

B.A. Programmes with Economics as Major discipline

DISCIPLINE SPECIFIC CORE COURSE -5 (DSC-5): Intermediate Microeconomics I: Behavioural foundations of Market Interactions

| Course title & Code | Credits | Duration (per week) | | | Eligibility Criteria | Prerequisite |
|---|---------|---------------------|----------|---------------------|----------------------|--------------|
| | | Lecture | Tutorial | Practical/ Practice | | |
| Intermediate Microeconomics I: Behavioural foundations of Market Interactions – ECON007 | 4 | 3 | 1 | 0 | Class 12th | NIL |

Learning Objectives

The Learning Objectives of this course are as follows:

- The course is designed to formally analyze the behaviour of individual agents like consumers and producers under certain conditions.
- Mathematical tools are used to facilitate understanding of the basic concepts.
- This course looks at the behaviour of the consumer and the choices of a competitive firm.

Learning outcomes

The Learning outcomes of this course are as follows:

- Students will learn the basic elements of consumption and production theories using various technical frameworks.
- This course provides them the behavioural foundations of market supply and demand.

Syllabus

UNIT I: Consumer behaviour (20 hours)

Preference and utility, Budget and choice, Income and substitution effect, Demand derivation, Labour supply, One-person welfare

UNIT II: Decision-making under uncertainty (20 hours)

Expected utility, Risk aversion, Insurance, Risk spreading

UNIT III: Producer behaviour and markets (20 hours)

Technology, Profit maximization, Cost minimization, Supply, Short and long run

Recommended readings

- Serrano, Roberto and Feldman, Alan (2012), *A short course in intermediate Microeconomics with Calculus*, Cambridge University Press
- Espinola-Arredondo, Ana and Muñoz-García, Felix (2020), *Intermediate Microeconomic Theory*, MIT Press
- Osborne, M J and Rubinstein, A (2020), *Models in Microeconomic Theory*, Open Book Publishers

- Muñoz-Garcia, Felix (2017) *Practice Exercises for Advanced Microeconomic Theory*, MIT Press
- Dunaway, Eric; Strandholm, John C., Espinola-Arredondo, Ana and Munoz-Garcia, Felix (2020) *Practice Exercises for Intermediate Microeconomic Theory*, MIT press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE -6 (DSC-6): Optimization Methods for Economic Analysis

| Course title & Code | Credits | Duration (per week) | | | Eligibility Criteria | Prerequisite |
|--|---------|---------------------|----------|------------------------|-------------------------|--------------|
| | | Lecture | Tutorial | Practical/ Practice | | |
| Optimization Methods for Economic Analysis – ECON023 | 4 | 3 | 1 | 0 | Class 12 th | NIL |

Learning Objectives

The Learning Objectives of this course are as follows:

- This course covers mathematical techniques used for comparative-static analysis and optimisation problems under various circumstances.
- The objective of this course is to transmit the body of basic mathematics that enables the study of economic theory.
- This course, in particular, includes rules of differentiation and its application in comparative-statistic analysis, unconstrained and constrained optimisation problems.

Learning outcomes

The Learning outcomes of this course are as follows:

- The students will be able to solve optimal solution and policy impacts using comparative- static analysis and statistic optimisation techniques.
- This offers the mathematical foundations necessary for further study of a variety of disciplines including postgraduate economics, statistics, computer science, finance and data analytic.
- The analytical tools introduced in this course will help them to apply optimization techniques used in business decision-making for managers, entrepreneurs and policy makers alike.

