Integral University, Lucknow

Effective from Session: 2023-24								
Course Code	HE401	**Title of the Course**	Micro Economics	**L**	**T**	**P**	**C**	
Year	First	**Semester**	First	4	0	0	4	
Pre-Requisite	Graduation	**Co-requisite**	None					
Course Objectives		It provides theoretical tools to analyze real/practical market situations. It develops an advanced theoretical understanding of consumer behavior and decision-making.						

Course Outcomes	
CO1	To understand the concepts of consumer behavior like cardinal utility and ordinal utility analysis, application of Indifference curve and advanced demand analysis.
CO2	To understand the theory of production, iso-quants, laws of returns to scale, and types of the production function.
CO3	To understand and compare the traditional and modern theories of cost.
CO4	To acquaint the decision-making process in different market situations such as perfect competition, monopolistic competition, monopoly, and oligopoly markets.
CO5	To know about old and new welfare economics

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	**Consumer Behavior**	Measurement of Utility, Cardinal vs. Ordinal Approaches, Indifference Curve, Theory of Revealed Preference and logic of Ordering; Strong and weak Ordering and theory of Demand; Hicks Revision of Demand theory and characteristics approach to Demand composite commodity theorem.	8	CO1
2	**Cost & Production Function**	Meaning and Types of Cost, Traditional and Modern Theory of Cost, Isocost Curve, Analysis of Economies of Scale. Technological Progress and Production Function, Choice of Optimal Input Combinations. Types of Production Function: Cobb-Douglas, CES, and Translog Production Function.	8	CO2
3	**Markets Form and Pricing of Product**	Types of Market Situations, Relationship between Perfect and Monopoly Situation, Duopoly Market Situation, Cournot's, Stackelberg, Edgeworth and Bertrand Models, Monopolistic Competition: Characteristics, Price and Non-Price Competition, Oligopoly: Cartels and Kinked demand curve	9	CO3
4	**Factor Pricing**	Marginal Productivity Theory of Distribution. Theories of Wages, Rent, Interest and Profit, Pricing of Factors in Perfect and Imperfect Competition.	7	CO4
5	**Welfare Economics**	Old Welfare Economics: Marshall and Pigou, Pareto and Welfare Economics: Criteria and Optimality, Compensation Principle: Hicks, Kaldor and Scitovsky, Social Welfare Function: Bergson and Samuelson.	8	CO5

Reference Books:

Ahuja, H.L (2013): Advanced Economic Theory", Chand & Company. Shastri, Rahul. A (1999): Microeconomics", Orient Blackswan.

A. Koutsoyiannis: Modern Microeconomics.

Andrew. Mas-Colel, Michael Dennis Whinston, Jerry R. Green: Micro Economics.

David Krepps: A course in Micro Economics Theory.

e-Learning Source:

https://swayam.gov.in/

http://www.ignouhelp.in/ignou-study-material/

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	3	2	3	3	2	2	1	3	3	3	3
CO2	3	3	2	2	2	2	3	3	3	3	3
CO3	3	2	3	2	3	3	2	3	3	3	3
CO4	3	3	2	2	3	2	1	3	3	3	3
CO5	3	2	3	3	2	3	2	3	3	3	3

1-Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	**Sign & Seal of HoD**

Effective from Session:	2023-24						
Course Code	HE 402	**Title of the Course**	International Economics	**L**	**T**	**P**	**C**
Year	First	**Semester**	First	4	0	0	4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives	This course introduces students to the principle issues of international trade. The course begins with theories of International trade, and then examines alternative trade theories. The students will learn measurement and gains from trade and understand balance of payment. They will gain knowledge about foreign exchange rate, economic intervention and integration.						

