EconS 301

Intermediate Microeconomic Theory with Calculus

4 Credits
Fall 2021 Pullman

Class: Tuesday, Thursday,	day 10:35 – 11:50	CUE 318
Section 1 (03086) Friday	11:10-12:00	CUE 412
Section 2 (06971) Friday	12:10-13:00	CUE 412

Instructor: Dr. H. Alan Love

Professor, School of Economic Sciences

Email: a.love@wsu.edu

Office Hours: By appointment via email.

For questions on course materials, assignments, and concepts, please see the teaching assistant first. If you need to see me, please send an e-mail to make an

appointment.

Teaching Assistant: Sahil Patil

Email: sahil.patil@wsu.edu

Office Hours: Monday and Wednesday 10:30-11:30 via zoom and

by appointment.

Prerequisites:

ECONS 101 or ECONS 198, and one semester of calculus (MATH 171 or 202) with a C or better.

Course Description:

Theory of individual behavior for consumers, households, producers, and firms and aggregation of those behaviors and their interaction into markets. This is the required foundational microeconomic theory course for undergraduate economics majors.

Course Learning Goals:

- 1. Students will demonstrate critical thinking within microeconomic paradigms.
- 2. Students will apply the concepts to analyze qualitative and quantitative problems.
- 3. Students will understand how markets operate and be able to identify welfare outcomes for consumers and producers due to policy actions and strategic behavior.
- 4. Students will understand how different market structures, firm technologies, and economic and social policies affect market equilibrium and welfare outcomes and be able to express those impacts quantitatively.
- 5. Students will be able to analyze and communicate economic problems and solutions in concise, technically correct, and accessible language.

This course is primarily designed to meet WSU Learning Goals:

LG1. Critical and creative thinking

LG2. Quantitative Reasoning

LG3. Information Literacy

Required Text:

Goolsbee, Levitt, and Syverson, *Microeconomics*, Third Edition. Worth Publishers, New York, 2020. (Ebook is available for purchase. Please see instructions on how to access and purchase in Canvas, access codes should also be available at the Bookie.)

Recommended Text:

Espinola-Arredondo, Ana, and Felix Munoz-Garcia. *Intermediate Microeconomic Theory*, MIT Press, Cambridge, Massachusetts, 2020.

Required Web Access:

- Canvas --- for course information, material, and links, go to: https://canvas.wsu.edu
- Achieve --- for online homework and potential extra credit opportunity. An electronic copy of the text is also available so you should not purchase the book separately. Please access Achieve through Canvas where there are instructions on how to access and purchase Achieve and the textbook.

<u>Graded materials</u> will consist of: 1) Online homework problems (Achieve) 2) Written homework (Canvas), 3) Mid-term examinations (2), and 4) Comprehensive final examination.

1) Online Achieve Homework (accessed via Canvas):

There will be ten graded online problems completed in Achieve; approximately one will be due each week for each chapter. Access to Achieve homework is available through Canvas. These problems are meant to enhance student proficiency with application of math to economic concepts and provide a more thorough working understanding of the material. Achieve homework questions will be graded as you complete and submit the assignment (through Canvas). The student is responsible for completing graded assignments by the scheduled cutoff date posted. *All work on each assignment must be completed before the cut-off date*. Scores on late assignments will be discounted 10% for each day late. *The deadline for each homework is posted on Canvas/Achieve*.

2) Written Homework (accessed via Canvas):

There will be ten written problems for each section that will be available in Canvas and graded by the TA. To complete these homework problems, download the file, complete the work, and upload your completed work online at the same location as the download. The student is responsible for completing graded assignments by the scheduled cutoff date posted on Canvas. Written homework questions completed on Canvas will require problem completion and explanation. *All work on each assignment must be completed before the cut-off date*. Scores on late assignments will be discounted 10% for each day late. *The deadline for homework is posted on Canvas*.

3) Examinations:

There will be two midterm exams and one comprehensive final. These will be in-class exams. The mid-term exams will be administered during regular class meeting times and the final will be held during the scheduled period for final exams (Thursday, December 16, 2021 at 1:10-4:00 pm). For each mid-term exam, students will be allowed to prepare one page (8.5 x 11 inch front and back) of notes to bring to the exam as reference. For the

final, students will be allowed two pages of notes. During the exams, students are not permitted to collaborate or to discuss the exam with anyone. The student will sign an honor statement for each exam. These exams will be graded by the TA and the professor. All examinations are required. Please see information about makeup policy below in the attendance policy section.

