Integral University, Lucknow

Effective from Session:								
Course Code	HE407	**Title of the Course**	Macro Economics	**L**	**T**	**P**	**C**	
Year	First	**Semester**	Second	4	0	0	4	
Pre-Requisite	Graduation	**Co-requisite**	None					
Course Objectives	Macroeconomics deals with the movement, fluctuations, and growth in economic aggregates like income, employment, interest rates, and price level. It attempts to explain the past behavior of such variables, predicts the likely future events, and helps policymakers to formulate the appropriate policies for improving the economic welfare of a country. The basic objective of this course is to help the learners in a proper understanding of the economic aggregates.							

	Course Outcomes
CO1	Understand the basic concepts and various approaches to macroeconomics.
CO2	Examine the systematic facts and latest theoretical developments for empirical analysis.
CO3	Acquire a logical and consistent framework for understanding the main macroeconomic facts and events
CO4	Evaluate economic models to assess the validity and relevance of various economic policies.
CO5	Develop the ability to employ the correct macroeconomic tool(s) to explain specific macroeconomic issues and justify policy proposals.

Unit No.	Content of Unit	Contact Hrs.	Mapped CO
1	The building blocks-Say's law and quantity theory of money, Wage-Price flexibility, Labour market, and its equilibrium; Policy implications of the classical model; Pigou's theory; Basic Keynesian model; Keynes vs. the Classics; Balanced budget multiplier; IS-LM analysis in a closed economy.	09	CO1
2	Main features of the new classical macroeconomics; Efficient market hypothesis; Lucas imperfect information model; Policy irrelevance, Lucas critique; Supply-side economics; New Keynesian models of wage-price stickiness-Mankiw model, Efficiency wage model, Policy implications of the new Keynesian model.	09	CO2
3	Classical, Keynesian, and Monetarist approach to inflation; Bent Hansen model of demand-pull inflation; Structuralist theory of inflation; Phillips curve-Short run and long run; Modified Phillips curve- Friedman, Tobin, and Solow; Theories of trade cycles- Samuelson, Hicks, Kaldor, and Goodwin's model; Real business cycle theory.	09	CO3
4	Macroeconomic variables and equilibrium in an open economy; IS-LM curve and balance of trade- Zero capital mobility, Interest rate differentials; Implications of capital mobility for macroeconomic policy; Mundell-Fleming model under fixed and flexible exchange rates; Inflation and unemployment in an open economy.	09	CO4
5	Macroeconomic policy- Meaning and objectives, Targets and instruments, Fixed and flexible target approach, Uncertainty and economic policy, Lags in the effects of policy, Gradualism versus shock therapy, Rules versus discretion; Deficits and money growth; Financing of the budget deficit; Inflation tax; Ricardian equivalence.	09	CO5

Reference Books:

Branson, W.H, Macroeconomic Theory and Policy, Harper and Row, New Delhi.

Bhole, L.M, Impact of Monetary Policy, Himalayan Publishing House, Bombay.

Dernburg McDowell, Macroeconomics, McGraw–Hill Publishers.

Dornbusch, R. and S. Fischer, Macroeconomics, 4th Ed., McGraw Hill, Kogakusha.

Gregory Mankiw, N, Macroeconomics, 7th Ed., Worth Publishers.

Turnovsky, S, International Macroeconomic Dynamics, Ma: MIT Press, Cambridge.

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	1	1	3	1	1	1	1	2	3	1	1
CO2	2	2	2	2	2	2	2	2	1	3	2
CO3	3	3	1	3	3	3	3	3	2	2	1
CO4	1	1	2	1	1	1	2	2	3	1	2
CO5	3	3	3	3	2	3	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: 2023-24									
Course Code	HE408	**Title of the Course**	Research Methodology	**L**	**T**	**P**	**C**
Year	First	**Semester**	Second	4	0	0	4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives	The objective of this paper is to enable the students to know the major concepts and methods in research methodology. The students at the post-graduate level are expected to know research methods and data analysis so that they can be employed in any business and industrial undertakings as research / economic analyst.						

