



# Lincoln University

## BA 301 II – Managerial Economics

### COURSE SYLLABUS

Spring 2020

**Instructor:** Prof. Aharon Hibshoosh, Ph.D.  
**Lecture Schedule:** Tuesday, Thursday (1/21-3/5)\* , 18:30 - 21:15  
**Credits:** 3 units / 45 lecture hours  
**Level:** Mastery 1 (M1)  
**Office Hours:** Tuesday, Thursday: 21:15-23:15  
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**Textbooks:** Jack Hirshleifer, Amihai Glazer and David Hirshleifer (2015) Price Theory and Applications, , 7th Edition , Cambridge University Press (Several ISBNs are available: ISBN-13, 978 0-521-81864-3 (hardback) , : ISBN-10, 0-521-81864-8 (hardback), ISBN-13, 978 0-521-52342-4 (paperback), ISBN-13, 0-521-52342-7 (paperback).

**Last Revision:** January 12, 2020

\*Final's date 3/17.

### CATALOG DESCRIPTION

The course covers basic economic relationships, demand and supply analysis, forecasting, production and cost theories, market structures and models, pricing practices, capital budgeting and governmental regulations. (3 units) *Prerequisite: MATH 10.*

### COURSE DESCRIPTION

The Managerial Economics course is essentially a microeconomics course which provides the Economics foundation necessary for understanding and modeling economics and business issues. Together with the Financial Accounting course, the micro and macro economics courses provide the most essential foundation in Business Education. In particular students studying finance should be aware that Finance can be considered as a special topic within Economics. Any future work in Finance would require deep comprehension of Micro and Macro economics. Additional required topics beyond the textbook will be presented.

The course assumes that different agents are forming preferences and optimal choices, while facing various constraints. We will thus study: a) the consumer as an agent maximizing its preference (utility) by consuming optimal quantities of goods b) the business firm maximizing its profit via recruiting the optimal number of workers and employing optimal quantities of production factors c) the financial investor maximizing its objective by balancing risk and expected return. The decisions of the different agents are made in an environment characterized

by scarcity and with limited agent resources, control, or strategic options. We will learn how to derive optimal economic decisions and how to characterize them. In particular, we will focus on the change in optimal behavior when the markets' environmental factors are varying. We will study the effect of distinctive market structures on the behavior of the agents, and learn how the aggregate behavior of the agents helps form these distinctive market structures.

### EDUCATIONAL OBJECTIVES

The initial objective of this course is to expose students to the Economics: to its rationale, and rational approach and to its rigorous structure. The student should be guided to realize that theoretical developments guiding the thinking in various areas of business are firmly rooted in the economics approaches, their concepts and tools. However, the purpose of this course goes way beyond learning about the nature of economics. It aims at developing the students' capability of actually analyzing economic and business situations. Hence, the course should help the student develop a more fundamental, theoretical, and technically rigorous approach in handling empirical observations and analysis of business issues and problems. This would be gained through developing: a) a technical ability in dealing with business problems and b) a student's sense of sophisticated introspection, which rests on absorbing the intrinsic approach of Economics inquiry, particularly that of microeconomics. For this purpose, the course is built to help the student acquire a variety of key concepts, tools, and principles based on economic results, which are used in business disciplines and in management of national and international economics. The required acquisition of knowledge is specifically targeted, while the course's scope covers a complete system of elements and their relationships. This scope reflects the consensus in teaching the subject in leading universities. This can be seen by the lengthy and specifically detailed list of expected outcomes in the next section.

### COURSE LEARNING OUTCOMES<sup>1</sup>

As a result of your study you should be able to:

	<b>Course Learning Outcome</b>	<b>Program LO</b>	<b>Institutional LO</b>	<b>Assessment activities</b>
1	Compare how Microeconomics and Macroeconomics knowledge is applied by the firm and the state.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework
2	Understand precisely, the relationship between a firm's revenues and cost functions and their corresponding marginal and average functions, as a consequence of general relationships between a function and its averages and marginals.	PLO1 PLO2	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b	Homework midterm/final exams

<sup>1</sup> Detailed description of learning outcomes and information about the assessment procedure are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

