# Intermediate Microeconomics (EC 311) Syllabus

#### **Grant McDermott**

#### Department of Economics, University of Oregon

#### Summary

When:	Tue & Thu, 14:15:15:50		
Where:	McKenzie 221 (map)		
Who:	Grant McDermott (instructor)	John Morehouse (GE)	
	Assistant Professor of Economics	🞓 Doctoral student in economics	
	🖂 grantmcd@uoregon.edu	🖂 jmorehou@uoregon.edu	
	∑ Mon 09:00−10:30*	∑ TBD*	
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\* Note: Both my and John's office hours will be conducted remotely. We'll post Zoom links on Canvas.

#### **Course description**

The aim of this course is to develop an deeper understanding of the economy. We will focus on the three pillars of microeconomic theory: (1) consumer behavior, (2) producer behavior, and (3) market competition. We will develop a set of mathematical tools that allow us better understand the foundation of each pillar and how they relate to each other. We will begin with consumers, and explore how their preferences and budgets lead to specific consumption choices. Moreover, we will see how this allows us to derive demand curves, both for individuals and for a group of consumers in the aggregate. We will then move on to producer theory and learn how available technologies lead to cost functions and supply curves. Finally, having gained a solid understanding of both the demand and the supply sides, we will study the interactions of consumers and firms in different market settings, such as pure competition, monopoly, etc.

**Learning objectives:** Upon completing the course, students should feel comfortable analysing and solving the basic mathematical models that form the core of modern microeconomic theory. Moreover, they should have developed an intuitive understanding of the relationship between different market inputs (*preferences, technology, costs*) and market outputs (*prices* and *quantities*). The most important mathematical objective is developing an ability to perform constrained optimization in the context of these classic economic problems. (Translation: We'll be doing quite a lot of calculus.) But we'll always try to back that up with economic intuition and familiar examples.

## Prerequisites

**Required:** Introduction to Microeconomics (EC 201) and College Algebra (MATH 111). If you have not passed these prerequisites prior to the start of the term, you **must** drop the course unless you have explicit written permission from me. Otherwise you will be given an "F" for this class.

**Recommended:** *Calculus* (MATH 241). You will soon find out that EC 311 makes extensive use of mathematics. We're going to move quickly and I'll assume that you are—or, very soon will be—comfortable with solving equations, taking partial derivatives, and doing constrained optimization.

## Textbook

*Microeconomics* 3<sup>rd</sup> ed. by Goolsbee, Levitt, and Syverson (aka "GLS"). The 3<sup>rd</sup> edition of GLS comes with access to Achieve, an online platform with practice problems, homework, e-book chapters, learning modules, and extra resources. This is important because you'll need to complete the weekly Achieve homework assignments as part of your grade. However, you may also consider purchasing a cheaper digital access token instead of the hardcover version of the book. Both options are available at the Duck Store.

## **Class rules and COVID-19 protocol**

**COVID-19:** The University of Oregon has very clear COVID-19 guidelines. I recommend reading the whole thing. But the three most important things from my perspective as your lecturer are:

- 1. Everyone is required to be fully vaccinated, including a 3<sup>rd</sup> "booster jab by the end of January.
- 2. You are expected to wear a mask, covering your mouth and nose, at all times.
- 3. Do NOT come to lectures if you are unwell or have been exposed to COVID-19.

Please note that I will be strictly enforcing point (2) and, as much as I can, point (3). People without a properly fitting mask, or who are clearly unwell, will be made to leave the lecture room. I will make sure that you have access to whatever material you need if you are unable to come to class. Again, please stay at home if in doubt!

**General:** Apart from the COVID-19 stuff, I'll stick to some pretty commonsense in-class rules. No laptops or cellphones during the lecture. iPads and other tablets are fine if that's what you're using to take notes or annotate the slides, so long as you use an Apple pencil or stylus.<sup>1</sup>

I'm hoping to encourage an interactive and engaging classroom atmosphere. We'll use in-class quizzes and polls, and you should expect me to call on you to answer questions and discuss ideas during lectures. I will treat you as adults and anticipate that you can engage with challenging or uncomfortable ideas accordingly. At the same time, discriminatory or egregiously inflammatory language will not be tolerated. Similarly, the university takes an appropriately hard-line policy on sexual discrimination and violence that you should acquaint yourself with. President Schill's NYT op-ed on free speech on campus is another useful reference.

<sup>&</sup>lt;sup>1</sup>Basically, anything that doesn't involve tapping the screen and thus distracting those around you. At the same time, I'm happy to make exceptions for relevant cases; just ask me.

## Grading

Final grades will be determined as follows.