Course Outcomes	
CO1	Acquaint with the principles related to international trade.
CO2	Understand the concept of measuring various indices revealing specialisation.
CO3	Know the concepts related to balance of payments (BoPs).
CO4	Understand the foreign exchange.
CO5	Create the knowledge Economic Integration.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	**Theories of International Trade**	Theory of international trade-theories of absolute advantage, comparative advantage and opportunity costs. Modern theory of international trade; Heckscher – Ohlin Theorem; factor price equalization theorem; Leontief's paradox.	10	CO1
2	**Measurement and gains from trade**	International trade and growth, Measurement of gains from trade and their distribution, Theory of Reciprocal demand; Gains from Trade- Offers Curve, Terms of Trade; Concept, Types, Factor affecting Terms of Trade.	8	CO2
3	**Balance of Payment**	The Current Account and Capital Account; Balance of payments (BoPs) and trade policy; Equilibrium and Dis-equilibrium in the balance of payments (BoPs); Adjustment Mechanism in the Balance of Payments – Direct and Indirect mechanisms; Mundell- Fleming model.	10	CO3
4	**Foreign Exchange Rate**	Foreign Exchange rate: Flexible and fixed exchange rates, exchange rate determination: Determination under Gold standard; purchasing power parity.	8	CO4
5	**Economic Interventions and Integration**	Theory of Interventions: Tariff, Quota, Non Tariff Barriers, Effect of Tariffs under partial and General Equilibrium; Forms of Economic Integrations, Customs union: Static and dynamic effects of a customs union;	9	CO5

Reference Books:

Kindlberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.

Krugman, P.R. and M. Obstgeld (1994), International Economics: Theory and Policy, Glenview, Foresman.

Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.

Soderston, B.O. (1994), International Economics, The Macmillan Press Ltd., London.

Solomon, R. (1982), The International monetary System, 1945-81, Harper and Row, New York.

Yeager, L.B. (1976), International Monetary Relations: Theory, History and Policy, Harper and Row, New York.

e-Learning Source:

https://ocw.mit.edu/courses/14-581-international-economics-i-spring-2013/pages/lecture-notes/

Course Articulation Matrix: (Mapping of COs with POs and PSOs)										
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	2	1	2	2	2	2	2	1	2	1	2
CO2	2	1	2	2	2	2	2	1	2	1	2
CO3	2	1	2	2	2	2	2	1	2	1	2
CO4	2	1	2	2	2	2	2	1	2	1	2
CO5	2	1	2	2	2	2	2	1	2	1	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	**Sign & Seal of HoD**

Effective from Session: 2023-24								
Course Code	HE 403	**Title of the Course**	Environmental Economics	**L**	**T**	**P**	**C**	
Year	First	**Semester**	First	4	0	0	4	
Pre-Requisite	Graduation	**Co-requisite**	None					
Course Objectives	Students will come to know about the relevance of environmental economics and how market allocate goods & how sometimes market fail to allocate environmental resources optimally and they will come to know how sustainable development of the economy can be attained.							

Course Outcomes	
CO1	To understand the basics of environment and environmental economics.
CO2	To understand the relationship between environment, Ecology and Economy
CO3	Examine the situations of market failure in case of environmental goods.
CO4	To evaluate Global and Domestic Environmental Issue
CO5	To understand Global Warming

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	**The Environment and Economics**	Meaning, importance and scope of Environmental Economics; Evolution and Growth of Environmental economics; Basic Concepts and Theories of Individual Choices.	9	CO1
2	**Environment, Ecology and Economy**	Environment, Ecology and Economy; Interaction between economy and environment. Ecological Relationship; Structure of Ecology, Cycle of Ecology.	10	CO2
3	**Genesis of Environmental Problems and Theory of Environmental Regulation and policy**	Market Failure, Public Goods and Externalities, Environmental Methods of abatement of externalities: The Pigouvian tax-subsidy approach; Coasian property rights approach; Liability laws: Emission Standard and Effluent Charges.	10	CO3
4	**Global and Domestic Environmental Issues**	Global environmental issues; Overview of climate change: Causes, Possible effects; Adaptation and mitigation measures for climate change; Politics and climate Change: Kyoto Protocol, Copenhagen, Paris Agreement.	8	CO4
5	**Economics of Global Warming**	Economics of Global Warming: The GHG Damage Cost, Abatement Costs, Climate Policy, Business as usual approach, Gradualist approach, Precautionary approach.	8	CO5

