University at Buffalo, The State University of New York

Summer 2022

ECO 405: Microeconomic Theory

Instructor: Sandipa Bhattacharjee

Class time: MW 9:35AM – 12:45PM (May 31st – Jul 8th, 2022) Primary Course Website: https://ublearns.buffalo.edu/

Class Meeting: Fronczak 422 (In- person)

Office Hours: By appointment. Send me an email to schedule an appointment.

Office Location: (Online) Zoom Meeting Link, Meeting ID: 434 636 9188, Passcode: UB_ECO

Contact Information: sandipab@buffalo.edu

Course Description: This is an intermediate course that presents fundamental concepts, analytical tools, and policy applications of microeconomics. Techniques are developed for modeling the choices of persons and firms, market interactions between economic agents, and the effects of government policies on market outcomes. Topics include supply and demand, consumer and producer behavior, competitive markets, and monopoly and monopsony. The course provides students with a framework for applying microeconomic theory to real world problems.

Student Learning Outcomes: Upon completion of the course, students should have the following competencies:

- Engage in economic way of thinking and able to model consumers, producers, and markets.
- Analyze the effects of government policies on prices, quantities, and welfare.
- Understand the basic principles behind major economic issues and critique the types of policies that can be used to address these problems.
- Develop the technical skills for solving algebraic and graphical models of economic behavior.

This course contributes to the general economics program by establishing a conceptual framework for more applied courses, improving problem solving and decision-making skills, and introducing analytical tools widely used in economic modeling. It also prepares students for the master's comprehensive exam in microeconomics.

All the learning outcomes will be assessed using homework assignments, quizzes and exams (midterm and final).

Goals: The course has two main goals:

The <u>first</u> is to develop in you the ability to reason for yourself, to raise you above having to submit to listening mindlessly to a politician asserting that you should adopt his or her point-of-view on an issue. You have no doubt already discovered that in many important economic issues there is always a debate, often shamelessly partisan, with at least two sides accusing the other of attempting to manipulate you. Your only immunity to this perfidy is an ability to reason logically for yourself. Expertise in applying logic is obtained only by hands-on practice. Consequently, this course heavily emphasizes, and assesses, your development of problem-solving skills. It is a "doing" course, rather than a "read and memorize" course. It is not a course that can successfully be completed merely by reading notes and answers that others have provided to problems – it is you who must do. The problems posed are sometimes purely teaching exercises intended to help you to understand as simply as possible ideas you need. But the applications are always to real-world issues.

The <u>second</u> goal is to show you the great practical value of microeconomics. It is a very practical science. You live in a time when humans are straining even the most basic of our resources; e.g., arable land, clean water, clean air, and nutritious food. Never has a knowledge of economics been more useful.

Textbook:

The following textbook (P&R) is required:

Pindyck, Robert, and Daniel Rubinfeld, Microeconomics, 8th ed., Prentice Hall, 2013.

The course will cover chapters 1 to 11. The textbook is relatively easy to read and has many real-world examples. It can be purchased from the campus bookstore or an online retailer.

The following two textbooks are entirely optional:

 Nicholson, Walter, and Christopher M. Snyder, Microeconomic Theory: Basic Principles and Extensions, 12th ed., Cengage Learning, 2017. • Varian, Hal R., Intermediate Microeconomics with Calculus, 1st ed., W. W. Norton & Company, 2019. These textbooks are recommended to students interested in a more mathematical treatment of the material. They can be purchased from an online retailer.

Pre-requisites: Knowledge of algebra and calculus (MTH121 or 131 or 141 and 122 or 142).

Course Requirements: This course presents the core analytical tools that economists use to model the behavior of consumers, firms, and markets. Topics include the analysis of supply and demand, consumer and producer behavior, competitive markets, monopoly, and pricing with market power. The concepts covered in this course underlie the methodology used in nearly all subfields of economics and provide a framework that can be used to analyze many practical decision problems and policy issues. For many students, these tools will be new, and analyzing policies using these tools will be difficult at first. Students should therefore expect to dedicate time and effort to learn to use these tools. The course is structured such that all students, especially those who take ownership of their learning, are willing to repeatedly try (and sometimes struggle), self-evaluate, and seek help when needed - can be successful.

Communication: Students should check UBLearns regularly. Any information I need to communicate regarding the class or lecture will be posted there. Office hours will be held by appointment. Students should also feel free to ask questions during, or after the lecture. Email correspondence should be reserved for scheduling office hours appointments or handling administrative matters related to the course. I will not answer questions about the course content (e.g., questions about lectures or homework assignments) by email. These questions should be asked in office hours or during lecture.

