MODULE OBJECTIVES

This module aims to familiarize students with advanced conceptual and appropriate mathematical tools in microeconomic theory.

LEARNING OUTCOMES

By the end of the module students will:-

- be able to explain and discuss an advanced treatment of the core principles in microeconomic theory;
- be able to use several key mathematical techniques common in microeconomic theory;
- be in a position to analyze strategic decision making by agents, applying game theory.

MODULE OUTLINE

The following is an indication of the likely topics to be covered (in no particular order):-

- The theory of production
- The theory of the firm
- Competition, monopoly and oligopoly
- The theory of consumer choice
- General equilibrium and the Fundamental Welfare Theorems
- Market failure: Externalities and asymmetric information
- Game theory (Basic solution concepts)
- Game theory applications: Adverse selection and moral hazard problems

TEXTBOOK

We will rely mostly on the following textbook:

Introduction to Economic Analysis

by

R. Preston McAfee


We may occasionally draw upon a few other sources, especially for game theory topics. Two excellent books on game theory, available in the library (no need to buy them), are:

- A Primer in Game Theory by Robert Gibbons (1992), Harvester Wheatsheaf
- An Introduction to Game Theory by Martin J. Osborne (2004), Oxford University Press
Also, the following book may be consulted for game theory materials (Chs 7, 8 and 9):

- **Microeconomic Theory** by Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green (1995), Oxford University Press

Some notes on game theory and applications will be provided in the lecture, if necessary.

**LECTURE MATERIALS**

Students are strongly advised not to miss any lectures. Nevertheless, if you miss any lecture for some reason, it is your responsibility to collect the materials covered in lecture. Most of the time, the lecture materials will be made available on IVLE and you need to download it directly. But occasionally only hard copies will be supplied and you make sure that a friend of yours collects the **HANDOUTS** on your behalf who will be attending the lecture.

**ASSESSMENT**

There is an in-class closed-book **mid-term exam to be held on October 4**, 6.30 pm – 9.30 pm in the regular Lecture room. The mid-term will count 35% of the final mark of the module. The final examination at the end of the semester will account for 65% of the final mark.

There will be **no excuses for missing the mid-term**. In particular, no replacement mid-term will be given. (Whenever I have had to give a make-up mid-term in the past, it invariably turned out to be much tougher and covered more materials than the regular mid-term.)

**WORKLOAD**

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**TUTORIAL ASSIGNMENTS**

The only way to pass the course is to solve the assigned exercises. Exams will involve exercises. Written solutions will be provided only after the students have gone over the exercises themselves. While solutions are handy to learn about where students might have gone wrong, just having the solutions without solving the exercises is not going to be of much help.

I strongly encourage you to go over the tutorial exercises, before the solutions are discussed in class, in small groups. Cooperation can only enhance learning.

Tutorials, to start in week 2 or week 3 (depending on progress), will be held generally between 8.30 and 9.30 (i.e., the final hour of each lecture).