### **Consumer and Producer Theory**

Spring 2023, ITAM Instructor: Xinyang Wang

- Class Hours: Tuesdays, 5 pm 8 pm
- Class Location: Room 105 ST
- Office Hour: Tuesdays, 4 pm 5 pm
- Email Address: xinyang.wang@itam.mx
- Course website: <u>https://www.xinyang-wang.com/cpt\_s23</u>

### **Course Description**

This is a graduate-level course in economic theory. The principle purpose of this course is to introduce the formal language for analyzing individual behavior of economic agents. You will encounter some, if not many, models and statements you have learned before. In this course, we will focus on the *reasoning* of these classical materials.

Given the time constraint, we may introduce some topics according to the interests of students and instructor.

# Topics

Broadly, we will cover:

- 1) A quick review of the relevant mathematics
- 2) Consumer Theory
- 3) Producer Theory
- 4) Decisions and Uncertainties

# Prerequisites

The formal prerequisite is intermediate microeconomics. Technically speaking, knowledge of multivariate calculus, probability, and some basic knowledge of matrix operations will be helpful. This course will be more abstract than other economic classes you have taken; you should feel comfortable with standard mathematical notation and abstract reasoning. Students' interests will be crucial.

# Grading

Homework: 20% Presentation: 40% Final Exam: 40%

# Readings

I will use my own notes throughout this course. For references, see below:

#### For consumer and producer theory:

- David M. Kreps, *Microeconomic Foundations I: Choice and Competitive Markets* (Princeton University Press, 2013),
- Osobrne, M. and Rubinstein, A., *Models in Microeconomic Theory* (Open Book Publishers, 2020)
- Geoffrey A. Jehle and Philip J. Reny, *Advanced Microeconomic Theory* (3rd edition, Prentice Hall, 2011)
- Mas-Colell, Andreu, Michael Dennis Whinston, and Jerry R. Green. Microeconomic theory. Vol. 1. New York: Oxford university press, 1995.

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#### For mathematics:

- Efe OK, *Real Analysis with Economic Applications* (Princeton University Press, 2007)
- Carl Simon and Lawrence Blume, *Mathematics for Economists* (Norton, 1994)

In some sense, this course will be a course on communications (about economics). Therefore, any interaction (including questions, comments, and criticisms) in or after class is a critical part of this course of the study, and will be greatly appreciated. I will be available through email as much as I can.

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