

ECONOMICS 100C: MICROECONOMICS

Winter 2021, Zoom ID: 883-658-9887
Section A MWF 1:00pm-1:50pm
Section B MWF 12:00pm-12:50pm

Maxim Sinitsyn, msinitsyn@ucsd.edu
Office Hours: Th 10:00am-12:00

Discussion Sessions:

A01 T 6:00pm-6:50pm
B01 T 7:00pm-7:50pm

TAs

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Office Hours

W 5:00pm-7:00pm
Tu 9:00am-11:00am
Th 4:00pm-6:00pm
M 2:00pm-4:00pm
M 10:00am-12:00pm

Zoom ID

632-246-1561
591-031-2400
971-6838-4193
983 4251 1563
858-900-5484

Study Group Sessions: Thursdays 12:00pm-1:20pm at <https://ucsd.zoom.us/j/98584262842>
Madison Kha (mkha@ucsd.edu)

Course Objectives: Econ 100C examines departures from the neoclassical model including imperfect competition, strategy, asymmetric information, and signaling.

Required Texts:

- (1) Perloff's Microeconomics: Theory and Applications with Calculus. The e-book is on our class web under Redshelf. The e-book costs \$47 and you will have access for 4 years. You can use the e-book for free for two weeks. NOTE: this is an opt-out system: if you don't want the e-book, you must opt out or you will be charged for the book.
- (2) Mark Machina's Econ 100ABC Math Handout.

Web Resources: You are encouraged to take advantage of the following supplemental material for the 100ABC sequence, available free over the Internet.

- (1) Martin Osborne's intermediate mathematics tutorial:

<http://www.economics.utoronto.ca/osborne/MathTutorial/index.html>

- (2) Preston McAfee's Introductory textbook (this material is at a level between most microeconomics principles textbooks and Perloff's more advanced treatment.) <http://www.introecon.com/>

Weekly Homework: Each week, I will post practice problems on Canvas. They will not be graded. The best way to prepare for the exams is to form study groups and practice doing the problem sets together. I will post the answers after the problems are reviewed in discussion sessions.

Exams: We will have four tests in this class (including the final exam). The three tests during the quarter will take place during the times listed in your schedule – at 8pm on Fridays, 1/22, 2/12, and 2/26. The last test will take place during the scheduled time of the final exam for this class. Each test will carry equal weight of 25% each.

All exams are closed book, but you can use a calculator. While I will do what I can to keep to this structure of the assessments for this course, the evolving situation may make it necessary for me to make a change.

Regrade Requests: You will have one week during which you can request a regrade of your exam. Your whole exam will be regraded, and your score can go up or down. You are allowed only one regrade request for the quarter. However, if your request is successful (your score goes up), you will get another regrade request.

Academic Integrity: We will be using LockDown Browser and a webcam for Canvas exams. I reserve the right to give an oral test if I feel it is necessary to uphold academic integrity.

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature.

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Download Instructions

Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=953813920>

Once Installed

- Start LockDown Browser
- Log into to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

Guidelines

When taking an online quiz, follow these guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
 - Avoid wearing baseball caps or hats with brims

- Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
- If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
- Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Getting Help

Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product
- If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it

Schedule:

Week	Topic	Textbook Chapter	Video
1	Review of Perfect Competition, Government Intervention in the Market		E.2
2	Monopoly	11	G.1
3	Pricing	12	G.2
4, 5	Game Theory	13	F
6, 7	Oligopoly	14	G.3
8	Externalities	17	H.1
9	Public Goods	17	H.2
10	Asymmetric Information	18	I

Final (Section A: March 19 at 11:30am; Section B: March 17 at 11:30am)

FAMOUS OPTIMIZATION PROBLEMS IN ECONOMICS

Optimization Problem	Objective Function	Constraint	Control Variables	Parameters	Solution Functions	Optimal Value Function
Consumer's Problem	$U(x_1, \dots, x_n)$ utility function	$p_1 \cdot x_1 + \dots + p_n \cdot x_n = I$ budget constraint	x_1, \dots, x_n commodity levels	p_1, \dots, p_n, I prices and income	$x_i(p_1, \dots, p_n, I)$ regular demand functions	$V(p_1, \dots, p_n, I)$ indirect utility function
Expenditure Minimization Problem	$p_1 \cdot x_1 + \dots + p_n \cdot x_n$ expenditure level	$U(x_1, \dots, x_n) = u$ desired utility level	x_1, \dots, x_n commodity levels	p_1, \dots, p_n, u prices and utility level	$h_i(p_1, \dots, p_n, u)$ compensated demand functions	$e(p_1, \dots, p_n, u)$ expenditure function
Labor/Leisure Decision	$U(H, I)$ utility function	$I = I_0 + w \cdot (168 - H)$ budget constraint	H, I leisure time, disposable inc.	w, I_0 wage rate and nonwage income	$168 - H(w, I_0)$ labor supply function	$V(w, I_0)$ indirect utility function
Consumption/Savings Decision	$U(c_1, c_2)$ utility function	$c_2 = I_2 + (1+i) \cdot (I_1 - c_1)$ budget constraint	c_1, c_2 consumption levels	I_1, I_2, i income stream and interest rate	$c_1(I_1, I_2, i), c_2(I_1, I_2, i)$ consumption functions	$V(I_1, I_2, i)$ indirect utility function
Long Run Cost Minimization	$w \cdot L + r \cdot K$ total cost	$F(L, K) = Q$ desired output	L, K factor levels	Q, w, r desired output and factor prices	$L(Q, w, r), K(Q, w, r)$ output-constrained factor demand functions	$LTC(Q, w, r)$ long run total cost function
Long Run Profit Maximization (in terms of Q)	$P \cdot Q - LTC(Q, w, r)$ total profit	none	Q output level	P, w, r output price and factor prices	$Q(P, w, r)$ long run supply function	$\pi(P, w, r)$ long run profit function
Long Run Profit Maximization (in terms of L and K)	$P \cdot F(L, K) - w \cdot L - r \cdot K$ total profit	none	L, K factor levels	P, w, r output price and factor prices	$L(P, w, r), K(P, w, r)$ factor demand functions	$\pi(P, w, r)$ long run profit function