Component	Description	Weight
Homework	Weekly problem sets on Achieve	
	(link via Canvas)	
Midterm	14:15 Thursday, February 03	30%
Final	12:30 Wednesday, March 16	40%

Please note that you are going to be graded on a curve. This means that the absolute scores or percentages from your midterm and final are largely irrelevant. What matters most is where you are in the distribution of scores among your peers. Your letter grades that I post at the end of the quarter will reflect this curve. Usually (but not always) the threshold for an "A" grade is around 80%. Usually (but not always) the threshold for an "A" grade is around 80%. Usually (but not always) the threshold for a "B' grade is around 65%. There is only one absolute standard: **To pass this course, you need to get at least 50% in aggregate**. This pass/fail threshold could be higher depending on how the class performs as a whole, but it will not be lower.<sup>2</sup> Finally, please also note that these are the *only* criteria by which you will be graded. I will not consider any additional submissions/essays/tests/etc. to change your final grade.

A more detailed description of each graded component follows below.

#### Homework

Weekly problem sets will be made available on Achieve. This is an online platform linked to our textbook, which can be accessed via Canvas. The goal of these problem sets is to review material that we would have covered during the week and keep you sharp for the main exams. Each problem set carries the same weight, although you get to drop your lowest grade (i.e. "one free pass"). Unless otherwise noted, problem sets are due **Sunday at 11:59 pm**. The deadline is fixed and I recommend you avoid waiting until the last minute in case of connectivity issues, etc.

#### Midterm

The midterm is scheduled to take place in class at the **end of week 5**.<sup>3</sup> This basically means that you will be tested on everything before the start of the producer theory section. (A lecture schedule is provided at the end of this document.) Please also see the **Exam rules** section below.

<sup>&</sup>lt;sup>2</sup>Please note that the Economics Department requires a letter grade of "C-" or higher for all classes to count towards your degree. If you take this class P/NP, it will not be counted toward your major or minor requirements.

<sup>&</sup>lt;sup>3</sup>If we are running behind on material then I might bump the midterm to week 6. I'll let you in advance if this looks likely.

#### Final

The final scheduled to take place on **12:30 Wednesday, March 16**. The final exam will primarily be focused on all the material that we cover after the midterm (i.e. from producer theory onward). However, it is *technically cumulative*, in the sense that the topics we cover in the 2<sup>nd</sup> half of the course will use and expand upon topics from the 1<sup>st</sup> half. Thus understanding the old material will still be fundamental to getting a good grade. Please also see the **Exam rules** section below.

## **Exam rules**

I will provide a "definitions" sheet with common rules and formulas for both your midterm and final exams. These will be physically attached to your printed exams, but are available on Canvas for you to peruse beforehand. In addition, you are allowed to bring and use the following items:

- 1. Your own cheatsheet, with handwritten notes on a  $3'' \times 5''$  index card, one side only.
- 2. A scientific (non-graphing) calculator.
- 3. A ruler or straight-edge to assist in graphing.

Please note that phones, tablets, smartwatches, pocket translators, etc. are NOT allowed. If you are caught using one of these during an exam, I reserve the right to subtract an arbitrary number of points, or fail you outright. Cheating will earn an automatic zero for that exam.

**Missing an exam:** Please email John (our GE) and CC me ahead of time if you are unable to sit an exam. Any emails received after an exam has started will NOT be accepted. In normal years, I would not provide make-up material and simply shift the weight for, say, your midterm on to your final. But COVID-19 has changed the situation. John will provide you with make-up material and an appropriate deadline, as needed and within reason. Again, do not come in to class and put others at risk if you have been exposed to COVID-19.

**Honesty and academic integrity:** I've already said this, but just to underscore the point: Students caught cheating or plagiarizing will automatically be assigned a zero grade.

**Accessibility:** If you have a documented disability and/or anticipate needing accommodations in this course, please make arrangements with me during the first week of the term. You should request that the Accessible Education Center send me a email verifying your situation.

## Schedule

Week	Торіс	GLS chapter	Achieve HW
1	Intro & calculus review Utility	4.1	Math Review Supply and Demand
2	Indifference; budgets Utility maximization	4.2, 4.3 4.4	Consumer Behavior
3	Demand	5.1–5.5, 2.5	Individual & Market Demand
4	Risk & uncertainty	14.5	Uncertainty & Insurance
5	Midterm prep <b>MIDTERM</b>		
6	Production	6	Producer Behavior
7	Cost functions	7	Costs
8	Profit maximization	8.2	Supply in a
	Market supply	8.1, 8.3, 8.4	
9	Monopoly	9.1–9.5	Market Power &
	Oligopoly	11.1–11.5	Monopoty
10	Review Finals prep		