

ECON370 - ADVANCED MICROECONOMICS - FALL 2021  
SABANCI UNIVERSITY – FACULTY OF ARTS AND SOCIAL SCIENCES

---

COURSE INFORMATION

**Instructor:** Mehmet Barlo

**Office/Phone:** FASS 1024; (90) 216 483 9284

**Office Hours:** By appointment.

**email:** barlo@sabanciuniv.edu

**web-page:** SUCourse

**Class:** Monday 10:40 - 11:30; Tuesday 11:40 - 13:30 – FASS 1101

**Recitation:** Friday 10:40 - 11:30 – Online

COURSE OBJECTIVES

The goal of this course is to introduce students to and obtain their acquaintance with the formal methods of microeconomics theory. This is a *serious* course in which you ought to learn to understand microeconomics and its related fields. We are going to derive most of the results from primitives and will not take any formulae as given. Moreover, we will associate what we have learned with practical applications.

BACKGROUND

You are expected to be familiar and fluent with introductory calculus and ECON 201 and 204. In this course, we are going to read and write some proofs of selected theorems. We may review some aspects of writing proofs if I see fit. Moreover, formal mathematics analysis is not required, yet, it would be of great help for the interested students. That is, even though helpful, mathematics courses such as MATH 301, Introduction to Analysis, are **not** a requirement (and in fact, not that essential for getting high grades) in this course.

TEXTS

We will not follow a particular book word for word, yet, the below listed books do cover the same material with lots of examples. Moreover, none of them is required, and each of them will be available in the reserve of the IC. Further sources will be announced in lectures.

- *Intermediate Microeconomics: A Modern Approach*, Hal Varian; this is maybe the most commonly used microeconomics textbook in the world. It is a very good book that you want to keep for your library. The level of it regarding this course is almost suitable, but sometimes it is not as formal as desired.
- *Advanced Microeconomic Theory*, G. A. Jehle and P. J. Reny; this is one of the most popular graduate microeconomics textbooks; it is formal and is intended for the first year in graduate economics studies. It requires more technical knowledge than our course, but going over it with the knowledge you have acquired in this course may help you a lot in getting a clear vision for the subjects at hand. You might want to buy it for your library.

## COURSE CONDUCT & METHODOLOGY

Due to the decision of Sabancı University, **our course will be conducted in hybrid style – both physically (on the campus) and online**. The details of the *hybrid* system I intend to employ emerge as follows:

- All of our lectures are to be conducted **synchronously** and (if the pandemic permits) in **FASS 1101** as long as otherwise announced via the SUCourse system.
- For each of our physical lectures in FASS 1101, we will have a **recorded Zoom meeting**, which will be broadcast live to its participants. Indeed, the online participants will have the opportunity to interact with the physical participants (asking questions, engaging in discussions, etc.).

The record of the Zoom meeting will be shared with the class via the SUCourse system.

- There will be weekly **recitations** conducted **online** by the ECON TA assigned to this course. Your TA will arrange a recorded Zoom meeting every week and share the recording via the SUCourse system.

The recitations will start in the third week of our course (and hence, there are no recitations in the first two weeks of the course).

Currently, the ÖK assigned “online” time slot of the recitation is Friday – 10:40 - 11:30. As this slot creates some time conflicts, we may change this time slot during our first meeting to one that fits all students’ schedules. Therefore, please come to our first meeting on Monday the 27th and participate in the discussion about where to schedule the online recitation time slot, provided that we are willing to change it.

Notwithstanding, please do not send me time conflict permits regarding this time slot before we change it. If you intend to take this course, come to our first meeting on Monday the 27th. Then, you would be able to “add” the course during the add-drop period.

- You are supposed to join these meetings (both the lectures and the recitations) either physically or online.

Nevertheless, all our meetings will be recorded, and these recorded Zoom meetings will be available online for those of you who missed them. Still, I need to stress that your participation is strictly expected!

As a result, please do not send me time conflict permits unless you cannot graduate without taking this course at the end of this semester! You need to prove that if you claim so.

