# UNIVERSITY OF WASHINGTON Foster School of Business

Microeconomics – BE 500 Edward M. Rice Fall 2022

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#### **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 these principles apply to managerial decisions, firm optimization, and various measures of social welfare.

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 reading books for the course should all be on reserve in the Business Administration library, except that the editions will not be the current ones. The books are as follows:

- (L) Landsburg- <u>Price Theory and Applications</u>, 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 have found unusually good (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 is useful in solidifying basic concepts for students with little economics and/or quantitative background. It also is fairly new (first edition, 2015; third edition 2022).

Another book that might be helpful to students is <u>Managerial Economics</u>: A <u>Problem Solving 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 has been used in the full-time (day) MBA core the last few years.

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 <a href="Schaum's Outline of Microeconomics">Schaum's Outline of Microeconomics</a>. This will not necessarily be available at the bookstore but can be obtained on the Web relatively cheaply. Other resources can be found free on the web.

### Required Work and Evaluation

Students should read the required material to be covered in the day's lecture before class.

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

Midterm 35% Final 45% Homeworks 10% Group Outlines 10%.

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 homework submissions 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 (or a few parts of a 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 purpose of the homeworks 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. The correctness of your homework answers is not my primary concern; my primary concern is that you do the homework! 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 concepts involved). You will not be severely penalized for doing homeworks 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 encourage you to extend your learning in new ways. The exams will be in-class with closed book, closed notes, and no electronic assistance (except for calculation).

Students will also be asked to work on two *discussion questions*. 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.

### 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 homeworks, however, you **SHOULD DISCUSS** with others the **APPROACHES** to (as opposed to final solutions to) homework problems. **Final solutions** to homeworks **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 your everyday life, provide excellent application practice. You would ideally discuss such situations with other students. (As an aside, the Foster School has a site license that gives students online access to the *Wall Street Journal* for free. You should take advantage of this offer and **read the** *Journal*.)

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. Students can also come see me (or the TA, Yizhen Liu) during office hours or by appointment. A fourth strategy is to get some private tutoring. Finally, they can attend the Review Session that TA Yizhen Liu will offer almost every Sunday during the quarter. These sessions, which last for about an hour and a half, have been very helpful to many past students. 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 the 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, a student with special difficulties should contact me to discuss their particular situation and ask about particular solutions.

To help you prepare for the exams, I also <u>strongly</u> encourage you to work out answers to the old exam questions. I will provide written feedback on <u>one exam per team per quarter</u> (except for multiple choice questions), if your answers are written up **in hard copy** and submitted to me more than 72 hours before the exam – that is, I promise turnaround with comments 72 hours from the time I get them. I encourage students to share my comments with other students before the exam. My comments will <u>not provide answers</u> to the old exams; they will, however, provide some guidance to help YOU find better answers.

## Missing Classes, Videotape, and Audiotape

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 make up the work covered in class, by getting notes from other students, 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 a day or two after the class takes place.

These recordings are highly imperfect – the video is often boring (only a single camera) and too far away from the whiteboard to enable you to make out what is written there. I usually prefer audiotape in conjunction with notes, and I often find the video part of the Panopto recording a distraction. Nevertheless, the audio of Panopto or your own recording, in conjunction with notes that include all things written on the whiteboard, seem to provide "the closest thing to being there." Also, many students disagree with my assessment of the recordings and find them very helpful. The recordings with notes have also been useful to students who *attended* the class!

While the recordings are not nearly as good as being present in the live classroom, they can be a useful supplement to, or an imperfect substitute for, the classroom live.

#### 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:

- 1. 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>. Students from previous classes SHOULD NOT be consulted for homework assistance or solutions. If you have questions about what is an "approach," you should contact me.
- 2. Exams These should be done individually in class. You should never use outside materials, including those available on Internet and phone, other than language dictionaries for students for whom English is a second language and calculators. Exams will be CLOSED BOOK and CLOSED NOTES.

- 3. Group Outlines Group outlines should be done entirely within your group, with no assistance from former students 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. The submission should also be in **hard copy**, not in email, not as an attachment, and not in other electronic form.

### Accommodations for Faith, Conscience, or Religious Activities

Any student seeking reasonable accommodations must provide written notice to the Office of the University Registrar of the specific dates of absence due to religious accommodation, within the first two weeks of the beginning of the course.

Students who have requested and been denied a religious accommodation and wish to file a complaint should contact the <u>University Complaint Investigation and Resolution Office (UCIRO)</u>. UCIRO is responsible for investigating complaints that a University employee has violated the University's nondiscrimination and/or non-retaliation policies, including a failure to accommodate a student under this policy.

#### Other Matters: My 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 your knowledge, as well as my 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 proof of this latter proposition, consider my own situation. When I took introductory MBA Corporate Finance, I received the equivalent of a C grade. 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 to do much of the grading but will make sure that any grader is highly competent.
- 2. I will be happy to go over exam questions with students to explain what a correct answer might look like 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 distract neither other students nor themselves in class. This means that during class they **should NEITHER have phones turned on NOR laptops/tablets open**, except in special circumstances previously approved by me.

