ECON 251: Intermediate Microeconomics

Spring 2024

Place: Simon Center for Economics 122

Instructor:	Prof. Sayorn Chin (he/him/his)	**Office Hours:**	By appointment
Email:	chins@lafayette.edu	**Office:**	202 Simon Center

About the Instructor: I am an applied microeconomist. I also hold the position of Data Science Fellow Affiliate at Mountain Data Group. My research addresses policy-related questions by employing a wide range of machine learning techniques and econometric methods. These techniques and methods encompass natural language algorithms, causal forest, dynamic panel data estimators, natural experiments, and microsimulations to examine the relationship between inequality and its influence on health and well-being. My research has been published in popular academic journals such as the *Journal of Economic Behavior and Organization*. I completed my Ph.D. and M.A. in Economics at Colorado State University. I also earned a B.A. in Mathematical Economics at Colorado College.

Mentored Study Group: Mukamani and Vanika will lead study group sessions four (4) days a week to help you succeed in this class. They will go over quizzes and problem set questions and answer additional questions regarding the class materials. I highly recommend you attend them even if you do not have questions. You will find these sessions invaluable. Detailed schedules and timings will be posted on Moodle.

1. Mukamani Luchera (he/him/his); Email: lucheram@lafayette.edu
2. Vanika Sok (she/her/hers); Email: sokv@lafayette.edu

Course Description: The goal of this course is to develop a sound understanding of microeconomic analysis and reasoning, while exploring the relationship between economic analysis and human behavior. Much of the course will focus on key theoretical models which are used to investigate a variety of specialized topics. We will model how individuals make optimal decisions when facing constraints as well as how firms make their decisions and interact with one another. We will pay close attention to the assumptions behind economic models and to the techniques used to analyze them. With this foundation, you should be more able to readily apply economic reasoning and theory not only to upper level economics courses, but also to real world issues.

Course Objectives: Upon completing this course, you should be able to:

1. Explain how rational individuals make decisions when faced with constraints.
2. Solve the consumer's utility-maximization problem, both mathematically and graphically, and derive individual demand curves.
3. Model the behavior of rational firm managers and show how that behavior changes when relevant variables change.
4. Solve the firm's cost-minimization problem, both mathematically and graphically, and derive the firms' cost functions.
5. Understand the strategic behaviors between individuals and firms.
6. Recognize limitations and weakness of the models.

7. Learn to use LaTeX.

Prerequisites: The prerequisites for this course are Econ 101 (Principles of Economics) and Math 141 or 161 (Calculus I).

Course Materials: The Moodle website will contain the syllabus, course schedule, notes, problem sets and quizzes, practice exams, extra reading materials, updates and announcements, plus other useful information. You should check the class website regularly. The main textbook is available at the College Bookstore.

1. Allan Feldman and Roberto Serran, A Short Course in Intermediate Microeconomics with Calculus, 2nd Edition, Cambridge University Press, 2018. ISBN: 9781108539340.

Class Activities and Preparation: Your attendance and participation in class is an essential component of your and your colleagues' learning. You are expected to come to class each day having read the material assigned for that day. As current college students and future professionals, I want you to practice the skill of learning independently. Class is meant to be a time to answer questions and extend the material more deeply, not just cover the basics. Each day, I will set aside some of our time to discuss the problems you did as homework. You will be most productive during this time if you have read and worked before our meeting.

In addition to our one hour and fifteen minutes of class, I expect that you will spend several hours reading, working problems on your own, debating solution techniques with your colleagues, and getting help from Mukamani and Vanika. If you hope to earn a high grade in this course, you should expect to work hard for it.

Course Evaluation: As a student enrolled in this course, one of your responsibilities is to submit course work by the due dates listed in the course schedule. With that said, I take my role as an instructor very seriously, and, in fact, I care about how well you do in this course and that you have a satisfying, rewarding experience. It is my commitment to you to respond individually to the work you submit in this class and to return your work in a timely manner. If, however, due to unforeseeable circumstances, the grading of your work takes longer than expected, I will keep you informed of my progress and make every effort to return your work with feedback as soon as I can!

