# UNIVERSITY OF WASHINGTON Foster School of Business

Microeconomics – BE 500 Home phone: (206)-522-1098 Email: <u>erice@uw.edu</u> Edward M. Rice

Rice Fall 2020 Office Hours: M 5-6, 9:30 MW and by appt. TA: Bingyu Yan (<u>byan109@uw.edu</u>)

# **Microeconomics Course Outline**

This course has a dual purpose. First, it teaches the student the fundamental principles of microeconomics, a theory of how agents interact in individual markets. Second, it shows the student how to apply these principles to managerial decisions, firm optimization, and public policy. At the end of this class, a student should

- 1. Understand how to frame business problems to help maximize a desired objective,
- 2. Be able to evaluate and interpret public policy discussions about economic matters more critically and sensibly,
- 3. Understand how his/her own decisions and the decisions of the business of which he/she is a part, fit into the overall economy and affect measures of overall welfare, and
- 4. Be able to think like an economist, or at least understand the way in which economists analyze problems.

# **Books**

The main books for the course are as follows:

- (L) Landsburg- Price Theory and Applications, 8th or 9<sup>th</sup> ed. -(required). This is the basic required text that should be purchased. It is written to get students to "think like an economist," with a style that students find unusually approachable (for an economics textbook). It has good theoretical development as well as good applications. Previous editions of the main text (7<sup>th</sup> and earlier) are similar and should be OK for almost all purposes. Landsburg is also author of a few less formal books, including <u>The Armchair Economist</u>, which a few students have enjoyed as a supplement to class. Many examples are common to the two books.
- (HH) Hirshleifer and Hirshleifer <u>Price Theory and Applications</u>, 6th edition (or Hirshleifer, Glazer, and Hirshleifer, 7<sup>th</sup> edition) - (not required). This was the required text in some previous years. It is written by one of my former professors and his son. It combines excellent theoretical development with some good and extensive applications. The primary reason that this is not the required text is that many students find it too abstract or difficult.
- (ALL) Acemoglu, Laibson, and List –<u>Microeconomics</u>, (not required). This book is more basic and less mathematically rigorous than the other two. It will be useful for students with little economics background to solidify basic concepts. It also is fairly new (first edition, 2015) which may help make its examples more salient to you. Recently a second edition came out.

Another book that might be helpful to students is <u>Managerial Economics: A Problem Solving</u> <u>Approach</u> by Froeb, McCann, Ward, and Shor which has only a little bit of theory but many application examples from a business perspective. This book is the main textbook that will be used in the full-time (day) MBA core this year.

In addition, students who have trouble with the abstraction and the algebra required for homework or who derive benefit from drill type problems, may want to get a workbook in Microeconomics. One useful one, especially for computation, is <u>Schaum's Outline of Microeconomics</u> (any edition). This will not necessarily be available at the bookstore but can be obtained on the Web relatively cheaply. Other similar resources can be found free on the web.

Economics textbooks can be very expensive. Therefore, I would not necessarily buy copies of the recommended books until you have tried the Landsburg book and found it less than what you want. The above book descriptions are designed to suggest books that your situation may align with the best, so you can avoid the expense of buying books that don't work. Also, those who are price sensitive can find deals on the web for used books, e-books, book rentals, and publisher joint book deals that can drastically reduce cost.

### Required Work and Evaluation

Students should read the required material to be covered in the day's lecture before class. They should also watch all assigned "asynchronous videos" (described below) before class.

Grading in this class will be based on two exams (midterm and final), homeworks, some group outlines relating to discussion questions, and class participation. These will count as follows:

Midterm35%Final40%Homeworks and<br/>Group Outlines15%Class Participation10%.