3	Use Excel for computing and graphing economic functions and solutions, identifying their relationships, and performing sensitive analysis.	PLO1 PLO2 PLO4	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 4b, ILO 5b, ILO 6b	Homework
4	Derive a variety of reference solutions including maximization of Revenue and Profit and minimization of Average Cost.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams
5	Understand concepts and conditions of consumer and producer choice. Be able to graphically identify optimal choice under constraints using indifference curves (or isoquants) and budget (or cost) constraint lines.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams
6	Derive and interpret measures of sensitivity of demand and production functions: marginals, elasticities and the relationship between price elasticity and marginal revenue. Apply this knowledge in the case of linear and constant Elasticity Demand and Production functions.	PLO1 PLO2	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b	Homework midterm/final exams
7	Characterize demand and production functions.	PLO1 PLO2	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b	Homework midterm/final exams
8	Understand the consequences of optimal choice in a static environment, and under inter-temporal choice. Compare nominal and real interest rates, and the rate of inflation.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams
9	Learn basic features of the Mean Variance Framework and topics in the managerial economics of Finance.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework
10	Compare and compute different project choice criteria.	PLO1 PLO2	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b	Homework midterm/final exams

11	Understand how market equilibrium is formed and evolved by market forces of supply and demand under free competition and under regulation and taxation. Understand conditions for free and perfect competition and identify Consumer and Producer surpluses.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams
12	Compare short run and long run supply functions.	PLO1 PLO2	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b	Homework midterm/final exams
13	Find the degree of return to scale of a firm's production function, and consequently decide whether to centralize or decentralize firm's production.	PLO1 PLO2	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b	Homework midterm/final exams
14	Identify the demand for a single factor of production and calculate the quantity demanded as a function of the product marginal revenue and a factor price.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams
15	Compare commonly considered market structures and their strategic implications for the firm (s).	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams
16	Compare different types of monopolies and apply the results in determining optimal price discrimination under market segmentation.	PLO1 PLO2 PLO6	ILO 1b, ILO 2b ILO 1b, ILO 2b, ILO 4b ILO 3b	Homework midterm/final exams

## METHODOLOGY

The course is based on lecture and exercise. The lecture will present selected topics from the most recent edition of the classical textbook of Hirshleifer et al. My focus will be on topics critical in Managerial Economics, and thus I will simplify and unify the analysis in order to teach the material efficiently. The teaching and study will be highly analytical and formal. In a typical topic, I will state and discuss some model's assumptions regarding agents, their objectives and constraints. This will typically involve teaching some newer mathematical techniques. I will then progress to derive on the blackboard, interactively, some optimal behavior rules and engage in sensitivity analysis. The presentation will typically use specific examples, and the boundaries of the model and its application will be exemplified and discussed.

**Homework:** HW in the form of textbook exercises, as well as my own specially developed exercises, is the most critical and challenging element of this course. Answers to key HW problems will be covered in class, supported occasionally with an Excel presentation for clarifying summaries.

In the teaching of this course, we distinguish between Passive comprehension and Active comprehension. In passive comprehension the student can verify that the derived answers of a third person are indeed correct. This is not too difficult. In active comprehension, the student develops the ability and confidence to personally derive the results. Engaging comprehension is achievable only through a sustained exercising process.

Specifically, students are expected to first try to solve their problems alone, but then compare their solutions with those of other group members. In case of difficulty, the group should work on the problem(s) together. Answers for some of the problems are provided briefly in the back of the book. The homework is then submitted individually. The group must review the progress of each member weekly, and report the completion of the homework of every member by the homework deadline.

HW format: Quantitative exercises including diagrams will be required to be processed in Word and or Excel. Typically, homework must be typed, unless otherwise specified.

My teaching assistant evaluates assignments under my direct guidance, and issues a preliminary grade. If any student has a question about the evaluator's comments and/or grade, he/she should first discuss it with the teaching assistant, and then with me if there are further questions. My teaching Assistant would be available on weekly bases for reviewing the HW answers with inquiring students.

We are using the CANVAS software for HW collection, submission time monitoring and grade assignments. The HW files are submitted only through CANVAS. No hard copy is turned in. Every student must be listed with CANVAS. An adding student must belong to a group and inform the teaching assistant his/her adding status and group number. HW is due by 1AM Tuesday or Thursday as instructed by CANVAS. If you are late, you still may use an automatic extension of 8 hours and submit the HW by 9 AM of that day, through CANVAS. CANVAS has a built in time cut off function and would not allow submission past the deadline or the deadline extension. No further extension would be provided. Hence, any homework passed the due date extension deadline would not be accepted for grading. The hard copy submitted with to CANVAS must be brought to class. It may be examined by the professor at the roll call and would help the students when we review the HW answers in class.

