

HELPMAN DEVELOPMENT INSTITUTE ABUJA

CERTIFICATE IN PUBLIC POLICY

(Microeconomics Syllabus)

First Semester January-April 2023

COURSE DESCRIPTION.

Microeconomics theory is intended to serve as the text for a First-Year graduate course in Economics, Microeconomics theory as a discipline begins by considering the behaviour of individual agents and builds from this foundation to a theory of aggregate economic outcomes (for detail see Mas-Colell).

INSTRUCTOR

Jafar Anafi

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Nafiu Junaidu Mallam

MEETINGS

MW 9:00am-10:30am

RECOMMENDED TEXTS

Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green: Microeconomic Theory, Oxford University Press 1995.

Hal R. Varian: Microeconomic Theory Third Edition, W.W. Norton and Company 1992.

N. Gregory Mankiw: Principles of Microeconomic Fourth Edition.

PREREQUISITES

Students are expected to be familiar with Algebra, calculus and Trigonometric.

EXERCISES

A set of assignments will be distributed throughout the semester (weekly). These will count towards the grade and solutions will be posted on the course website weekly.

Examination

There will be one midterm test and a final exam. The exam dates are:

Midterm and Assignment: In class (60%)

Final: April (40%)

MAKE-UP EXAMS

No make-up exams will be given unless acceptable reasons can be provided as defined by the Institute.

ACADEMIC CONDUCT

It is a student's responsibility to know and understand the provisions of the HDI Academic Conduct Code. Cases of suspected academic misconduct will be referred to the Management office.

COURSE OUTLINE

Below is a preliminary list of topics. Some deviations from the actual schedule may be necessary as the class progresses. Students are responsible for attending classes and learning of any changes in the schedule. The readings refer to the text by Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green.

I. INDIVIDUAL DECISION MAKING

- Introduction
- Preference Relations
- Choice Rules
- The Relationship between Preference Relation and Choice Rules
- Exercises

Readings: 3-5, 5-6,6-11,15.

II. CONSUMER CHOICE

- Introduction
- Commodities
- The Consumption Set
- Competitive Budgets
- Demand Functions and Comparative Statics
- The weak Axiom of Revealed Preference and the Law of Demand
- Exercises

Readings: 17-28

III. CLASSICAL DEMAND THEORY

- Introduction
- Preference Relations: Basic Properties
- Preference and Utility
- The Utility Maximization Problem
- Duality: A Mathematical Introduction
- Relationships between Demand, Indirect utility and Expenditure Functions
- Integrability
- Welfare Evaluation of Economics Changes
- The Strong Axiom of Revealed Preference

Readings: A92, 40-91

IV. AGGREGATE DEMAND

- Introduction
- Aggregate Demand and Aggregate Wealth
- Aggregate Demand and the Weak Axiom
- Aggregate Demand and the Existence of a Representative Consumer

Readings: A122, 105-116

V. PRODUCTION

- Introduction
- Production Sets
- Profit Maximization and Cost Minimization
- The Geometry of Cost and Supply in the Single Output Case
- Aggregation
- Efficient Production
- Remarks on the Objectives of the Firm

Readings: A154, 127-152

VI. CHOICE UNDER UNCERTAINTY

- Introduction
- Expected Utility Theory
- Money Lotteries and Risk A version
- Comparison of Payoff Distributions in Term of Return and Risk
- State-dependent Utility
- Subjective Probability Theory
- Exercise

Readings: 167-205

VII. GAME THEORY

- Introduction
- What is a Game?
- The Extensive Form Representation of a Game
- Strategies and the Normal Form Representation of a Game
- Randomized Choices

Readings: 217-231

VIII. SIMULTANEOUS MOVE GAMES

- Introduction
- Dominant and Dominated Strategies
- Rationalizable Strategies
- Nash Equilibrium
- Game of Incomplete Information: Bayesian Nash Equilibrium
- The Possibility of Mistake: Trembling-Hand Perfection

Readings: A260, 235-258

IX. DYNAMIC GAMES

- Introduction

- Sequential Rationality, Backward Induction, and Subgame Perfection
- Belief and Sequential Rationality
- Reasonable Beliefs and Forward Induction
- Exercises

Readings: A282, A299, 267-292

X. MARKET EQUILIBRIUM AND MARKET FAILURE

- Introduction
- Pareto Optimality and Competitive Equilibria
- Partial Equilibrium Competitive Analysis
- The Fundamental Welfare Theorems in a Partial Equilibrium Context
- Welfare Analysis in the Partial Equilibria
- Concluding Remarks on Partial Equilibrium Analysis
- Exercise

Readings: 311-341

XI. EXTERNALITIES AND PUBLIC GOODS

- Introduction
- A simple Bilateral Externality
- Public Goods
- Multilateral Externalities
- Private Information and Second-Best Solutions
- Exercise

Readings: A374, 350-374