



**DEPARTMENT OF ECONOMICS
ECON 100B: INTERMEDIATE MICROECONOMIC THEORY II**

**LOCATION: VIRTUAL LECTURE HALL (SEE CANVAS LINK)
TIME: TUESDAYS & THURSDAYS, 5:00PM-6:20PM & 6:30PM-7:50PM**

**SPRING QUARTER 2020
SYLLABUS**

Instructor: Dr. Steve Levkoff, PhD, CAP®

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Instructor Webpage: <http://stevelevkoff.com>

Course Webpage: <http://canvas.ucsd.edu>

Virtual Office: <https://ucsd.zoom.us/j/704261915>

Office Hours: T/Th 2:30pm-3:30pm by appointment

Course Description: This is the second course in the intermediate micro theory sequence. While the first part (100A) of the sequence analyzed *consumer behavior*, emphasis in this course will be placed on the analysis of *producer behavior* and competitive market interaction in a general equilibrium framework. Topics include technology and cost, profit maximization, competitive supply, and general equilibrium analysis.

Prerequisites: In order to be enrolled in this course, you should have satisfactorily completed ECON 100A or ECON 170A, and ECON 1. Also, you should have taken some course in multivariate calculus or optimization (MATH 10C, MATH 20C, or MATH 21C) and be comfortable with basic integration and differentiation. Supplemental review materials for the mathematics required will be provided on Canvas and in the readings below.

Course Modifications for COVID-19: As you all know, we are in the middle of a global COVID-19 pandemic, which has required dramatic changes to how we teach and learn. All instruction will be conducted remotely using Zoom and Canvas. My hope and aim this quarter is to provide as high quality an intellectual experience for students as would have been the case if we were to have been able to meet in person. There will be some trial and error and we will need to make adjustments along the way, but I am adding design

elements to the course to create a greater sense of academic community despite the lack of personal proximity in a classroom in a way that can accommodate students across multiple time zones. I am also modifying the assessments structure to be based more on engagement with the materials than on high-stakes examinations.

Lectures & the “Flipped” Classroom: The online course structure lends itself well to a “flipped” classroom environment. This will allow us to effectively leverage the Intermediate Microeconomics Video Handbook (IMVH) to move what would have traditionally been theory taught in an in-person lecture outside of the live class session to an asynchronous video format in a way that helps accommodate students regardless of time zone. Students will watch the videos in the IMVH series and examine the associated textbook readings prior to the live lecture session, which will focus more on solving problems (much like a discussion). All live lecture sessions will take place at the regular scheduled time for the class, which is from 5:00 – 6:20pm (A) and 6:30-7:50pm (B) on Tuesdays and Thursdays. All lectures will take place through Zoom and will be recorded (see disclaimer below). All recorded lecture videos will be posted. Links to the “virtual lecture halls” are posted to Canvas as recurring meeting links. The specific problems solved may vary between the two sections to maximize your exposure to examples through the course material, so it is important to utilize all of the video content to your advantage. My plan is to conduct the lectures live, but I may also prerecord the lecture for simultaneous viewing in case we have problems with connectivity. During the live lecture, TAs will help “co-host” the Zoom meeting and will be able to take your questions in the chat during the lecture in real time.

Worked Problems: While not a formal part of the course grade, the problems worked in class and posted in the “problem sets / exam vault” will play a crucial role in developing your problem solving skills and should be taken *very seriously*. In the past, it has often been the case (and is no secret if you look at my course evaluations online) that students putting the most effort into the worked problems tend to perform best on the exams because *the worked problems tend to be much more difficult than exams*. Worked problems will be posted regularly to Canvas and will be used as constructive examples in the live lecture sessions.

Technology Prerequisites: It is your responsibility to make sure you are enrolled in the online course (Canvas) by registering for the class formally through the university. I will not provide access to the Canvas course if you are not already enrolled or on the wait list to avoid complications with the course roster. and to routinely check it and your email for announcements and to access newly distributed material. You must also make sure that your browser is compatible with the Canvas quiz assessment system. In the past, some students had browsers that did not display the math text. We will run a practice

Technology Check Practice Quiz Saturday of week 1 to iron out any technical issues – it will not count towards your course score. Any questions regarding Canvas issues or general technology issues should be directed to ITS@ucsd.edu.

