## Our course website is at: https://canvas.uw.edu/courses/1520041

(Please check Canvas regularly. The syllabus is subject to change due to unforeseen circumstances.)

## Acknowledgement

In ECON 300 C, lectures will be offered in-person. They will not be recorded and made available for remote viewing, but lecture slides will be available for viewing on Canvas. Assignments (homework) must be submitted remotely via Canvas. Exams will be given in-person.

## Overall Description of the Course

From ECON 200, you know that economics is the social science of choices. Microeconomics captures how individual economic agents - household, firm and government - make decisions and how they interact in markets. In the introductory microeconomics, we primarily addressed these questions through intuitions and graphs. Now it's time to introduce you to the way that economists build mathematical models to understand their choices and interaction. Mathematics allows us to build precise models and to strip a model down to its important components and interactions. Note that although models expressed mathematically may seem simplistic at first, the art of being an economist is to impart economic meaning and conclusions to the equations, derivatives and graphs. The payoff is a deeper understanding of the importance that logical modeling and critical thinking play in economics.

## Prerequisites

Econ 200 and any one of: Math 112, 124, 127, 134, or 145.
You must have completed an introductory microeconomics course (ECON 200). It goes without saying that you must not be surprised when you hear me use terms like demand, supply, profit, cost, monopoly, externality, public goods, without necessarily defining them. If it's been a while since your ECON 200, keeping an introductory textbook on hand to look up terms is advised. You must have calculus proficiency at the Math 112 level or similar. You must be comfortable with the total differential, partial derivative, product rule, chain rule, maximization, minimization and first order condition. It would be very helpful for you to have a calculus textbook as a reference.

## Textbook and Related Reading Material

Our main textbook is Intermediate Microeconomics: A Modern Approach (Media Update) (9 ${ }^{\text {th }}$ ed.), by Hal R Varian (published by W. W. Norton). Older print editions are also okay. You are not required to purchase any online package.

## Evaluating student learning

- Homework (30\%): There will be a set of questions titled "Homework". These will be assigned approximately weekly and will be posted on the course website. The questions in this type of assignment check your understanding of the concepts and on a few occasions ask you to analyze a problem using the concepts you have learned. Your Homework will be collectively worth $30 \%$ of your course grade. Each homework carries equal weight. One lowest homework score is going to be automatically dropped for GPA. For example, if you have 7 homework during the quarter, then only 6 homework scores will be counted. I will grade the homework based on your effort as well as correctness. The answer key for homework will be posted on the course website after due date.
- Exams (70\%): There will be two exams. Both exams will be conducted in-person unless there is other instruction by the Economics department. You will need a calculator for some of the questions on your tests. Please bring a simple 4 -function or a scientific calculator to all your exams. Graphing calculators are not allowed in any of the exams in this course. Your Exams are collectively worth $\mathbf{7 0 \%}$ of your grade; each exam is worth $\mathbf{3 5 \%}$. For exams, problems will consist of both multiple choice and short answer problems. Your grade from an exam depends on the quality of your answer. The exam coverage will be announced before each exam, while exam 2 (final) will be non-cumulative.


## Grading and the grade scale

There will be a grade scale on the basis of which I determine course grades. According to the grading policy of the Department of Economics, I will maintain a median grade for this course in the 2.9-3.1 range. If the median grade for the course happens to be outside of 2.9-3.1 range on the preliminary grade scale, I will adjust the grade scale accordingly. Please note that the ranks within this section C (not between the sections) is important when you expect your final grade.

## Make-up Exams

If you miss any of exams due to an unexpected event or an accident, you will have to notify me as soon as possible. I may ask a doctor's note or equivalent, if necessary, before setting up a make-up exam. Your grade for the missed exam/homework will be zero and I will calculate your course grade based on the zero grade you have earned. However, one lowest homework score will be automatically dropped for GPA.

## How to study effectively

- Read the relevant parts of chapter(s) carefully before each lecture. Try to get a good idea of both the questions asked and the approach (the concept and the reasoning process) to addressing the questions in the textbook.
- Take notes during class. The lecture slides with blanks will be posted before the class and the slides with full materials will be posted after the class. You are welcome to ask clarifying questions, present points of debate, etc. during class.
- After the lecture, read again the textbook thoroughly and attempt the homework problems and make sure you fully write down the answer to each question using the relevant concepts you have learned. Please do not address the problems in your head only. Rather, use the concepts you learn plus the reasoning process to write out the solutions in full. The analysis uses graphs, calculus and algebra. You should also write out some explanations about your graphical and mathematical solutions.
- It is a good idea to form an on-line study group (2-4 members) among peers to discuss the material of the course and/or do homework problems together using on-line communication methods. However, you must submit your own homework.

