

ECON 301 – Intermediate Microeconomic Theory

Fall Term 2011

Professor: Kamran Bilir

Office: Sewell Social Science Building, Room 7432

Office Hours: Thursday 3:45 – 5:15 pm

Email: econ301@ssc.wisc.edu

Lectures: Tuesdays and Thursdays, 2:30 – 3:45 pm
Sewell Social Science Building, Room 5206

Webpage (check this frequently): Learn@UW

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Sections: TBA

Course Description

This course will build on your knowledge of microeconomics from Econ 101, and will emphasize development of basic mathematical tools required for economic analysis. We will cover topics including (1) consumer theory, (2) producer theory, (3) equilibrium involving the interaction of firms and consumers in markets or similar institutions, and (4) the role of government policy in improving economic outcomes. Each of these topics will be examined at greater depth than in Econ 101, and our analytical approach will be based on the mathematics of constrained optimization. In addition, we will consider some new concepts and techniques that are helpful in studying behavior under uncertainty, as well as game theory and strategic interactions. The theory surrounding each topic will be accompanied by evidence, illustrations, and applications.

Note: This course is a less math-intensive version of intermediate microeconomics. If you know multivariable calculus and linear algebra to the level of Math 222 or better, you should take the math-intensive course, Econ 311. Econ 311 is offered this fall and meets T/Th, 11am-12:15pm.

Required Textbook

Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, seventh edition, 2009

Prerequisites

You must have taken two introductory economics courses for credit and passed (received a C- or better, or P if Pass/Fail).

You must also have taken one semester of calculus (Math 221 or 211; 221 recommended) and passed, or placed out of it. Although we will not use heavy mathematics, concepts in the course will often be presented using mathematical notation and some simple calculus. This is the less-math version of intermediate micro, but it is a problem-based course, so familiarity and comfort with mathematics is essential. These prerequisites are enforced without exceptions.

Problem Sets, Exams, and Grading

Problem sets

There will be 8 problem sets. Each will be posted on the course web site about a week before its due date. All problem sets will be due in class by the end of class (3:45pm) on the due date; alternatively, you may submit your problem set to my mailbox in the economics department by 2:30pm on the due date. We will not accept late problem sets for any reason, but only the best six will count toward your grade for the course. You can thus miss two problem sets without cost.

The approximate schedule of problem sets is:

	<u>Date Available</u>	<u>Date Due (in class)</u>
Problem set 1:	9/15/2011	9/22/2011
Problem set 2:	9/22/2011	9/29/2011
Problem set 3:	10/6/2011	10/13/2011
Problem set 4:	10/13/2011	10/20/2011
Problem set 5:	10/20/2011	10/27/2011
Problem set 6:	10/27/2011	11/3/2011
Problem set 7:	11/10/2011	11/22/2011
Problem set 8:	11/29/2011	12/8/2011

Exams

There will be two midterm exams and one final exam:

- 1) Midterm 1: In class on Thursday, October 6, 2:30 – 3:45pm
- 2) Midterm 2: In class on Thursday, November 10, 2:30 – 3:45pm
- 3) Final exam: Wednesday, December 21, 2011, 7:45am – 9:45am

Note: If you cannot make this time, do NOT take this class.

Attendance at both midterms and final exam is mandatory; no make-up exams will be offered.

Sections and Quizzes

There will be weekly sections devoted to developing the analytical concepts and techniques discussed in class. Throughout the semester, there will be 3 short quizzes in section. Your performance on these quizzes will contribute toward extra credit for the course. Quizzes will not be pre-announced, so it is strongly recommended that you attend and prepare for all sections. As with exams, make-up quizzes will not be offered.

Grading

Grading weights:

Problem sets: 20%

Midterm 1: 20%

Midterm 2: 20%

Final: 40%

Section quizzes: extra credit

Frequently asked questions

When will lecture notes be posted? In general, lecture notes will be posted online the night before class. You are welcome to bring print-outs to class and take notes on them. Note that class attendance is mandatory, as I will generally supplement lecture slides with additional material (including mathematical derivations and examples) during lecture. Reading the lecture notes is of course recommended, however is not a substitute for attending class.

Can my friends and I work together on the problem sets? Yes. The problem sets are intended to be learning experiences and you are encouraged to work with your classmates. However, you must submit your own problem set solutions. You may find it useful to attempt the problems on your own before working with others. Doing the problem sets is the best way to prepare for the exams. If you copy another student's answers without understanding the material, your exam performance will suffer.

How are the problem sets graded? The problem sets are graded on a scale of check plus, check, check minus and zero (if no problem set is handed in or it is submitted late). Problem set solutions will be posted on the course web page after they are collected and evaluated.

What material will be covered on the midterms and final exam? The first midterm will cover Chapters 1—4. The second midterm will cover Chapters 1—8, with an emphasis on material in chapters 5—8. The final will cover material from the entire semester (Chapters 1—18). Exams will cover all lecture material (including any extensions covered in section) and all material in Chapters 1—18 of the Pindyck-Rubinfeld textbook.

What do I do if a mistake was made in grading my exam? After the exam is returned, you will have one week to submit a written account of your problem or concern to one of the TAs. Beyond this deadline, no complaints will be entertained. Note that regrades will not be confined to the disputed part of the exam.

Course Outline

The course will follow the ordering of topics in the Pindyck & Rubinfeld textbook. My lecture slides will be an important supplement to the textbook, because I will develop the content somewhat differently and will emphasize some topics more than others in the course and on exams. Lecture slides will be posted on the course website prior to class. In weekly sections, additional technical details and problem-solving techniques will be developed; these sections are also an opportunity to address any individual questions you may have. Attending both lectures and sections will be important to your understanding of the material you will be expected to know on exams. You should also try to do some advance reading from the book both for the lectures and sections.