Readings:

Required:

- [1] Microeconomics: Theory and Applications with Calculus, Jeffrey M. Perloff. Your digital course materials are provided by the UC San Diego Bookstore through Canvas using the RedShelf link in the modules section. *You will have continued access if you did not opt-out of inclusive access for ECON 100A.* Otherwise, the e-book is free for the first two weeks of classes. After two weeks, your student account will be charged a special reduced price (only \$47) unless you opt-out. If you decide to opt-out, you must complete the process by 4/18/2020 (the add/drop deadline) and you will be responsible for sourcing the materials elsewhere.
- [2] Intermediate Micro Videos (IMVH) on Canvas (see schedule at the end of syllabus). These will make up the core of the “lecture” material and are mandatory for all students to watch outside of the live Zoom sessions.

Alternatives and Supplements:

- [3] Intermediate Microeconomics with Calculus: A Modern Approach, Hal R. Varian, (Any edition is fine).
- [4] Introduction to Economic Analysis, by Preston McAfee. This text is free online at <http://www.mcafee.cc/Introecon/IEA.pdf>. Good text to supplement with lecture material. (Did I mention free?)
- [5] Martin Osborne’s Intermediate Mathematics Tutorial: <http://www.economics.utoronto.ca/osborne/MathTutorial/index.html>. This is suggested if you feel that your mathematics are “rusty.”
- [6] Mark Machina’s ECON 100ABC Mathematics Handout (on Canvas). This handout is a mathematical survival guide to optimization in intermediate microeconomic theory.
- [7] Additional supplemental materials may be found online (Canvas)

Discussion Sections: Since we are utilizing the “flipped” classroom model where the live lectures will function as what would otherwise have been a discussion session, the

originally scheduled discussion sessions will be converted to a permanently staffed floating TA office hour in order to help us maximize our availability for live engagement outside of the lectures. These discussions may involve TAs also solving problems and will be recorded in the event substantive examples are covered. See the *Course Support Schedule* on Canvas for more details (TBD).

Location: Zoom meeting room may vary. See *Course Support Schedule* on Canvas

Times: Wednesdays: 5-6PM, 6-7PM, 7-8PM, 8-9PM

Teaching Assistants: Nobuhiko Nakazawa (nnakazaw@ucsd.edu), Yanying Sheng (yas107@ucsd.edu), Frederick Papazyan (fpapazya@ucsd.edu), Victor Sellemi (vsellemi@ucsd.edu), Rohini Ray (r3ray@ucsd.edu), Diana Martinez (djmartin@ucsd.edu), Xiao Chang (xic357@ucsd.edu)

PSET Tutors: Qijun Liu (qil194@ucsd.edu), Shiyu Hu (shh190@ucsd.edu)

SI Tutor: Victoria Zhou (xuz146@ucsd.edu)

Lecture Survey Questions (LSQ – W#L#): At the beginning of each lecture (starting in week 2), I will ask a quiz-like question in Canvas related to reviewing material covered in a previous lecture or to motivate the material to come. While these questions are designed for the students attending the live-session, they can be answered anytime up until 11:59pm (PST) the following day. These questions are graded on a participation basis only (full credit if you do it, none if you don't) and cannot be “made up” for *any* reason in the event they are missed, which is why the time window is extended through the next day. They are coded “LSQ -W#L#” where the # following W is the week and the # following L is the lecture number of that week (either 1 or 2).

Lecture Review Problems (LRP – W#L#): Following each lecture (starting in week 2), there will be a small set of 5 problems to be completed for reviewing the material associated with that lecture. These problems will act to check your understanding of the lecture material and will be graded for correctness. You are encouraged to use your notes and digital resources to help yourself complete these review problems, and may consult with classmates and TAs on these problems. Review problems will be available from 8am (PST) until 11:59PM (PST) the day following lecture (Wednesdays and Fridays). They are not time constrained otherwise and you may go back and forth between questions freely. They are coded “LRP -W#L#” where the # following W is the week and the # following L is the lecture number of that week (either 1 or 2).

