

Econ 7012: Microeconomic Theory I — Fall 2026 Syllabus

Essentials

- instructor: Maxwell (Max) Rosenthal
- time: Monday and Wednesday 9:30 AM — 10:45 AM
- duration: August 24, 2026 — December 17, 2026
- last day of class: December 7, 2026
- place: Old Civil Engineering G10

There is no teaching assistant for this course.

Instructor contact information

- email: rosenthal@gatech.edu
- office: 219 Old Civil Engineering
- office hours: by appointment Monday and Wednesday

Course description

This is a first course in microeconomic theory primarily intended for first-year students enrolled in the Economics doctoral program at the Georgia Institute of Technology. The course is also suitable for doctoral students enrolled in one of the various doctoral programs offered by the Scheller College of Business. Topics to be emphasized include utility and preference, consumer theory, producer theory, and choice under uncertainty.

Course objectives

The primary goal of this course is to familiarize students with microeconomic theory at a level appropriate for those pursuing a doctoral degree in economics.

Required materials

This course refers to one primary (required) text and two secondary (optional) texts.

- The primary reference for this course are the notes *Lecture Notes in Microeconomic Theory: The Economic Agent* authored by Rubinstein. An electronic copy of these notes are freely available on Canvas.
- The first secondary reference for this course is the classic textbook *Microeconomic Theory* authored by Mas-Colell, Whinston, and Green (ISBN 978-0-19-507340-9).

- The second secondary reference for this course are my own lecture notes that I periodically upload to Canvas. These notes are incomplete and contain errors of both omission and commission. Inconsistencies with assigned readings should be resolved in favor of the textbook unless explicitly noted. Do not distribute my notes.

For better or for worse, microeconomic theory (and modern economics more broadly) has mathematical foundations. This course necessarily assumes that students have a working knowledge of multivariable calculus and basic probability theory. Familiarity with undergraduate real analysis will be helpful but is not required. Along those lines, this course is complemented by our doctoral course in mathematical economics (Econ 7004), which is taught concurrently by Professor Justin Burkett.

Tentative rubric

We will spend most of our time covering the following material:

- foundations: preferences (Rubinstein ch. 1), utility (Rubinstein ch. 2), choice (Rubinstein ch. 3);
- classical demand theory part 1: consumer preferences (Rubinstein ch. 4) and demand (Rubinstein ch. 5);
- classical demand theory part 2: the expenditure problem and duality (part of Rubinstein ch. 6);
- choice under uncertainty: expected utility (Rubinstein ch.7) and risk aversion (Rubinstein ch. 8), subjective expected utility (my notes).

The first midterm is likely to cover the first two bullets, while the final will cover the third and fourth. The final will not be explicitly comprehensive, although some dependency on the material covered in the first half of the course is unavoidable.

Assessment policy

Grades will be determined according to the following weights:

- homework: 20%
- midterm examination: 40%
- final examination: 40%

Letter grades will be assigned in a manner that is no less generous than the following scale:

- A: [90%, 100%]
- B: [80%, 90%)
- C: [70%, 80%)
- D: [60%,70%)
- F: [0%,60%)

Similarly, pass/fail grades will be assigned in a manner that is no less generous than the following scale:

- Pass: [60,100]
- Fail: [0,60)

For economics PhD students, letter grades should be interpreted as follows:

- 'A': you are on track to pass the 7012 component of the comprehensive exam in economic theory;
- 'B': your current level of understanding is insufficient to pass the 7012 component of the comprehensive exam in economic theory;
- 'C' or below: you are on track to fail the 7012 component of the comprehensive exam in economic theory.

Assessment objectives

The goal of homework assignments is primarily to prepare students for examinations. In turn, the goal of the midterm and especially the final examination is primarily to prepare students for the comprehensive exams that Economics doctoral students take after completing their first year of doctoral study.