Course grades will be determined by the completion of assignments, exams, essay, and discussions, as shown below:

Assignment	Frequency	Points per Assignment	Grade Points	Grade Percentage
Discussion Posts	4	25	100	10
Moodle Quizzes	8	10	80	10
Problem Sets	9	20	180	15
Essay	1	100	100	15
Midterm Exams	2	100	200	30
Final Exam	1	150	150	20
Total			810	100%

1. **Discussion Posts:** To remain engaged with the course material and other students in the course, we will have 4 discussion posts that you will be required to complete. Detailed instructions will be posted on Moodle for each discussion assignment. Each post must be at least 500 words or more in order to

be considered for the week's discussion credit. In addition, you will write at least 150-words-or-more responses to other student's posts. Your comments/questions should be respectful and considerate. Your grade on the discussion posts will be determined by its content, organization, and spelling and grammar.

2. **Quizzes:** You have a 5-question multiple-choice quiz on Moodle that is due every Sunday by 11:59 PM. These quizzes will help prepare you for the exams. I encourage you to discuss these questions with your colleagues. You have two attempts to complete the quiz, and your grade will be the highest of the two attempts.

3. **Problem Sets:** The primary purpose of the problem sets is to give you experience thinking and working through economic problems. Getting the right answer is much less important than understanding the right answer and how it was derived. Accordingly, problem sets are graded on a combination of effort and accuracy. Your investment or lack of investment in these assignments will determine your success in the course as homework investment is strongly correlated with exam performance. You will work in teams of 2-3 people on the problem sets, but you should attempt to solve each question on your own first. Your problem sets are a reflection of yourself and the way in which you present your work conveys a great deal. Problem sets are due and must be handed in before the start of class on the due date.

4. **Exams:** There will be three exams administered during the semester. Note that the last exam will be a cumulative final. Your exams will consist of multiple choice questions (modeled on the quizzes) and short-answer questions (modeled on the problem sets). Exams will be closed book and closed note. You may, however, bring a double-sided "cheat-sheet" to the exam, one(1) page for the first and second exams, and two(2) pages for the final exam. You may need a calculator to work the exams; you may not use your cell phone.

5. **Social Dilemma Essay:** In teams of 2-3 people, you will write one essay, in which you analyze an original social dilemma as a 2x2 game. Detailed instructions and grading rubrics will be posted on Moodle.

Grading Scale: I follow the standard grade scale (be aware that I will not round up):

Grade	Percentage Grade
A	93 – 100%
A–	90 – 92%
B+	87 – 89%
B	83 – 86%
B–	80 – 82%
C+	77 – 79%
C	73 – 76%
C–	70 – 72%
D+	67 – 69%
D-	60 – 62%
F	<60%

Late Work Policy: Makeup discussion posts, quizzes, problem sets, essay, and exams are not permitted. The only exceptions are in case of documented medical emergencies or conflicts with College sanctioned activities. In these cases, you must provide me with documentation as soon as possible. Except for the case of medical emergencies, make-ups must be requested prior to the due date.

Credit Hours: The student work in this course is in full compliance with the federal definition of a four credit hour course. In order to comply with this rule, students in this class are expected to devote 2 hours and 30 minutes per week in class and an additional 9 hours per week outside of class. This additional 9 hours includes but is not limited to preparing for class, reading the text and notes, solving problem sets and quizzes, and reviewing for exams.

Study Groups: I strongly recommend that you study with others in small groups on a regular basis. This will permit active rather than passive learning as you explain concepts to others, have them explain things to you, and debate correct answers and possible test questions. Remember, if you understand the material well enough to explain it to a fellow student, then you truly understand it.

For students having a particularly hard time with the material, a tutor should be consulted as early as possible. Close to the end of a semester is usually too late for help to be beneficial. You should start by seeking help with Mukamani and Vanika, supplement with the Academic Resource Hub if needed.

Communication Policy: The best time to ask me questions is immediately before, during, and after class. I also encourage you to make an appointment with me.

I am also available to you by email, but whenever possible try to ask me substantive questions in person. Most of your topical questions will be best answered with a graph or an equation, and that's much more effective to provide in person. It's also more difficult for me to gauge your understanding over email, so in-person interaction really is best. Feel free to take care of paperwork and other business with me over email.