*Homeworks* must be handed in. The homework assignments will be graded with one of three grades: G, S, and U. G, for "Great," will be given only for outstanding insight and explanation. U, for "Unsatisfactory," will be given when a student did not put forth enough effort to engage with the issues the homework was designed to teach. Almost all homeworks will receive some form of an S, for "Satisfactory," grade. Within the S grade, an S+ will be given for an entirely correct (or virtually entirely correct) solution to the homework problem; an S- will be given for a solution with severe errors; and an S will be given for everything between S+ and S-. Only a single question on a given homework will be graded (although there will be a penalty for not attempting "ungraded" questions). I will randomly select the graded question after you submit your answers.

The primary purpose of the homework is to ensure that you achieve some basic computational competence in the subject matter and that you struggle with some of the material enough to operationalize it. How correct your homework answers are is not my primary concern; my primary concern is that you <u>do the homework</u>! Thus, you will be severely penalized in my evaluation if you do not do homeworks (or you do them *so poorly* that you do not get to the point where you must face the key issues involved). You will not be severely penalized for doing homework poorly.

The *examination questions* will require a student to apply the course material to real situations. Unlike some exams, which ask for regurgitation of the professor's lecture notes, these questions attempt to test how well you can apply the concepts of the course to unstructured new problems. They thus test whether you can discern the correct concepts to apply, as well as whether you can apply these concepts correctly. Sample past exam questions will be made available to you on the Canvas website at least a week before the midterm. The EXAM QUESTIONS ARE NOT LIKE THE HOMEWORK for the most part and are designed to teach you different things. The exams will be at limited, designated times with closed book, closed notes, and no electronic or other outside assistance.

While the *exams* will be taken at home, the form of the exams will simulate an in-class exam. There will be only two hours or so for the student to complete the exam once it has begun. Thus, the student must dedicate a **block of uninterrupted time** for completing the exam. The exam will be closed book and closed notes, with no help from any party external to the individual student. Thus, the student will be required to study the material in depth before taking the exam. It will be the student's responsibility to ensure that the exam answers are transmitted to me in a complete form – including any graphs and margin markings-- before the time due.

Students will also be asked to work on two *discussion questions* with their groups outside of class. These questions require application of microeconomic principles to real situations. Students should think about the answers and discuss the questions in their groups before class. Each group/team will be required to submit the outline of a suggested answer in 1 or 2 **double-spaced** pages (I will not read past page 2). The answers should make precise use of economic tools. During class, a period of approximately 15 to 20 minutes will be devoted to student suggestions about answers to the questions. I will supply my answer after the student discussion.

#### Covid-19, Class Format, and Designated Hitters

I have never taught a fully online class before this summer, when I taught a class of ten students. So I am not exactly sure how this larger class is going to work. But here is my current plan.

There will be "asynchronous videos" posted before class that all students must watch. These videos will likely be of varying lengths between 5 and 50 minutes. You should think of these videos as ABSOLUTELY COMPULSORY homework that must be done before class in addition to required reading. There may also be short videos to watch during class, where we will break from interaction and you will watch. We will then join back together and interact.

I plan to use a Document Camera as the equivalent of a Whiteboard during class and sometimes in asynchronous videos. To see the DocCam clearly, you will have to use the PIN feature in Zoom. You should work to familiarize yourself with PIN and UNPIN before the first class so that the process will work smoothly for you. We will practice this method briefly in the first class.

Some of the in-person sessions will involve me answering questions that you have about the material on the videos. I will also sometimes pose questions to you, and have you discuss the answers among yourselves for a few minutes in your pre-assigned groups. I may use Breakout Rooms in Zoom for this purpose. Then we will come back together as a class and discuss the answers we have all come up with.

I also plan to use a system of Designated Hitters (DHs) to stimulate the interaction and intimacy of an in-person class. The way I plan for this system to work is that before class I will randomly

pick a few students, probably eight, who will be primarily responsible for answering my questions during the class and for asking good questions. A student's class participation grade will depend to a large extent on their service to the other students in this DH function. I currently plan to swap out the original eight for eight new students in the middle of class. DHs will be the primary drivers of discussion when they get assigned this role.

