# ECO 3101 Intermediate Microeconomics FALL 2010 TR 4:05 - 6:00 PM Stuzin 0103 (STZ 0103)

Instructor: Edward C. See
Office: Matherly Hall 321 (MAT 321)
Phone: (352) 392-1328
Office Hours: TR 2:00-3:30 and by appointment only.
e-mail: bossed007@ufl.edu

### **Course Description**

This course covers the standard theory in Microeconomics at an intermediate level. We study consumer behavior, firm behavior, and the market structures. This course should serve as a baseline for more advanced studies in economics. In addition to learning the models we analyze, the course should help you develop your skills in doing economic analysis. While we will cover "standard theory," this includes recent developments in economic analysis, especially with respect to the use of game theory in economic analysis. There will be some overlap with your economic principles courses, but I'll teach the material at a higher level, and we will cover additional topics.

### Textbook

Nicholson, W. and Snyder, C., *Intermediate Microeconomics and Its Applications*, 11<sup>th</sup> edition, South-Western Cengage Learning, 2010.

#### **Reading Materials and Course Information**

Relevant chapters in the textbook are shown in the course outline below. Classes will be a combination of lectures and discussions. With that, you are recommended to read the assigned book chapters before coming to class. In some topics, I will use some course notes outside the prescribed textbook. Please come to class prepared. If you are having problems understanding some of the concepts, I encourage you to make use of my office hours. You have to make an appointment at least a day before of your planned visit (I prefer that you use e-mail).

### Exams

There will be 2 midterm exams (**Thursday September 23** and **Thursday October 28**) and a final exam (**Tuesday December 7**). Each exam, including the final, will allow up to 115 minutes to answer a combination of multiple choice and problem solving questions. All exams are closed book. You are allowed to use non-programmable calculator. The use of programmable calculator, PDA, cellular phone etc. will result to a 15 point penalty. The same penalty applies if a cell phone or text messenger rings. The coverage of each exam is given below. Note that some topics will make use of additional notes which may also be included in the exams.

$\mathbf{Exam}$	Date	Coverage
${\rm Midterm}\ 1$	Thursday Sep 23	Chapters 2 and 3
${\rm Midterm}\ 2$	Thursday Oct 28	Chapters 6, 7, 8, and 9
Final Exam	Tuesday Dec 7	Chapters $11, 12, and 5$

# Problem Sets

I believe that understanding the problems and concepts is crucial to success in this course. To maximize learning potential and success in this course, there will be 3 problem sets assigned to you for work and practice. These problem sets will be given at least 2 weeks before the due date. For greater learning opportunities, you can work in groups although you have to write and turn in the final answers individually. The 3 problem sets are due on **Thursday September 16**, **Thursday October 21**, and **Thursday December 2**. You

are required to turn in each of the assigned problem sets at the beginning of the class on each due date. There will be a 15 point penalty for late submissions.

### Grading

The 3 problem sets, 2 midterm exams, and the final exam count toward your grade as follows:

Problem Set	15%
Midterm	55% (Exam 1 - 25%; Exam 2 - 30%)
Final	30%

### Grading Scale

The grading scale is given below.

Letter Grade	Grade
А	90 and above
$A^-$	87 - 89.99
$\mathrm{B}^+$	84 - 86.99
В	70 - 83.99
$B^{-}$	77 - 79.99
$\mathrm{C}^+$	74 - 76.99
$\mathbf{C}$	70 - 73.99
$\mathrm{C}^{-}$	67 - 69.99
$\mathrm{D}^+$	64 - 66.99
D	60 - 63.99
$\mathrm{D}^{-}$	57 - 59.99
$\mathbf{E}$	below 57

There are no exceptions to this scale. For instance, if you finish this course with a grade of 79.99, you will receive a  $B^-$ . The grade you receive is a product of many factors: learning, skills, and some random element. Sure you have the skills and learned the material in class. But there are also some random element that cannot be avoided. You guessed answers in some questions. You are sick the day before the test which diminished your capacity to review the material for the test. The topics you studied most did not appear on the test material. You are great at problem solving type of questions but not on multiple choice.

I cannot eliminate the random element but I have devised ways to mitigate its effect:

- 1. I give 3 tests, 2 midterms and a final which are non-cumulative.
- 2. I give problem sets which may be worked out in groups that count heavily in grade computation.
- 3. I will write tests which are combination of multiple choice and problem solving questions.
- 4. I will write the tests such that they cover the course material closely evenly.

### Make-up Exam Policy

If you miss an exam due to health or some other reason, I allow you to take special make-up exam which we have to arrange. The make-up test may be a different format or be more comprehensive. To be fair with students who took the test on time, there is a 10 points penalty on make-up exams, regardless of the reason.

### Prerequisite

The course catalog stated prerequisite for this course are Principles of Microeconomics (ECO 2023) and Calculus (MAC 2233) or Principles of Food and Resource Economics (AEB 3103). I will assume you know the materials from principles of economics. You are advised to review the principles materials if you feel rusty. I also assume that you possess good basic Algebra skills.

