

# ECONOMICS 303 INTERMEDIATE MICROECONOMICS

Fall '05

Reynolds

10.40 am – 11.55 am

Reynolds

B-311-D, 426.1469

Office hours:

08.00 – 09.00 am TWTH, 01.30-2.30 pm TWTH and by appointment or chance (I am in class from 9.00 am – 11.55 TTH.)

**TEXT:**

**Materials provided at**

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

**Optional text - Frank , Robert, Microeconomics and Behavior, McGraw Hill,**

**2006,, 2002.** No textbook is perfect. Frank has the basic theory in a reasonably friendly format. The applications are often a stretch and rarely incorrect. We will not focus on the applications in the Frank text unless students ask questions. One of the things, not in the book, that will be important in this course is the historical and philosophical context of economic theory. Most microeconomic texts do not include this material. Knowledge is incomplete without philosophical foundations and a context; a theory to guide the questions and analysis; and an understanding of the historical events that formed the theories. The ability to apply the knowledge includes the ability deal with ambiguity, to ask relevant important questions and to evaluate various tools to solve problems and answer the relevant questions.

The topics, structure and terminology are relatively standardized, so any intermediate text will provide the same basic information. If you use another text, you will need to use the course outline and look up the topics in whatever book you use. 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> )

**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 3 of 4 midterm exams and a final. . You must take the final exam. A scheduled make-up exam will be given (1 December 05). The exam with the lowest score on the first four exams will be dropped. (There are no extra credit projects).

## Weights:

Exams (3 of 4 total)	67%
Final (comprehensive)	33%
Participation	±5% (this will be used only when students are exceptional)

## Dates:

20 September 05 (Tues)

18 October 05 (Tues)

15 November 05 (Tues)

1 December 05 (Thursday) Make-up exam

Comprehensive final will be on Tuesday, 13 December 05, 10.30am – 12.30pm.

**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.

### **Proposed Classroom Conduct and Expectations**

(Excerpted from the 1998-1999 College of Charleston *Student Handbook* with additional modifications. Proposed for adoption by the BSU College of Business & Economics as a guideline.

While there are many informal situations in which people have neither the desire nor the right to prescribe how others ought to behave, a college classroom requires a higher level of courtesy than many people exercise in ordinary public space. Everyone in a classroom is there for the purpose of learning, and no one should be able to deprive another person of the chance to learn. Expressions of rudeness and even of carelessness degrade the high purpose of learning that should be paramount in a college classroom. Your professor expects that you as a student:

- Will be attentive and courteous during class.
- Will complete the assigned work according to the course schedule, and
- Will do all your own work and will not present anyone else's work as your own (this is also covered by the BSU Code of Conduct).

Some more specific principles of civil conduct in a college classroom:

- Do not cut classes, come in late or leave early. If you ever are late for class, enter in complete silence and do not walk between the class and the professor. Never leave during class unless you absolutely must. Leaving for a short break and then returning is not acceptable. The professor is not a TV set, but a person addressing the class, and it is rude to leave when someone is addressing you.
- Likewise, it is rude and inappropriate to talk with classmates while the professor (or another student who has the floor) is talking.
- It is also entirely unacceptable to use a cell phone during class. Cell phones, pagers and similar electronic devices should be **turned off** prior to the beginning of a class period and

**left off** until after the professor has dismissed the class. To request an exception to this policy on a specific occasion, see the instructor before class begins.

- Visible and noisy signs of restlessness are rude as well as disruptive to others. If you cannot sit still or stay awake, you should not be taking a college class. Do not begin packing your book bag or otherwise indicate that *you* think it is time for class to come to an end; wait for the professor to dismiss class. If this class period has ended but the professor has not finished and you cannot stay any longer, leave in complete silence,
- Come to class *prepared* to work. Bring writing materials and any other necessary instructional material with you, such as your textbook, workbook, computer disks, etc. Make necessary financial arrangements so that you can purchase all such material at the beginning of the semester. It is a waste of money to pay for a class and then not buy the books you will be reading. Your professor expects you to obtain all necessary material in order to succeed in the course. Your professor also expects you to prepare for class by completing reading and homework assignments. If you are unprepared for class, this may prevent you from participating in a class activity. *Do not present your lack of preparation as a problem for the professor to solve or excuse.*
- Submit work and take tests on schedule. Professors aim to evaluate all students in a course under the same standards. If you miss a test or fail to turn in work on time, you may not have the opportunity to make it up, because that might give you an advantage not available to the entire class.
- While in class, students are expected to participate actively in discussion, or other activity at hand. Avoid such unrelated activities as reading newspapers, magazines, or unrelated books, doing homework assignments for this or other classes, balancing checkbooks, sleeping, etc.
- Computers in classrooms are provided for class purposes only. Classroom computers are to be used only when and as directed by the professor—not for general web browsing, etc. Never make any unauthorized changes to any classroom computer or network; such as installing software or creating macros other than as assigned.

If you bring your own laptop computer to class, do not use the computer in class without prior approval by the professor for class purposes.

# COURSE OUTLINE

## I. INTRODUCTION TO MICROECONOMIC THEORY

- A. Scope and Philosophical foundations of microeconomics
- 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. SIMPLISTIC VIEWS OF THE MARKET

- 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*"