Attendance Policy:

Students are expected to attend and participate in class. Frequently missing class meetings without an approved excuse may result in a reduction in a student's overall grade in the class. Students are also expected to complete online work in a timely manner. In the event of a medical excuse or other serious problems, please contact Dr. Love at the earliest possible time to explain the reason for the absence (and provide documentation, if appropriate). Makeups will be considered following University policies. See Office of the Registrar, Academic Regulations, #72 Class Attendance and Absences, https://registrar.wsu.edu/academic-regulations/.

Grading:

Grading for the course is based on 1,000 points, though there is an opportunity to earn 100 points extra credit during the course. The points can be earned as follows:

Assignment Category	Total Number	Points Each	Total Points	% Total Grade
Homework	10	25	250	20+%
Online Problems	10	25	250	20+%
Midterm Exam 1	1	175	175	20%
Midterm Exam 2	1	175	175	20%
Final Exam	1	250	250	20%
Total		-	1,000	100%

Grades will be determined as follows:

Over 930 points	A
900-929 points	A-
870-899 points	B+
830-869 points	В
800-829 points	B-
770-799 points	C+
730-769 points	C
700-729 points	C-
670-699 points	D+
600-669 points	D
Below 600 points	F

WSU COVID-19 Statement

Per the proclamation of Governor Inslee on August 18, 2021, masks that cover both the nose and mouth must be worn by all people over the age of five while indoors in public spaces. This includes all WSU owned and operated facilities. The state-wide mask mandate goes into effect on Monday, August 23, 2021, and will be effective until further notice.

Public health directives may be adjusted throughout the year to respond to the evolving COVID-19 pandemic. Directives may include, but are not limited to, compliance with WSU's COVID-19 vaccination policy, wearing a cloth face covering, physically distancing, and sanitizing common-use spaces. All current COVID-19 related university policies and public health directives are located at https://wsu.edu/covid-19/. Students who choose not to comply with these directives may be required to leave the classroom; in egregious or repetitive cases, student non-compliance may be referred to the Center for Community Standards for action under the Standards of Conduct for Students.

WSU Academic Integrity Statement:

Washington State University, a community dedicated to the advancement of knowledge, expects all students to behave in a manner consistent with its high standards of scholarship and conduct. Students are expected to uphold these standards both on and off campus and acknowledge the university's authority to take disciplinary action. The purpose of these standards and processes is to educate students and protect the welfare of the community.

University instructors have the authority, and are expected to intervene, in all situations where students are suspected of academic dishonesty. In such instances, responsible instructors retain the authority to assign grades to students considering, from an academic standpoint, the nature of the student action. Students found responsible for academic integrity violations may receive an F on the particular assignment or exam, as well as an F for the course. Offenses may result in referral to the WSU Center for Community Standards Conduct Board. More information regarding responding to academic integrity violations can be found at: https://www.communitystandards.wsu.edu.

Students with Disabilities:

Reasonable accommodations are available for students with documented disabilities or chronic medical conditions. If you have a disability and need accommodations to fully participate in this class, please visit your campus Access Center website (websites listed below) to follow published procedures to request accommodations. Students may also call or email the Access Center to schedule an appointment with an Access Advisor. All disability related accommodations are to be approved through the Access Center.

Reasonable accommodations to reduce/eliminate barriers in the learning environment are available in online classes for students with a documented disability/chronic medical condition. All accommodations must be approved through your WSU Disability Services office. If you have a disability and need accommodations, we recommend you begin the process as soon as possible. It is a university expectation that students with approved accommodations visit with instructors (via email or Zoom) within two weeks of requesting their accommodations to discuss logistics. For more information contact a Disability Specialist in Pullman (or WSU Online Campus): 509-335-3417 http://accesscenter.wsu.edu, Access.Center@wsu.edu

Policy Prohibiting Discrimination and Harassment (Executive Policy 15):

This policy expresses WSU's commitment to maintaining an environment free from discrimination, including sexual harassment. This policy applies to all students, faculty, staff, or others having an association with the University.

Discrimination, including discriminatory harassment, sexual harassment, and sexual misconduct (including stalking, intimate partner violence, and sexual violence) is prohibited at WSU (See WSU Policy Prohibiting Discrimination and Harassment (Executive Policy 15) and WSU Standards of Conduct for Students).

If you feel you have experienced or have witnessed discriminatory conduct, you can contact the WSU Office of Civil Rights Compliance & Investigation (CRCI) and/or the WSU Title IX Coordinator at 509-335-8288 to discuss resources, including confidential resources, and reporting options. (Visit crci.wsu.edu for more information).

