

Intermediate Microeconomics - Mathematical Approach (ECO 310): Spring 2022

Professor: Andrea Wilson (awilson@princeton.edu)

Class: Tues & Thurs, 11-12:20

- the first 2-3 classes will be removed, via the link in the Zoom tab here on Canvas
- after that, starting Feb 1 or Feb 3, we'll meet in person (tentatively in Jadwin A09, I've requested a room change but don't expect to get it)

Office Hours: Wed 3:30-4:30 and Fri 2:30-3:30 (Zoom right now, will eventually become in-person)

Preceptors: • Ana Dutra (adutra@princeton.edu)

- Leon Musolff (lmusolff@princeton.edu)
- **NOTE: precepts begin in the second week of classes**

Textbook: No required textbook. (I can recommend one if you feel that extra reading would be helpful). Lecture slides will be posted on Canvas, and should contain everything you need to know.

Evaluation: Best 4 of 5 problem sets (20%), Exams 80%:

- no late problem sets, for any reason. If you miss one, please use it as your dropped one.
- Exams: whichever is better of 30% midterm + 50% final, or 20% midterm + 60% final
- Midterm (likely 80 minutes) will be held on Thursday, March 3
- Final: to be determined

Tentative Problem Set Schedule: • PS1: posted Mon Jan 31, due Thurs Feb 10

- PS2: posted Mon Feb 14, due Thurs Feb 24
- PS3: posted Mon March 21, due Thurs March 31
- PS4: posted Mon April 4, due Mon April 11
- PS5: posted Tues April 12, due Thurs April 21

Disability Accommodations: Students must register with the Office of Disability Services (ods@princeton.edu) for disability verification and determination of eligibility for reasonable academic accommodations. Requests for academic accommodations for a course need to be made to ODS at the beginning of the semester, or as soon as possible for newly approved students, and again at least two weeks in advance of any needed accommodations so that arrangements can be made.

Precepts and Class Attendance: Precepts will mostly go through additional practice problems. You are expected and encouraged to attend. However, there is no explicit "attendance grade", either for lecture or for the precepts.

Course Outline

Part 1. **Consumer Behavior (5 classes: Jan 25,27; Feb 1,3,8))**

- intro + preferences, utility
- rational choice; revealed preference
- budget-constrained utility maximization; demand functions
- income and substitution effects; more properties of demand

Part 2. **Uncertainty and Financial Assets (3 classes: Feb 10,15,17)**

- expected utility
- applications
- paradoxes and extensions

Part 3. **Equilibrium (2 classes: Feb 22,24)**

- market demand, market supply, and equilibrium
- taxes; externalities

Midterm Week: No Class and/or Review March 1, Midterm March 3

Spring Break: March 6-13

Part 3: **Firm Behavior; Markets (6 classes)**

- Firm Behavior and Supply (March 15,17)
 - competitive markets: SR and LR
 - monopoly
- General Equilibrium (March 22,24)
 - exchange economies
 - double auctions
 - rational expectations
- Matching (March 29, 31)

Part 4: **Game Theory (6 classes)**

- NE in one-shot games (April 5,7)
- SPNE in dynamic games (April 12,14)
- information economics (April 19,21)