Course Outcomes	
CO1	To understand the scope, purpose of social research and various types of research.
CO2	To understand the identification, selection and formulation of research problem.
CO3	To know about various methods of data collection.
CO4	To know about hypothesis, its importance and problems in formulating hypothesis.
CO5	To understand the format of research report and its structure.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction	Introduction, Nature, Scope and Purpose of social research. Types of research: pure & applied research; formulative or exploratory research; descriptive research, historical research, experimental research, survey research.	8	CO1
2	Research Process	Identification, selection and formulation of research problem – sources of research problem – criteria of a good research problem. Review of literature. Preparing Research Design: Definition, Concepts, and types– exploratory, descriptive and diagnostic, experimental and Analytical research designs. Major Difficulties in the Area of economic research.	8	CO2
3	Data Collection	Data Collection and Processing Population, Sample, Sampling techniques; Methods of collection of Primary Data: Direct Personal Investigation, Indirect oral investigation, Information received through local agents and correspondents, mailed questionnaire; Design of questionnaire; Editing, coding, classification and tabulation of data. Secondary data: Sources, Limitations of Secondary Data, Precautions in the use of Secondary Data.	8	CO3
4	Hypothesis Testing	Definition of Hypothesis, Problems in formulating Hypothesis, Importance of hypothesis, Prerequisites for testing of Hypothesis, Testing of Hypothesis, Types of errors in testing of Hypothesis, Level of significance.	8	CO4
5	Research Report	Presentation of Information and Writing of a Research Report, Language, Analysis and interpretation of Data, Format of a Research Report, Principles of writing the Research Report: Organization and Style - Contents-Styles of reporting, Pagination- Identification- Using quotations- Presenting footnotes – abbreviations- Presentation of tables and figures- Citation and Referencing: APA Style; - format of appendices- Indexing - Bibliography, Appendices, Ethical issues relating to research.	8	CO5

Reference Books:

Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age.

Sadhu A,.N. & Amarjit Singh: Research Methodology in Social Sciences, by Himalaya Publishing House.

Gopal, M.H (1970) An Introduction to Research Procedures in Social Sciences, Bombay, Asia Publishing House.

Nachmias David &Nachmias Chava, (1981), Research Methods in the Social Sciences, New York.

e-Learning Source:

https://swayam.gov.in/

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	2	3	2	1	2	1	2	1
CO2	3	3	2	3	3	3	2	1	2	1	2
CO3	2	3	1	2	3	2	2	2	1	2	1
CO4	2	3	1	2	3	2	1	2	1	2	1
CO5	3	3	1	3	3	3	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 409	**Title of the Course**	Computer Application in Economics	**L**	**T**	**P**	**C**
Year	First	**Semester**	Second	4	0	0	4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives	This course will develop an interest among students regarding use of computer in Economics. The usage of statistical tools, software and preparation of data files will make the student industry ready. On satisfying the requirements of this course, students will be able to critically evaluate economic problems of developing countries.						

CourseOutcomes	
CO1	Students will understand the Basic of Computers
CO2	Students will know the basicsof documentation and presentation tools
CO3	Student will know about the Ecommerce
CO4	Student will use MS-Excel in analysing Data
CO5	Student will use software in analysingData

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	**Introduction to Computers**	Computer : Definition, Characteristics and Limitations; History and Evolution of Computers; Generations of Computers; Components of a Personal Computer System; Classification of Computers and their applications; Model and Functioning of a Digital Computer, Computer Vs. Human – Being. Artificial Intelligence.	10	C01
2	**Computer Fundamentals**	System – Meaning and Concept; Hardware, Software and Types of Software; Operating System- Meaning and Functions; Memory – RAM and ROM; Input-Output Devices. MS Office: MS Word, MS Excel, MS Power Point.	9	C02
3	**E-Commerce**	E-Commerce: Meaning, E-Commerce, E-Business and E- Transaction; Ecommerce vs. TraditionalCommerce; Security, Digital Signature, Digital Certificate; Encryption; Electronic Payment System- Debit Cards, Credit Cards, Smart Cards, Electronic Funds Transfer, ATM.	8	C03
4	**Application of MS-Excel**	MS-excel basics, functions, charts, sorting data, filtering data, macros, pivot table.Summarizing and analysis of data; Descriptive Statistics (Mean, median, mode, standard deviation,CV, skewness); Comparison of means; Correlation and Regression analysis; Estimation of GrowthRates; Trends of Forecasting; Testing the significance of parameters.	9	C04
5	**Application of SPSS**	Data Entry in SPSS ; Computing with SPSS – Preparation of Graphs withSPSS – Distribution Functions and Density Functions – Statistical Package handling and commanddescription for SPSS – Reports, Descriptive – Statistics, Compare Means, Time Series Analysis,Correlation and Regression Models.	9	CO5

