ECONS 501 - MICROECONOMIC THEORY-I

FALL 2016

http://faculty.ses.wsu.edu/Munoz/Teaching/Teaching_EconS501.html

Instructor: Felix Munoz-Garcia

Lectures: Hulbert Hall 27 (ground floor),
Mondays, Wednesdays and Fridays, 10:10-11:00a.m.

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Office hours: Fridays, 9:00-10:00a.m.,
and by appointment.

TA: Casey Bolt and Xinlong Tan
Office hours:
Tuesdays, 3:00-4:00pm (Xinlong), and
Wednesdays, 1:00-2:00pm (Casey);
and by appointment.

Review sessions: Fridays, 1:00-2:00pm.
Location of review sessions: Hulbert 23.

Offices: 323D Hulbert Hall (Casey), and
323C Hulbert Hall (Xinlong).
E-mails: casey.bolt@ wsu.edu (Casey), and
xinlong.tan@ wsu.edu (Xinlong).

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

The main objective of the course is to make students be able to apply the tools of advanced microeconomic theory to understand and model individual decision making. In addition, the topics learned in this course should prepare the student for a better understanding of the concepts he/she will learn in the spring sequence of the Micro theory course. Furthermore, the theoretical approach of the course (and many of the mathematical tools explained) will set stronger foundations for analyzing economic problems, not only from a microeconomic perspective but also in other fields in economics.

Prerequisites:

Intermediate Microeconomics is recommended and some college algebra and calculus is also expected. Some books on mathematical methods in economics are suggested below, as a helpful support during the course, and are strongly recommended.

Required Text:

Andreu Mas-Colell, Michael Whinston, and Jerry Green. (MWG) *Microeconomic Theory*. Oxford University Press, 1995. ISBN: 0195073401. You can find it at the Washington State University Bookstore ("Bookie").

Recommended Reading (Microeconomics):

- Walter Nicholson and Christopher M. Snyder (NS) *Microeconomic Theory: Basic Principles and Extensions.* South Western College Publ. (11th edition, 10th edition is also ok). [This book is good complement to MWG in terms of intuitive reasoning. It is especially useful as a bridge between Intermediate Micro and graduate level micro theory]. I especially encourage you to read Chapter 2 on useful mathematics for microeconomic theory. In addition, I highly recommend you to read the corresponding chapter of the textbook before starting to read MWG.
- Hugh Gravelle and Ray Rees. (GR) *Microeconomics.* Prentice Hall. (2nd or 3rd edition). [A good complement to MWG in terms of intuitive reasoning. It is especially useful as a bridge between Intermediate Micro and graduate level micro theory].
- Eugene Silberberg and Wing Suen. (SS) *The Structure of Economics. A Mathematical Approach*. McGraw-Hill (Any edition might work).
- Geoffrey Jehle and Philip Reny. (JR) *Advanced Microeconomic Theory*. 2nd ed. Reading, MA: Addison-Wesley, 2000. ISBN: 0321079167. [More readable than MWG and more concise].
- Ariel Rubinstein. *Lecture notes on Microeconomic Theory: the economic agent.* Princeton University Press, 2006. ISBN: 0691120315. Downloadable for free at the following link: http://arielrubinstein.tau.ac.il/Rubinstein2007.pdf [Only recommended for the first chapters].
- Hal Varian. *Microeconomic Analysis*. 3rd Ed. New York, NY: W.W. Norton, 1992. ISBN: 0393957357. [Very concise].
- John G. Riley. *Essential Microeconomics*. Cambridge University Press, 2012. ISBN: 0521827477. [Good for the part on uncertainty, and later on for general equilibrium.]
- David Kreps. *Microeconomic Foundations I: Choice and Competitive Markets.* Princeton University Press, 2012. ISBN: 0691155836. [Good for the foundations.]
- Elmar Wolsftetter. *Topics in Microeconomics: Industrial Organization, Auctions, and Incentives.* Cambridge University Press, 1999. ISBN: 0521645344. [Really good for applications on uncertainty, industrial organization and auctions.]
- I strongly recommend using an Intermediate Micro textbook as a support for the intuition behind the theoretical concepts we will discuss in class. You can choose some textbook you might be familiar with, but I include some below (Any edition might work):
    - Michael Wetzstein. *Microeconomic Theory: Concepts and Connections.* Cengage Publishing. √;
    - Nechyba, Thomas. *Microeconomics. An intuitive approach with calculus*. South-Western publishing, 2010. √;
    - Hal Varian. *Intermediate Microeconomics.* W.W. Norton.
    - Jeffrey F. Perloff. *Microeconomics: Theory and Applications with Calculus*. Addison-Wesley. √;
    - David Besanko and Ronald R. Braeutigam. *Microeconomics*. Wiley.