In-class Notes: Lecture notes will be posted on UBLearns before class. Make sure to take notes during the class in addition to what is already posted. This will help you to prepare well for the tests. It is very important that you try to learn and understand the material when you are writing the notes down. If you try to learn the material while I'm teaching it this will make life much easier! You may want to read the chapter before I cover it to make it easier to comprehend. You can get the notes from the book as well.

Lecture, Attendance & Participation: Students should try to attend every lecture and actively participate in class discussions. The course is designed to cover a substantial amount of material in a short time. Students should not expect to consistently miss lectures and still be able to keep up with the class only by reviewing the lecture slides posted. It is also recommended that students read the relevant material in the textbook before and after the lectures. Taking notes in the class is highly encouraged. Students are responsible for any missed announcements and assignments. Students who are not willing to regularly attend lectures should drop the class. Class participation will be used to evaluate marginal cases when final grades are computed (e.g. C+/B-). Be comfortable asking questions during lectures. If you don't understand something, then it is likely that others do not understand it either. They will be grateful to you for asking, so don't be afraid of "looking dumb" – ask!

Homework Assignments: There will be several homework assigned and posted on UBLearns. The answers will be posted on UBLearns soon after the submission deadlines of homework's. Late assignments will not be accepted unless a student provides proper documentation of a serious illness or family emergency. They should either be (a) typed or (b) neatly handwritten and then carefully scanned. (High-quality scanning is now possible with mobile phone apps. One good option is Adobe Scan, available for free for iOS and Android.) Please make sure the images are intelligible before you submit them. Assignments should be submitted as a single file (not separate files for each page). Students are encouraged to complete these assignments in small groups (of up to 3 students). However, every student must submit the answers to each problem set individually. Students can decide their own group. [Due dates to be announced in class]

Quizzes: In order to monitor student attendance and performance, a short quiz will be given in class on a randomly selected date every few weeks.

Midterm: There will be one midterm exam. The exam will be proctored in class. There will be <u>no</u> make-up exam. Students who fail to take an exam but can provide proper documentation of a serious illness or family emergency or a circumstance beyond his or her control will have increased weight placed on the final exam score in the calculation of their course grade. Students must complete the exam individually. No collaboration is allowed. Midterm is closed book, although a calculator may be used. [Date to be announced in class]

Final: Closed book exam and no collaboration is allowed. Although a calculator may be used. The final exam is on (7/6/2022, Talbert 112, 9:45AM – 12:45PM). This exam will be cumulative.

Grading Policy: The following are the weights given to assignments, exams and quizzes:

| Attendance + Class Participation | 10% | |
|----------------------------------|-----|--|
| Homework Assignments | 20% | |
| Quizzes | 20% | |
| Midterm | 25% | |
| Final | 25% | |

Grading Scale: Final grades will be assigned based on the following scale:

| A 93%-100% | C+ 77%-79.9% |
|--------------|---|
| A- 90%-92.9% | C 70%-76.9% |
| B+ 87%-89.9% | D 60%-69.9% |
| B 83%-86.9% | F< 60% |
| B- 80%-82.9% | FX Failure for reason of non-attendance |

In order to ensure that all students are treated equally, final grades will not be rounded.

Incomplete Grades: Students should be familiar with the incomplete grade policies of the university (https://catalog.buffalo.edu/policies/explanation.html)

A grade of incomplete ("I") indicates that additional course work is required to fulfill the requirements of a given course. Students may only be given an "I" grade if they have a passing average in coursework that has been completed and have well-defined parameters to complete the course requirements that could result in a grade better than the default grade. An "I" grade may not be assigned to a student who did not attend the course.

Prior to the end of the semester, students must initiate the request for an "I" grade and receive the instructor's approval. Assignment of an "I" grade is at the discretion of the instructor.

The instructor must specify a default letter grade at the time the "I" grade is submitted. A default grade is the letter grade the student will receive if no additional coursework is completed and/or a grade change form is not filed by the instructor. "I" grades must be completed within 12 months. Individual instructors may set shorter time limits for removing an incomplete than the 12-month time limit. Upon assigning an "I" grade, the instructor shall provide the student specification, in writing or by electronic mail, of the requirements to be fulfilled, and shall file a copy with the appropriate departmental office.

Academic Honesty: Students should be familiar with the academic integrity policy of the university (https://catalog.buffalo.edu/policies/integrity.html)

Academic integrity is critical to the learning process. It is your responsibility as a student to complete your work in an honest fashion, upholding the expectations your individual instructors have for you in this regard. The goal is to ensure that you learn the content in your courses in accordance with UB's academic integrity principles, regardless of whether instruction is in-person or remote. Thank you for upholding your own personal integrity and ensuring UB's tradition of academic excellence.

