

# ECONOMICS 303 INTERMEDIATE MICROECONOMICS

Spring '06

Ec303 10276-003 TTh 09.15-10.30am E416  
Ec303 10277-004 TTh 01.40-2.55pm MP203  
Ec311 11836-001 TTh 10.40-11.55am E416

**Reynolds**

**B-311-D, 426.1469**

**Office hours:**

08.00 – 09.00am TWTh,

01.30-2.30pm MW

Other hours by appointment or chance (I am in class from 9.15am – 2.55pm TTh.)

**Normally, the class would be computer based with multimedia materials, however the administration has chosen to provide us with a room that makes it difficult to use those materials in class. The materials on the Internet are available for your use. See (<http://www.boisestate.edu/econ/lreynol/web> )**

**TEXT:**

**Materials provided at**

<http://www.boisestate.edu/econ/lreynol/web>

**Text – Salvatore, Dominick. Theory and Problems of Microeconomic Theory, Third Edition, Schaum's Outline Series, McGraw-Hill.** This book is an outline of basic economic theory and should be thought of as a reference for the course. It is recommended that you also pick up an Intermediate Microeconomics text. Nearly all Microeconomics texts contain the same material with little variation, so any will do. Salvatore provides the "barebones" of theory with solved problems. Micro texts have examples and cases. What these texts do not provide is the philosophical and historical contexts for the theory. A Principles of Microeconomics course (EC202) is a prerequisite for EC303 (Intermediate Microeconomics). If you do not have a good grasp of the principles, you will need an old introductory microeconomics text to supplement the review materials available on the web: (<http://www.boisestate.edu/econ/lreynol/web> )

Knowledge is incomplete without philosophical foundations and a context. The primary purpose of this course is to provide historical and philosophical contexts to guide questions and analysis. The ability to apply the knowledge includes the ability deal with ambiguity, to ask relevant, important questions and to evaluate various tools used to solve problems and answer the relevant questions. It is also important that students be able to communicate ideas effectively. Four writing projects will be assigned.

Handouts will be used to structure the class. Handouts will be passed out during one class. If you are not there it is your responsibility to obtain a copy, I will not carry copies of the handouts around with me.

**OBJECTIVES:**

- (1) To familiarize students with the methodology and nomenclature used in the analysis of microeconomic problems.
- (2) To develop the basic concepts of microeconomic theory.
- (3) To enable the students to apply the theory and understand the limitations of the neoclassical paradigm.
- (4) To aid the students in the understanding their ideological perspective of economic relationships.
- (5) To emphasize the need to ask the "right" questions.
- (6) And, according to Joan Robinson;

*"The purpose of studying economics is not to acquire a set of ready made answers to economic questions, but to learn how to avoid being deceived by economists."*

Knowledge of economics requires

- Awareness of the philosophical foundations to understand the nature of the problems it addresses, the perspective it takes and the questions it purports to answer.
- An understanding of the historical events that framed the theories. A historical context is necessary to understand the reasons why a discipline developed and its biases. It provides insights as to how the discipline might be altered or its focus shifted as conditions evolve.
- A theory or set of theories to guide the questions and analysis.
- An ability to apply the theories to relevant problems.
- A willingness and ability to critically evaluate the tools of a discipline and to evaluate how a discipline may alter one's perception of problems and solutions.

The College catalogue (BSU Undergraduate Catalogue 2001-2002, p 96) has a statement that courses numbered 300 and higher are upper division and students are *"expected to communicate clearly and correctly so that assignments such as term papers and presentations can be completed effectively, to organize and solve problems using the techniques of intermediate high school algebra, to use a microcomputer for simple word processing and spreadsheet applications."* Further, lower division courses, Math 160 or Math 170/171, are in the core requirements for the undergraduate core for COBE. Basic skills in mathematics are necessary to understand microeconomics.

## GRADES:

Grades will be based on 4 writing assignments, 7 of 8 quizzes, a midterm (9 March) and a final (8-10 and 1-3 11 May). A scheduled comprehensive make-up exam will be given (27 April). There are no extra credit projects.

## Weights:

Quizzes (highest 7 of 8)	30%
Exam (midterm)	30%
Final (comprehensive)	30%
Written assignments	10%
Participation	±5% (this will be used only when students are exceptional)

## Dates:

Midterm exam	9 March
Makeup	27 April
Final	11 May

**NOTE:** The instructor reserves the right to adjust scores based on participation. This means that if you are close to the next higher grade, have been actively involved in your education, asked questions and made positive contributions to the class, your participation will be used to justify the higher grade. Participation includes

- Attending class regularly
- Reading the material identified on the course outline
- Asking relevant questions
- Making relevant observations about material

## The grading scale is:

- 90% - 100% = A
- 80% - 89% = B
- 64% - 79% = C
- 55% - 63% = D

It is relatively easy to earn a passing grade. The grade of "A" is for exceptional performance in the class. The grade of "B" represents "above average" performance. The grade for average performance is "C."