In reporting to CANVAS every student must list on his/her assignment by the following order the following information: Student ID, Last Name and First Name- as appear on the enrolment sheet and group number. In reporting group work all group members must reported on the assignment in this format but only one submission per group is allowed.

Assignments and projects require students to actively use resources of the library. Detailed guide to business *resources of the library* as well as the description of Lincoln University approach to *information literacy* are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

### **Student Conduct:**

- Please participate. What you put into the class will determine what you get out of it – and what others get out of it.

- Please come **on time**. Late arrivals disturb everyone else. Plan to stay during the whole class period. Attendance may be taken at least one time in of each class. In the case where more than one attendance is taken, only students attending all attendances would be considered as present. Attendance is a component of the overall grading.
- Students may not read other materials (newspapers, magazines) during class and no multitasking is allowed.
- Students are not allowed to come and go during class sessions.
- If you miss a class, you are responsible for getting notes/slide printouts on the material covered from a classmate in your group.
- To avoid distracting noise in class, cellular phones **must** be turned off or the ringing mode silenced.
- During an exam or a review of an exam all recording devices of any form must be closed and stored in closed bags. (See also Examination Policy).
- All class participants are expected to exhibit respectful behaviors to other students and the instructor. All students have the right and privilege to learn in the class, free from harassment and disruption. Inappropriate or disruptive behavior will not be tolerated, nor will lewd or foul language.

### **EXAMINATION POLICY**

I will use objective exams consisting of T/F and MC questions. The midterm will only include chapters covered in the lecture prior to the midterm and associated extra lecture information. The final is comprehensive, but will have higher representation of the second part of the course. The exams are closed book exams, without a restroom break (or any other break). (I will make alternative examination opportunities where the need for break is medically required and professionally supported by a letter from a medical doctor). No exchange of pencils, erasers or any other material between students is allowed during the exam. No electronic instrument capable of copying material in any form (in particular, in print or visual image) is allowed in the exam. In particular, cell phones, phone hearing aids, organizers, calculators, tape recorders, cameras, computers, etc. must be closed and stored inside a closed bag. Likewise, any conduct that constitutes subversion of the exam is punishable in at least a course failure. These specifically include: removing or reproducing examination material; communication with anyone with the purpose of reconstructing the examination or any part of it; keeping or using the instructor's past exam questions to prepare for the exam without specific instructor authorization; distributing any examination material; impersonating an examinee or having an impersonator take the examination. This list is not exhaustive.

A student violating any of these requirements or similar ones should expect an F, in addition to other disciplinary consequences.

### **GRADING GUIDELINES**

Class attendance and participation 10 pts

Homework 30 pts\*

Midterm 30 pts

Final 50 pts.

Total course points: 120 pts

Regardless of exam grades, a student must participate substantially in the Homework and in each exam to gain a passing grade.

The grade will be based on a curve. Gaining the following number of course points would assure the grade:

Course Points	Grade
96 and above	A
90-95	A-
80-89	B+
70-79	B
60-69	B-
50-59	C+
48-49	C
46-47	C-
44-45	D+
42-43	D
Below 42	F

## COURSE SCHEDULE

We will focus on elements in the following chapters<sup>^</sup>, in Hirshleifer, Glazer and Hirshleifer.

### Topics

#### **I. The Economics Perspective and Mathematical Modeling of Economic Concepts**

1/21-1/23	Introduction and Overview.	1
1/21-1/30	Mathematical derivation of economic relationships and Working Tools *	2

#### **II. Preference consumption and Demand**

1/23-2/4	Utility and preference	3, 4
2/4-2/6	Demand: consumer optimal choice	4
2/6-2/11	Demand sensitivity and Characterization	5

#### **III. The economics of Finance**

2/11-2/18	Topics in Financial Economics	15 and elements of 6 and 11
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#### **IV. The firm and the Market Structure**

2/13-2/27	Business Firm's production and cost	6 and elements of 7 and 12
2/18-2/27	Equilibrium in the product Market –Competitive industry	7

**3/3-3/5** Review of Market structures with monopoly power \*  
and externalities

Elements of 8, 9 10 and 16

**3/17** Final

**Special Dates:**

Presidents' Day Holiday: February 17.

Spring Recess: March 10-14.

Midterm: February 25.

Final: March 17.

^ The numerical reference to a chapter in the textbook.

^^ The time table is tentative. This is not an exclusive list of topics to be covered in this course. If time permits, I will accelerate the presentation. Alternatively, if necessary, pace and intensity of coverage may be traded off to assure greater comprehension.

**Updated:** January 12, 2020. The syllabus may be updated in the future as necessary.