# ECON 603: Microeconomic Analysis 1 (first half) FALL 2025

**Instructor:** Emel Filiz-Ozbay **Office:** Tydings Hall (TYD) 4115C

**Office Hour:** Thursday 12:00 pm - 1:00 pm (online or in person: by appointment only)

E-mail: efozbay@umd.edu Phone: 401-305-3474

Class: Tuesdays/Thursdays 2:00 pm - 3:15 pm, TYD 2106

**Discussion:** Fridays, 1:00 pm – 2:30 pm, TYD 0117 (starting on Sept. 5<sup>th</sup>)

**Teaching Assistant:** Caleb Foote (<u>cdfoote@umd.edu</u>)

**TA's Office Hours:** Mondays, 2:00 pm – 3:00 pm, TYD 3115P

Midterm Exam: Tuesday, October 21, 2:00 pm - 3:15 pm

During the semester, if you are sick with airborne/direct contact diseases, please stay home and let the instructor and the TA know for appropriate accommodations.

Course Description and Objectives: Economics 603 is the first half of the Economics Department's two-semester core sequence in Microeconomics. This course is taken by all first-year Economics Ph.D. students, as well as by quite a few Ph.D. students in Agricultural & Resource Economics, the Smith School of Business, and other academic departments. The first half of the semester covers consumer theory and the theory of the firm. The first five chapters of the textbook will be covered in this part. The second half of the semester is an introduction to game theory and its applications in economics. The first half of this course will be taught by Professor Emel Filiz-Ozbay. The final half will be taught by Professor Larry Ausubel (first lecture on October 23). More information on the final half can be found at <a href="http://www.ausubel.com/econ603/">http://www.ausubel.com/econ603/</a>.

#### Text Book:

Mas-Colell, M. Whinston and J. Green (henceforth "MWG"), *Microeconomic Theory*, Oxford Univ. Press, 1995.

**Organization of the Topics:** The first half of the course is going to have two main parts. The first part deals with consumer theory, and the second part deals with firm theory.

#### PART 1

## 1) Preferences, Utility Functions and Utility Maximization

MWG, pp. 3-9, 17-28, 40-57 and 926-935 Problem Set #1

#### 2) Review of Kuhn-Tucker Theory / Envelope Theorem and Applications

MWG, pp. 935-966 Handout on Kuhn-Tucker Conditions Handout on Envelope Theorem

# 3) Expenditure Minimization, Hicksian Demands and Slutsky Equation

MWG, pp. 57-75 Problem Set #2

# 4) Integrability, Substitutes Preferences

MWG, pp. 75-95 Problem Set #3

# 5) Welfare Evaluation, Revealed Preference and Aggregate Demand

MWG, pp. 9-14, 28-36 and 105-123 Problem Set #4

#### PART 2

# 1) Theory of the Firm, Profit Maximization, Cost Minimization and Duality

MWG, pp. 127-160 Problem Set #5

## 2) Monopoly and Price Discrimination

MWG, pp. 383-387 and 488-501 Problem Set #6

<u>Course Website</u>: If you are registered for this course, you should use your directory ID and password to access https://elms.umd.edu. Copies of this syllabus, homework, lecture notes, old exams, links to the Zoom meetings (if needed) and other relevant documents will be made available through the course website.

**Email:** The University has adopted email as the primary means of communication outside the classroom, and I will use it to inform you of important announcements. Failure to check email, errors in forwarding email, and returned email due to "mailbox full" or "user unknown" will not excuse a student from missing announcements or deadlines.

You are encouraged to contact me by email, and I will do my best to respond within 24 hours. PLEASE include course code in the subject line, so that I can quickly distinguish your message from spam or other less important matters. PLEASE also include your name and any previous messages we've exchanged within every message you send to me.

#### **Expectations of Students:**

Your grade for the course is based upon your performance in the first and second halves of the course, i.e. Midterm and Final exams.

**Exams:** The midterm exam will be on **Tuesday, October 21, 2025** at 2:00 pm - 3:15 pm. Any students having any known conflicts with the exam times should notify me immediately. If you miss the midterm exam because of illness that can be documented by a medical professional, you must inform me ASAP, preferably in advance of the exam, and a make-up exam will be scheduled. The final exam for Econ 603 is tentatively set for Tuesday, December 16 at 10:30 am - 12:30 pm (pending room availability). This is outside the regular final exam time slot. If anybody has a conflict with this tentative final exam time, please email Professor Ausubel no later than September 9<sup>th</sup>.

**Problem Sets:** There will be 6 problem sets for the first half of the course. You are recommended to solve the problem sets before the discussion sessions and the TA will answer your questions at those sessions. You do not need to submit your solutions to the problem sets but studying them will help you prepare for the exams. If you want your solutions to the problem sets to be checked by the TA, you may ask the TA to

read them or attend the TA's office hours to discuss them. If you cannot follow the logic of lectures or problem sets then please meet me during my office hours.

Attendance and Course Participation: Students are expected to attend class regularly. If you miss classes due to illness, *contact me immediately.* Participation in class discussion is encouraged. I suspect that most successful students spend a significant amount of time reading, studying, and working through examples outside of class. Consistent attendance greatly improves the likelihood of success in this course. You will get much more out of the class if you read the material before it is covered in class.

<u>Notes:</u> If you find that you can't follow the class discussions, please talk to me during my office hour. If you anticipate or experience any problem fulfilling the requirements of the course, you must inform me as soon as possible to maximize the possibility that I can help you. Contacting me about such problems at the end of the term when your grade is lower than what you would like is too late.

I look forward to receiving your feedback on the course at the end of the semester, so please use the University's on-line course evaluation system at the end of the semester.

Please contribute to a positive learning environment. We can make the most of this opportunity if you are willing to work at it. Students are expected to treat each other and me with courtesy and respect. Disruptive behavior will be referred to the Office of Student Conduct or the Campus Police.

#### **Policies and Resources**

Those who need ADS (Accessibility and Disability Service) accommodations should contact the instructor immediately and complete all the paperwork in the first two weeks of the semester.

It is our shared responsibility to know and abide by the University of Maryland's policies that relate to all courses, which include topics like Academic integrity, Student and instructor conduct, Accessibility and accommodations, Attendance and excused absences, Grades and appeals, Copyright and intellectual property. Please visit <a href="https://gradschool.umd.edu/faculty-and-staff/course-related-policies">https://gradschool.umd.edu/faculty-and-staff/course-related-policies</a> for the full list of campus-wide policies and follow up with me if you have questions.

Counseling Center Sometimes graduate students experience academic, personal, and/or emotional distress. The Counseling Center in Shoemaker Hall provides comprehensive support services that promote personal, social, and academic success of UMD students. The cost of these services is covered by fees you already paid when you registered, so there is no additional charge if you use these valuable resources. Proactively explore the range of services available including the Counseling Service, the Disability Support Service, the Learning Assistance Service, and the Testing Office, all described at <a href="http://www.counseling.umd.edu/">http://www.counseling.umd.edu/</a>