#### **COVID** and Class

As of now, I expect us to have a choice about whether to be masked or not, although the University administration strongly recommends masking during the first two weeks of the quarter. Given our experience over the last 2-1/2 years, however, rules and advice can be evolving. They may change because of governmental mandate changes, an uptick in on-campus virus transmissions, transportation disruptions, or many other uncertain possible events. You should keep abreast of news on these issues and try to maintain your flexibility if possible.

You can stay up to date on COVID-related news and information at uw.edu/coronavirus.

If we are forced to go to more online learning, we will use some different learning tools. One of these is likely to be posted, online, asynchronous videos. (I may use some asynchronous videos anyway, even if we are fully in-person.) I will discuss these new tools with you if they become necessary, most likely using "Announcements" in Canvas.

### Readings, Topics, and Tentative Class Schedule

Session 1-9/26 "Introduction to Microeconomics and Philosophy of Science"

Required Reading: (L) Preface and skim Ch. 19 Optional Reading: (HH) Ch. 1, (ALL) Ch. 1 and 2

Session 2- 9/28 "Basic Supply and Demand Analysis"

Required Reading: (L) Ch. 1 and 2

Optional Reading: (HH) Ch. 2, (ALL) Ch. 4

Session 3- 10/3 "Using Basic Supply and Demand Correctly "

Required Reading: See Session 2 Optional Reading: See Session 2 Assignment to turn in: Homework #1

Session 4- 10/5 "Price Control and the Role of Markets, Taxes"

Required Reading: See Session 2 Optional Reading: See Session 2

Session 5- 10/10 "Prices and Comparative Advantage, the Marginal Concept"

Required Reading: See Session 2

Optional Reading: See Session 2, (ALL) Ch. 3 and Section 8.2

Assignment to turn in: Homework #2

Session 6- 10/12 "Utility Theory and Consumer Choice"

Required Reading: (L) Ch. 3 and 4

Optional Reading: (HH) Ch. 3 and 4, (ALL) Ch. 5

Session 7- 10/17 "Deriving the Demand Curve"

Required Reading: See Session 6 Optional Reading: See Session 6 Assignment to turn in: Homework #3

Session 8- 10/19 "Elasticity and Applications of Demand Theory"

Required Reading: See Session 6 Optional Reading: (HH) Ch. 5

Session 9- 10/24 "Applications of Demand Theory (Continued)"

Required Reading: See Session 6 Optional Reading: See Session 6 and 8 Assignment to turn in: Homework #4

Session 10- 10/26 "Firms and Costs" Required Reading: (L) Ch. 5 and 6

Optional Reading: (HH) Ch. 6, (ALL) Ch. 6

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Session 11- 10/31 "Supply Curve Concepts and Input Optimization"

Required Reading: See Session 10 Optional Reading: See Session 10

Assignment to turn in: Discussion Question #1

Session 12- 11/2 "Long Run and Short Run Supply Curves"

Required Reading: (L) Ch. 7 and see Session 10

Optional Reading: (HH) Ch. 7

Session 13 – 11/7 "Equilibrium, Long Run Adjustment, 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

Assignment to turn in: Homework #5

Session 14 -- 11/9 "Equilibrium, Long Run Adjustment, Surplus and Welfare (Continued)"

Required Reading: See Session 13 Optional Reading: See Session 13

Special (optional) Review Session – Sunday Evening, November 13

## Session 15 – Monday, November 14 -- MIDTERM EXAM

Session 16- 11/16 "Monopoly and its Welfare Cost"

Required Reading: (L) Ch. 10

Optional Reading: (HH) Ch. 8, (ALL) Ch. 12

Session 17- 11/21 – first session "Price Discrimination"

Required Reading: See Session 16 Optional Reading: See Session 16

Session 18-11/21 – second session "Collusion, Strategic Behavior, and Market Structure"

Required Reading: (L) Section 11.2

Optional Reading: (HH) Section 9.1, 10.1, and Ch. 8 (ALL) P. 329-332 ed.1; 355-360 in ed. 3)

Session 19- 11/28 "Solutions to and Sources of the Monopoly Problem"

Required Reading: (L) Sections 11.1 and 11.3

Optional Reading: See Session 16 Assignment to turn in: Homework #6

Session 20- 11/30 "Factor Markets Introduction (if time allows); 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 21- 12/5 "Property Rights, Externalities, and Sustainability"

Required Reading: See Session 20

Optional Reading: See Session 20, (HH) Section 16.1

Assignment to turn in: Homework #7

Session 21-12/7 "Property Rights, Externalities, Sustainability, and Creative Destruction"

Optional Reading: (L) Ch. 19 (again)

Optional Assignment to turn in: Homework #8

Special (optional) Review Session – Tuesday Evening, December 13

**FINAL EXAM:** Wednesday December 14