Reference Books:

A.M Hussen : Principles of Environmental Economics

C.D. Kolstad: Environmental Economics

David.A.Anderson: Environmental Economics and Natural resource

Down to Earth, Science and Environment Fortnightly

K. Singh & A. Shisodia: Environmental Economics, Sage Publications, New Delhi

N. Hanley, Shogren, B. White: Introduction to Environmental Economics

R.N. Bhattacharya: Environmental Economics

T. Tietenberg and L. Lewis : Environmental & Natural Resource Economics

e-Learning Source:

https://nptel.ac.in/courses/109107171

https://fcom.stafpu.bu.edu.eg/Economy/3898/crs-15010/Files/environmental_and_natural_resource_economics_by_tom_tietenberg_9th_edition.pdf

Course Articulation Matrix: (Mapping of COs with POs and PSOs)											
PO-PSO **CO**	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	2	2	2	2	2	1	2	1	2	1	2
CO2	2	2	2	2	2	1	2	1	2	1	2
CO3	2	2	2	2	2	1	2	1	2	1	2
CO4	2	2	2	2	2	1	2	1	2	1	2
CO5	2	2	2	2	2	31	2	1	2	1	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	**Sign & Seal of HoD**

Integral University, Lucknow

Effective from Session:								
Course Code	HE405	**Title of the Course**	Monetary Economics	**L**	**T**	**P**	**C**
Year	First	**Semester**	First	4	0	0	4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives	This course analyses the significant role of Money and Banks in the economy. The course deals with banks and financial markets, which are most significant in the process of growth and development. Since reforms were introduced in the financial sector; many new concepts have emerged in this sector. For the students of economics, it is essential to understand and analyze these new concepts as well as monetary forces and real forces, their development role, and limitations in shaping and influencing the monetary and related policies both at the national and international levels.						

Course Outcomes	
CO1	Examine the various concepts, theories, and working of the monetary system in India.
CO2	Understand the role and importance of the money market and capital market
CO3	Apply their knowledge to protect themselves and others from false and baseless rumors regarding financial markets and institutions in the country.
CO4	Evaluate the implications of monetary policy.
CO5	Suggest new policies to control inflation and make banks more effective.

Unit No.	Content of Unit	Contact Hrs.	Mapped CO
1	Money: History, Concept and Function; Measures of money supply in India; RBIs analysis of money supply; New monetary aggregates and Liquidity Aggregates; Monetary theory: Quantity Theory of Money, Wicksell's Contribution, Keynes Theory of Money and Prices.	09	CO1
2	Indian banking system: Meaning and Types of Banks, Functions of Banks, Changing role and structure; Latest Trends in Banking Sector, Comparison of India with other developed countries. Banking sector reforms in India.	09	CO2
3	Theories of Demand for Money, Neoclassical Theory, Liquidity preference theory, Baumol's Inventory theory approach, Tobin portfolio approach, Friedman's restatement of the quantity theory of money, Patinkin's real balance effect, Monetary neutrality view of real business cycle theory.	09	CO3
4	Structure of financial markets; Money And Capital Markets: Organization, structure, and reforms in India; Call money market, Treasury bill market, Commercial bill market, Repo market, Term money market, Market for the certificate of deposits and commercial papers, Money market mutual funds, CLBO, DFHI; Major recommendations of the Chakravarty committee and Narasimham committee I&II.	09	CO4
5	Monetary policy: Objectives, Intermediate targets, Instruments; Rules versus discretion; Monetary transmission mechanism and targeting; Financial globalization and impossible trinity; Monetary policy framework in India; Balance sheet of RBI; Demonetization in India: A critical assessment, An overview, Raju & The Forty Thieves.	09	CO5

Reference Books:
Gupta S.B, Monetary Economics, S Chand and Co., New Delhi, 2001
Jadhav N, Monetary Policy, Financial Stability and Central Banking in India, Macmillan India Ltd
RBI, Report on currency and finance (various issues)
Government of India, Economic Survey (various issues)
Lewis MK and Mizen PD, Monetary Economics, Oxford University Press, London
Honda J, Monetary Economics, Routledge, New York, 2000
Kulkarni K G, Modern Monetary Theory, Macmillan India Ltd., 1999
Khan, M. Y, Indian Financial System. Tata McGraw Hill, New Delhi.