Homework policy

- Students may work homework assignments in groups, but assignments are to be submitted by each individual student.
- Homework is to be submitted electronically via Canvas before the start of class on the day that it is due.
- Hardcopy submissions of homework or e-mail submissions of homework are not accepted.
- Homework will be graded on a “pass-fail” basis. Good faith efforts to complete the assignment will typically (but not necessarily) yield a “passing” grade.
- We will solve each homework assignment in class; typically on the day it is due.

Midterm policy

- The midterm examination is TBD and will be scheduled at least one week in advance.
- The midterm examination will be taken in class, at the normally scheduled place and time.
- Students will have 75 minutes to complete the midterm.

Final examination policy

The Institute maintains strict policies for final exam scheduling. In particular:

- our final exam day is TBD and will be determined by the Institute’s Final Exam Matrix
- the exam will be in-person.

I reserve the right to make the final “take home”. Any such decision will be communicated on or before the final day of instruction.

Additional criteria for successful completion

There are no additional criteria for successful completion of the course.

Letter of recommendation policy

I encourage undergraduate and master’s students who are interest in pursuing further study in economics to enroll in this course. If you intend to ask me for a letter of recommendation for graduate school, you should notify me no later than Thanksgiving and we can schedule an appointment to discuss your applications. I will not submit letters of recommendation until after the final exam, regardless of application deadlines, and I expect students to e-mail me an organized list of applications no later than November 30, 2026. Do not ask me to submit a letter of recommendation that is due before December 15, 2026 unless our academic relationship predates your enrollment in this course.

Expectations

- I expect students to attend class. This applies especially to economics PhD students and any student that intends to ask me for a letter of recommendation to attend class.
- While I strive to reply to e-mail promptly (within 24 hours during the week), you should not expect immediate replies, especially in the evenings or over the weekend. Please do not send follow-up e-mails in fewer than 24 hour working hours.
- Fairness is a priority when it comes to grades. I make a commitment to letter grades that are monotonic in raw averages. This means that you will not receive e.g. a better letter grade than someone with a better average than you, nor a worse letter grade than someone with a lower average than you. As a consequence, I do not take out-of-the-classroom considerations into account when assigning final letter grades except where indicated by the Institute.
- I expect students to be courteous and professional in e-mail communications and I do the same.

Please see <https://catalog.gatech.edu/rules/22> for the Institute's official policy on Student-Faculty Expectations.

Attendance policy

I expect students to attend class. This applies especially to economics PhD students and any student that intends to ask me for a letter of recommendation. Students who miss class because of approved Institute activities are permitted to make up the work missed during their absences (see below).

Institute approved absences

Students who miss class because of approved Institute activities (such as field trips, professional conferences, and athletic events) are permitted to make up the work missed during their absences. Institute-approved absence requests are reviewed by a faculty committee, and the student receives an official letter from the Office of the Registrar as documentation of an approval. Please consult the Catalog for more information on Institute-approved absences and for other guidance on class attendance including absences for medical emergencies, religious observances, and voting in elections: <http://www.catalog.gatech.edu/rules/4/>.

Disability accommodations

This course obeys all Institute policies with regards to disability accommodations. If you require disability accommodation, please do both of the following:

- refer to Office of Disability Services at <https://disabilityservices.gatech.edu/>
- let me know during the first week of class.

Academic integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are held to high ethical standards. For information on Georgia Tech's Academic Honor Code, please visit the following website:

- <http://policylibrary.gatech.edu/student-affairs/academic-honor-code>.

Cheating on examinations is unfair to other students in the course and will not be tolerated. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Classroom behavior

If you need to use your cellphone to communicate in the event of an emergency, please leave the classroom. You are free to return after your call or text message exchange is complete. I strongly discourage but do not forbid the use of laptops for note-taking. In the event that technology becomes a distraction to other students, the instructor will request that the student either leave the classroom or cease use of electronic devices. Please do not make audio or video recordings of the instructor without his permission.