$\label{eq:constant} \begin{array}{l} ECON501 - Microeconomics{-}I - Fall \ 2020 \\ Sabanci University - Faculty of Arts and Social Sciences \\ \end{array}$

Course Information

Instructors: Mehmet Barlo Office Hours: By appointment over Zoom. email: barlo@sabanciuniv.edu web-page: SU Course Class: Tuesday - 4:40 pm - 6:30 pm (Zoom meeting)

Course Objectives

This course is to teach formal methods of microeconomics theory. Clearly, this is a serious course in which you ought to learn microeconomics and its related fields. We are going to derive most of the results from primitives, and generally will not take any formulae or technique as given.

Background

As this is one of the compulsory courses for graduate economics programs and other students permitted to take this course are already assumed to have the necessary background. For more details on the background needed please contact the instructor. That said, a formal mathematics analysis course is <u>not</u> a requirement (yet truth be told, it would be of some valuable help).

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 three hours of course material every week. As I am not bound with physical limitations, I may cover the same amount 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 Tuesdays starting 4:40 pm primarily to interact with you synchronously and to take and answer your questions. Therefore, you are supposed to join these meetings. That said, it also needs to be told that these meetings will be recorded and available for those who miss them.
- My advice for you is to follow this course promptly 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 devote their time and resources 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 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 501 – Microeconomics I – 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 Sabanci University, including receiving a failing grade for the course and facing further disciplinary actions.

Texts

I will provide some lecture notes prepared for this course over the years. Moreover, we will **not** follow any particular book word. 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.

- Theory of Value, G. Debreu;
- Equilibrium Analysis, W. Hildenbrand and A. P. Kirman;
- Lecture Notes in Microeconomic Theory: The Economic Agent, A. Rubinstein;
- Microeconomic Theory, A. Mas-Colell and M. D. Whinston and J. R. Green;
- A Course in Microeconomic Theory, D. M. Kreps;
- Advanced Microeconomic Theory, G. A. Jehle and P. J. Reny;
- A Course in Game Theory, M. J. Osborne and A. Rubinstein.

Grading

- Midterm: There will be one midterm with a value of %40. It will be conducted prior to the start of the price mechanism.
- Final: (%60 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 material, hence, <u>attendance is essential.</u> And now the list:

• Choice, axioms of rationality and bounded rationality, derivation and representation of preferences, utility functions; uncertainty, von Neumann–Morgenstern Expected Utility Theorem, monetary lotteries, attitudes towards risk;

- Pure exchange economies;
- Welfare concepts: Fairness, Pareto optimality and individual rationality;
- Cooperative solution concepts, and the core; non-cooperative solution concepts, domination and Nash equilibrium; implementation, no-veto and Maskin monotonicity;
- The price mechanism, the theory of demand, the properties of demand *functions*, and aggregation of demand;
- The competitive equilibrium and its characterization and existence;
- Welfare properties of competitive equilibrium: 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, and asymmetry of information.
- Repeated interaction, dynamic competitive equilibrium, and the use of competitive equilibrium in modern macroeconomics.
- Production: Derivation of cost functions, cost-benefit analysis and competitive equilibrium with production;

POLICIES: EXAMINATIONS, AND SCHOLARLY CONDUCT

- 1. All answers to 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.
- 2. 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.
- 3. 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.
- 4. 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" – *Resmi Gazete No: 29607 Tarih: 28 Ocak 2016* Madde 22-2-a.

 $^{^{2}}$ 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.