# Methodology in Intermediate Microeconomics

Intermediate Microeconomics involves a lot of analytical thinking. Measuring and solving problems using mathematics improve decision-making (and also elegant). Learning Intermediate Microeconomics with mathematics is the price we have to pay to solve economics problems systematically and logically. I have to emphasize that this is not a math course.

A cornerstone of Economics is the marginal analysis. We use marginal analysis to analyze optimization problems such as profit maximization. The mathematical counterpart of marginal analysis is Differential Calculus. In this course, you will have the opportunity to apply the basic Algebra and Differential Calculus you learned before with emphasis on interpretation rather than the technique. You will need to be able to work with such tools in order to be successful in this course. I will review and develop with you the Calculus used in this course. See me early if you have difficulty working with Calculus.

# **Course Outline and Reading**

1.	Math Review	My Notes
2.	Consumer Theory	Chapter 2
3.	Demand	Chapter 3
4.	Production	Chapter 6
5.	Costs	Chapter 7
6.	Profit Maximization and Supply	Chapter 8
7.	Analysis of Competitive Markets	Chapter 9
8.	Monopoly	Chapter 11
9.	Oligopoly	Chapter 12
10.	Game Theory	Chapter 5

A detailed course outline with book chapters, pages, topics, and dates is attached below. I emphasize that the calendar of topics below is tentative (I might get behind but will surely catchup). Exam dates, however, are not tentative.

# The Contract

We each have responsibilities in this course. I am responsible to deliver my best in teaching this course and for assessing your performance appropriately, consistently, and objectively. We are all responsible for maintaining proper classroom behavior. You are responsible for keeping up with the material. You are also responsible for seeking help if needed. Class attendance is required and you may not come to class late. You are responsible for any act of cheating. If such cheating occurs I am responsible to take appropriate actions prescribed by the Dean of Student Office. You are responsible for knowing and understanding all the rules of this course. I promise to keep my end of this agreement. I expect you to do the same.

#### Students with Disabilities

The University of Florida strives to provide reasonable accomodations for students with disabilities. Students with disabilities must provide me with documentations through the Dean of Student Office at the beginning of the semester.

Week	Date	Day	Chapter and Pages	Торіс
4	24-Aug	Т	Notes	Syllabus and Math Review
T	26-Aug	R	Notes	Math Review
2	31-Aug	Т	Ch 2: pp 53-67	Utility and Preferences; Indifference Curves
2	2-Sep	R	Ch 2: pp 67-80	Budget Constraint; Utility Maximization
2	7-Sep	Т	Ch 2: pp 71-80	Utility Maximization Continued
5	9-Sep	R	Ch 3: pp 87-99	Income and Substitution Effects
1	14-Sep	Т	Ch 3: pp 105-110	Individual Demand Curve and Consumer Surplus
4	16-Sep	R	Ch 3: pp 117-129	Elasticity
E	21-Sep	Т	Ch 6: pp 215-220	Production (1 variable input), MP, LDR, AP
5	23-Sep	R	Midterm Exam 1	Midterm Exam 1
6	28-Sep	Т	Ch 6: pp 220-233	Production (2 variable inputs): Isoquants, TRS, Returns to Scale
0	30-Sep	R	Ch 7: pp 243-250	Cost concepts, Cost-minimization
7	5-Oct	Т	Ch 7: pp 250-269	Cost Curves: TC, MC, AC, LR Cost Curves
/	7-Oct	R	Ch 8: pp 274-288	MR, MC, Profit Maximization
0	12-Oct	Т	Ch 8: pp 288-295	Profit Maximization continued
0	14-Oct	R	Ch 9: pp 303-316	Perfect Competition: Short Run
9	19-Oct	Т	Ch 9: pp 316-330	Perfect Competition: Long Run and CS
	21-Oct	R	Ch 9: pp 330-339	Perfect Competition: Applications
10	26-Oct	Т	Ch 11: pp 375-382	Monopoly: Overview and Profit Maximization
	28-Oct	R	Midterm Exam 2	Midterm Exam 2
11	2-Nov	Т	Ch 11: pp 382-388	Monopoly: Profit max cont'd; Social Cost of Monopoly
	4-Nov	R	Ch 11: pp 388-402	Moponopoly: Price Discrimination

Week	Date	Day	Chapter and Pages	Торіс
12	9-Nov	Т	Ch 12: pp 411-415	Oligopoly: Cournot Competition
	11-Nov	R	No Classes	No Classes: Veterans Day
12	16-Nov	Т	Ch 12: pp 433-436	Oligopoly: Stackelberg Model
13	18-Nov	R	Ch 12: pp 418-421	Oligopoloy: Bertrand Competition; Comparing Oligopoly Models
14	23-Nov	Т	Ch 5: pp 175-200	Game Theory: Overview; One-Shot Simultaneous Move Games
	25-Nov	R	No Classes	No Classes: Thanks Giving Day
15	30-Nov	Т	Ch 5: pp 200-204	Game Theory: Repeated Games
	2-Dec	R	Ch 5: pp 193-200	Game Theory: Sequential Games
16	7-Dec	Т	Final Exam	Final Exam