Reference Books:

David Whiteley, E-Commerce: Strategy, Technologies and Applications, Tata McGraw Hill, New Delhi

Fundamentals of Computers by Rajaraman V, Prentice Hall India Learning Private Limited.

Goel, Sushil, Computer Application to Business & E-Commerce, Natraj Publishing House,Karnal.

Lipschultz, M.M. and S. Lipschultz , Theory and Problems of Data Processing, Schum'sOutlineSeries, McGraw Hill, New York.

Madan, Sushila, Information Technology, Taxman Allied Services, New Delhi.

P.T. Joseph, S.J. , E- Commerce : An Indian Perspective, PHI Learning , New Delhi.

Parameswaranm R. Computer Applications in Business, S. Chand and Company, New Delhi

e-Learning Source:

https://nptel.ac.in/courses/106106092

https://nptel.ac.in/courses/109107190

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	1	2	1	1	1	1	1	1	2	1	1
CO2	1	2	1	1	1	1	1	1	2	1	1
CO3	1	2	1	1	1	1	1	1	2	1	1
CO4	1	2	1	1	1	1	1	1	2	1	1
CO5	1	2	1	1	1	1	1	1	2	1	1

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

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

Department of Economics
Faculty of Humanities and Social Sciences
Integral University, Lucknow

Effective from Session:2023-24								
Course Code	HE 410	Title of the Course	Labour Economics	L	T	P	C
Year	First	Semester	Second	4	0	0	4
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives		To develop students' abilities in acquiring a better understanding of the functioning of labour markets.					

Course Outcomes	
CO1	Acquaints students with the contribution of labour in the process of capitalist development.
CO2	The students will be able to understand the labour market institutions, such as union and the government influences the operation of labour markets.
CO3	Student will able to understand Industrial Relations
CO4	How incentives shape labour markets outcome, such as the allocations of labour across occupations or intensity of work effort.
CO5	Students will be able to understand the contemporary issues related to labour market in India.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Labour	Key issues in Developing Economy, Characteristics of Indian Labour, Structure of Labour Market, Employment exchange in India, Rural labour in India Employment Progrmmes in India, Labour Productivity and wage Determination theories, Minimum wages Act, share of wages in National Income of India, wages Differentials Standardization, National wages Policy.	10	C01
2	Trade Union	Theories & Function, Trade Union Movement in India and Abroad, National Trade Unions, Impact of Trade Unions.	9	C02
3	Industrial Relations	Recruitment of workers, Disputes & Establishment of peace, Settlement of Disputes, Collective Bargaining, Conciliation Arbitration and adjudication, Participation in management.	8	C03
4	Labour Welfare	Labour Welfare Measures in India, legislations in India, Child and women, Labour, Social security –Social Security in India and Abroad, International labour organization.	9	C04
5	Contemporary Issues	Labour markets failure, working poverty surplus labour, lack of labour reforms, and other contemporary issues.	9	CO5

Reference Books:

Labour Economics : Theory, institutional & pub policy, by Ray Marshall

Labour Economics : by Dr. Sinha, Sinha

Labour Economics and social welfare, by- Dr. B.P Tyagi & Dr. H.P Singh

Labour Economics & Labour Problems – by M.V. Josh

e-Learning Source:

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	1	2	1	1	1	1	1	1	2	1	1
CO2	1	2	1	1	1	1	1	1	2	1	1
CO3	1	2	1	1	1	1	1	1	2	1	1
CO4	1	2	1	1	1	1	1	1	2	1	1
CO5	1	2	1	1	1	1	1	1	2	1	1

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	HE411	**Title of the Course**	Resource Economics		**L**	**T**	**P**	**C**
Year	First	**Semester**	Second		4	0	0	4
Pre-Requisite	Graduation	**Co-requisite**	None					
Course Objectives	Students will come to know about market failure, students will learn to design regulation which corrects market failure and they will learn how to regulate pollutants that travel across country boundaries and how environmental regulations affect trade flows.							

Course Outcomes	
CO1	To know the basics of Resource
CO2	To understand the relationship between Environment and Economic Development.
CO3	To know about Green Accounting
CO4	To know about Environmental valuation methods.
CO5	To know about the techniques of Valuation

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction	Resources: Types, Renewable and Non-renewable Resources, Common-pool Resources: Tragedy of the Commons, Empirical Studies on CPR in Indian Context.	8	**CO1**
2	Environment and Economic Development	Environment and Economic Development: Classical: Malthusian and Neo-Malthusian, Neo-classical: Environmental Kuznet Curve, Economics of Sustainability: Weak and Strong Sustainability.	8	**CO2**
3	Green Accounting	Green Accounting: Environmental adjusted system of national income accounting. Environmental adjusted sustainable national income, Indicators of Economic and Environment.	7	**CO3**
4	Valuation of Environmental Goods-I	Environmental Valuation- Meaning, Need for Environmental Valuation, Difficulty in Measuring Environmental Values, Techniques of Valuation: Revealed Preference Methods, Hedonic property values and house hold production models (Travel cost method and household health production function).	9	**CO4**
5	Valuation of Environmental Goods-II	Techniques of Valuation: Stated Preference Methods, Methods based response to hypothetical Markets, Contingent Valuation Methods, Assessing willingness to pay (WTP) and willingness to accept (WTA).	8	**CO5**

Reference Books:

A.M Hussen : Principles of Environmental Economics, Routledge, London

C.D. Kolstad: Environmental Economics, OUP, New Delhi.

David .A .Anderson: Environmental Economics and Natural resource

Katar Singh & Anil Shisodia: Environmental Economics, Sage Publications, New Delhi

e-Learning Source:

https://swayam.gov.in/

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

Integral University, Lucknow

Effective from Session:								
Course Code	HE412	**Title of the Course**	Indian Economy	**L**	**T**	**P**	**C**
Year	First	**Semester**	Second	4	0	0	4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives	To make students aware of the structure and growth of the Indian economy and to Apprise them of policy issues related to the economy of India.						

	Course Outcomes
CO1	Comprehend the Basic Characteristics of the Indian Economy.
CO2	Know about the Basic Features of Indian Agriculture and Industries.
CO3	Understand the Issues related to food security and Public Distribution systems.
CO4	Understand the concept of Poverty Inequality and Unemployment.
CO5	Examine the Issues and Challenges of the Indian Economy.

Unit No.	**Content of Unit**	Contact Hrs.	Mapped CO
1	**Growth and Structure of the Economy:** Basic Features of Indian Economy; Trends in National and Per Capita Income; Sectoral Contribution and Economic Transition; Demographic Transition-Stages, Trends, and Issues, Demographic Dividend.	09	CO1
2	**Agriculture:** Characteristics of Indian Agriculture; Trends in Agricultural Production and Productivity; Causes of Low Productivity; Green Revolution; Agricultural Price Policy, Public Distribution System and Food Security, Agricultural Credit-Non Institutional and Institutional sources of credit.	09	CO3
3	**Industry:** Importance of Industries in the Indian Economy; Industrial Pattern and Growth during the Planning Period; Industrial Policy; Micro, Small and Medium Enterprises (MSMEs); Industrial Sickness; Sources of Industrial Finance.	09	CO4
4	**Poverty, Unemployment, and Inequality:** Poverty- Concept, incidence and causes; Human Poverty Index(HPI), Multi-Dimensional Poverty Index; Poverty Eradication Programmes; Unemployment- Types, Estimates, and Causes; Unemployment Eradication Policies and Programmes; Inequality- Pattern and Causes.	09	CO2
5	**Foreign Trade and Investment:** India's Foreign trade: Composition and direction; EXIM policy; Current account deficit and Capital flows; FDI and Portfolio investment; Balance of trade and Balance of Payment.	09	CO5

Reference Books:

Agarwal A. N and M.K. Indian Economy, New Age Publications.