Syllabus

UNIT I: Comparative-Static Analysis (20 hours)

Derivatives, Slopes, Limit Theorem

UNIT II: Differentials and its role in Comparative static analysis (20 hours)

UNIT III: Optimisation Problems (20 hours)

Unconstrained and constrained optimisation with single and multiple variables, Lagrangian functions, quasi-concavity and convexity, envelope theorem

Recommended readings

- Chiang, A and Wainwright, K. (2005). *Fundamental methods of mathematical economics*. Boston, Mass. McGraw-Hill/Irwin.
- Sydsaeter, K., Hammond, P. (2002). *Mathematics for economic analysis*, Pearson Educational.
- Hoy, M., Livernois, J., McKenna, C., Rees, R., Stengos, T. (2001). *Mathematics for Economics*, Prentice-Hall India.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

B.A. Programmes with Economics as non-Major or Minor discipline

DISCIPLINE SPECIFIC CORE COURSE -3 (DSC-3): Intermediate Microeconomics I: Behavioural foundations of Market Interactions

| Course title & Code | Credits | Duration (per week) | | | Eligibility Criteria | Prerequisite |
|---|---------|---------------------|----------|---------------------|----------------------|--------------|
| | | Lecture | Tutorial | Practical/ Practice | | |
| Intermediate Microeconomics I: Behavioural foundations of Market Interactions – ECON007 | 4 | 3 | 1 | 0 | Class 12th | NIL |

Learning Objectives

The Learning Objectives of this course are as follows:

- The course is designed to formally analyze the behaviour of individual agents like consumers and producers under certain conditions.
- Mathematical tools are used to facilitate understanding of the basic concepts.
- This course looks at the behaviour of the consumer and the choices of a competitive firm.

Learning outcomes

The Learning outcomes of this course are as follows:

- Students will learn the basic elements of consumption and production theories using various technical frameworks.
- This course provides them the behavioural foundations of market supply and demand.

Syllabus

UNIT I: Consumer behaviour (20 hours)

Preference and utility, Budget and choice, Income and substitution effect, Demand derivation, Labour supply, One-person welfare

UNIT II: Decision-making under uncertainty (20 hours)

Expected utility, Risk aversion, Insurance, Risk spreading

UNIT III: Producer behaviour and markets (20 hours)

Technology, Profit maximization, Cost minimization, Supply, Short and long run

Recommended readings

- Serrano, Roberto and Feldman, Alan (2012), *A short course in intermediate Microeconomics with Calculus*, Cambridge University Press
- Espinola-Arredondo, Ana and Muñoz-Garcia, Felix (2020), *Intermediate Microeconomic Theory*, MIT Press
- Osborne, M J and Rubinstein, A (2020), *Models in Microeconomic Theory*, Open Book Publishers
- Muñoz-Garcia, Felix (2017) *Practice Exercises for Advanced Microeconomic Theory*, MIT Press
- Dunaway, Eric; Strandholm, John C., Espinola-Arredondo, Ana and Munoz-Garcia, Felix (2020) *Practice Exercises for Intermediate Microeconomic Theory*, MIT press

GENERIC ELECTIVE: PRINCIPLES OF MICROECONOMICS II

Subject: **Common Pool of GE Sem III**
Course : Principles of Microeconomics II - ECON027

UNIT-I: Market Structure

Mankiw, N. G. (2018). Principles of Microeconomics 8th ed. Chapter 15:
Monopoly
Chapter 16: Monopolistic Competition Chapter 17:
Oligopoly

UNIT-II: Consumer and Producer Theory

Mankiw, N. G. (2018). Principles of Microeconomics 8th ed. Chapter 10:
Externalities
Chapter 11: Public Goods and Common Resources
Bernheim, B., Whinston, M. (2009). Microeconomics. Tata McGraw-Hill. Chapter 20:
Externalities and Public Goods
Chapter 21: Asymmetric Information

UNIT-III: Income Distribution and Factor Pricing Mankiw, N. G.
(2018). Principles of Microeconomics 8th ed. Chapter 18: The Markets
for the Factors of Production

UNIT IV: International Trade

Mankiw, N. G. (2018). Principles of Microeconomics 8th ed. Chapter 3:
Interdependence and the Gains from Trade Chapter 9: Application
International Trade

Essential/recommended readings:

Mankiw, N. G. (2018). Principles of Microeconomics 8th ed.
Bernheim, B., Whinston, M. (2009). Microeconomics. Tata McGraw-Hill.

Suggested weightage for each unit in the final examination:

Unit I-25

Unit II- 25

Unit III- 25

Unit IV- 15

This division is flexible and plus/minus 10% of the marks and can be done in each unit, given the total is 90.