<i>Apr 8</i> Competition & Market Equilibrium
<b>Week 11</b>	Chapter 10 (due Thursday)	<i>Apr 13</i> Competition & Market Equilibrium	<i>Apr 15</i> Information: Contracts, Norms & Power
<b>Week 12</b>	-	<i>Apr 20</i> No Class (Wed class schedule)	<i>Apr 22</i> Information: Contracts, Norms & Power
<b>Week 13</b>	Chapter 11 (due Thursday)	<i>Apr 27</i> Information: Contracts, Norms & Power	<i>Apr 29</i> Labor market: Jobs, unemployment & wages.
<b>Week 14</b>	-	<i>May 4 (last class)</i> Review Session	-

## V. Requirements and Grading

The course requirements consist of:

- 8 reading-based quizzes;
- 6 take-home assignments;
- a mid-term exam and a final exam.

*It is your responsibility to be aware of the quizzes and assignments posted on Moodle and their deadlines, by checking the Moodle page of the course regularly.*

### A. Reading-based quizzes

Whenever you are assigned a reading, you will also have a quiz on the reading, to be completed on Moodle. These quizzes were previously (when the course was in person) called 'pre-lecture quizzes' and were due before class: they are designed so that you can do them after doing the reading, but you don't need to have watched the lecture yet. With asynchronous teaching, the lecture might actually be available to you when you do the pre-lecture quiz, and you are welcome to watch it before/while doing the quiz if you find it useful.

There will be 8 reading-based quizzes in all. The two in which you do worse will not be counted. You can make unlimited attempts and will be able to see your score after each attempt. Only *the last* attempt will be graded.

Online quizzes will account for **15% of your grade**.

Note: extensions *cannot* be requested for reading-based quizzes (the whole point is to incentivize people to read regularly). If you skip one or two pre-lecture quizzes, they will just count as the 2 worst-graded ones, so they will not be counted towards your final grade.

### B. Take-home assignments

6 take-home assignments will be distributed through Moodle. I will make available the assignments on Moodle at least 10 days before they are due. You can make unlimited attempts but (unlike pre-lecture quizzes) will not be able to see your score after each attempt. Only *the last* attempt will be graded.

Take-home assignments will account for **35% of your grade**.

Note: Extension requests for take-home assignments must be directed to your TA (not the professor) *before* the deadline and only for extraordinary (documented) reasons.

### C. Mid-term exam

The mid-term exam will be done on Moodle between Mar 22 and Mar 24. You will be able to start at a time of your choice during that two-days window. Once started, it must be completed in 2 hours. It will have three kinds of questions: multiple choice questions; numerical exercises; short answer questions. The midterm exam will account for **25% of your grade**.

### D. Final exam

The final exam will take place in December (date TBD). It will be similar in format to the mid-term exam. The final exam will account for **25% of your grade**.

#### E. Extra-credits opportunities

Students who fill the pre-course survey ([at this link](#)) before Feb 8 will receive 2% extra-credits.

#### **TIP 4: Try solving the assignments individually first before asking a friend**

It is OK to seek help from your classmates on quizzes and take-home assignments. In fact, I encourage you to discuss the quizzes and assignments with your classmates. I would, however, highly recommend that you try the assignment individually first. This will be helpful in two ways. First, you are more likely to do well on the midterm and final by getting practice through the assignments. (Remember, you can't work together on the midterm and final exams.) Second, both you and your classmate are more likely to do well on the assignment itself by putting two separate minds on it.

#### **TIP 5: Read every week!**

The course is structured so that the material almost continuously builds on itself. This means that the best way to do well on the course is to read regularly. By doing the weekly readings you will be able (1) to better follow the classes and get the most out of them and (2) to do well on the weekly quizzes that I will assign. (This is actually something you are required to do, not just a tip.)

## **VI. Accommodations for disability**

The University of Massachusetts Amherst is committed to making reasonable, effective and appropriate accommodations to meet the needs of students with disabilities and help create a barrier-free campus. If you are in need of accommodation for a documented disability, register with Disability Services to have an accommodation letter sent to your faculty. It is your responsibility to initiate these services and to communicate with faculty ahead of time to manage accommodations in a timely manner. For more information, consult the Disability Services website at <http://www.umass.edu/disability/>

## **VII. Academic honesty**

Academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. The instructor may employ appropriate software (such as Turnitin or others) to check for possible plagiarism. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. The instructor will take reasonable steps to address academic misconduct.

Since students are expected to be familiar with academic honesty policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent.

For more information about what constitutes academic dishonesty, please see the Dean of Students' website:

[http://umass.edu/dean\\_students/codeofconduct/acadhonesty/](http://umass.edu/dean_students/codeofconduct/acadhonesty/)