Syllabus

Fourth Semester Courses in ECONOMICS

(November 2025 onwards)

Contents:

ST. XAVIER'S COLLEGE-AUTONOMOUS MUMBAI-400 001

APPROVED SYLLABUS

PRINCIPAL
ST. XAVIER'S COLLEGE
(AUTONOMOUS)
MUMBAI - 400 001.

S.Y. B.A. Economics		
Course Title: Econometric Applications **Course Code: UAECO5003CR1**		
Credits: 4		Theory (4) = 60 hrs
No.	**Course Objectives**	
1. 2. 3. 4.	To explain formulation empirical research questions and translate them into econometric models. To explain evaluation of the validity and reliability of empirical research. To explain diagnostics tests for econometric models. To explain how to formulate models and perform quantitative analysis.	
CO	**Course Outcomes** **On completing the course, the learner will be able to**	**Bloom's Taxonomy Level (BT level)**
1.	To learn to conduct independent econometric analysis of real-world datasets.	Analysing
2.	To learns to diagnose and address violations of regression assumptions like heteroscedasticity and autocorrelation	Understanding
3.	To apply the regression model for forecasting and policy analysis.	Applying
4.	To interpret the results of econometric analysis.	Applying

UNIT I **Multiple Linear Regression Model** **(15)**

1. Interpretation of Partial Regression Coefficients
2. Interval Estimation and Hypothesis Testing
3. Testing Partial Regression Coefficients: The t-test
4. Testing overall significance of Multiple Linear Models: The F test

UNIT II **Failure of Classical Assumptions:** **(15)**

1. Heteroscedasticity- Consequences for OLS; Testing for Heteroscedasticity- Informal Methods and Formal Methods: Park Test, Spearman's Rank Correlation Test, Goldfeld - Quandt Test, Breusch-Pagan-Godfrey Test, White's Test
2. Multicollinearity- Consequences; Detection
3. Autocorrelation: Consequences of using OLS in the presence of Autocorrelation; Detection of Autocorrelation: Graphical Methods, The Runs Test, Durbin- Watson Test
4. Remedial Measures for CLRM violations

UNIT III **Model Specification** **(15)**

1. Types of Specification Errors: Omission of a relevant variable; Inclusion of an irrelevant variable, Functional form misspecification.
2. Concept of Omitted variable bias
3. Tests of specification errors
4. Model Selection Criteria: R^2; Adjusted R^2; Akaike Information Criterion; Schwarz Information Criterion.

UNIT IV **Time Series Analysis** **(15)**

1. Components of Time Series
2. Measurement of Trend: Method of Semi-Averages, Method of Curve Fitting by Principle of Least Squares
3. Measurement of Seasonal Variations: Ratio to Trend Method
4. Measurement of Cyclical Variations

Basic Reference Books/ Reports/ Publications

1. Chris Brooks, (2008), Introductory Econometrics for Finance, Cambridge University

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Press, Second Edition.
2. Christopher Dougherty, (2011) Introductory Econometrics, Oxford University Press, Fourth Edition.
3. G.S. Maddala, (1992) Introduction to Econometrics, Macmillan Publishing, Second Edition
4. Gujarati, Damodar and Sangeetha, (2011), Basic Econometrics, McGraw Hill, Fifth Edition
5. James Stock and Mark Watson, (2011) Introduction to Econometrics, Pearson, Third Edition
6. Jan Kmenta, (1986) Elements of Econometrics, Macmillan Publishing, Second Edition
7. Jeffrey Wooldridge, (2009) Introductory Econometrics, Cengage Learning, Fourth Edition
8. Marno Verbeek, (2004)A Guide to Modern Econometrics, John Wiley, Second Edition
9. Michael Intriligator, (1996) Econometrics Models, Techniques and Applications, Prentice Hall, Second Edition
10. Ronald Wonnacott and Thomas Wonnacott, (1979) Econometrics, John Wiley, Second Edition
11. S.C. Gupta & Indra Gupta, (2018) Business Statistics, Himalaya Publishing House; Second Edition

Evaluation and Assessment:

Evaluation (Theory – Core course): Total marks per course 100 (for a 4-credit course)

Continuous Internal Assessment (CIA): 40 marks

CIA 1: Written test - 20 marks

CIA 2: Assignment - 20 marks

End Semester Examination – 60 marks

Learning Levels	Remembering	Understanding	Analyzing	Application	Evaluation	Creation
% Weightage	10%	25%	30%	15%	15%	5%

S.Y.B.A.		
Course Title: Macroeconomics: Theory & Practice **Course Code: UAECO5004CR1**		
Credits: 4		No. of lectures: 60
No.	**Course Objectives**	
1	To explain the different analytical methods in Macroeconomics through the IS - LM framework.	
2	To describe the relevance of macro-economic theories with fiscal and monetary policy by using the IS - LM framework.	
3	To facilitate the learning of various techniques in macro-economic analysis to assess the impact of inflation and business cycles on Indian economy through IS - LM framework.	
CO	**Course Outcomes** **On completing the course, the learner will be able to**	**Bloom's Taxonomy Level (BT level)**
1	Understand the relevance of IS - LM theory with real world problems like inflation and unemployment	Understanding
2	Apply the IS - LM theory to assess its impact on the economy	Applying
3	Analyse the macroeconomic data pertaining to fiscal and monetary policies with the IS- LM model.	Analyzing
4	Evaluate the policies in India with respect to macroeconomic challenges.	Evaluating