Quizzes (Quiz – W#): Rather than only a few high stakes exams, there will be 8 weekly quizzes administered every Saturday (starting week 2 and ending in week 9). There will be one more (9th) quiz administered during the final exam time slot scheduled by the registrar. The quizzes will involve applications and problem solving related to recently covered topics. The quizzes (10-20 questions) will be administered through Canvas, will consist of a variety of question types (multiple choice, numerical response, etc.), and will make up a majority of the course assessment. During the quizzes, you will only be able to see one question at a time, cannot move onto the next question until answering the current one, and cannot go back to past questions after answering them. Each student will have a different quiz using randomized question variants from a question pool. The quizzes will be available starting at 4pm (PST) on Saturday and will remain open until 11:59pm (PST) that night - you will have one hour to complete the quiz after starting it (so don't start it if you're not ready to finish it!). The last quiz will be available during only the scheduled three hour final exam time slot (see schedule below) and may be weighted slightly more than the other equally weighted quizzes. You will effectively be able to drop your two lowest quiz scores at the end of the quarter (with the exception of the final quiz). You may use your notes and digital resources to complete the quiz, but you may not consult any other individuals during the quiz - your answers should be your own per the academic integrity policy (see below). Note that Canvas provides many metrics to allow us to monitor your quiz activity (even in real time). The quizzes are coded "Quiz – W#" where the # corresponds to the week in the quarter.

Self-Proctoring Instructions (QUIZZES ONLY): You will be required to "self-proctor" your quizzes by hosting your own Zoom meeting and saving a recording of yourself taking the quiz on canvas using the "screen share" function in Zoom while having your video and audio on. This can be done by *carefully* following the steps outlined below. Failure to follow these instructions may result in nullified quiz results and a score of zero on the assessment. You DO NOT need to self-proctor / record your assessment for the LRP or LSQs assessments.

Steps to follow when self-proctoring a Quiz:

BEFORE YOU BEGIN THE QUIZ

- 1) Start your own hosted Zoom meeting.
- 2) Open the Canvas course page and navigate to the quiz (don't begin the quiz yet).
- 3) Use the "Screen Share" option from the control bar on Zoom and share your screen with your web browser open to the Canvas page the entire time while you take the assessment.

4) Make sure your video is on and your microphone audio is on ***so we can see and hear you during the quiz in your recording***. Failure to do so will result in a nullified quiz grade (and a score of zero). You will see your video in a “thumbnail” view (you can move this around) and it will show up in the top-right corner of your recording when it is done processing once you end the Zoom meeting. If for some reason, you don’t have camera access on your computer and cannot screen share, you may use your cell phone to record your entire session – you must get permission from the instructor in advance to do this, must have audio access and video visible of both you and your screen.

5) In the options of the control bar in Zoom, choose either "Record on this Computer" or "Record to Cloud" to begin recording your session. You should see a red dot under the control bar indicating that recording is taking place – failure to do this will result in a nullified quiz score and a possible grade of zero for the assessment. It is recommended that you use the “Record on this Computer” option as the Cloud recordings will be deleted in 30 days and you may be asked to provide a recording after that period, requiring you to download them locally anyway.

6) Show your student ID to your camera so it is clearly captured in the video (hold it up for at least 5 seconds). Failure to do this will result in a nullified quiz score and a possible grade of zero for the assessment.

COMPLETE THE QUIZ

7) Once you have completed the quiz, end the meeting on Zoom. When you do, you will see a message / popup window saying that the video is processing and will either be saved in a folder on your computer or to the cloud depending on which option you chose in step 5).

8) You may want to take a look at the video to make sure you've adequately achieved the goal of screen sharing your exam, having your video visible with audio, and showing your student ID.

9) Do not delete the recording until after the course is complete. We may ask you to provide the video file for your recorded session. Failure to do so will result in a nullified quiz grade and potentially result in a score of zero.

