CONTENTS

MICROECONOMICS I

I. Theory of Consumer Behaviour (14 Hours)
II. Theory of the Firm (12 Hours)
III. Inter-Temporal Choice (4 Hours)
IV. Uncertainty and Risk (10 Hours)
V. Market Structure (8 Hours)
VI. General Equilibrium and Welfare Economics (12 Hours)

MICROECONOMICS II

VII. Market Failure (9 Hours)
VIII. Game Theory (16 Hours)
IX. Oligopoly (8 Hours)
X. Asymmetric Information (16 Hours)
XI. Other Topics in Microeconomics (11 Hours)
I. MICROECONOMICS

INTRODUCTION
Microeconomics has evolved very rapidly in the last few decades. Many new fields, which were peripheral a few years ago, have become central to the microeconomics literature. This presents important challenges for the teaching of a Masters level course in microeconomics. The core teaching of traditional Masters level textbooks are no longer sufficient to give an adequate theoretical training for students interested in following the contemporary literature. Moreover, to train students for research or to enable them to engage in policy debates must now involve a sound training in new concepts and theoretical tools such as game theory, the economics of information, property rights, transaction costs and so on. A lively and relevant microeconomics course must steer a course between the standard material of traditional microeconomics and the new game theoretic and other material, which is now central to the discipline.

PREREQUISITES
An important issue for course construction is to establish the prerequisite training, which is assumed for the course. Students starting the Masters programme should have an undergraduate level training in economics and an understanding of the fundamentals of mathematics (set theory, calculus and matrix algebra).

COURSE COVERAGE
The course is divided into two main parts, (each consisting of a total of sixty (60) teaching hours). The first part of the course covers the theory of consumer behaviour, the theory of the firm, inter-temporal choice, uncertainty and risk, market structure, general equilibrium and welfare economics. The second part covers market failure, game theory, asymmetric information and other topics in microeconomics.

COURSE AIMS
Students completing the course are expected to have:
- A good understanding of the core theories and concepts in microeconomics;
- The ability to understand contemporary journal articles;
- A flair for economic reasoning;
- The ability to engage in contemporary policy debates; and
- The ability to apply the knowledge gained from the course to real world situation.

TEXTBOOKS
Core Texts:
**Supplementary Texts:**


(+) below denotes compulsory reading materials while other references are optional reading.
DETAILED COURSE OUTLINE

PART ONE (60 TEACHING HOURS)

1. THEORY OF CONSUMER BEHAVIOUR: 14 Hours.
   1.1 Preferences, choices, utility, demand functions and their properties, and revealed preferences.
   1.2 Indirect utility functions and expenditure functions; duality; household welfare measures.
   1.3 Aggregation and market demand.
   1.4 Empirical issues in demand theory.


2. THEORY OF THE FIRM: 12 Hours.
   2.1 Specifications of production technology: returns to scale, homotheticity, monotonicity, convexity, elasticity of substitution.
   2.2 Conditional factor demands and cost functions.
   2.3 The profit function.
   2.4 Relationship between profit and cost functions and technology sets.
   2.5 Cost functions: the short and long runs.
   2.6 Empirical issues in theory of production and supply.


3. INTER-TEMPORAL CHOICE: 4 Hours.
   3.1 Intertemporal preferences 1 Hour
   3.2 Intertemporal optimization with several time periods 3 Hours

4. UNCERTAINTY AND RISK: 10 Hours.
4.1 The distinction between risk and uncertainty.
4.2 Expected utility theory.
4.3 Risk aversion and measurement.
4.4 Prospect theory


5. MARKET STRUCTURE: 8 Hours
5.1 Perfect competition
5.2 Monopoly
5.3 Monopolistic competition


### 6. GENERAL EQUILIBRIUM AND WELFARE ECONOMICS: 12 Hours.

6.1 General equilibrium under pure exchange
6.2 General equilibrium with production
6.3 Walras’ Law
6.4 Welfare Theorems


PART TWO (60 TEACHING HOURS)

7. MARKET FAILURE: 9 Hours
   7.1 Natural monopolies, Indivisibilities and Increasing Returns, Externalities, Public Goods, Transaction Costs and Imperfect Information.
   7.2 The theory of the second-best.
   7.3 The Analysis of Property Rights.


8 GAME THEORY: 16 Hours

8.1 Non-Cooperative versus Cooperative Games. The topic should concentrate on Non-Cooperative games but students should know the difference between the two approaches.
8.2 Information: Perfect, Imperfect, Symmetric, Asymmetric, Complete and Incomplete.
8.3 Pure and Mixed Strategies.
8.5 Classic Games: Coordination Games, Games With Conflict, Chicken game, Prisoner’s Dilemma.
8.6 Dynamic Games: Backward Induction and Sub-Game Perfection.
8.7 Repeated Games.


9. OLIGOPOLY: 8 Hours

9.1 Cournot model
9.2 Bertrand model
9.3 Stackelberg model


11. **ASYMMETRIC INFORMATION: 16 Hours.**

10.1 Adverse Selection, Signaling and Screening.
10.2 Moral Hazard and the Principal-Agent Problem.

+ Milgrom, P. and J. Roberts (1992), *Economics, Organization & Management* New Jersey: Prentice Hall.Ch. 5-6


11. OTHER TOPICS IN MICROECONOMICS: 11 Hours

11.1 Alternative Theories of the firm (Transaction Cost Models of the Firm, Behavioral Models of the Firm and Evolutionary Models of the Firm)


11.2 Introduction to Behavioural Economics