E-Learning Source:
https://swayam.gov.in/
http://www.ignouhelp.in/ignou-study-material/

Course Articulation Matrix: (Mapping of COs with POs and PSOs)										
PO-PSO / CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	3	1	1	2	1	2	3	2	3	1	1
CO2	2	2	2	1	3	2	1	2	1	3	2
CO3	1	3	3	3	2	3	2	3	2	2	1
CO4	2	1	2	1	1	2	3	2	3	1	2
CO5	3	2	1	2	3	1	1	1	1	2	3

1-Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	**Sign & Seal of HoD**

Effective from Session: 2020-21							
Course Code	MT404	**Title of the Course**	Concept of Applied Statistics	**L**	**T**	**P**	**C**
Year	Ist	**Semester**	Ist	3	1	0	4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives		The main objective is to equip the students with the various economic issues that they are expected to face as managers at the firm level.					

Course Outcomes	
CO1	To demonstrate and understand the quantitative approach of mathematical and statistical analysis.
CO2	To demonstrate and understand the matrices and calculus concepts.
CO3	To understand the knowledge of central tendency.
CO4	To understand the concept of probability with its laws and principles.
CO5	To demonstrate and implicated the decision theory and index number.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	**Introduction**	Discrete and continuous data, graphical representation of grouped data: Bar diagram, histogram, and pie chart. Concept of central tendency and its measures: Mean, Median, Mode, Geometric and Harmonic mean, partition values, Dispersion and its measures: Range, Quartile deviation, Mean deviation, Standard deviation and Coefficient of variation, moments, skewness, kurtosis and its measures.	12	CO1
2	**Methods of Mean**	Scatter diagram, Karl Pearson's and Spearman's rank correlation coefficients, coefficient of determination, correlation ratio, the principle of least squares, fitting of linear regression and related results, partial and multiple correlations of three variables, their measures, and their results.	12	CO2
3	**Probability**	Random experiment, events, mutually exclusive and disjoint events, trial, sample space, the definition of probability, addition and multiplication theorem, independent events, conditional probability, Bayes theorem (without proof), and its applications. Probability distribution: Binomial, Poisson, and normal distributions.	12	CO3
4	**Time series analysis**	Index numbers: Types of methods of their constructions (Weighted & Unweighted), Components of time series, Additive and multiplicative models, Fitting of the trend by Freehand method, semi-average method, Moving averages, and the principle of least squares. Seasonal variations calculation and uses, Simple averages, ratio to trend methods.	12	CO4
5	**Data test methods**	Test of Significance: Sample and hypothesis, Null and alternative hypothesis, critical region, Type I & Type II errors, level of significance and power of a test, Large and small sample test: Z, t, Chi-square, F tests and Analysis of variance: one way and two-way classifications.	12	CO5

Reference Books:

Goom A.M., Gupta M.K. and Das Gupta B.(1991): Fundamental of Statistics, Vol. I, World Press, Calcutta.

Rohtagi, V.K.(1967): An Introduction to Probability and Statistics.

Hogg R.V. and Craig A.T. (1972): Introduction to Mathematical Statistics, Amerind Publishing Co.

e-Learning Source:

https://swayam.gov.in/

http://www.ignouhelp.in/ignou-study-material/

PO-PSO CO	Course Articulation Matrix: (Mapping of COs with POs and PSOs)															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	2	2	2	1	2	2	2	2	1	2	2	2	2	2
CO2	2	1	2	2	1	2	1	3	1	2	2	2	1	1	1	2
CO3	2	2	1	3	1	2	1	2	2	1	3	1	2	2	2	1
CO4	2	2	1	2	1	1	2	2	2	1	2	2	1	2	1	2
CO5	3	1	2	3	1	2	1	2	1	2	1	1	2	1	2	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator   **Sign & Seal of HoD**