Agarwal M.K. Uttar Pradesh Mein Arthik Vikas, New Royal.

Stiglitz Joseph, Globalization and its Discontents, Penguin.

Dreze Jean, Social Policy (EPW), Orient Blackswan.

Human Development Reports, UNDP.

Economic Survey, Ministry of Finance, Government of India.

Rudra Dutt and KPM Sundaram- Indian Economy.

Uma Kapila- Indian Economy.

Mishra and Puri- Indian Economy.

Bansil PC-Agricultural Problem of India.

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	1	1	3	1	1	1	1	2	3	1	1
CO2	2	2	2	2	2	2	2	2	1	3	2
CO3	3	3	1	3	3	3	3	3	2	2	1
CO4	1	1	2	1	1	1	2	2	3	1	2
CO5	3	3	3	3	2	3	1	1	1	2	3

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

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

Integral University, Lucknow

Effective from Session: 2020-21								
Course Code	MT433	**Title of the Course**	Econometrics Theory	**L**	**T**	**P**	**C**
Year	Ist	**Semester**	IInd	3	1		4
Pre-Requisite	Graduation	**Co-requisite**	None				
Course Objectives	The course objective is to learn the concepts of Econometrics and to construct the multiple regression models, partial and multiple regression coefficients and apply these models for future prediction.						

Course Outcomes	
CO1	To understand the nature and scope of econometrics and Gauss-Markov theorem.
CO2	To demonstrate and understand the Multiple regression models with two explanatory variables.
CO3	To know about Multi-collinearity and Errors of Measurement.
CO4	To understand problems in regression analysis having Time series and Cross section data.
CO5	To know about Heteroscadasticity, detection and its remedial measures.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Unit - I	Nature, meaning and scope of econometrics, Simple linear regression models, assumptions, estimation through ordinary least square method (OLS) and Maximum likelihood method. Properties of estimators; significance test and confidence interval, Gauss- Markov Theorem.	12	CO1
2	Unit - II	Multiple regression models with two explanatory variables. Partial and Multiple regression coefficients, Estimation of the Regression Coefficients, Testing of Significance of Regression Coefficients and Regression Model, R- square, Adjusted R- square, Akaike Information Criteria and Schwarz Criterion.	12	CO2
3	Unit - III	Problems of Regression Analysis: Nature, Tests, Consequences and remedies of Problem of Multi-collinearity, Problems of specification error, Errors of Measurement.	12	CO3
4	Unit - IV	Problems in Regression Analysis having Time Series and Cross Section Data: Auto correlation, Nature of the problem, Consequences of using OLS in the presence of Auto correlation, Detecting Auto-correlation-Graphical Method, Durbin-Watson 'd-statistic', remedial measures of the problem.	12	CO4
5	Unit -V	Heteroscadasticity- meaning, graphical presentation of the presence of Heteroscadasticity. Consequences of Heteroscadasticity, Detection and remedial measures of the problem.	12	CO5

Reference Books:

Econometric Methods- J. Johnston & J. DiNardo (1997) McGraw Hill Higher Education IV Edition.

Basic Econometrics – D.N Gujrati, D.C Porter, S Gunasekar (2012) McGraw Hill Higher Education V Edition.

Theory of Econometrics – A. Koutsoyiannis (1973) Palgrave Macmillan Second Edition

Advanced Econometrics --Amemiya, T. (1985), Harvard University Press, Cambridge, Mass.

e-Learning Source:

https://nptel.ac.in/courses/111/104/111104072/

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