

WASHINGTON STATE UNIVERSITY – SPRING 2026

ECONS 301 – INTERMEDIATE MICROECONOMIC THEORY WITH CALCULUS

Instructor: Ana Espinola-Arredondo
Lectures: CLAR 147.
Tuesdays and Thursdays, 9:10-10:25a.m.

Teaching Assistant: Shejuti Haque
TA Office hours: Tuesdays 12pm-1pm
Location: 207A Hulbert
Recitation: Friday 11:10am-12:00pm (week before exams)

You can also contact your TA to schedule additional office hours, by appointment.

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Office hours: Fridays 9am-10am.,
or by appointment

Website: <https://anaespinolaarredondo.com/econs-301-intermediate-microeconomic-theory/>

Course Rationale

This course analyzes the individual behavior of individuals, consumers, and firms. The focus of the course will mainly be theoretical, although several applications and empirical implications will be discussed.

Course Objectives and Learning Outcomes:

Learning Objectives. Microeconomics is the study of individual economic units, such as households and firms, and how they interact to make trades and to determine prices. We attempt to understand these economic units by constructing what we think are reasonable representations of how they behave when confronted with economic decisions. Given these models of economic behavior, we can analyze the workings of the economy and the effects of policy.

The scope of the issues you can study with microeconomic tools is almost limitless – ranging from corporate mergers to charitable giving, to tax cut and prescription drug plans. The primary objective of this course is to develop and understand intermediate microeconomic tools and to prepare you to take more advanced courses in economics and other social sciences.

Learning Outcomes. The student will demonstrate the ability to think critically and to use appropriate concepts to analyze quantitative and qualitatively problems, and situations involving consumers' and firms' strategic behavior. In addition, the student will demonstrate the ability to use appropriate mathematical techniques and concepts to obtain quantitative solutions to problems in consumer and producer theory, market failures and the assessment of public policy.

Prerequisites:

Introductory Microeconomics (EconS 101 or 198), and one semester of calculus (Math 171 or 202) are required.

Required Text:

- Ana Espinola-Arredondo and Felix Munoz-Garcia. *Intermediate Microeconomic Theory: Tools and Step-by-Step Examples*. MIT Press, October 2020 (ISBN: 0-262-04423-4).

Recommended Reading:

- Besanko, David and Braeutigam, Ronald, *Microeconomics*, 5th edition. Wiley Publishers. [Henceforth referred to as BB]. You can find it at the Washington State University Bookstore (Bookie). [Acquiring the 3rd or 4th edition of the book is also possible.]
 - This is the most recommended textbook if you are planning to buy one.
- Nicholson, Walter and Christopher Snyder. *Microeconomic Theory. Basic Principles and Extensions*. Thompson Publishing. 2008 (ISBN: 0-324-42162-1). (10th or 11th edition).
 - This textbook is especially useful if you are considering graduate studies in Econ/Business, since it introduces you to the material in Masters programs.
- Perloff, Jeffrey M. *Microeconomics: Theory & Applications with Calculus*. Pearson – Addison Wesley, 2008 (ISBN 0-321-27794-5). (Any edition). This book is similar to Besanko and Braeutigam's, but provides a few more mathematical proofs.
- Pindyck, Robert S. and Daniel L. Rubinfeld. *Microeconomics*. Pearson. (7th edition or later). Intermediate micro topics with plenty of thorough examples and anecdotes.

Lectures:

Lectures will be held in CLAR 147, on Tuesdays and Thursday 9:10-10:25am.
Attendance is **very important** to your success in this class.

Grading:

Your grade for the course will be based on:

- Problem sets (35% from written assignments),
- Two midterm exams (15% each),
- Quizzes (10%), and
- Final exam (25%).

Exam dates:

- Midterm #1: Thursday, February 12th, in class
- Midterm #2: Take-home exam.
 - It will be posted on the course website on March 31st at 10am, and it will be due in class on Thursday, April 2nd.
- Final Exam: Wednesday May 6th, 9:00am-11am, in class (CLAR 147).

Make-up exams will only be given if you have a note from a doctor indicating that you were unable to take the exam at the scheduled time.

