ECON 302: Intermediate Microeconomic Theory
Fall 2010

Professor: Karim Seghir
Office: 1020
Office hours: M&R from 10.00AM to 11.00AM, or by appointment.
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Phone: 3187
Class Location: C109 BEC.
Meeting Times: M&R from 11.30PM to 12.45PM.
Teaching assistant: Sarah El Sheikh
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Prerequisites:
ECON 202, Econ 216 and Econ 316. Upon the approval of the instructor, a student may take Econ 316 concurrently.

1. Course description and objectives:
This course is concerned with the behavior of individual economic agents and their interactions. It studies how individual economic agents make decisions and how markets function. The course is roughly composed of four parts. Part 1 introduces the basics of microeconomic analysis. It also serves as a quick review of some basic economic concepts as covered in Econ 202. Part 2 studies consumer behavior and market demand. We will show how a consumer may make optimal choices, how individual demands are formed, and how market demand can be derived. Part 3 discusses the firm's technologies, production functions and production costs. We shall see how firms can make the optimal input choices to minimize production costs. This lays the foundation for the study of behavior of firms under different forms of market structure. Part 4 integrates the previous material into models of prices and outputs under different market structures. Topics in game theory, general equilibrium theory and business strategies will be covered. Economic efficiency and public policy issues will also be discussed. The course will end with an analysis of decision making under uncertainty.

2. Course learning outcomes: After completion of this course, students should:
   - Demonstrate a command of the theory of rational choice and be able to apply it to questions of: consumer demand; labor supply; saving behavior; producer demand for factors of production; producer supply of goods.
   - Be able to describe the factors that influence demand and supply and how changes in these factors influence the levels of output, employment and prices.
• Be able to explain the theory of consumer behavior with its components of marginal utility, the law of diminishing marginal utility, and utility maximization.
• Be adept at analyzing questions of rational choice using the Lagrange technique of constrained optimization they first met in Econ 316.
• Demonstrate a command of the role of risk and uncertainty and the impact of information and insurance on both in the marketplace.

3. **Recommended textbooks:**

The required textbook is:

The following textbook is recommended for this course:

4. **Class material on Blackboard:**

• This course is Blackboard supported. I will communicate all essential information through Blackboard. It is your responsibility to maintain a valid Blackboard account and to keep yourself up-to-date regarding the information we communicate through Blackboard. *I recommend you to log on to Blackboard at least once a day!*
• On Blackboard you will find essential lecture material, problem sets, practice questions, and useful communication tools such as email and a discussion board.
• On Blackboard, you’ll also find an information sheet (word file). To help me recognize you and remember your name, it would be good if you fill in the word form and hand it in the first week of the semester (with a recent picture of yours attached with the form).
• To access Blackboard, open your browser and type: [http://blackboard.aucegypt.edu/webct/entryPageIns.dowebct](http://blackboard.aucegypt.edu/webct/entryPageIns.dowebct). Your username is your AUC student ID and your password is also your AUC student ID, but you’ll be asked to change it.

5. **Grading policy and important dates:**

There will be 2 quizzes, a term paper and a comprehensive Final Exam. Each quiz is worth 20% of your overall grade and the Final exam is worth 30% of your grade. The term paper (see Section 6 below for more details) is worth 20% of your grade. Attendance-Assignment-Participation is worth 10% of your grade. If the final class average is below 75, I will give a raise. Whether you qualify for the raise depends on your overall performance, attendance, academic integrity, and classroom behavior. We will decide on the exact procedure of raises at the end of the semester. The grading policy and exam dates are given by the following table:

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<tr>
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<tr>
<td>QUIZ 1</td>
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<td>Monday, October 18th @ 11.30am</td>
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<td>QUIZ 2</td>
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<td>Monday, November 22nd @ 11.30am</td>
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<td>FINAL EXAM (Comprehensive)</td>
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<td>Term Paper</td>
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<td>Due on Monday, December 13th</td>
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<td>Attendance-Assignment-Participation</td>
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6. **Term paper:**

You are required to write a short paper, about 6-8 pages (typed, double-spaced). The purpose of this paper is to apply the theory and concepts of microeconomics to analyzing a practical economic problem. This exercise will help you understand and apply the concepts that we will be discussing in class (and those covered in Econ 202). You should, of course, try to pick a topic that you are, or think you’ll be, interested in. While I do not expect your research to be exhaustive, you should read a variety of articles from newspapers, magazines, academic journals, and government and research agencies about your topic.

You must meet with me to discuss your topic and have the topic *approved* no later than **Thursday, November 5th**. You are encouraged to discuss the paper topic with other students in the class. You must, however, compose your paper independently. **The paper is due on Sunday, December 13th.**

Here are some options/ideas that may help to choose your topic and write the guidelines.

**Option 1:** You may choose a MARKET (in Egypt of course) and write a case study on it. If you choose such an option, you should include in your discussion recent developments in the market, the market structure (demand and supply and the factor that affect them) and nature of competition in the market, public policy issues relating to this market. You are also encouraged to discuss any other issues that you find interesting. You might pursue questions such as, where is the product made, by what kind of workers, how large are barriers to entry, how rapid is technological change, what kind of government interventions are there in this market… In choosing your market, you have a great deal of latitude. Assigning one topic/market would be very constraining for the students. This degree of freedom in choosing your topic is to urge students to be *creative*. You can, but you are not obliged to, choose a product market (automobiles, mobile phones, cigarettes…) or a sub-market (SUVs, hybrid cars).