It is assumed that you will read the book and ask questions (in class or during office hours) regarding the material. It is the responsibility of the instructor to "summarize" the material, answer students' questions, add ideas and concepts not in the text and

to ask students questions to encourage independent thought on economic issues. There are "problems and questions" with each chapter. If you cannot answer these questions, you should ask them in class.

Attached is an outline. There are no dates on the outline; we will begin with Item 1 and progress as rapidly as we can. You will be held responsible for the material discussed in class as well as the material on the outline. It is the student's responsibility to read the outline and the related material in the text. It is also the responsibility of the student to ask questions about ideas that they do not understand.

Participation in a community requires that everyone [student and instructor] be treated with respect. While all ideas are not of equal value [some ideas are "better" than others], it is necessary to treat each person and their ideas with respect. In this manner, it is possible to explore the reasons why some ideas are "better" than others. One of the functions of the educational process is to make the participants uncomfortable with what they think they know. This process encourages an individual to seriously investigate what they believe, the reasons for the belief and to consider alternatives. They may or may not conclude that what they originally believed should be retained. Training is the process of instructing a student in what to think and how to do specific tasks. This course is not training.

This investigation and open, competitive discussion are necessary to facilitate a process in which the "best" ideas can emerge. The competitive atmosphere for ideas must be structured so that each idea can be accepted or rejected on its merits. No ideas should be accepted or rejected only because its proponents or detractors are "rude."

In any community, there must be some standard of acceptable behavior. Common courtesy among the members of any community is required. If you were talking to me, it would be common courtesy for me to excuse myself before turning and walking away or starting a conversation with someone else. The way in which we treat one another not only makes the class a more pleasant experience, but it also affects the nature of the learning experience.

### **Student Responsibilities**

Students will be expected to follow the provisions of the student policies and procedures of the Student Handbook.

Students are required to attend class and participate in class discussions. Participation includes attending class, asking questions, answering questions, engaging in discussions and offering information relevant to the course. Students missing more than 7 classes ( 7 of 46 is over 15% or the class days) may be assigned a grade of F. The final grade may be reduced by one letter if 5 or more classes are missed.

# COURSE OUTLINE

## I. INTRODUCTION TO MICROECONOMIC THEORY

- A.
- B. Fundamental Questions of Economics
  - 1. Production and allocation questions
  - 2. The “Big Question” “How can they autonomy of the individual be protected and coordinated with the commonweal?”
- C. Positive and Normative Issues in Economics  
(Real and Nominal Prices and Price indices will be covered in the section on Indifference curves.)
- D. Assumptions about the market
  - 1. Voluntary Transactions
  - 2. Nonattenuated Property rights
- E. Scarcity, Opportunity Cost, Marginal Cost
  - 1. implicit cost
  - 2. explicit cost
  - 3. Sunk cost
- F. Production Possibilities Frontier, Transformation Function and efficiency
  - 1. Technical efficiency
  - 2. Allocative Efficiency
  - 3. Pareto Efficiency and Benefit/cost Analysis
- G. Foundations Review
  - 1. Utilitarianism and Microeconomics
  - 2. The individual, society and the market
  - 3. Scarcity, opportunity cost and the transformation function (PPF)
  - 4. Price and Valuation
  - 5. Allocation and Rationing
  - 6. Information, risk and uncertainty
  - 7. Ethics and Efficiency
  - 8. Ends and Means
  - 9. Economic Systems
  - 10. Allocative mechanisms
    - a) Reciprocity
    - b) Command or Eminent Domain
    - c) Philanthropy
    - d) exchange

## II. MECHANICAL ANALYSIS OF MARKET TRANSACTIONS

Salvatore, Chapter 2, 3

- A. Demand Functions
  - 1. Nature of demand (Two perspectives)
    - a)  $Q_d = f(P_x, P_y, \text{Income, Preferences, Population, } \dots)$
    - b) Price as a reservation price [  $P = f(Q)$  ]
  - 2. Change in demand and change in quantity demanded
  - 3. Individual and Market Demand functions (Browning, Chapter 4)
    - a) Indifference curves
    - b) Income and Substitution effects
  - 4. Demand for a product
- B. Supply Functions
  - 1. Nature of Supply function
    - a)  $Q = f(P_x, \text{price of inputs, technology, \#sellers, } \dots)$
    - b) Price as a reservation price [  $P = f(Q)$  ]
  - 2. Changes in supply and change in quantity supplied
- C. Market and Equilibrium
- D. Elasticity as a tool
  - 1. “own” Price Elasticity of Demand
  - 2. Cross Elasticity