Extra-Credit: I might give extra-credit opportunities to students based on the progress of the class. I will be providing the details later during the semester.

COVID-19 Protocols:

- Stay tuned for the latest updates and news regarding the <u>UB Health and Safety Guidelines</u>.
- Students, faculty, staff and visitors, regardless of vaccination status, are no longer required to wear masks in most settings, indoors or outdoors as per the UB Guidelines. Anyone who wishes to continue wearing a mask in a classroom, office or any other campus space is encouraged to do so.

- Any student who receives a positive COVID-19 test result should <u>isolate</u> and report it via <u>UB's confidential reporting</u> form.
- If students need to miss class due to illness, isolation or quarantine, they must notify their instructor by email as soon as possible and no later than 24 hours after missing class.
- All campus community members who have regular on-campus contact and are not <u>up to date</u> with their COVID-19 vaccinations must continue to participate in weekly surveillance testing, including those with an approved medical or religious exemption.
- The university's COVID-19 dashboard will be updated daily to report new cases among UB students and employees.
- UB students, faculty and staff are reminded to <u>monitor their health</u> each day regardless of vaccination status, stay home if they are sick or develop symptoms of COVID-19 and get tested immediately, practice good hand hygiene and follow UB's <u>guidelines</u> on face coverings and other protocols.
- The <u>Erie County Department of Health</u> asks that anyone who tests positive for COVID-19 to <u>self-isolate</u>, notify household members and other close contacts. If you are a close contact, you must follow the <u>CDC guidance for Quarantine and Isolation</u>.

Classroom Conduct: The course's instructors are obliged to maintain classroom environments in which all students can learn. Therefore, the instructor will insist that students who indulge in persistent talking or other disruptive behaviors cease these behaviors upon request. Repetitive poor conduct by a student to conduct him or herself properly when requested to do so will result in that student's removal from the course.

Student Feedback: Every student in the course can and should participate in UB's secure and anonymous course assessment website. The data provided by student comments are used to enhance future offerings of the course. Students are welcome at any time to provide constructive suggestions for the course's improvement.

Accessibility Resources: If you require classroom or testing accommodations due to a disability, please contact Accessibility Resources. You can reach AR in person in 60 Capen Hall, by phone at (716) 645-2608, or by email at <u>stuaccessibility@buffalo.edu</u>. Please inform me as soon as possible about your needs so that we can coordinate your accommodations. (https://www.buffalo.edu/studentlife/who-we-are/departments/accessibility.html)

Critical Campus Resources: As a student, you may experience a range of issues that can cause barriers to learning or reduce your ability to participate in daily activities. These might include strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, health concerns, or unwanted sexual experiences. Counseling, Health Services, and Health Promotion are here to help with these or other issues you may experience. You can learn more about these programs and services by contacting:

Counseling Services: 120 Richmond Quad (North Campus), 716-645-2720 202;

Michael Hall (South Campus), 716-829-5800

Health Services: Michael Hall (South Campus), 716-829-3316

Health Promotion: 114 Student Union (North Campus), 716-645-2837

Title IX Coordinator: 716-645-2266

<u>Crisis Services Campus Advocate</u>: 716-796-4399

<u>UB Campus Police</u>: 716-645-2222

Student Life Emergency Funds: https://www.buffalo.edu/studentlife/help/emergency/emergency-funds.html

Tentative Course Outline: Additional details will be posted on UBLearns.

Although the intention is to follow this schedule as closely as possible, there will be times when deviation will be necessary. Changes will be announced as early as possible so that students will be able to adjust their schedules accordingly. Due dates and the most accurate schedule of content will be posted to UBLearns.

| Week | Date | Topic | Suggested Readings | Lecture |
|--------|-------|----------------------------|--------------------|---------|
| Week 1 | 1-Jun | Introduction | Ch 1 | Yes |
| | | Markets, Supply and Demand | Ch 2 | Yes |

| | | Individual and Market Demand | Ch 4 | Yes |
|--------|--------|--|----------|-----|
| Week 2 | 6-Jun | Consumer Behavior | Ch 3 | Yes |
| | 8-Jun | Uncertainty and Consumer Behavior | Ch 5 | Yes |
| Week 3 | 13-Jun | Production Functions and Cost Structures | Ch 6 & 7 | Yes |
| | 15-Jun | Midterm | | No |
| Week 4 | 20-Jun | Holiday | | No |
| | 22-Jun | Profit Maximization and Competitive Supply | Ch 8 | Yes |
| Week 5 | 27-Jun | The Analysis of Competitive Markets | Ch 9 | Yes |
| | 29-Jun | Market Power: Monopoly & Monopsony | Ch 10 | Yes |
| Week 6 | 4-Jul | Holiday | | No |
| | 6-Jul | Final | | No |

Podcasts: There are a lot of good (and some not so good...) podcasts that relate to this class. While I do not myself listen to podcasts (I prefer to read rather than watch/listen), I have sampled the podcasts below and had recommendations from other instructors that I respect. I hope you enjoy them!