DESCRIPTION OF COURSE REQUIREMENTS

Homework:

1. Short written assignments (with 2-3 exercises) will be assigned during the semester. I will announce them in class and by e-mail. You will be allowed to work in groups, but each student must submit in class his/her own written assignment.
2. Quizzes (probably 5) will be given in class. I will announce them in advance. The quizzes will only have 2-3 exercises closely related to the material covered in recent classes.

Grading scale:

A	88-100	C	55-59
A-	80-87	C-	50-54
B+	74-79	D+	45-49
B	70-75	D	40-44
B-	65-69	F	0-39
C+	60-64		

Note: Grades will not be curved.

Course Schedule:

The following course schedule is tentative and subject to change depending upon the progress of the class. Espinola-Arredondo and Munoz-Garcia (EA-MG) is the main recommendation as reading material, but I also included references to Besanko and Braeutigam (BB), Perloff's (P) textbook and Nicholson and Snyder (NS), if you would like to accompany the intuitive explanations of BB with the more formal treatment.

1. January 13th.
 - Introduction to Demand and Supply Analysis.
 - *Readings:* (EA-MG): Chapter 1.
 - *Alternative readings:* BB and P: Chapter 2
2. January 15th and January 20th.
 - Consumer Preferences and Utility.
 - *Readings:* (EA-MG): Chapter 2.
 - *Alternative readings:* BB: Chapter 3, P: Chapter 3.1-3.2, and NS: Chapter 3
3. January 22nd and 27th.
 - Consumer choice.
 - *Readings:* (EA-MG): Chapter 3.
 - *Alternative readings:* BB: Chapter 4, P: Chapter 3.3-3.4, and NS: Chapter 4.
4. January 29th and February 3rd.
 - Substitution and Income Effects.
 - *Readings:* (EA-MG): Chapter 4.
 - *Alternative readings:* BB: Chapter 5.1-5.3, P: Chapter 4, and NS: Chapter 5.
5. February 5th and February 10th.
 - Measuring Welfare Changes.
 - *Readings:* (EA-MG): Chapter 5.
 - *Alternative readings:* BB: Chapter 5.3-5.7, P: Chapter 5, and NS: Chapter 5.

6. February 12th and 17th. -- Thursday, February 12th: First Midterm Exam. In class
 - Choice under uncertainty.
 - *Readings*: (EA-MG): Chapter 6.
7. February 19th and 24th.
 - Firms and Production.
 - *Readings*: (EA-MG): Chapter 7.
 - *Alternative readings*: BB: Chapter 6, P: Chapter 6, and NS: Chapter 9.
8. February 26th and March 3rd.
 - Cost Minimization.
 - *Readings*: (EA-MG): Chapter 8.
 - *Alternative readings*: BB: Chapters 7 and 8, P: Chapter 7, and NS: Chapter 10 and 11.
9. March 5th - 12th.
 - Monopoly.
 - *Readings*: (EA-MG): Chapter 10.
 - *Alternative readings*: BB: Chapter 11, P: Chapter 11, and NS: Chapter 14.
10. March 16th – 20th. Spring Break, No class.
11. March 24th and 26th.
 - Game Theory: Simultaneous-Move Games
 - *Readings*: (EA-MG): Chapter 12.
 - *Alternative readings*: BB: Chapter 14, P: Chapter 14, and NS: Chapter 8.
12. March 31st - April 14th.
 - Game Theory: Sequential and Repeated Games
 - *Readings*: (EA-MG): Chapter 13.
 - *Alternative readings*: BB: Chapter 14, P: Chapter 14, and NS: Chapter 8.
 - *Take-home exam*. It will be posted on the course website on Tuesday, March 31st at 9:10am, and it will be due in class on Thursday, April 2nd.
13. April 14th and 16th.
 - Imperfect Competition.
 - *Readings*: (EA-MG): Chapter 14.

- *Alternative readings:* BB: Chapter 13, P: Chapter 13, and NS: Chapter 15.