Note: There will be no extra papers, assignments, or other ways for you to increase your grade anytime during or after the quarter. In case you aim for a certain grade, in order to prevent the chance of a disappointingly low grade, you should aim about a 0.4 grade higher than the minimum grade you desire. I have no policy of assigning extra work in order to increase a grade you are not happy with once you commit yourself to attending and completing this course.

## Academic Honesty

1. Exams are individual work and cheating will not be tolerated. Looking at a neighbor's exam is considered cheating. If a student is seen committing this act, they will not be allowed to continue taking their exam. The neighbor sitting next to the student will also be duly punished if they are seen as facilitating this act of cheating.
2. Altering an exam before submitting it for a review of the grading, obtaining an advance copy of an examination, or arranging for a surrogate test-taker are all flagrant violations of university policy.
3. Cheating of any kind may result in expulsion from the University. The Department will follow University policy in case of academic misconduct. I strongly recommend that you review University policy at http://www.washington.edu/uaa/advising/help/academichonesty.php
Students found to have engaged in academic dishonesty will be subject to sanctions, which range from a disciplinary warning to permanent expulsion from the University, depending on the seriousness of the misconduct.

## Access and Accommodations

Your experience in this class is important to me. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you have already established accommodations with Disability Resources for Students (DRS), please activate your accommodations via myDRS so we can discuss how they will be implemented in this course. If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), contact DRS directly to set up an Access Plan. DRS facilitates the interactive process that establishes reasonable accommodations. Contact DRS at disability.uw.edu.

## Religious Accommodations

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 Religious Accommodations Policy (https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodationsrequest/).

## Notice to Students - Use of Plagiarism Detection Software

The University has a license agreement with SimCheck, an educational tool that helps prevent or identify plagiarism from Internet resources. Your instructor may use the service in this class by requiring that assignments are submitted electronically to be checked by SimCheck. The SimCheck Report will indicate the amount of original text in your work and whether all material that you quoted, paraphrased, summarized, or used from another source is appropriately referenced.

## Scheduled Readings and Exam Dates

| Week | Learning Subjects / Plans | Readings <br> (Varian, 9e) |
| :---: | :---: | :---: |
| Week 1 | < Introduction > <br> <Theory of the Consumer > <br> - Budget Constraint | Ch. 2 |
| Week 2 | - Preferences <br> - Utility <br> - Choice | $\begin{aligned} & \hline \text { Ch. } 2 \\ & \text { Ch. } 3 \\ & \text { Ch. } 5 \end{aligned}$ |
| Week 3 | - Demand <br> - Slutsky Equation | $\begin{aligned} & \text { Ch. } 6 \\ & \text { Ch. } 8 \end{aligned}$ |
| Week 4 | - Market Demand <br> - Equilibrium <br> - Welfare Analysis | $\begin{aligned} & \hline \text { Ch. } 15 \\ & \text { Ch. } 16 \\ & \text { Ch. } 17 \end{aligned}$ |
| Week 5 | * Exam 1 (Feb 3, Thu) | - |
| Week 6 | < Theory of the Firm > <br> - Technology <br> - Profit Maximization <br> - Cost Minimization | $\begin{aligned} & \text { Ch. } 19 \\ & \text { Ch. } 20 \\ & \text { Ch. } 21 \end{aligned}$ |
| Week 7 | - Cost Curves <br> - Firm Supply <br> - Industry Supply | $\begin{aligned} & \hline \text { Ch. } 22 \\ & \text { Ch. } 23 \\ & \text { Ch. } 24 \end{aligned}$ |
| Week 8 | < Theory of the Market > <br> - Monopoly <br> - Monopoly Behavior | $\begin{aligned} & \text { Ch. } 25 \\ & \text { Ch. } 26 \end{aligned}$ |
| Week 9 | - Oligopoly <br> - Game Theory | $\begin{gathered} \text { Ch. } 28 \\ \text { Ch.29-30 } \end{gathered}$ |
| Week 10 | * Exam 2 (Mar 10, Thu) | - |

Note: I encourage you to read the chapters ahead of the corresponding lectures. The schedule would be modified as needed. / University holidays: Jan 17 (Martin Luther King Jr. Day), Feb 21 (Presidents' Day)