**Option 2:** You may also pick a market relating to an existing or a project-business on the new campus. You would need to identify a product (food, beverages, for instance) or two (or more) stores (Cilantro, Marcato Italiano, Tabasco, for instance) and discuss demand and cost conditions, price information etc…

**Option 3:** You may also identify a product (not offered yet on the new campus), analyze demand and cost conditions and argue why this is a promising product to be offered on the new campus. If you choose this topic/option, it is strongly recommended to make surveys for AUCians (students, stuff and faculty) and include your finding in the paper. I definitely think that this is an exciting topic in our first semester on the new campus. This may be a project/business that AUC administration may consider, who knows! Creative ideas and effective surveys will be highly appreciated.

This list of options is not exhaustive. You may have an idea which is not in this list.

Note that good writing requires care in *organizing your ideas* and a *willingness to revise several drafts of any essay*. Try to be as *clear* and *straightforward* as possible.
7. **Plagiarism:** The term paper will be submitted through www.turnitin.com (plagiarism detection program). Plagiarism is simply the use of others’ words and/or ideas without clearly acknowledging their source. Students who plagiarize will receive an F in the course, and will be reported to the Academic Integrity Committee. Full acknowledgement for all information obtained from sources outside the classroom must be clearly stated in all written work submitted. All ideas, arguments, and direct phrasings taken from someone else's work must be identified and properly footnoted. Quotations from other sources must be clearly marked as distinct from the student's own work.

8. **Problem sets:** Problem sets will be available on Blackboard. *No late submission will be accepted.*

9. **Class expectations and policies:**

   - Students are expected to be **punctual** in coming to class. A student who is often late may be not allowed to attend the lecture.
   - Missing an exam is serious and will be handled on a case-by-case basis. If you miss an exam, you must inform me in advance, or immediately afterwards, to avoid receiving a failing grade. Written documentation is required but not necessarily sufficient. All medical documentation must be issued or confirmed by the AUC infirmary.
   - The material presented in class will complement, not substitute, for the material covered in the assigned readings. Appendices, boxes, and exercises are part of the assigned readings. We also encourage you to make use of the internet resources that come with your textbook. There you will find, for example, additional quizzes.
   - If you enter the classroom after class has started, please take your seat as quickly and quietly as possible. We reserve the right to deny you access to the classroom if we feel it may disturb the class. **Three occasions of tardiness count as one absence.**
   - **You are urged to express your views, ask questions freely, and discuss the points you don’t understand or don’t agree.**
   - **Office hours are an excellent venue for asking questions and assessing your progress. If you fail an exam, pass by and see your instructors as soon as possible so that they can advice you appropriately.**
   - I expect every student to maintain a high standard of academic integrity and to be familiar with the policies and principles of student conduct. I have zero-tolerance for violations of academic integrity. Please, visit the following AUC page for more information on types of violations and recommended punishments: http://www.aucegypt.edu/resources/acadintegrity/Disciplinaryprocedures/Typesofviolations.html

10. **List of topics:**

    **Introduction.**

    - The economic problem, the economic science, Microeconomics Vs. Macroeconomics, partial Vs. general equilibrium analyses.

    **The Theory of the Consumer.**

    - Preferences, assumptions on preferences, utility functions, indifference curves, marginal utilities, marginal rate of substitution.
    - The budget set and the budget constraint.
• The consumer’s optimal choice, derivation of the individual demand function, including the cases of complement goods and substitute goods.
• The Engel curve, normal and inferior goods, ordinary and Giffen goods, the inverse demand curve.
• Substitution and income effects, ordinary demand, compensated demand and aggregate demand, elasticity.
• Choice between consumption and leisure, the labor supply, substitution and income effects in the labor supply, working overtime, non-labor income and unemployment benefits.

The Theory of the producer

• The technological constraints of the firm, the long-run production function, assumptions on technology, the technical rate of substitution, returns to scale, the short-run production function, marginal product and average product.
• Cost curves, cost minimization, the long-run cost function, the short-run cost function.
• Profit maximization, profit maximization in the short-run, the supply of a perfectly competitive firm in the short-run, long-run profit maximization, the long-run supply of a competitive firm.

Competitive markets:

• Partial equilibrium model: industry supply in the short-run, the industry supply in the long-run in a competitive market with free entry and exit, producer’s surplus, effects of taxes in the short run, effects of taxes in the long run, the deadweight loss of a tax.
• General equilibrium and welfare: a pure exchange economy and the Edgeworth box diagram, PPF, determination of equilibrium prices, Pareto efficiency.

Models of imperfect competition:

• Monopoly: profit maximization by a monopolist, the effects of taxes on monopoly, the loss of efficiency in a monopoly and the monopoly deadweight loss, price discrimination, comparison with a competitive market.
• Oligopoly: Cartel, strategic interaction/behavior, game theory, dominant and dominated strategies, iterated elimination of dominated strategies, Nash equilibrium in games, existence of Nash equilibria.

Uncertainty, information and externalities:

• Uncertainty: expected utility maximization, risk aversion and insurance premiums, asymmetry of information, information and insurance, moral hazard, adverse selection, market signaling.
- Externalities: externalities and allocative inefficiency, solutions to externality problems,
- Public goods. The “free rider” problem, public goods and resource allocation.

11. Grading system:

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HAVE A PRODUCTIVE SEMESTER!