ECO 3101 Intermediate Microeconomics Section 4720 FALL 2011 MW 4:05 - 6:00 PM Matherly Hall 120 (MAT 120)

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Course Description

This course covers the standard theory in Microeconomics at an intermediate level. We study consumer behavior, firm behavior, and the market structure. 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 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*, 11th 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 send me an e-mail.).

Exams

There will be 2 midterm exams (Monday September 26 and Monday October 31) and a final exam (Wednesday December 7). Each exam, including the final, will allow up to 110 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 |
|--------------------|-----------------|--------------------------------|
| ${\rm Midterm}\ 1$ | Monday Sep 26 | Chapters 2 and 3 |
| ${\rm Midterm}\ 2$ | Monday Oct 31 | Chapters $6, 7, 8, and 9$ |
| Final Exam | Wednesday 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 Wednesday September 21, Wednesday October 26, and Monday December 5. You are required to turn in each of the assigned problem sets at the beginning of the class on each due date. I also provide you the rules pertaining to late problem set submissions (please see attached).

Grading

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

| Problem Set | 20% |
|-------------|----------------------------------|
| Midterm | 50% (Exam 1 - 20%; Exam 2 - 30%) |
| Final | 30% |

Grading Scale

The grading scale is given below.

| Letter Grade | Grade |
|------------------|--------------|
| А | 90 and above |
| A^- | 87 - 89.99 |
| B^+ | 84 - 86.99 |
| В | 80 - 83.99 |
| B^- | 77 - 79.99 |
| C^+ | 74 - 76.99 |
| \mathbf{C} | 70 - 73.99 |
| C^{-} | 67 - 69.99 |
| D^+ | 64 - 66.99 |
| D | 60 - 63.99 |
| D^{-} | 57 - 59.99 |
| 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 these random elements but I have devised ways to mitigate their effects:

- 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 concepts 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 differential calculus concepts used in this course. See me early if you have difficulty working with differential 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 |
|------|--------|-----|-------------------|--|
| 1 | 22-Aug | М | Notes | Syllabus and Math Review |
| 1 | 24-Aug | W | Notes | Math Review continued; Utility and Preferences |
| | | | | |
| 2 | 29-Aug | М | Ch 2: pp 53-67 | Utility and Preferences continued; Indifference Curves |
| | 31-Aug | W | Ch 2: pp 67-80 | Budget Constraint; Utility Maximization |
| | | | | |
| 3 | 5-Sep | М | No Classes | No Classes: Labor Day |
| 3 | 7-Sep | W | Ch 2: pp 71-80 | Utility Maximization Continued |
| | | | | |
| 3 | 12-Sep | М | Ch 3: pp 87-99 | Income and Substitution Effects |
| 5 | 14-Sep | W | Ch 3: pp 105-110 | Individual Demand Curve and Consumer Surplus |
| | | | | |
| 4 | 19-Sep | М | Ch 3: pp 117-129 | Elasticity |
| 4 | 21-Sep | W | Ch 6: pp 215-220 | Production (1 variable input), MP, LDR, AP |
| | | | | |
| 5 | 26-Sep | М | Midterm Exam 1 | Midterm Exam 1 |
| 5 | 28-Sep | W | Ch 6: pp 220-233 | Production (2 variable inputs): Isoquants, TRS, Returns to Scale |
| | | | | |
| 6 | 3-Oct | М | Ch 7: pp 243-250 | Cost concepts, Cost-minimization |
| O | 5-Oct | W | Ch 7: pp 250-269 | Cost Curves: TC, MC, AC, LR Cost Curves |
| | | | | |
| 7 | 10-Oct | М | Ch 8: pp 274-288 | MR, MC, Profit Maximization |
| / | 12-Oct | W | Ch 8: pp 288-295 | Profit Maximization continued |
| | | | | |
| 0 | 17-Oct | М | Ch 9: pp 303-316 | Perfect Competition: Short Run |
| 8 | 19-Oct | W | Ch 9: pp 316-330 | Perfect Competition: Long Run and CS |
| | | | | |
| 9 | 24-Oct | М | Ch 9: pp 330-339 | Perfect Competition: Applications |
| | 26-Oct | W | Ch 11: pp 375-382 | Monopoly: Overview and Profit Maximization |
| | | | | |
| 10 | 31-Oct | М | Midterm Exam 2 | Midterm Exam 2 |
| 10 | 2-Nov | W | Ch 11: pp 382-388 | Monopoly: Profit max cont'd; Social Cost of Monopoly |

| Week | Date | Day | Chapter and Pages | Торіс |
|------|--------|-----|-------------------|--|
| | 7-Nov | М | Ch 11: pp 388-402 | Moponopoly: Price Discrimination |
| 11 | 9-Nov | W | Ch 12: pp 411-415 | Oligopoly: Cournot Competion |
| | | | | |
| 42 | 14-Nov | М | Ch 12: pp 433-436 | Oligopoly: Stackelberg Model |
| 12 | 16-Nov | W | Ch 12: pp 418-421 | Oligopoloy: Bertrand Competition; Comparing Oligopoly Models |
| | | | | |
| 12 | 21-Nov | Μ | No Classes | No Classes: Prof. See is away (conference). |
| 13 | 23-Nov | W | Ch 5: pp 175-200 | Game Theory: Overview; One-Shot Simultaneous Move Games |
| | | | | |
| | 28-Nov | М | Ch 5: pp 175-200 | Game Theory: One-Shot Simultaneous Move Games continued |
| 14 | 30-Nov | W | Ch 5: pp 200-204 | Game Theory: Repeated Games |
| | | | | |
| 45 | 5-Dec | М | Ch 5: pp 193-200 | Game Theory: Sequential Games |
| 15 | 7-Dec | W | Final Exam | Final Exam |

Problem Set Rules:

I have made these rules to protect and to be fair to those students who will turn in their problem sets on time. After reading these rules, I hope you will understand why I have set these rules.

Rules:

- 1. The answer key will be on "selective release" in Sakai. Those students who already turned in their problem sets will get to view the answer key. This is to be fair for those who turned in their problem sets on time. Of course, those who didn't turn in their problem sets will not be able to view and download the answer key in Sakai.
- 2. If you turn in your problem set late, there is an automatic 20 points deduction. The advantage of doing this is you will be able to view and download the answer key in Sakai. (see #4 on how to turn in your problem set after the deadline).
- 3. If you want to view the answer key (because you want to prepare for the test) and you have not turned in your problem set, you have to make a request by sending me an email to <u>bossed007@ufl.edu</u> and I will release the answer key to you (in Sakai). However, there will be an automatic 40 points deduction on top of the 20 points penalty when you turn in your problem sets after the answer key is released to you (this is again to be fair for those who turn in their problem sets on time). Of course you will not get any points (or deductions) if you decided not to turn in your problem set answers. I hope you understand why I do this.
- 4. Since there is no guarantee that I will be in my office on Thursdays and Fridays (and definitely I will not be around during the weekend) to get your problem sets, you can turn in your problem sets in one of the following ways:
 - a. Typeset your answers in (MS Word, PDF, etc) and send it to my email address above.
 - b. Scan your hand written answers and send it in PDF to my email address above. Make sure your answers are readable. Otherwise, I will have to mark them wrong.