- My advice for you is to follow this course on a timely basis and work every week as the course progresses. If you wait, do not follow the course and accumulate materials, do not come to our meetings to ask questions, and study just before the examinations, then it is highly probable that you will not show a strong performance. Hybrid teaching methods, I think, are very efficient for those students who want to learn. Therefore, please regard this as a fair warning urging you to come to our meetings, work in a timely manner, and follow the course.

- The examinations of this course will be conducted adhering to the regulations called for by our university. Currently, all midterm and final examinations are to be conducted physically. However, this can change due to the pandemic. If so, we will be bound by the regulations/demands of our university. In that regard, make sure to follow the university's respective announcements and my announcements via the SUCourse system.

## GRADING

- **Attendance** is essential in this course.

That is why I expect each student to be present in every synchronous lecture (either physically or online) of this course.

- **Take-Home Examinations:** (%30 of grade) There will be 4 or 5 take-home examinations (depending on our speed), each with a due date of 1 (or 2) week(s).

Important Issues concerning take-home examinations:

- Students are encouraged to work together. Thus, come together and do the questions in a group. BUT, no outsiders under any circumstances! This cooperative work permit extends only to your fellow students, and if I catch you getting your homework done by an outside party (with or without compensation), I will pursue this with all the disciplinary regulations available.

Notice that these are not homework assignments but take-home examinations. Thus, according to YÖK regulations, they are *subject to disciplinary regulations*.

- Each student has to **submit his/her work separately**. I will not accept “group answers”. Those who submit such work will get 0 from that particular work.
- The front page of the work **MUST** contain all the names of the students that you worked with. These names have to be listed in a “list of collaborators”.
- As the answer keys will be posted online at the due date, **no late take-home examinations will be accepted**. This is a strict rule, so please adjust yourselves accordingly.
- **Midterm:** (%30 of grade) There will be **one midterm**.

The midterm will cover all the subjects up to the beginning of the price mechanism.

The particular timing of the midterm will be determined together with the students in the class. Moreover, the details of the procedures to be applied in connection with the midterm will be announced via SuCourse prior to the exam.

- **Final:** (%40 of grade) The final will be comprehensive –covering all the subjects– and will be administered on the date announced by the ÖK.

Details of the procedure to be applied in connection with the final will be announced via SuCourse prior to the exam.

## COURSE CONTENT

The following list gives the list of topics to be covered. You will be responsible for the lecture materials, hence, **following the course material timely is essential**. And now the list:

- Individual choice, rationality, bounded rationality, and derivation of preferences;
- Representation of preferences: Utility functions;
- Pure exchange economies;
- Welfare concepts: Pareto optimality, individual rationality and the Core;
- The price mechanism, the theory of demand, the properties of demand *functions*, and aggregation of demand;
- The Competitive (general or Walrasian) equilibrium
  - Introduction to the Walrasian equilibrium, and its formal definition;
  - Existence of competitive equilibria: The Walrasian auctioneer interpretation;
  - Welfare properties: Two fundamental theorems of welfare economics, their policy implications, and Debreu-Scarf Limit Theorem;
- Critical conditions regarding the failure of welfare properties of competitive equilibrium:
  - Strategic behavior;
  - Non-private consumption (public goods) and externalities;
  - Asymmetry of information.

After finishing with the materials listed above, we will cover selected topics from the following list (while the particular selection from these topics will depend on the preferences of the class):

- Production: Derivation of cost functions, cost-benefit analysis;
- Competitive equilibrium with production;
- Repeated interaction, dynamic competitive equilibrium;
- The use of Walrasian equilibrium in modern macroeconomics.
- Choice under uncertainty:
  - von Neumann–Morgenstern Expected Utility Theorem;
  - Monetary lotteries: Attitudes towards risk.
- Introduction to Financial Economics: Competitive equilibrium under uncertainty;

- Assets (securities), and investments (portfolio construction),
  - Arrow-Debreu Equilibrium and Radner (Sequential) Equilibrium,
  - Complete and Incomplete Markets.
- Other selected topics.