Plagiarism and Academic Dishonesty: Cases of academic dishonesty will be dealt with according to College policy. College policies are clearly detailed in the "Student Handbook." All intellectual work builds on the ideas of others; it is very important to provide appropriate references to the sources you consult, whether they are paraphrased or quoted directly.

Use of ChatGPT and Other Generative AI: On both problem sets and essay, using ChatGPT and similar tools in certain ways is fine; simply inputting my questions as prompts and submitting the output as your work is cheating.

On Problem Sets: Using generative AI like ChatGPT as a tool—for example, to brainstorm examples, clarifying your ideas, and iterate and refine your answers or improve your writing—is perfectly fine; it's similar to working collaboratively with another student.

On the other hand, plugging problem sets questions into ChatGPT and submitting the output as your own work is dishonest, and also defeats the purpose of the problem sets. If I am fairly convinced this what you did on an assignment, you will receive no credit for it. (I do not have to "prove beyond a reasonable doubt" that you did this, but I do need to be certain enough that I'm able to sleep at night.) Keep in mind that if you go through college never doing any work that ChatGPT can't do on its own, you won't be qualified for any jobs where you couldn't be easily replaced by AI.

On Essay: The rules are the same as on problem sets—it's find to use AI as a tool while refining your essay (e.g., grammars, sentence structures), but having AI "write the essay" is clearly academic misconduct. Once again, if I am sufficiently convinced the work on part of your essay is not your own (purely generated by AI or by another person), you will receive no credit for it.

Also be aware that generative AI does not "know" anything, it tries to statistically predict how people would respond to a question. AI can offer false facts, and answers that sound plausible but are wrong! If it gives you a number or fact, assume it is wrong unless you either know the answer or can check in with

another source. You will be responsible for any errors or omissions provided by the tool. It works best for topics you understand!

Accommodations for Special Needs: I am committed to making learning as accessible as possible for all students. In accordance with Lafayette College policy and equal access laws, I am available to discuss appropriate academic accommodations that you may require. Requests for academic accommodations need to be made during the first two weeks of the semester, except for unusual circumstances, so that arrangements can be made. You must register with the Office of the Dean of Advising and Co-Curricular Programs for disability verification and for determination of reasonable academic accommodations. I will treat as private and confidential any information that you share.

If there is a religious holiday that you wish to observe and will miss a class meeting, please let me know within the first week of the semester.

If you need any help with study, I strongly encourage you to come to my office hours, review sessions, and the study group sessions. The Academic Resource Hub is also a great place to go! We are here to help you.

Moodle Privacy Statement: "Moodle contains student information that is protected by the Family Educational Right to Privacy Act (FERPA). Disclosure to unauthorized parties violates federal privacy laws. Courses using Moodle will make student information visible to other students in this class. Please remember that this information is protected by these federal privacy laws and must not be shared with anyone outside the class. Questions can be referred to the Registrar's Office."

Diversity and Inclusion Statement: The College recognizes that we live in an increasingly interconnected, globalized world and that students benefit from learning in educational and social contexts, in which there are participants from all manner of backgrounds. The goal is to encourage students to consider diverse experiences and perspectives throughout their lives. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, gender identity, religion, or belief. Each of these diverse identities, along with many others not mentioned here, shape the perspectives we bring to our community. All members of the College community share a responsibility for creating, maintaining, and developing a learning environment in which difference is valued, equity is sought, and inclusiveness is practiced.

My commitment to promote an inclusive environment in this classroom:

- Learn about each other through "Who's in class" survey
- Respectful of diverse backgrounds, identities, and ideas
- Work with student partners to improve inclusivity in the classroom
- Please feel free to come and talk with me if anything is troubling you.
- Remember that you can also submit anonymous feedback (which will lead to me making a general announcement to the class, if necessary to address your concerns).

Remember, *each of us is responsible for creating a safer, more inclusive environment.*

Tentative Schedule: The schedule is tentative and subject to change. The applications in the second half of the semester tend to build on the concepts in the first half of the semester, so it is very important to review those concepts throughout the semester. Moreover, it is your responsibility to keep track of specific deadlines throughout the course schedule. *A complete schedule is available on Moodle.*

Disclaimer: All of the information in this course syllabus is subject to change when deemed necessary by me. Students will be notified via postings on the class homepage if such changes occur.