

Managerial Economics

(SBE-2011-400-EBC2023)

Course Manual

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School of Business and Economics

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1 Introduction

Managerial economics applies microeconomic principles to managerial issues. Executives, consultants, investment bankers and many other practitioners make daily economic decisions that explicitly or implicitly follow economic laws. Understanding these laws is important for making good decisions concerning diverse managerial problems: devising an effective internal promotion and incentive schemes; making risky investments at a good moment in time; planning and executing take-overs; fighting speculative attacks; pricing products and many more. This course provides the analytical skills and economic insights to analyze such managerial problems without being trapped in everyday biases and truisms. The course will provide skills to analyze consumer behavior and make good product placement and pricing decisions. It will also provide the abilities to examine production technologies and firm cost structure and show how a manager should deal with market inefficiencies and government interventions like taxes, subsidies and regulation. The problems regarding trading on the securities or insurance markets as well as sharing of risk with employees will be discussed. The last but not least, the course will demonstrate how to make strategic decisions in the uncertain world of management.

2 Position in the Curriculum

This course starts from the fundamentals of microeconomics that you should have learned earlier in your studies; that is, it presumes a working knowledge of microeconomic theory. Some additional knowledge on game theory might be very helpful.

3 Literature

The textbook for this course is *"Microeconomics"*, 6th International Edition by Jeffrey M. Perloff, published by Pearson Education Inc. in 2011. You should have already seen this book in your first year. We will continue studying the chapters left out in your first year Microeconomics course. In addition to the textbook we will use notes that will be posted online. Supplementary materials like lecture slides, problems and solutions will be provided online in EleUM.

4 Session Structure

Each meeting will have the following structure:

- Briefly summarize the content of the discussion topic
- Make a list of keywords and key concepts with their meaning
- Relate those key concepts with each other
- Discuss the literature in detail (for instance page by page), and answer each other's questions on the literature
- Do the exercises
- Discuss the tasks.

A few remarks about this list. Making and using a list of key concepts and their relations, should help to identify quickly the main aspects of the theories covered. Make certain that you understand what has been covered. If not, don't hesitate to ask questions. As the book contains some difficult material, you should not hesitate to pay explicit attention to questions about the literature. You are encouraged to prepare questions related to the literature so that you are able to formulate them clearly in class.

It is a well known fact that it is impossible to learn economics without working some problems. Therefore, a number of exercises and tasks are included in the course. They form an indispensable part of an adequate training in microeconomics. Each group member should prepare the solutions to these exercises and tasks at home, although you may find it useful to prepare and discuss them in small groups before the tutorial. The solutions will be discussed in class. On the basis of suggestions of the students, the tutor can help you to structure the problem and to find the correct solution (probably in the next meeting). Exercises and tasks will be taken from the textbook as well as from the additional material.

Don't expect the tutor to elaborate her/his own solution on the whiteboard. Individual students may be asked to present their answers. The setup that includes the discussion of the literature and solution of the exercises and tasks is designed to give you a feel for solving real life problems with analytical tools that economics provides. Believe it or not, many arguments become much simpler with a little mathematics. The lectures are meant to provide an overview, explanation or deepening of the main themes and theories. Moreover, the lectures will relate the different topics discussed

and provide possible applications. As a result, the logic behind the chosen structure of the course will become clear from the lectures.

5 Course Structure

Week	Day	Date	Meeting	Subject, Literature, Tasks
6	Tue	Feb 7	L-01	<i>Why Do Managers Need Microeconomics? Introduction to Game Theory</i>
	Wed	Feb 8	T-01	<i>Normal Form Games: Nash Equilibrium; Cournot and Bertrand Duopolies</i> <i>Games in Normal Form, Lit.: 14.1-2, Notes Part 1</i> <i>Cournot and Bertrand Models of Duopoly</i> <i>Lit.: 13.1,3,4,7, Notes Part 1</i>
7	Tue	Feb 14	L-02	<i>Extensive Form Games: Backward Induction</i>
	Wed	Feb 15	T-02	<i>Stackelberg Duopoly; Credible and Incredibly Threats</i> <i>Examples of Games in Extensive Form</i> <i>Lit.: 14.3, Notes Part 2</i>
8			
9	Tue	Feb 28	L-03	<i>Intertemporal Choice, Repeated Games, Time Inconsistency</i>
	Wed	Feb 29	T-03	<i>Stackelberg Model of Duopoly, Lit.: 13.5-6, 14.3, Notes Part 2</i> <i>Game Theoretic Models of Factor Markets Lit.: Notes Part 2</i>
	Fri	Mar 2	T-04	<i>Repeated Games: Trigger Strategies</i> <i>Repeated Game Model of Collusion in Cartels</i> <i>Lit.: 13.2, 16.1, Notes Part 3</i>
10	Tue	Mar 6	L-04	<i>Choice under Uncertainty, Risk Attitudes, Simple Asymmetric Information</i>
	Wed	Mar 7	T-05	<i>Examples of Choice under Uncertainty, Mixed Strategies in Games</i> <i>Lit.: 17.1,2,4,5. Lecture 4 slides</i>
	Fri	Mar 9	T-06	<i>Externalities, Models of Bargaining, Public Goods</i> <i>Lit.: 18.1,2,6</i>
11	Tue	Mar 13	L-05	<i>Asymmetric Information, Adverse Selection, Moral Hazard, Contract Theory</i>
	Wed	Mar 14	T-07	<i>Choice Situations with Asymmetric Information</i> <i>Lit.: 19</i>
12	Wed	Mar 21	T-08	<i>Adverse Selection and Moral Hazard</i> <i>Lit.: Notes Part 4</i>
	Fri	Mar 23	T-09	<i>Contract Theory</i> <i>Lit.: 20.1-4</i>
13	Wed	Mar 28	T-10	<i>Review</i>

