

Revised Course Outline of 'Intermediate Microeconomics I'

Course title: Intermediate Microeconomics I				
Course code: UEO 203		No. of credits: 4	L-T-P: 46-14-0	Learning hours: 60
Pre-requisite course code and title: UEO 103: Introductory Mathematical Methods for Economics, UEO 102: Basic Mathematics for Economics, UDS 103: Mathematics for Data Science				
Department: Department of Policy and Management Studies				
Course coordinator:			Course instructor:	
Contact details:				
Course type: Core			Course offered in: 3 rd Semester	
<p>Course description: This is a second course on microeconomics which uses calculus that was taught in mathematical economics courses. Broadly, the course is divided into four parts. The first part teaches preferences of a consumer, utility representations, and demands. The second part focuses on production, profit maximisation, and cost minimisation. The third part focuses on different forms of markets – perfect competition and monopoly. The fourth part focuses on general equilibrium and welfare economics.</p>				
<p>Course objective:</p> <ol style="list-style-type: none"> 1. To learn fundamentals of microeconomics using calculus. 2. To apply the core concepts in economic applications. 				
Course contents				
S.No	Topics	L	T	P
1	<p>Consumer choice I</p> <p>Preference relations, budget sets, utility representations, cardinal and ordinal utilities, indifference curves, marginal utility, and marginal rate of substitution.</p> <p>Examples of utility functions: Cobb-Douglas, perfect substitutes, perfect complements, CES, and quasi-linear.</p>	8	3	
2	<p>Consumer choice II</p> <p>Optimality, Marshallian demands, normal and inferior goods, income offer curves and Engel curve, price offer curve and demand curve, law of demand, substitutes and complements.</p> <p>Substitution and income effects, Slutsky equation, Hicksian demand, revealed preferences, weak axiom of revealed preference, intertemporal choice.</p> <p>Uncertainty, expected utility, risk averse, risk neutral, risk loving preferences.</p>	8	3	
3	<p>Production and Costs</p> <p>Technology, marginal product, technical rate of substitution, short and long run, returns to scale, and elasticity of substitution.</p> <p>Examples of technology functions: Cobb-Douglas, perfect substitutes, perfect complements, CES, and quasi-linear.</p> <p>Cost minimization, cost functions, expansion path, fixed and sunk costs, average costs, variable costs, cost-output elasticity, marginal costs and duality with technology.</p>	6	2	

4	Markets I: Perfect competition Firm: Perfect competition, demand function of a firm, short-run supply function of a firm, shutdown decision, profit maximization, input demand, producer surplus. Market: market demand, short-run market supply, short-run supply elasticity, short-run equilibrium, long-run supply, long-run supply elasticity and long-run equilibrium.	6	2	
5	Markets II: Monopoly Monopolist's problem, linear demands and profits, marginal revenue and elasticity, rectangular hyperbola demands and profits, non-existence of supply functions, deadweight loss. Price discrimination: first-degree price discrimination, second-degree price discrimination, and third-degree price discrimination.	6	2	
6	General equilibrium Exchange, endowments, Edgeworth box, Pareto efficiency, relative prices, competitive equilibrium, first theorem of welfare economics, second theorem of welfare economics, applications.	8	2	
7	Welfare economics Social welfare function, individual preferences, axioms of Pareto, independence of irrelevant alternative and dictatorship, Arrow's impossibility theorem.	4		
	Total	46	14	
Pedagogical approach: Classroom teaching and problem-solving sessions.				
Evaluation criteria: Minor 1: Written Examination - 30% [Syllabus: 1-4, Learning outcomes: 1-6] Minor 2: Written Examination - 30% [Syllabus: 5-6, Learning outcomes: 1-6] Major: Written Examination - 40% [Syllabus: Complete course, Learning outcomes: 1-6]				
Learning outcomes: At the end of the course, the students will be able to: 1. Understand the core concepts of microeconomics. [Modules 1-6] 2. Analyze an economic problem graphically. [Modules 1-6] 3. Solve an economic problem mathematically using calculus. [Modules 1-6] 4. Build intuitions of the core results. [Modules 1-6] 5. Figure out the cases where cookbook methods are not applicable. [Modules 1-6] 6. Apply the concepts and results in economic applications. [Modules 1-6]				
Core reading: 1. H. Varian, "Intermediate Microeconomics: A Modern Approach", 8 th edition (2010) (HV) 2. W. Nicholson, C. Snyder. "Microeconomic Theory: Basic Principles and Extensions", 10 th edition (NS)				

Additional readings:

3. T. Bergstorm, H. Varian. "Workouts in Intermediate Microeconomics" (2014)

Module-wise chapters from the core reading: H. Varian, "Intermediate Microeconomics", 8th edition (2010) (HV)

1. Module 1: HV, Chapters 2, 3 and 4
2. Module 2: HV, Chapters 5, 6, 7, 8, 10, and 12
3. Module 3: NS, Chapters 9 and 10
4. Module 4: NS, Chapters 11 and 12
5. Module 5: NS, Chapter 14
6. Module 6: HV, Chapter 31
7. Module 7: HV, Chapter 33

Coursepreparedby:Sanyyam Khurana

Studentresponsibilities: Attendance,feedback,discipline:asperuniversityrules.

Coursereviewers:

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