Grading:

Lecture Surveys	5%
Review Problems	15%
<u>Quizzes</u>	<u>80%</u>
Total	100%

In the *past*, a student could typically guarantee themselves an A by ranking in the top 25% of students in the course and a B by ranking in the top 60%. The instructor reserves the final judgement in all grade assessment matters.

Absences & Attendance: Any unexcused absence of a quiz will be awarded a score of zero. Otherwise, the instructor reserves the right to re-weight the composite grading structure above to accommodate valid excused absences (ie: medical emergency, etc.). This could involve an oral exam via Zoom with the instructor. To hedge risk, it is in the students' best interest to complete as many of the course assessments as possible. An excused absence for the last quiz will result in an incomplete grade. The instructor reserves the right to change the format of the assessment for any legitimately excused absence. You will get to (effectively) drop two quiz scores, but you will not be able to make up LRPs or LSQs given the broad / flexible submission window.

Supplemental Material & Slides: Throughout the course, the instructor may post supplemental readings and slides via Canvas. These materials are meant to be used in addition to the lecture and are not to be used as a substitute for going to lecture, reading the textbook, or watching the IMVH videos. The instructor reserves the right to remove access to this material if he feels that it has adversely affected attendance in the lecture.

Classroom Decorum & Email: To avoid distracting others in the classroom, please arrive on time. You will be queued into the "waiting room". When class is in session, please respect others appropriately in the chat and in the meeting framework in general. You should not be trying to distract others using your video or audio inappropriately. The instructor reserves the right to "remove" you from the Zoom session if inappropriate behavior occurs. In extreme cases the instructor reserves the right to decrease the letter grade by an entire letter for a student due to inappropriate behavior. Please restrict the use of email to the minimally necessary volume, put the course number (ECON 100B) in the subject of the email, and put your *full name* at the end of email messages. Email questions regarding *how to do a particular review or worked problem* should be first directed to your TAs. Questions regarding course policies will be directed to the syllabus (if applicable). All other general questions are welcome!

Statement of Academic Integrity: Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind.

It is possible that the department adopt the use of Zoom/Loom/LockDown Browser for proctoring this quarter, as some of you may have experienced in the past. These programs use video and audio recording or other personal information capture for the purpose of facilitating the course and/or test environment. You may be required to record your exam session to provide to the University to assess academic integrity. UC San Diego does not allow vendors to use this information for other purposes and the recordings will be deleted when no longer necessary. However, if cheating is suspected, the recording may become part of the student's administrative disciplinary record. Finally, the instructor reserves the right to give an oral or alternative exam - potentially nullifying the assessment under question - if it is necessary to uphold academic integrity in situations where suspicious activity may have occurred.

Tentative Schedule of Topics (Subject to Change):

Review: Chapter 2

Part I: Technology and Cost

Week 1: Modeling Technological Processes

Reading: Chapter 6

Videos: D1

Week 2: Short-Run & Long-Run Cost Minimization

Reading: Chapter 7

Videos: D2, a-h

Week 3: Cost Functions

Reading: Chapter 7

Videos: D2, i-l

Part II: Profit Maximization and Competitive Supply

Week 4: Short-Run Profit Maximization

Reading: Chapter 8

Videos: D3, a-c, k

Week 5: Long-Run Profit Maximization

Reading: Chapters 8

Videos: D3, a-c, k

Week 6: Deriving the Supply Curve

Reading: Chapter 8

Videos: D3, d-j

Week 7: Partial Equilibrium Analysis

Reading: Chapter 9

Videos: E1, a-j

Part III: General Equilibrium

Week 8: Pure Exchange Economy and the Edgeworth Box

Reading: Chapter 10

Videos: E2, a-c

Week 9: Pareto Efficiency, Equilibrium, and Production in the Edgeworth Box

Reading: Chapter 10

Videos: E2, d-l

Week 10: Production and Consumption: a 2x2x2 Model

Reading: Chapter 10

Videos: E2, m

Final Exam: 6/9/20 & 6/11/20, 7:00PM-10:00PM