The horizontal lines separate the meetings by weeks. There are two different kinds of meetings. The lectures are numbered by L-xx. Apart from a short explanation of the content of the chapters to be studied, the lectures will address the applications and the relation between theories within economics. In order to optimally benefit from the lectures, it is advised to read/scan through (rather than study) the literature and the lecture slides that will be provided before each lecture. The literature section in the table states the chapters from the textbook that correspond to each lecture. The material covered in class might not necessarily cover *everything* in the stated chapters. Certain topics might not be covered.

The rest of the meetings are regular tutorials numbered by T-xx. For each tutorial the chapters from the textbook are given in the last column. To prepare for the tutorial you are supposed to study the chapter (which involves *understanding* of the material), solve exercises and tasks. More information on exact sections that should be prepared from these chapters as well as the list of questions and tasks will be given before the tutorial in the discussion list from ELEUM. This will be announced before each meeting.

6 Grading Policy

The course grade will be determined by a written exam and participation in tutorial groups. Exam constitutes 90% of the grade and participation 10%.

The exam is closed book and will consist of open (not multiple choice) questions. The exam problems will be similar to the exercises and tasks discussed during the tutorials. Consult the examinations website in EleUM for the latest news on the date, time and location of the exam. Your results for the exam will be graded on the scale from 1 to 10, and rounded to the nearest half point. To pass the exam you need to get an *unrounded* grade of at least 5.5. Students who fail the exam will be offered a reexamination during exam period 5.

Your participation in the tutorial groups will be assessed on the scale from 1 to 10 by your tutor. Each tutor in the beginning of the first tutorial will inform you about his/her rules for giving you participation grade and block assignments. The main guidelines for these rules are the same for all tutors (see below). However, each tutor might have personal preferences for his/her way of evaluating your performance. This will be explained to you in the first tutorial. Tutors have the final word on what participation grade you obtain. *Under no circumstances may the participation grade be contested with the block coordinator.*

Your final grade in this course is calculated as follows:

$$FinalGrade = 0.9E + 0.1P$$

where E and P range from 1 to 10 and correspond to your exam grade and participation grade.

7 Block Assignments and Participation Guidelines

This is an example of the rules that your tutor *might* use to give you participation grade and block assignments.

The block assignment is an essay of approximately 2000 words for each meeting. The exact topic of the essay is decided by the coordinator of the course, but will be related to the content of the meeting. Students with sufficient participation are exempted from writing block assignments. However, mere physical presence at the tutorial meetings is not enough to make a session a success. The effectiveness depends also on your efforts at home as well as during the meetings. Active participation is essential to have an exemption from the block assignment. During each meeting your tutor will evaluate the individual effort. At the first session she/he will provide you with the necessary information on the evaluation procedure and criteria. Basically, she/he will evaluate two aspects: preparation, the extent to which you demonstrate that you studied the required material; and participation, the extent to which you actively contribute during group discussions. Given the course structure, preparation shows in the questions you raise and the answers you provide, and in the preparation towards and contribution in solving the exercises and tasks. Participation reflects not only the frequency of your contributions, but also their relevance, quality and professionalism, such as respecting other group members and their contributions, refraining from distracting conduct, punctuality, etc. If your efforts are considered insufficient on one or both accounts, the tutor can ignore your physical attendance and book you as being mentally absent (M). Physical absence is denoted by (A). Exemption for the block assignment is granted if you have no more than 2 A's and no more than 2 M's. At any time you may consult the list of your attendance or absenteeism. Students who do not meet the criteria for full exemption from the block assignment can still benefit from a leniency programme: they will be exempted for a number of essays equal to the number of meeting in which they sufficiently participated.

The participation grade might be calculated as a number of tutorials in which you were both physically and mentally present.

8 Contact Information

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