To help you plan your advance reading, I have provided an outline of the course topics and the dates they will be covered in class. The dates given below are approximate and subject to revision, but the order will mostly stay as stated below.

1. Overview of Microeconomics (September 6 and 8)
 - a. Main Themes: Scarcity, Choice, Markets, Trade-offs, Opportunity Costs, Equilibrium, Efficiency
 - b. Supply and Demand Curves, Elasticities, Shift Variables
 - c. Mathematics of Constrained Maximization, Economic Interpretation
Pindyck-Rubinfeld, Chapters 1, 2

2. Consumer Behavior
 - a. Ingredients: Preferences and Budget Constraints (September 13)
 - b. Utility Maximization and Individual Demand Functions (September 15, September 20)
 - c. Market Demand Functions, Empirical Estimation (September 22)
 - d. Applying the Theory: Consumer Surplus and Dead-Weight Loss (September 27)
 - e. Applying the Theory: Cost-of-Living Indexes, Effects of Taxes (September 29)
 - f. Choice Under Uncertainty: Basic Theory (October 4)
 - g. Choice Under Uncertainty: Testing and Applying the Theory (October 11)
Pindyck-Rubinfeld, Chapters 3-5 including the appendix to Chapter 4

3. Production, Costs, and Supply
 - a. Production Functions, Returns to Scale (October 13, October 18)
 - b. Cost Functions: Input Demands and Substitution (October 20, 25)
 - c. Cost Functions: Long- and Short-Run Cost Curves and Supply Surves (October 27)
Pindyck-Rubinfeld, Chapters 6-8 including appendix to Chapter 7

4. Markets: Characterizing and Evaluating Equilibria

- a. Perfect Competition: Efficiency, Dead-Weight Losses of Distortions (November 1)
 - b. Monopoly and Price Discrimination (November 3, November 8)
 - c. Oligopoly and Game Theory (November 15, November 17)
 - d. Applications: Labor and Capital Markets (November 22)
 - e. General Equilibrium of Multiple Markets, Economic Efficiency (November 29)
 - f. Other Institutions of Transactions: Auctions, Implicit Contracts (December 1)
- Pindyck-Rubinfeld, Chapters 9-16

5. Asymmetric Information

- a. Adverse Selection, Insurance, Signaling, Screening (December 6)
 - b. Moral Hazard, Incentives and Organization Within Firms (December 8)
- Pindyck-Rubinfeld, Chapter 17

6. Externalities and Public Goods

- a. Spillovers and Market Failures, Governmental and Market Solutions (December 13)
 - b. Collective-Action Problems and Their Solutions (December 15)
- Pindyck-Rubinfeld, Chapter 18

Misconduct Statement

Academic Integrity is critical to maintaining fair and knowledge-based learning at UW-Madison. Academic dishonesty is a serious violation: it undermines the bonds of trust and honesty between members of our academic community, degrades the value of your degree, and defrauds those who may eventually depend upon your knowledge and integrity.

Examples of academic misconduct include, but are not limited to: cheating on an examination (copying from another student's paper, referring to materials on the exam other than those explicitly permitted, continuing to work on an exam after the time has expired, turning in an exam for regrading after making changes to the exam), copying the homework of someone else, submitting for credit work done by someone else, stealing examinations or course materials, tampering with the grade records or with another student's work, or knowingly and intentionally assisting another student in any of the above. Students are reminded that online sources, including anonymous or unattributed ones like Wikipedia, still need to be cited like any other source; and copying from any source without attribution is considered plagiarism.

The Dept. of Economics will deal with these offenses harshly following UWS14 procedures (<http://students.wisc.edu/saja/misconduct/UWS14.html>):

1. The penalty for misconduct in most cases will be removal from the course and a failing grade,
2. The department will inform the Dean of Students as required and additional sanctions may be applied.
3. The department will keep an internal record of misconduct incidents. This information will be made available to teaching faculty writing recommendation letters and to admission offices of the School of Business and Engineering.

If you think you see incidents of misconduct, you should tell your instructor about them, in which case they will take appropriate action and protect your identity. You could also choose to contact our administrator (Mary Beth Ellis: mellis@ssc.wisc.edu) and your identity will be kept confidential.

Grievance Procedure

The Department of Economics has developed a grievance procedure through which you may register comments or complaints about a course, an instructor, or a teaching assistant. The Department continues to provide a course evaluation each semester in every class. If you wish to make anonymous complaints to an instructor or teaching assistant, the appropriate vehicle is the course evaluation. If you have a disagreement with an instructor or a teaching assistant, we strongly encourage you to try to resolve the dispute with him or her directly. The grievance procedure is designed for situations where neither of these channels is appropriate.

If you wish to file a grievance, you should go to room 7238 Social Science and request a Course Comment Sheet. When completing the comment sheet, you will need to provide a detailed statement that describes what aspects of the course you find unsatisfactory. You will need to sign the sheet and provide your student identification number, your address, and a phone where you can be reached. The Department plans to investigate comments fully and will respond in writing to complaints.

Your name, address, phone number, and student ID number will not be revealed to the instructor or teaching assistant involved and will be treated as confidential. The Department needs this information, because it may become necessary for a commenting student to have a meeting with the department chair or a nominee to gather additional information. A name and address are necessary for providing a written response.