## POLICIES: EXAMINATIONS AND SCHOLARLY CONDUCT

1. Take-home examinations should be turned in by the announced deadline. Our policy is strict and decrees that ***no late take-home examinations will be accepted.***
2. All answers to take-home examinations, midterm, and the final must be neatly and clearly written. The grader is the final judge of what is legible and may request specific students to type their work.
3. Collective and cooperative work on take-home examinations is strongly encouraged. However, any take-home examination *must* be written up separately by the owner of it. Additionally, any take-home examination *must* contain the list of the fellow students with whom the work was done under the heading “List of Collaborators”.

Notice that students are encouraged to work together. However, this does not extend to outsiders under any circumstances! The cooperative work permit is for your fellow students only. If I catch instances of a student getting his/her homework done by an outside third party (with or without compensation), I will pursue this with all the disciplinary regulations available. In that regard, notice that these are not homework assignments but take-home examinations. Thus, according to YÖK regulations, they are subject to disciplinary practices.

4. During physical midterm and final examinations (and their make-up examinations if granted), all students are to prove their identity (via a formal id card) and sign the attendance sheet, which will be taken by the proctor(s) of the examination. At the end of the examination, every student (whose name appears on the attendance sheet) has to turn in their work. Failure to do so counts as a violation of rules (*Kural İhlali*) and would result in the draft of the so-called *Kural İhlal Tutanağı* that may result in disciplinary consequences.

On the other hand, during online midterm and final examinations (and their make-up examinations if granted), the attendance sheet will be taken by the proctor(s) of the examination using the Zoom participation list. That is why every student has to join the Zoom meeting of the examination with their formal “sabanciuniv.edu” email account.<sup>1</sup> Students’ ids will be recorded (into the online Zoom meeting recording) by asking them to show their faces and formal id cards to the camera. In furtherance, during online midterm and final examinations (and their make-up examinations if granted), the webcam of the student must always

---

<sup>1</sup>Students are not allowed to utilize other email accounts unless explicitly permitted by the instructor.

be on. Otherwise, the examination at hand will be void. At the end of the examination, every student (whose name appears in the Zoom participation list) has to turn in their work. Failure to email the exam paper to the instructor and/or proctor counts as a violation of rules (*Kural İhlali*) and would result in the draft of the so-called *Kural İhlal Tutanağı* that may result in disciplinary consequences.

5. Make-up exams are granted only in case of a valid and documented reason. Absence in exams without any valid and documented excuse will result in a grade of 0 from that exam. In case of an illness or other documentable excuses, the student is required to contact me within three business days with a petition summarizing his/her situation and preferably presenting documentation for their excuses.<sup>2</sup> I will also accept a formally written email from the sabanciuniv.edu email address of the student, and hence the petition does not have to be physical. The documentation could be in the form of a formal doctor's note from a state hospital<sup>3</sup> or police/insurance report in case of a minor traffic accident providing details; and so and so forth. All verified documentation has to be submitted physically in three business days following the expiration of the excuse or the verification date. If the instructor finds the excuse of the student valid, then either a make-up examination will be arranged, or the corresponding points from that examination will be shifted to the consequent examination. I wish to emphasize that due to YÖK regulations, I have to be quite strict about these formalities.
6. A student who fails to show up for the final examination without a valid excuse and does not take the make-up examination of the associated examination will receive N/A (and not F) as his/her final grade.
7. The definition for scholastic dishonesty is as given in the rules and regulations/announcements of the Sabancı University and include aspects concerning online evaluation/examination practices.
8. In case of scholastic dishonesty, no credits will be given for that particular work. Cheating during written work will result in an F for the course. All incidents of scholastic dishonesty will be reported to FASS.

---

<sup>2</sup>These regulations are from the “Sabancı Üniversitesi Lisans Eğitim ve Öğretim Yönetmeliği” – *Resmî Gazete No: 29607 Tarih: 28 Ocak 2016* Madde 22-2-a.

<sup>3</sup>A doctor's note taken from a doctor's private practice does not count as formal. In the case of private hospitals, the doctor's note has to be verified by the university health service within five business days following the expiration date of the doctor's note.