Economics 101 – Intermediate Microeconomic Theory

Summer 2022, Main First Session: June 6 – July 8, 2022

Time: MTWR, 1:10 PM-3:15 PM

Instructor: Juno Kim (jk2083@georgetown.edu)

Office Hours: Friday, 1:00 PM – 3:00 PM

Textbook: There is no "Golden Rule" textbook for this course. Lecture notes will be provided for each topic via Canvas. However, you can refer to either (or both) of the following two books for further understanding:

- Serrano, R., and A. Feldman, <u>A Short Course in Intermediate Microeconomics with Calculus</u>, Cambridge (2018, 2nd Edition).
- Varian, Intermediate Microeconomics: A Modern Approach, Ninth Edition, Norton, 2014

Recordings of Lectures: I will provide links to recordings of the lectures if there are some students are in other time zones. Please note that the recordings are protected by copyright law. They are being provided to you in connection with this course and as an accommodation during the current pandemic. They may be used only by you for purposes of this class, and you may not copy, download, or otherwise redistribute them for any other purpose.

Overview: Intermediate Microeconomics is designed to formalize and extend the material introduced in the Micro Principles course so that the course builds the foundation for upper-level courses. The course will highlight the role of incentives in determining economic behavior. It begins by studying the behavior of individuals and firms and spans to many topics such as equilibrium analysis, market, game theory and asymmetric information. Many of the concepts will require mathematical analysis, and basic elements of multivariable calculus and algebra with an emphasis on optimization and the solution of simultaneous equations will be introduced. While calculus is essential for a modern treatment of Microeconomics, graphs will also be used to help build intuition for the results; graphical analysis will be used extensively as well.

Organization: There will be *approximately* 5 problem sets. There are two midterm exams, and a final exam. The purpose of the problem sets is to give you practice in formulating and solving Microeconomic problems with the techniques developed in the course. Doing problem sets is the best way to learn Microeconomics.

Grading Scheme: Problem Sets (20%) Midterm 1 (25%) Midterm 2 (25%) Final (30%). If you miss an assignment or exam without being excused, you will receive a grade of zero. (In case of a medical or family emergency, you should contact your dean or academic counselor to document the issue to be excused.) If you wish to appeal the grade on an assignment or exam, you must do so within seven days after grades have been posted. Please copy or scan the assignment or exam and explain the issue. Note that regrading could conceivably result in a lower grade.

Problem Sets

- Each problem sets should be scanned and submitted via Canvas. The exact deadline of each PS will be posted in the Canvas; normally, they will be due 11:59 PM Sunday of the week.
- **Groups**: I encourage you to do group works in doing their assignments. If you want to do on your own, it's ok. Each group consists of 2-3 (no more than 3 but it depends on the size of the class) people and only 1 copy (scan) from a group should be handed in. Make sure to write down the names of all the members and the names should be *Legal Full Name as Registered in Canvas*. At the beginning of the Summer 2022 session, 1 email from a group should be handed into the instructor saying that you are a group. You cannot change or switch your group once you have been made up.
- Grades of PS: There are three different grades for HWs: V- (1); V (2); V+ (3). The measure gauges the effort, not the excellence of the performance. V- can be balanced by V+. If you have V (2) from all the PS, that is the full credit; if you have all V+(3), that is also the full credit; if you have one V-(1), one V+(3), and V (2) for the rest, that is also the full credit. However, you must make sure to study by yourselves with the suggested answer key to learn how to solve the problems and to understand each setup for each topic.

Honor Code: All students are expected to abide by the Georgetown Honor Code. Any student found in violation of the Honor Code will receive an F for the course in addition to any penalties imposed by the Honor Council. The Honor Council webpage can be found at https://honorcouncil.georgetown.edu.

Course Topics: Lecture notes for each topic will be provided. You can also refer to any textbooks including the two above if you want. This course is divided into the following topics (to be updated).

- 1. Introduction
- 2. Consumer Theory
 - A. Consumer's Objective
 - B. Preference
 - C. Budget Constraint
 - D. Utility Maximization Problem
 - E. Indirect Utility Function
 - F. Expenditure Minimization Problem
 - G. Price Effect
 - H. Demand
 - I. Government Policy
- 3. Producer Theory
 - A. Producer's Objective
 - B. Cost Function
- 4. Market
 - A. Perfect Competition
 - i. SR Market Equilibrium
 - ii. LR Market Equilibrium
 - iii. Social Welfare
 - B. Monopoly
 - i. General
 - ii. Price Discrimination
 - C. Oligopoly
 - i. Basic Game Theory
 - ii. Bertrand Competition
 - iii. Cournot Competition
 - iv. Stackelberg Competition
- 5. Uncertainty

Title IX Syllabus Statement (endorsed by Faculty Senate)

Georgetown University and its faculty are committed to supporting survivors and those impacted by sexual misconduct, which includes sexual assault, sexual harassment, relationship violence, and stalking. Georgetown requires faculty members, unless otherwise designated as confidential, to report all disclosures of sexual misconduct to the University Title IX Coordinator or a Deputy Title IX Coordinator. If you disclose an incident of sexual misconduct to a professor in or outside of the classroom (with the exception of disclosures in papers), that faculty member must report the incident to the Title IX Coordinator, or Deputy Title IX Coordinator. The coordinator will, in turn, reach out to the student to provide support, resources, and the option to meet. [Please note that the student is not required to meet with the Title IX coordinator.]. More information about reporting options and resources can be found on the Sexual Misconduct Website: https://sexualassault.georgetown.edu/resourcecenter.

If you would prefer to speak to someone confidentially, Georgetown has a number of fully confidential professional resources that can provide support and assistance. These resources include:

Health Education Services for Sexual Assault Response and Prevention: confidential email sarp@georgetown.edu

Counseling and Psychiatric Services (CAPS): 202.687.6985 or after hours, call (833) 960-3006 to reach Fonemed, a telehealth service; individuals may ask for the on-call CAPS clinician

More information about reporting options and resources can be found on the Sexual Misconduct Website.

(Above statement and TIX faculty resources found at: <u>https://sexualassault.georgetown.edu/get-help/guidance-for-faculty-and-</u> <u>staff-on-how-to-support-students/</u>)

Title IX Pregnancy Modifications and Adjustments

Georgetown University is committed to creating an accessible and inclusive environment for pregnant students. At any point throughout their pregnancy students may request adjustments/modifications based on general pregnancy needs or accommodations based on a pregnancy-related complication or medical need. Students may also request accommodations following labor and delivery based on a complication or medical need.

SCS students must complete the <u>Pregnancy Adjustment Request Form (https://titleix.georgetown.edu/title-ix-pregnancy/student-pregnancy/)</u> and submit it to the SCS Deputy Title IX Coordinator at <u>titleixscs@georgetown.edu</u>. Upon receiving the completed form, the Deputy Title IX Coordinator will schedule a meeting with the student to discuss the requested adjustments and implementation process. More information about pregnancy modifications can be found on the <u>Title IX at Georgetown University Website</u>.