# University of Oregon Department of Economics Spring 2022

## Syllabus for EC 311: INTERMEDIATE MICROECONOMIC THEORY

16:00 – 17:50 Monday and Wednesday, 110 FEN

**Instructor:** Ethan Holdahl

Office: 419 PLC

Office Hours: Tuesdays and Thursdays 1-2

Email: eholdahl@uoregon.edu

**GE:** Ryan Tran

Office: 820 PLC
Office Hours: Mondays 12-1
Email: rtran7@uoregon.edu

**Course Description:** This course is designed to develop an understanding of the three pillars of modern microeconomic theory: consumer behavior, producer behavior, and market competition. The material in this course provides the foundation for studying issues in a wide variety of fields in economics, including labor, health, education, industrial organization, trade, environmental economics, and other fields, and it is essential for further study in economics.

We start with a review of material from Introduction to Microeconomics (EC 201) by discussing supply and demand and how these interact to determine market equilibrum. After we develop the mathematical tools we need for the class from calculus, we will proceed to study consumer theory. We will gain an understanding of how consumers' preferences and budgets lead to their consumption choices and the derivation of individual and market demand curves. We will then study producer theory and learn how available technologies lead to cost functions and supply curves. Having gained an understanding of both the demand and the supply sides of economies, we proceed to study the interactions of consumers and firms in different types of markets.

### **Learning Outcomes:**

- Proficiency in basic microeconomic concepts.
- Proficiency in microeconomic analysis. This builds on the basic microeconomic concepts and requires the ability to examine models of agents' decisions, including consumer utility maximization, firm profit maximization, and market equilibria, using mathematical tools.

**Prerequisites:** As stated in the University of Oregon catalog, EC 201 (introduction to microeconomics) and MATH 111 (college algebra) or equivalent are prerequisites for this course. 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 to take it without having met these prerequisites, otherwise you will be given an F for this class. In addition to the required prerequisites, it is strongly

recommended that you take calculus (at least MATH 241) before you take EC 311, as this course will use differentiation and constrained optimization.

You will soon find out that this course makes extensive use of mathematics. I assume that you are, or will soon be, comfortable with solving equations, and maximizing a function.

**Textbook:** Currently, to get a bulk discount, all Econ 311 courses at the UO use *Microeconomics*, *2*<sup>nd</sup> *Edition* by Goolsbee, Levitt, and Syverson. The book comes with access to "Achieve", an online platform with practice problems, homework, e-book chapters, learning modules, and extra resources. It is available at the Duck Store (ISBN: 1319252087).

**Achieve:** Students can go to https://achieve.macmillanlearning.com/courses/jny9sc/ to join the Achieve course. More information, including links, is available on the canvas website for the class (as is this syllabus).

I *strongly* encourage you to come to class. Lecture notes will be posted on the Canvas website.

**Attendance:** I encourage you to come to class. Attendance is not mandatory, but the course moves fast and covers a lot of material and it is very easy to fall behind. Coming to class is the best way to avoid that. I use the canvas website to update you on exactly what material we have covered during each lecture.

**Assessment:** There will be one in-class midterm, held Monday of week 6, and a 2-hour final, as well as weekly homework assignments on the Achieve platform. Your final course grade will be determined as follows:

<b>OPTION A</b>	OPTION B	
30%	30%	ACHIEVE HOMEWORK
30%	35%	MIDTERM [May 2 in class]
40%	35%	FINAL [14:45 Tuesday, June 7]

The course is graded on a curve. I will calculate your class scores for both option A and option B, and then automatically choose the highest score. After the midterm and final, I will post letter grade ranges for scores where I apply the curve to the exam that I will end up applying to the whole course. If your raw composite score is below 40%, you will earn an automatic F — regardless of the curve. 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.

#### **Problem Sets**

To complete the <u>homework assignments</u> you will need access to Achieve. Homework assignments must be completed on the website before a pre-set time on their due dates.

- The due date and time for each assignment is [Sunday nights at 11:59pm].
- You get three attempts at each Achieve homework, and your highest score is kept.
- All problem sets carry the same weight.
- You get one "free pass", so if for whatever reason you cannot turn in your homework in a given week, this will not count against your final grade.

• If you turn all of your problem sets, the one with the lowest grade is dropped.

Late assignments are accepted up to 10 days late, but with a cumulative 5% penalty per day late. Note that you always have the option of submitting a homework assignment early, and I encourage you to not wait until the last moment in case you encounter connectivity problems.

#### **Exams**

The midterm will be in class during week 6 on Monday May 2<sup>nd</sup>. The final be on **Tuesday, June 7 at 14:45**, as announced in the final exam schedule on the registrar's website <a href="https://registrar.uoregon.edu/calendars/examinations#final-examinations">https://registrar.uoregon.edu/calendars/examinations#final-examinations</a>. Both exams are closed-note and closed-book, and will be based on multiple choice and long-form questions.