3. Income Elasticity
4. Other Uses of Elasticity

### III. MARKETS AND SOCIAL WELFARE

- A. Objectives of An economic system
  1. Individual welfare
  2. The commonweal
  3. Ethics and the social process
    - a) Consequentialist ethics and Utilitarianism
    - b) Deontological ethics
- B. Pareto optimality and market exchange
  1. Voluntary exchange and utility maximization
  2. Non-attenuated Property rights
  3. Pareto Potential and Benefit/cost analysis
    - a) Production possibilities
    - b) Prices and values
    - c) Economics as a valuation process
- C. Constraints
  1. Production constraints and alternatives
  2. Social institutions

### IV. PRODUCTION

- A. Production Functions
  1. Long run production functions
  2. Short run production functions
  3. Technology
- B. Production Functions and the Transformation Function
  1. Isoquants
  2. Pareto Efficiency
  3. Returns to Scale
  4. Marginal Rate of Technical Substitution (MRTS)
  5. Marginal Rate of Transformation (MRT)
  6. Empirical evidence on production functions.
  7. Long run
- C. Short Run Production
  1. TP, AP, MP
  2. Graphical Presentation of Short run Production
  3. Diminishing Marginal Productivity

### V. PRODUCTION AND COST

- A. Nature of Cost
- B. Relation of Production and Cost Functions
- C. Short Run Cost Functions
  1. Total, Total variable, and Fixed Costs
  2. Average Costs (ATC or AC, AVC, AFC,)
  3. Marginal Cost (MC) *Know the relationship of the MRT and MC.*
  4. Graphical presentation of Cost Functions (and relation to production)
- D. Long run Cost functions
  1. Isocost functions
  2. Isoquants
  3. Least Cost input combinations
  4. Expansion Path and ridge lines
  5. Envelope Curve
  6. Economies of size or scope

### VI. REVENUE OF THE FIRM

- A. Demand for Firm's Product
- B. Demand and Revenue
  1. TR, AR and MR
  2. Elasticity and Revenue

### VII. OBJECTIVES AND FIRM BEHAVIOR

- A. Profit maximization
  - 1. Short Run –  $MR = MC$
  - 2. Shutdown conditions
  - 3. Pure Competition and Profit max in the short run
  - 4. Pure Competition and profit max in the long run
  - 5. Efficiency and profits in pure competition
- B. The supply function In pure competition
  - 1. Returns to scale and the supply function
  - 2. Shifts in supply
- C. Pure competition and social welfare (Browning, Chapter 9)
  - 1. Consumer surplus
  - 2. Producer surplus
  - 3. Dead Weight loss
- D. Sales Maximization, market share and other objectives
- E. Monopoly
  - 1. Demand, AR and MR
  - 2. MC and profit maximization
  - 3. Measurement
  - 4. source of market power and natural monopoly
  - 5. Monopoly and social welfare
  - 6. Monopoly pricing strategies
    - a) Price discrimination (Browning, Chapter 12)
    - b) Peak load pricing
- F. oligopoly and imperfect Competition (Browning, Chapter 13)
  - 1. Monopolistic competition
  - 2. Efficiency and imperfect competition
  - 3. Oligopoly and interdependence
    - a) Cournot
    - b) Other models
    - c) Game theory

### **VIII. FACTOR MARKETS**

- A. Demand for inputs and VMP or MRP
- B. Supply of inputs
- C. Wages and Labour
- D. Interest and Kapital
- E. Rent and land
- F. Normal Profits

### **IX. GENERAL EQUILIBRIUM – SOCIAL WELFARE AND THE MARKET**

- A. Partial and General Equilibrium
- B. "efficiency" (again)
  - 1. Technical Efficiency
  - 2. Economic or Allocative Efficiency
  - 3. Pareto Efficiency and Pareto Potential
- C. Conditions for General Equilibrium
  - 1. Production
  - 2. Consumption
  - 3. Markets and Prices
- D. Property Rights failures (Browning, Chapter 20)
  - 1. Externalities
  - 2. Collective or Public Goods
  - 3. Common Property Resources

### **X. GAME THEORY AND STRATEGY**

- A. Prisoners Dilemma
- B. John Nash and "*A Beautiful Mind*"