Other recommended Reading (Mathematics):

Most comprehensive:

- Carl P. Simon and Lawrence E. Blume. *Mathematics for Economists.* W. W. Norton.
- Michael Hoy, John Livernois, Chris McKenna, Ray Rees and Anthanassios Stengos. *Mathematics for Economists.* MIT Press.

- Angel de la Fuente. *Mathematical methods and models for economists.* (Any edition might work). Cambridge University Press. [Good macro applications].

Also recommended (refreshing undergrad mathematics):

- Alpha Chiang. *Fundamental Methods of Mathematical Economics.* (Any edition). McGraw-Hill.
- Knut Sydsaeter and Peter I. Hammond. *Mathematics for Economic Analysis.* (Any edition) Prentice Hall.
- Michael Klein. *Mathematical Methods for Economics*. (Any edition might work) Addison-Wesley.

Also recommended (although not so comprehensive):

- Robert G. Bartle and Donald R. Sherbert. *Introduction to real analysis.* 3rd edition. Wiley. [A gentle introduction to real analysis].
- Russel A. Gordon. *Real Analysis, A first course.* Second edition. Addison Wesley. [Another gentle introduction to real analysis.]
- William Trench. *An Introduction to Real Analysis*. Free downloadable textbook at: http://ramanujan.math.trinity.edu/wtrench/misc/index.shtml. [Recommended if you never had courses on real analysis before.]
- Rangarajan K. Sundaram. *A first course in optimization theory.* Cambridge University Press. [Good connection of real analysis with maximization problems.]

Lectures:

Lectures will be held in Hulbert Hall 27 (ground floor), on Mondays, Wednesdays and Fridays 10:10–11:00a.m. Attendance is very important to your success in this class.

Review Sessions (Practice sessions):

Your teaching assistant, Casey Bolt, will be holding review sessions every week. You will cover exercises similar to those you will have to solve in your homework assignments and exams. The TA will go over each step that you have to use in order to solve these exercises. Attendance is strongly recommended, and has proven very useful in previous editions of this course.
Time: Fridays, 1:00-2:00pm.
Location: Hulbert 23.

Class materials:

All class materials (handouts, homework assignments, answer keys, etc.) will be posted on the website: http://faculty.ses.wsu.edu/Munoz/Teaching/Teaching_EconS501.html.

Grading:

Your grade for the course will be based on:

- Problem sets (35%),
- Two midterms (20% each), and
- Final exam (25%).

Exam dates:

Midterm #1: Friday, October 7th, in class

Midterm #2: Wednesday, November 16th, in class.

Final exam: Tuesday, December 13th, 8:00-10:00a.m., in class.

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.

Attendance and Participation:

Students are expected to attend all scheduled class times, as attendance and participation contribute significantly to learning in this course. If you feel miss a class, it is your responsibility to find out from an informed student what occurred in class, what assignments may have been given, etc. Assignments are due at the beginning of class (as described below). Late work is subject to significant grade reduction, depending upon the assignment.

Students with Disabilities:

Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Disability Resource Center at http://www.drc.wsu.edu/, stop by their office at the Admin Annex Building, Room 205; or call 509-335-3417. All accommodations must be approved through the Disability Resource Center.