14. April 21st – 30th.

- Externalities and Public goods.
- *Readings:* (EA-MG): Chapter 17.
- *Alternative readings:* BB: Chapter 17, P: Chapter 17, and NS: Chapter 19.

15. May 4th – 8th, Final exams' week.

- Final exam: Wednesday May 6th, 9:00am-11am, in class (CLAR 147).

Disability Resource Accommodation:

Reasonable accommodation is available for students who have a documented disability. Please notify the instructor the first week of class of any accommodation needed for the course. Late notification may cause the requested accommodation to not be available. All accommodations must be approved through the Disability Resource Center (DRC) in Administration Annex 205, 335-1566, <http://www.drc.wsu.edu/>

Academic Honesty:

WAC 504-25-015. Academic dishonesty, such as cheating, plagiarism, fabrication, and fraud, is prohibited. See <http://www.conduct.wsu.edu/default.asp?PageID=343> for more information and specific definitions of academic dishonesty.

As an institution of higher education, Washington State University is committed to principles of truth and academic honesty. All members of the University community share the responsibility for maintaining and supporting these principles. When a student enrolls in Washington State University, the student assumes an obligation to pursue academic endeavors in a manner consistent with the standards of academic integrity adopted by the University. To maintain the academic integrity of the community, the University cannot tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. Washington State University reserves the right and the power to discipline or to exclude students who engage in academic dishonesty. To that end, the University has established the following rules defining prohibited academic dishonesty and the process followed when such behavior is alleged. These rules incorporate Washington State University's Academic Integrity Policy, the University-wide document establishing policies and procedures to foster academic integrity. This policy is applicable to undergraduate and graduate students alike, as it pertains to dishonesty in course work and related academic pursuits. In cases of dishonesty in research and original scholarship, the University's Policy and Procedural Guidelines for Misconduct in Research and Scholarship may take precedence over the policies and procedures contained herein.

Academic dishonesty includes cheating, plagiarism, and fabrication in the process of completing academic work. These standards should be interpreted by students as general notice of prohibited conduct. They should be read broadly, and are not designed to define misconduct in exhaustive forms.

Campus Safety Plan:

Can be found at <http://safetyplan.wsu.edu> and <http://oem.wsu.edu/emergencies>, contains a comprehensive listing of university policies, statistics and information related to campus safety, emergency management and the health and welfare of the campus community.

Lauren's Promise

I will listen and believe you if someone is threatening you. Lauren McCluskey, a 21-year-old honors student athlete, was murdered on Oct. 22, 2018, by a man she briefly dated on the University of Utah campus. We must all take actions to ensure that this never happens again.

- If you are in immediate danger, call 911.
- If you are experiencing sexual assault, domestic violence, and stalking, please report it to me and I will connect you to resources or call Alternatives to Violence of the Palouse at 877-334-2887 (24-hour crisis hotline).

Any form of sexual harassment or violence will not be excused or tolerated at Washington State University. WSU has instituted procedures to respond to violations of these laws and standards, programs aimed at the prevention of such conduct, and intervention on behalf of the victims.

WSU Police officers will treat victims of sexual assault, domestic violence, and stalking with respect and dignity. Confidentiality is of the utmost importance and WSU Police will assist by providing resources to victims. In addition to its law enforcement efforts regarding sexual assault, domestic violence and stalking, WSU Police refer victims to the appropriate university and/or local community counseling and other resources devoted to assisting victims.

Advocates help survivors determine their own needs in regard to their physical and emotional health, reporting options, and academic concerns. They connect survivors to campus and community services, and provide accompaniment to important appointments (court, hospital, and police) and support throughout the process. WSUPD can also connect you with advocacy services, if desired. The local advocacy group is Alternatives to Violence of the Palouse, whose services are free, immediate, and confidential.

Other confidential resources include WSU Counseling and Psychological Services. If you would like to speak with a counselor after business hours, WSUPD can contact the on-call counselor and have them call you directly or a crisis telephone number is provided. Information shared with the counselor will not be provided to WSUPD without expressed permission from you.

WSU Counseling and Psychological Services 509-335-2159 (crisis services line)

Disclaimer: This syllabus is subject to change to facilitate instructional and/or student needs.