When a student is not a DH, he or she will typically ask questions or make comments through the Chat feature in Zoom. The Chat will be filtered by Bingyu Yan, the TA, and, where necessary, a student's question or comment will be interjected into the session at a pause.

#### Fellow Students and Other Learning Aids

Talking through the material and the homework with other students should significantly enhance your learning and reduce your stress. On homework, however, you **SHOULD DISCUSS** with others the **APPROACHES** to (as opposed to final solutions to) homework problems. **Final solutions** to homework, however, **MUST BE DONE INDIVIDUALLY**.

I also encourage you to apply the principles you are learning to problems you encounter outside the classroom. Trying to interpret unstructured situations in terms of economic principles typically improves your depth of understanding and illustrates where gaps in your knowledge are. Situations written about in the *Wall Street Journal*, as well as those encountered in everyday life, provide excellent application practice. You would ideally discuss such situations with other students. (As an aside, students can subscribe to the *Wall Street Journal* at low student rates. To get these rates you should go to <u>https://r.wsj.com/PROFmjen</u>) or search out coupons.

Students having difficulty with the course material have several strategies available to them in addition to talking to their fellow students. First, they can read textbooks other than the required one, and see if these provide better connections and explanations. Another strategy is to work out many homework type problems, in addition to the ones assigned. Such additional problems can be found on the publisher's website, in online microeconomics materials, as well as in texts and workbooks. They can also meet with me (or the TA, Bingyu Yan) during office hours or by appointment. A fourth strategy is to get some private tutoring. Finally, they can attend the Review Session that TA Bingyu Yan will offer almost every Sunday during the quarter. These sessions will be recorded and made available on the Canvas website. The sessions last for about 2 hours and have been very helpful to many students in the past. The review sessions often offer a combination of a review of the concepts covered in the class during the previous week, and the tying together of these concepts with questions from the next homework that is due.

A problem that students sometimes have with the class is that the lack of structure to exam questions requires some creativity in the application of theoretical principles. I know of no easy shortcuts to acquiring the skill of application; usually application skill is acquired through experience and practice. There are, however, some profitable directions that I can suggest for channeling your energies to get useful applications practice. One useful direction, mentioned above, is to attempt application of economic principles to situations encountered in the *Wall Street Journal*, the news, and other areas of your life. In any event, students with special difficulties should contact me to discuss their individual situation and ask about particular solutions.

To help you prepare for the exams, I also **strongly** encourage you to work on the old exam questions. I will provide written feedback on <u>one recent exam per team per quarter</u> (except for multiple choice questions), if your answers are written up carefully and submitted to me more than 72 hours before the scheduled exam – that is, I promise turnaround with comments 72 hours from

the time I get the practice exams. I encourage students to share my comments with other students before the exam. My comments will not provide answers to the old exam questions; they will, however, provide some guidance to help YOU find better answers.

#### Attendance, Recordings, and Missing Class

Attending class is required. But sometimes, attending class is not practical because of unavoidable alternative commitments, travel problems, or illness. In these cases, it is the student's responsibility to let me know they will miss class and to make up the work covered in class, by checking with team members, reading the textbook more carefully, etc. Questions that remain after using these other sources of catch-up can be addressed in office hours.

Those missing a class will also be able to get a recording of the class session on the Panopto recording system. These recordings will be available on the Canvas website for the class. The recordings even have been useful to students who *attended* the class!

### The Honor Code

I employ the principles and procedures espoused by the Foster School of Business MBA Honor System to maintain academic integrity in the course. The Honor Code of the Foster School expressly prohibits cheating, attempted cheating, plagiarism, and lying to administration or faculty as it pertains to academic work. Suspected violations of the Honor Code will be handled by referral of the matter to the Foster MBA Honor Council.