Most WSU employees, including faculty, who have information regarding sexual harassment or sexual misconduct are required to report the information to CRCI or a designated Title IX Coordinator or Liaison. Visit https://crci.wsu.edu/reporting-requirements/ for more information.

Safety and Emergency Notification:

Classroom and campus safety are of paramount importance at Washington State University, and are the shared responsibility of the entire campus population. WSU urges students to follow the "Alert, Assess, Act," protocol for all types of emergencies and the "Run, Hide, Fight" response for an active shooter incident. Remain ALERT (through direct observation or emergency notification), ASSESS your specific situation, and ACT in the most appropriate way to assure your own safety (and the safety of others if you are able).

Please sign up for emergency alerts on your account at MyWSU. For more information on this subject, campus safety, and related topics, please view the <u>FBI's Run, Hide, Fight video</u> and visit the WSU safety portal.

Reasonable Religious Accommodation:

Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 - Academic Complaint Procedures. See also Rule 82.

Tentative Schedule

Tentative Schedule				
Week	Date	Readings in: Required: Goolsbee, Levitt, and Syverson (labeled in Bold Italic) Optional: Espinola-Arredondo and Munoz-Garcia (labeled in Italic)		
1	Tue Aug 24	Course Overview: Syllabus, Achieve Math Review Appendix		
	Thu Aug 26	Chapter 1 Adventures in Economics Chapter 2 Supply and Demand		
2	Tue Aug 31	Chapter 3 Using Supply and Demand to Analyze Markets		
	Thu Sep 2	Chapter 4 Consumer Behavior Chapter 2 Consumer Preferences and Utility		
		Chapter 4 continued		
3	Tue Sep 7	Chapter 3 Consumer Choice		
	Thu Sep 9	Chapter 4 Appendix (The Calculus) Chapter 3 continued		
		Chapter 5 Individual and Market Demand		
4	Tue Sep 14	Chapter 4 Substitution and Income effects		
	Thu Sep 16	Chapter 5 Appendix (The Calculus) Chapter 4 continued		
	Tue Sep 21	Chapter 18 Behavioral and Experimental Economics		
5	-	-		
	Thu Sep 23	In-class Midterm 1		
	Tue Sep 28	Chapter 6 Producer Behavior Chapter 7 Production Functions		
6				
	Thu Sep 30	Chapter 6 Appendix (The Calculus)		
		Chapters 7 continued & Chapter 8 Cost Minimization		
7		Chapter 6 continued		
	Tue Oct 5	Chapters 7 & 8 continued		
	Thu Oct 7	Chapter 7 Costs Chapters 7 & 8 continued		
8	Tue Oct 12	Chapter 7 (The Calculus) Chapters 7 & 8 continued		
	Thu Oct 14	Chapter 13 Factor Markets		
9	Tue Oct 19	Chapter 8 Supply in a Competitive Market		
	Thu Oct 21	Chapter 8 continued		
4.0	Tue Oct 26	Chapter 9 Market Power and Monopoly		
10		Chapter 10 Monopoly		
	1	Chapter 10 Honopoly		

		Chapter 9 Appendix (The Calculus)
	Thu Oct 28	Chapter 10 continued
		Chapter 10 Pricing Strategies for Firms with Market
	Tue Nov 2	Power
11	Tue Nov 2	Chapter 11 Price Discrimination and Bundling
11	Thu Nov 4	
	THG TVOV	Chapter 10 continued
		Chapter 11 continued
	Tue Nov 9	In-class Midterm 2
12		
	Thu Nov 11	Chapter 11 Imperfect Competition
	1110/11/07/11	Chapter 14 Imperfect Competition
		Chapter 11 continued
	Tue Nov 16	Chapter 14 continued
13		
	Thu Nov 18	Chapter 12 Game Theory (12.1-12.3)
		Chapter 12 Simultaneous-Move Games
	Tue Nov 23	HAPPY THANKSGIVING!
	Thu Nov 25	
		Chapter 17 Externalities and Public Goods
	Tue Nov 30	Chapter 17 Externalities and Public Goods
14		
	Thu Dec 2	Chapter 17 continued
		Chapter 17 continued
	Tue Dec 7	Chapter 14 Investment, Time, and Insurance
15		
	Thu Dec 9	Chapter 16 Asymmetric Information
		Chapter 16 Contract Theory
	Final	Thursday, December 16, 2021 at 1:10-4:00 pm