- You are required to bring your UO ID card, a Scantron and a pencil.
- You are allowed a basic-function calculator (no graphing calculators).
- You are allowed a ruler or straight-edge to assist in graphing.
- Cellular phones, smartphones, iPads, iPods, smartwatches and any other contraption that didn't exist circa 1998 are NOT allowed.
- Pocket or electronic translators are not allowed. You do have the option of asking for clarification during the exam from one of the proctors. You are, however, partly tested on your understanding of the economic terminology that is introduced in the class.

The final is technically cumulative because some of the topics covered after the midterm will use and expand upon topics covered in the midterm. Thus, while the final is focused on new material, understanding of the older material will be fundamental to that new material.

I will not allow anyone who shows up more than 30 minutes late for an exam to take the exam for *credit*. Also, I ask students who do take the exam to not leave the room for the first 30 minutes. You are also not allowed to leave the room during the exam if you haven't finished it yet. (So, no bathroom breaks!)

No makeup exams will be given. In the case of a missed midterm due to unanticipated emergency situations, the student will be allowed to put the weight of the missed test on the final exam, provided I am notified *as soon as possible* and verification of the emergency is given. A missed final due to an unanticipated emergency may be handled with an "incomplete" for the course. Again, this will require *timely* notification and verification of the emergency and in case of the flu it will require notification *before the exam*. Do not take this class if you already know you cannot make the final exam. Please review the schedule of final examinations for any conflicts in your final exams and for potential multiple exams on the same day. Exam regulations, including rules for re-scheduling final exams can be found on the website <a href="https://registrar.uoregon.edu/calendars/examinations">https://registrar.uoregon.edu/calendars/examinations</a>. If, based on the rules laid out on this website, you are in situation where you require a re-scheduling of the final exam for this class, you will have to let me know *in a timely manner*.

Any requests for re-grades on an exam must be submitted in writing within *one week* of when the exam is handed back. If you do not pick up your exam when it is handed back, you still must make a re-grade request within a week of when the exam was originally handed back. A re-grade request should include an argument of why you feel your answer was correct. Since exam questions are graded as a whole, I reserve the right to re-grade the entire question when a re-grade request is made.

**Extra Help:** Office hours are scheduled at various days and times of the week and provide opportunities for one-on-one help. I also recommend the "Learning Curve" feature on Achieve. Each chapter's learning curve is a set of adaptive practice problems that change in difficulty depending on how you do, and refer you to the relevant material in the book when you get a problem wrong or need help. You might also find it helpful to check the review questions and problems (with answers) that are available on Achieve.

**Academic Integrity:** Academic dishonesty will not be tolerated. Please acquaint yourself with the Student Conduct Code, which is available at conduct.uoregon.edu.

Among other things, it is not allowed to let another student complete your Achieve homework assignments or to copy answers to homework assignments from any source. Copying cheats you of the practice necessary to succeed on exams. If I observe that you copy homework answers or answer keys in any fashion, I will give you zero credit for all homework assignments for the class. If you have questions about the boundaries between working on homework assignments jointly and copying them, ask me for clarification.

During exams, you may have pens and pencils, a ruler or straightedge, and a non-programmable hand-held calculator at your desk. Any other forms of assistance or sources of information (including cellular phones and electronic dictionaries) are prohibited. Any violations of the Student Conduct Code will result in a failing grade for the course. In addition, an incident report will be filed with the Office of Student Conduct and Community Standards.

**Students with Disabilities:** If you have a documented disability and anticipate needing accommodations in this course, please make arrangements with me during the couple of weeks of the term. Please request that the counselor for students with disabilities send me a letter informing me what accommodations you will require.

**Student Athletes:** If you are a student athlete and will need special accommodations, it is your responsibility to notify me in a timely and appropriate manner, and to support your request for special accommodations by providing appropriate documentation.

#### **CLASS SCHEDULE**

Wee k	Topic	Book chapter	PS
1	Review of Supply, Demand, Equilibrium Calculus for EC311	2.1—2.4	1
2	Preferences, Utility, Budget constraints, and Choice	4.1—4.4	2
3	Individual and Market Demand	5.1—5.5; 2.5	3
4	Individual and Market Demand (continued)		3

5	Topics of consumer theory: Risk and Uncertainty	14.5	
6	MIDTERM; Production	6	4
7	Cost functions	7	5
8	Profit maximization under Perfect Competition	8	6
9	Monopoly	9.1—9.5	7
10	Oligopoly	11.1—11.5	8