The Honor Code will apply to course deliverables in the following manner:

- Homework As previously mentioned, <u>approaches</u> to solving the homework <u>should be</u> <u>discussed</u> with other students (e.g., teammates). But final solutions to the homework must be solved, written-up and submitted <u>individually</u>. Previous classes of students SHOULD NOT be consulted for homework assistance or solutions. If you have questions about what qualifies as an "approach," you should contact me.
- Exams These should be done individually in the specified time. You should never use outside materials, including those available on Internet and phone, other than calculators and language dictionaries for students for whom English is a second language. Exams will be CLOSED BOOK and CLOSED NOTES.
- 3. Group Outlines Group outlines should be done entirely within your group, with no assistance from outsiders and other students in the class.
- 4. Practice Exams Practice Exams submitted for my comments should be done entirely by yourself or other current students, with no assistance from former students.

## Accommodations for Faith, Conscience, or Religious Activities

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Faculty Syllabus Guidelines and Resources. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form available at <u>https://registrar.washington.edu/students/religious-accommodations-request/</u>

#### Other Matters: Attitudes, Inflexibility, and Idiosyncrasies

A few matters that may concern students relate to my philosophy towards teaching, classroom sessions, and grading. First, I enjoy teaching itself -- that is, communicating ideas to students eager to learn. Teaching is one of the key inputs in the production of knowledge. I get a thrill from having an impact on the way many bright young people will think and act. I also usually learn quite a few things myself in the process.

Different teaching techniques seem to work best for different teachers. I find my teaching to be most effective when students are actively engaged during class. This means that students must think along with me during class sessions. There must be substantial student-teacher interaction—typically through student questions, comments, and answers to my questions. Despite the class being structured in a primarily lecture style, students have a strong impact on the class session.

The worst part of teaching is the grading and evaluating required of teachers. Grading consumes a large portion of professorial time and student attention even though, in the long run, grades themselves are of little importance to anyone. Consider how disproportionate the time spent on grades is, given that nobody ever asks about your grades once you have been out of school for more than a year or two. (As support for this latter proposition, consider my own situation. When I took introductory MBA Corporate Finance, I received the equivalent of a C. Yet no one at UW asked me about this grade, or any of my other grades, when deciding whether I should teach introductory Finance. As a result, I taught Finance in the MBA core for more than 20 years.) Deemphasizing grades and emphasizing learning would seem to be in all our interests.

Finally, I expect all of us in the class to behave responsibly. People who behave irresponsibly, imposing costs on others, should expect to bear the consequences of their actions. These attitudes, and other factors, give rise to the following policies:

1. I will use graders but will make sure that any grader is highly competent.

2. I will be happy to go over exam questions with students to explain the correct answer and/or where they went wrong. However, I refuse to listen to grade complaints. Complaints are almost always unsuccessful and a waste of everyone's time. In over four decades of teaching, never has a student complaint caused me to change a grade I have given (except when scores were added incorrectly). If you must complain about your grade, submit an explanation in written form.

3. I will expect all students to be prepared for class and to turn in assignments on time. Similarly, students can expect me to be prepared for class and to present them with assignments, handouts, and course materials on time.

4. I will encourage students to ask questions and otherwise participate in class. In some instances, "votes" on questions will be taken. ALL students in class will be expected to vote.

5. Students should not distract themselves or waste other students' time in class. This means they should have their <u>video feed turned "on" at all times</u>, and be ready to participate in breakout rooms or to answer questions posed in class at any time. They should separate themselves as much as feasible from outside noise and communication devices.