Academic Integrity:

Academic integrity will be strongly enforced in this course. Any student caught cheating on any assignment will be given an F grade for the course and will be reported to the Office Student Standards and Accountability. Cheating is defined in the Standards for Student Conduct WAC 504-26-010 (3). It is strongly suggested that you read and understand these definitions: http://conduct.wsu.edu/default.asp?PageID=338.

WSU Safety:

WSU is committed to maintaining a safe environment for its faculty, staff, and students. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. In support of our commitment to the safety of the campus community the University has developed a Campus Safety Plan, http://safetyplan.wsu.edu. It is highly recommended that you visit this web site as well as the University emergency management web site at http://oem.wsu.edu/emergencies to become familiar with the information provided.

DESCRIPTION OF COURSE REQUIREMENTS

Homework:

Homework assignments will be posted on the course website (almost) every Monday, and they must be submitted the next Monday at the beginning of the class. Make sure you give yourself enough time to complete the problem sets. You are encouraged to work in groups, although an individual homework assignment has to be submitted per student. Working in groups has proven to be a very successful learning technique for previous students of this course.

Additional practice problems will be provided if required.

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 course schedule is tentative and subject to change depending upon the progress of the class. When more than a reading is suggested for a given topic, the √ sign marks those which are especially recommended.

1. August 22nd – 26th.
    - Preference Relations and Consumer Choice.
    - MWG: Chapters 1 and 2 √; JR: Chapters 1.1-1.3; and Rubinstein: Lectures 1 and 3.
2. August 29th –September 2nd.
    - Demand Theory: Preferences and Utility.
    - MWG: Chapters 3A-3D √; JR: 1.3; GR: 2A-2C √; and Rubinstein: Lectures 2, 4 and 5.
3. September 6th and 8th. [No class on Monday, September 5nd, Labor Day.]
    - Demand Theory: Duality.
    - MWG: 3E-3G √; JR: 1.4, 1.5, 2.1; GR: 3A-3B √; Rubinstein: Lecture 6.
4. September 12th – 16th.
    - Demand Theory: Measuring welfare changes.
    - MWG: 3I; and GR: 3C-3D. √
5. September 19th – 23rd.
    - Demand Theory: Applications.
    - GR: Chapter 4, SS: 10.7 and 11.3-11.6.
6. September 26th – 30th.
    - Aggregate Demand.
    - MWG: 4A-4C.
7. October 3th – 7th – October 7th (Friday): *First Midterm Exam*. In class.
    - Aggregate Demand and Production.
    - MWG: 5A-5C √; JR: 3.2.
8. October 10th – 14th.
    - Production and Costs.
    - MWG: 5D-5G √; JR: 3.3-3.5; SS: 8 and Rubinstein: Lecture 7.

9. October 17th – 21st.
    - Choice under uncertainty.
    - MWG: 6A-6B √, SS: 13, and GR: 17A-17D.
10. October 24th – 28th.
    - Choice under uncertainty.
    - MWG: 6C-6E √, GR: 17E-17G.
11. October 31st – November 4th.
    - Competitive Markets.
    - MWG: 10A-10C.
12. November 7th – 9th. [No class on Friday, November 11th, Veteran's Day.]
    - Competitive Markets.
    - MWG: 10D-10G.
13. November 14th – 18th. – November 16th (Wednesday): *Second Midterm Exam*. In class.
    - Externalities and Public Goods.
    - MWG: 11, and additional readings.
14. November 18th – 21st.
    - Externalities and Public Goods.
    - MWG: 11, and additional readings.
15. November 21st – 25th.
    - No class: Thanksgiving break.
16. November 28th – December 2nd.
    - Monopoly and Price discrimination.
    - MWG: 12B (only monopoly), and additional readings.
17. December 5th – 9th.
    - Introduction to Oligopoly and Review.
18. December 12th – 16th, Final exams' week.
    - Final exam: Tuesday, December 13th, 8:00-10:00a.m., in class.