- NPR Planet Money
- Think Like an Economist (the hosts have also written an excellent intro econ textbook)

Additional Readings:

Supply and Demand

After GameStop, A Better Way to Take on Wall Street? (Greg Rosalsky, Planet Money, 9 Feb 2021)

Government Intervention in the Market (Price Controls)

How a Minimum-Wage Increase Is Being Felt in a Low-Wage City (Sydney Ember, The New York Times, 14 Feb 2021)

How Poverty Makes Workers Less Productive (Greg Rosalsky, Planet Money, 2 Feb 2021)

What McDonald's Shows about the Minimum Wage (Greg Rosalsky, Planet Money, 16 Feb 2021)

<u>International Tra</u>de

What a Tariff Looks Like (Stacey Vanek Smith and Cardiff Garcia, The Indicator, Planet Money, 1 Aug 2018)

<u>Technology, Subsidies, and Cotton</u> (Robert Siegel, All Things Considered, NPR News via Planet Money for Educators, 2 Dec 2013)

<u>Taxes</u>

Strange and Unusual Taxes throughout History (eFile, 10 Oct 2020)

How Tax Brackets Actually Work (Vox, 18 Jan 2019)

<u>Decision Making by Individuals and Firms</u>

Buy a Home or See a Doctor? Millenials and Generation Z Make More Sacrifices to Become Homeowners (Zillow, 22 Oct 2019)

How Uber Drivers Decide How Long to Work (Noam Scheiber, The New York Times, 4 Sept 2016)

<u>Due to New California Law, Uber Allows Some Drivers to Set Their Own Rates</u> (Scott Rodd, All Things Considered, 28 Jan 2020)

Consumer Choice

Introduction to Consumer Chocie (Joana Girante, Arizona State University)

Budget Constraints (Joana Girante, Arizona State University)

Inputs and Costs

Why Are There Still Not Enough Paper Towels? (Sharon Terlep and Annie Gasparro, The Wall Street Journal, 21 Aug 2020) The Starbury (Kenny Malone, Planet Money, 21 Jul 2017)

Adding Up the Cost of the Planet Money T-Shirt (Planet Money, 13 Dec 2013)

Firm Choice under Perfect Competition

The Economics of Vending Machines (Zachary Crockett, The Hustle, 3 Oct 2020)

Why It's Harder than Ever to Run a Restaurant in Los Angeles (Jenn Harris, Los Angeles Times, 15 Aug 2019)

Milk Marketing Board Chairman Encourages Lancaster County Dairy Farmers to Adjust to a Changing Market (Chad Umble, Lancaster Online, 2 Sept 2019)

How to Start a Magazine (And Make a Profit) (Jacob Goldstein, Planet Money, 21 Feb 2013)

Factor Markets and the Distribution of Income

<u>Lebron James is Still Underpaid</u> (Taylor Tepper, Alex Blumberg, and Kenny Malone, Planet Money, 11 July 2018) <u>Fastest Growing Occupations</u> (US Bureau of Labor Statistics, 1 Sept 2020)

Monopoly

Why Tinder's Charging Older Users More, and Why It Makes Perfect Sense (Patrick Campbell, 7 May 2020)

Is Your Friend Getting a Cheaper Uber Fare Than You Are? (Arwa Mahdawi, The Guardian, 13 Apr 2018)

A Special Price Just For You (Neil Howe, Forbes, 17 Nov 2017)

<u>Jay-Z Has Figured Out How to Make Concerts Cheap - By Selling Crazy Expensive Tickets</u> (Amy X. Wang, Quartz, 6 Nov 2017)

The Birth and Death of the Price Tag (Planet Money, 17 June 2015)

Monopolistic Competition

Bagging the Birkin (Sindhu Ghanasambandan and Stacey Vanek Smith, Planet Money, 10 Nov 2017)

Oligopoly

Saudi Arabia is Launching an Oil Price War. That's Risky. (Jim Krane, The Washington Post, 23 Mar 2020)

<u>The High Cost of College Textbooks, Explained</u> (Gaby Del Valle, Vox, 6 Mar 2019)

Inside Quebec's Maple Syrup Cartel (Michael Moynihan, Vice News, 19 Apr 2017)

Bread Collusion in Canada (The National, Economics Media Library)

The Poop Cartel (Robert Smith, Planet Money, 25 July 2018)