

Teaching Plan

Priyambada Gupta

Subject: B.A. (H) Economics

Semester: I

Section: 1 and 2

Course: Introductory Mathematical Methods for Economics

Hours	Topic(s)	Teaching Methodology
9 hours	Unit-1 Chapters: 1	Lectures and discussions with students
4 hours	Logic and proof techniques	
5 hours	Sets and set operations; relations; functions and their properties; number systems.	
25 hours	Unit-2 Chapter 2-8	Lectures and Problem-solving in class
5 hours	Graphs; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic	
8 hours	Continuous functions: characterization, properties concerning various operations and applications	
12 hours	Differentiable functions: characterization, properties concerning various operations and applications; second and higher order derivatives: properties and applications. Chapters	
10 hours	Unit-3 Chapter: 9	Lectures and problem set. Remedial discussion for slow learners. Internal Assessment and Continuous Assessment
5 hours	Geometric properties of functions: convex functions, their characterization, and applications.	
5 hours	Local and global optima: geometric and calculus-based characterization, applications.	

CORE TEXTS

Mathematics for Economic Analysis (2nd Edition) by Sydsaeter and Hammond.

Internal Assessment (IA): 30 Marks

Two class tests (12 marks each), and

6 marks for attendance

Continuous Assessment (CA): 40 Marks

Problem-solving for 10 marks

At least 2 quizzes/assignments, adding up to a total of 25 marks.

5 Marks for attendance.

Subject: B.A. (H) Economics (DSC - ECON 013)

Semester: V

Course: Game Theory and Strategic Interactions

Hours	Topic(s)	Teaching Methodology
9 hours	Unit-1 Complete information simultaneous move game, Dominance, Nash equilibrium, Mixed strategy Nash equilibrium	Lectures, games with students
9 hours	Unit-2 Complete information extensive form game. Sequential rationality and sub-game perfection.	Lectures and Problem-solving in class
9 hours	Unit-3 Topics from Industrial Organization	Lectures and problem set. Remedial discussion for slow learners. Internal Assessment and Continuous Assessment
9 hours	Unit-4 Incomplete information: Bayes Nash equilibrium, Auction, Moral Hazard, Contract	Lectures and Test
9 hours	Unit-5 Communicating information. Perfect Bayesian equilibrium. Job market signaling and reputation	Lectures and Test. Problem Solving in class for Continuous Assessment

CORE TEXTS

Osborne, M. (2004): An Introduction to Game Theory (Indian Edition)

Watson, J. (2013): Strategy: An Introduction to Game Theory, 3rd edition.

Internal Assessment (IA): 30 marks

6 marks will be for attendance

24 marks will be based on one class test plus another assignment/class test (12 marks each)

Continuous Assessment (CA): 40 marks

5 marks will be for attendance

35 marks will be based on quizzes/assignments/class tests or any other mode of assessment as per University guidelines.