### **Readings, Topics, and Tentative Class Schedule**

Session 1- 9/30 "Intro to Microeconomics, Philosophy of Science, and Supply and Demand" Required Reading: (L) Preface and skim Ch. 19 Optional Reading: (HH) Ch. 1, (ALL) Ch. 1 and 2

Session 2- 10/5 "Basic Supply and Demand Analysis" Required Reading: (L) Ch. 1 and 2 Optional Reading: (HH) Ch. 2, (ALL) Ch. 4

Session 3- 10/7 "Using Basic Supply and Demand Correctly, Taxes" Required Reading: See Session 2 Optional Reading: See Session 2

Session 4- 10/12 "Price Control and the Role of Markets" Required Reading: See Session 2 Optional Reading: See Session 2 Assignment to turn in: Homework "Social Security Tax"

Session 5- 10/14 "Prices and Comparative Advantage, the Marginal Concept" Required Reading: See Session 2 Optional Reading: See Session 2, (ALL) Ch. 3 and Section 8.2

Session 6- 10/19 "Utility Theory and Consumer Choice" Required Reading: (L) Ch. 3 and 4 Optional Reading: (HH) Ch. 3 and 4, (ALL) Ch. 5

Session 7- 10/21 "Deriving the Demand Curve" Required Reading: See Session 6 Optional Reading: See Session 6 Assignment to turn in: Homework "Utility and Demand Theory"

Session 8- 10/26 "Elasticity and Applications of Demand Theory" Required Reading: See Session 6 Optional Reading: (HH) Ch. 5

- Session 9- 10/28 "Applications of Demand Theory (Continued)" Required Reading: See Session 6 Optional Reading: See Session 6 and 8 Assignment to turn in: Homework "Applications of Demand Theory"
- Session 10- 11/2 "Firms and Costs" \*8 PM joint session Required Reading: (L) Ch. 5 and 6 Optional Reading: (HH) Ch. 6, (ALL) Ch. 6

Session 11- 11/4 "Supply Curve Concepts and Input Optimization" Required Reading: See Session 10 Optional Reading: See Session 10

Session 12- 11/9 "Key Issues in Supply and Long Run Adjustment" Required Reading: (L) Ch. 7 and see Session 10 Optional Reading: (HH) Ch. 7 Assignment to turn in: Homework "Inputs and Supply"

Session 13 - Friday, November 13 -- MIDTERM EXAM \*6 PM joint session

Session 14 – 11/16 "Equilibrium, Surplus, and Welfare"
Required Reading: (L) Ch. 8 (but Edgeworth Box material not required), Section 9.1
Optional Reading: (HH) Ch. 13, Sections 15.1 and 15.2, (L) Remainder of Ch. 9, (ALL) Ch. 7

Session 15- 11/18 "Monopoly and its Welfare Cost" Required Reading: (L) Ch. 10 Optional Reading: (HH) Ch. 8, (ALL) Ch. 12

Session 16- 11/23 "Price Discrimination" Required Reading: See Session 15 Optional Reading: See Session 15

Session 17- 11/25 "Collusion, Strategic Behavior, and Market Structure" \*6 PM joint session Required Reading: (L) Section 11.2
Optional Reading: (HH) Section 9.1, 10.1, and see Session 15, (ALL) Pages 329-332
Assignment to turn in: Homework "Surplus and Monopoly"

Session 18- 11/30 "Solutions to and Sources of the Monopoly Problem" Required Reading: (L) Sections 11.1 and 11.3 Optional Reading: See Session 15

Session 19- 12/2 "Factor Markets Introduction; Externalities and Public Goods" Required Reading: (L) Ch. 13 and 14, Section 15.1 Optional Reading: (HH) Ch. 11 and 15, (ALL) Ch. 9 and 10, Section 11.3

Session 20- 12/7 "Property Rights, Externalities, and Sustainability" Required Reading: See Session 19 Optional Reading: See Session 19, (HH) Section 16.1 Assignment to turn in: Homework "Theaters and Market Segments"

Session 21-12/9 "Property Rights, Externalities, Creative Destruction, and Review" Optional Reading: (L) Ch. 19 (again) Optional Assignment to turn in: Homework "Externalities and Rent Seeking"

# FINAL EXAM: Monday December 14, 6 PM