

ECON370 - ADVANCED MICROECONOMICS - FALL 2020
SABANCI UNIVERSITY – FACULTY OF ARTS AND SOCIAL SCIENCES

COURSE INFORMATION

Instructors: Mehmet Barlo

Office Hours: By appointment over Zoom.

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Teaching Assistant: TBA

web-page: SU Course

Class: Monday – 4:40 pm - 6:30 pm (Zoom meeting)

Recitation: Tuesday – 6:40 pm - 7:30 pm (Zoom meeting)

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 we 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.

COURSE CONDUCT

Due to the decision of Sabancı University, our course will be conducted online. I have decided to opt for the *hybrid* system:

- Our “lectures” will be done *asynchronously* by providing you a video file (possibly over YouTube) that I will record. These lectures will be providing you roughly two hours of course material every week. As I am not bound with physical limitations, I may cover the amount of the two hours of course material in a slightly longer video to provide you more helpful insights and examples. The lectures will be announced through the SuCourse and these announcements will contain the pdf of that particular lecture along with the link to the online video file.
- Following the lecture, I will arrange 60–90 minutes weekly online synchronous “meetings” over Zoom on Mondays starting 4:40 pm primarily to interact with you synchronously and to take and answer your questions. (Thus, 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.) Therefore, you are supposed to join these meetings even though these meetings will be recorded and available for those who miss them.
- There will be weekly recitations conducted by the ECON TA assigned to this course. The name of that person is not determined as of now. I will be making the announcement as soon as I learn the name. Your TA will arrange a recorded Zoom meeting every week on Tuesday – 6:40 pm - 7:30 pm.

Thus, please do not send me time conflict permits regarding this time slot. Moreover, these recorded Zoom meetings will be available online for those of you who missed them.

- My advice for you is to follow this course in 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. Online methods, I think, are very efficient for those students who want to learn. On the other hand, those who were coming to the courses because they were obliged to take the course physically, are the ones to suffer the most in the online system. 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 online adhering to the regulations called for by our university. On top of those, each student participating any examination of this course, is obliged to read and sign the printed version of the following statement at the beginning of the examination and keep it safe in order to be able to give it to me in the first opportunity that arises. If the student does not have a printer, then the student must write this statement completely on some piece of paper (include the date) and scan the handwritten version and send it along with his/her examination (while keeping it safe to submit it to me in the first opportunity that presents itself). This statement can be changed to accommodate emerging regulations and/or altered slightly by the instructor if the need arises.

Statement of Academic Honesty and Integrity

I, hereby, declare that during the final/midterm examination of ECON 370 – Advanced Microeconomics – Fall 2020 I have not received, I have not given, nor will I give or receive, any assistance from/to another party and/or a student taking this examination, including discussing the examination with fellow students and other parties. Moreover, I will not use any electronic devices apart from calculators to assist me on this closed-book examination and I will not cheat and plagiarize someone else's work and turn it in as my own. I understand that acts of academic dishonesty may be penalized to the full extent allowed by the Sabancı University, including receiving a failing grade for the course and facing further disciplinary actions.

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.

GRADING

- **Take-Home Examinations:** (%30 of grade) 3 take-home examinations with a deadline of a week.
- **Midterm:** There will be **one midterm**. The first will cover subjects prior to the price mechanism (%30 of grade).
- **Final:** (%40 of grade) The final will be comprehensive.

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, 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-Debrue Equilibrium and Radner (Sequential) Equilibrium,
 - Complete and Incomplete Markets.
- Other selected topics.

POLICIES: EXAMINATIONS, TAKE-HOME EXAMINATIONS, AND SCHOLARLY CONDUCT

1. Take-home examinations should be turned in by the announced deadline. Our strict policy is 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.
4. 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.¹ 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 hospital² 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.
5. 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.
6. 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.

¹These regulations are from the “Sabancı Üniversitesi Lisans Eğitim ve Öğretim Yönetmeliği” – *Resmî Gazete No: 29607 Tarih: 28 Ocak 2016 Madde 22-2-a.*

²A 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.