

## Syllabus

### **Contact details.**

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Course website: <http://sites.google.com/site/stergiosathanasoglou/microphd>

### **Course description and objectives.**

This course is the first module of the Microeconomics sequence for the DEFAP-ECOSTAT PhD program in Economics. The module is divided along thematic lines in two main parts. The first (10 hours) consists of five lectures covering the following topics: preferences and utility, consumer choice, classical demand theory, production, and choice under uncertainty. The second part (5 hours) consists of two lectures on general equilibrium theory. Complementing the lectures, there will be six hours of recitations (esercitazioni), divided into three 2-hour sessions.

The objective of the course is twofold. In terms of the material covered, it aims to provide students with a brief but rigorous introduction of essential topics in microeconomic theory. On the methodological side, it aspires to expose students to a toolkit of mathematical results and techniques that are useful for academic research in economics.

### **Prerequisites.**

Since this is a PhD-level class, a certain level of mathematical preparation and maturity is expected. Familiarity with multidimensional calculus and constrained optimization is especially important.

### **Course Materials.**

Lecture slides will generally contain all the material students are expected to learn. In turn, the lectures will often refer to and closely follow the relevant chapters in:

- Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic theory*. Oxford University Press. (hereafter, MWG)

The majority of homework problems appear in MWG as exercises. Students are highly encouraged to obtain a copy of MWG and consult it frequently.

### **Homework.**

Three problem sets will be handed out to students, roughly once a week (consult Lecture schedule for precise dates). Students are highly encouraged but not required to hand in solutions. Solutions will be provided during recitations (esercitazioni).

**Working on the problem sets is, in my view, the best way to learn the material. I recommend you do so.**

**Assessment.**

Students will be assessed on the basis of their performance in the final exam, to be held in conjunction with those of Modules 2, 3 and 4.

**Lecture schedule.**

Lectures will be streamed via Google meet.

Lecture	Date and location	Topic	Reference	Notes
1	Mon 11/01, 10.30-12.30	Preferences and Utility	MWG 1A-B, 3A-B-C	
2	Wed 13/01, 10.30-12.30	Consumer choice	MWG 2A-B-C-D-E*	
3	Fri 15/01, 10.30-12.30	Classical demand theory	MWG 3D-E-G	PS1 handed out
4	Mon 18/01, 10.30-12.30	Production	MWG 5A-B-C-E-F	
5	Fri 22/01, 10.30-12.30	Choice under uncertainty	MWG 6A-B-C-D	PS2 handed out
6	Mon 25/01, 10.30-13.00	General equilibrium I	MWG 15A-B-C	
7	Thu 28/01, 10.30-13.00	General equilibrium II	MWG 16A-B-C-D, 17A-B-C	PS3 handed out

\*Material on Revealed Preference will be solely based on lecture slides.

**Recitation schedule.**

Recitation	Date and location	Topic
1	Wed 20/01, 10.30-12.30	Problem set 1
2	Wed 27/01, 10.30-12.30	Problem set 2
3	Mon 01/02, 10.30-12.30	Problem set 3