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UNIT I **ISLM Analysis** **(15)**

1. Derivation of IS - LM curves, mathematical treatment of ISLM curves
2. Determination of product market and money market equilibrium interest rates and income
3. Factors affecting position and slope of IS - LM curves
4. Deriving aggregate demand and supply curves with IS - LM model

UNIT II **Fiscal and Monetary Policy** **(15)**

1. Explanation of fiscal policy using IS - LM curves.
2. Phenomenon of Crowding out and criticisms
3. Explanation of monetary policy using IS - LM curves
4. Liquidity Trap and transmission effect in India

UNIT III **Open Economy Macroeconomics** **(15)**

1. Fixed vs Flexible Exchange Rate. Concept of Real Exchange Rate
2. Mundell-Fleming Model. Impossible Trinity
3. Disequilibrium in Balance of Payments. Adjustment in Balance of Payments: Devaluation, Reduction in Absorption, Direct controls
4. Global financial and economic crises and India

UNIT IV **Macroeconomic Challenges in India** **(15)**

1. A historical overview of macroeconomic challenges in India
2. Inflation - Growth trade off in the context of India
3. External shocks and efficacy of macroeconomic policies in India
4. External risk management system in India: BOP and FOREX

Basic Reference:

1. Ahuja H.L., (2019), Advanced Macroeconomic Theory, S Chand Publication, New Delhi.
2. D'Souza Errol, (2012), Macroeconomics, Dorling Kindersley India pvt. Ltd.-Pearson Education, second edition
3. Dwivedi D. N. (2005), Macroeconomics: Theory and Policy, Tata McGraw-Hill.
4. Mankiw Gregory, (2007), Principles of Macroeconomics, Cengage Learning India Private ltd. New Delhi, Fourth edition

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Evaluation and Assessment:

Evaluation (Theory – Core course): Total marks per course 100 (for a 4-credit course)
Continuous Internal Assessment (CIA): 40 marks
CIA 1: Written test - 20 marks
CIA 2: Assignment - 20 marks
End Semester Examination – 60 marks

Learning Levels	Remembering	Understanding	Analyzing	Application	Evaluation	Creation
% Weightage	10%	25%	30%	15%	15%	5%

S.Y.B.A. (Minor)		
Course Title: Theories of Macroeconomics **Course Code: UAECO5002MN1**		
Credits 4: No. Of lectures: 60		
No.	**Course Objectives**	
1. 2. 3.	To explain the different analytical methods in Macroeconomics through the IS - LM framework. To describe the relevance of macro-economic theories with fiscal and monetary policy by using the IS - LM framework. To facilitate the learning of various techniques in macro-economic analysis to assess the impact of inflation and business cycles on Indian economy through IS - LM framework.	
CO	**Course Outcomes** **On completing the course, the learner will be able to**	**Bloom's Taxonomy Level (BT level)**
1.	Understand technical and policy-oriented approach of Macroeconomics	Understanding
2.	Apply the IS - LM theory to assess its impact on the economy	Applying
3.	Analyse the interrelation between fiscal and monetary policies with the IS- LM model.	Analyzing
4.	Evaluate the policies in India with respect to macroeconomic challenges.	Evaluating

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UNIT I **Macroeconomic Analysis with IS-LM Model** **(15)**

1. Derivation of IS - LM curves, mathematical treatment of ISLM curves
2. Determination of product market and money market equilibrium interest rates and income
3. Factors affecting position and slope of IS - LM curves
4. Deriving aggregate demand and supply curves with IS - LM model

UNIT II **Theoretical Approach of Fiscal and Monetary Policies** **(15)**

1. Fiscal Policy and Product Market
2. Phenomenon of Crowding out and criticisms
3. Explanation of monetary policy using IS - LM curves
4. Liquidity Trap and transmission effect in India

UNIT III **Open Economy Macroeconomics Dynamics** **(15)**

1. Fixed vs Flexible Exchange Rate. Concept of Real Exchange Rate
2. Mundell-Fleming Model. Impossible Trinity
3. Disequilibrium in Balance of Payments. Adjustment in Balance of Payments: Devaluation, Reduction in Absorption, Direct controls
4. Global financial crisis and India

UNIT IV **Macroeconomic Challenges and Risk Management Technique in India.** **(15)**

1. A historical overview of macroeconomic challenges in India
2. Inflation - Growth trade off in the context of India
3. External shocks and efficacy of macroeconomic policies in India
4. External risk management system in India: BOP and FOREX

Basic Reference:

1. Ahuja H.L., (2019), Advanced Macroeconomic Theory, S Chand Publication, New Delhi.
2. D'Souza Errol, (2012), Macroeconomics, Dorling Kindersley India pvt. Ltd.-Pearson Education, second edition
3. Dwivedi D. N. (2005), Macroeconomics: Theory and Policy, Tata McGraw-Hill.
4. Mankiw Gregory, (2007), Principles of Macroeconomics, Cengage Learning India

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Private ltd. New Delhi, Fourth edition

Evaluation and Assessment:

Evaluation (Theory – Core course): Total marks per course 100 (for a 4-credit course)
Continuous Internal Assessment (CIA): 40 marks
CIA 1: Written test - 20 marks
CIA 2: Assignment - 20 marks
End Semester Examination – 60 marks

Learning Levels	Remembering	Understanding	Analyzing	Application	Evaluation	Creation
% Weightage	10%	25%	30%	15%	15%	5%

S.Y.B.Sc. (Minor)		
Course Title: Macroeconomics: Policy & Applications **Course Code: USECO5002MN1**		
Credits 4: No. Of lectures: 60		
No.	**Course Objectives**	
1. 2. 3.	To explain the different analytical methods in Macroeconomics through the IS - LM framework. To describe the relevance of macro-economic theories with fiscal and monetary policy by using the IS - LM framework. To facilitate the learning of various techniques in macro-economic analysis to assess the impact of inflation and business cycles on Indian economy through IS - LM framework.	
CO	**Course Outcomes** **On completing the course, the learner will be able to**	**Bloom's Taxonomy Level (BT level)**
1.	Understand technical and policy-oriented approach of Macroeconomics	Understanding
2.	Apply the IS - LM theory to assess its impact on the economy	Applying
3.	Analyse the interrelation between fiscal and monetary policies with the IS- LM model.	Analyzing
4.	Evaluate the policies in India with respect to macroeconomic challenges.	Evaluating

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UNIT I **Theoretical Approach of Fiscal and Monetary Policies** **(15)**

1. Fiscal Policy and Product Market
2. Phenomenon of Crowding out and criticism
3. Explanation of monetary policy using IS - LM curves
4. Liquidity Trap and transmission effect in India

UNIT II **Theories of Business Cycles** **(15)**

1. Keynesian Theory of Business Cycle
2. Schumpeter's Innovation Theory of Business Cycle
3. Samuelson's Model of Business Cycle: Interaction between Multiplier and Accelerator
4. Real Business Cycle Theory

UNIT III **Open Economy Macroeconomics Dynamics** **(15)**

1. Fixed vs Flexible Exchange Rate. Concept of Real Exchange Rate: Exchange Rate Overshooting, Speculative Attacks and Currency Crises, Role of Capital Flows in External Equilibrium, International Financial Institutions and Policy Coordination
2. Mundell-Fleming Model and Impossible Trinity
3. Disequilibrium in Balance of Payments. Adjustment in Balance of Payments: Devaluation, Reduction in Absorption, Direct controls
4. Global financial crisis and India

UNIT IV **Macroeconomic Challenges and Risk Management Technique in India** **(15)**

1. A historical overview of macroeconomic challenges in India
2. Inflation - Growth trade off in the context of India
3. External shocks and efficacy of macroeconomic policies in India
4. External risk management system in India: BOP and FOREX

Basic Reference:

1. Ahuja H.L., (2019), Advanced Macroeconomic Theory, S Chand Publication, New Delhi.

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2. D'Souza Errol, (2012), Macroeconomics, Dorling Kindersley India pvt. Ltd.-Pearson Education, second edition

3. Dwivedi D. N. (2005), Macroeconomics: Theory and Policy, Tata McGraw-Hill.

4. Mankiw Gregory, (2007), Principles of Macroeconomics, Cengage Learning India Private ltd. New Delhi, Fourth edition

Evaluation and Assessment:

Evaluation (Theory – Core course): Total marks per course 100 (for a 4-credit course)
Continuous Internal Assessment (CIA): 40 marks
CIA 1: Written test - 20 marks
CIA 2: Assignment - 20 marks
End Semester Examination – 60 marks

Learning Levels	Remembering	Understanding	Analyzing	Application	Evaluation	Creation
% Weightage	10%	25%	30%	15%	15%	5%

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S.Y.B.A.		
Course Title: Statistical Techniques for Economic and Business Analysis **Course Code: UAECO5001SE1**		
Credits 2:		No. of lectures: 30
No.	**Course Objectives**	
1. 2. 3. 4.	To explain the construction of frequency distributions and graphical representation of data To explain measures and central tendency and dispersion for conducting statistical analysis. To explain bi-variate techniques like regression and correlation for modelling relationships between variables. To introduce MS Excel for data analysis.	
CO	**Course Outcomes** **On completing the course, the learner will be able to**	**Bloom's Taxonomy Level (BT level)**
1.	To learn basic statistical tools and techniques for analyzing data.	Remembering
2.	To learn to perform univariate and bivariate analyses using statistical tools.	Understanding
3.	To apply the techniques to real data to understand the data's characteristics and features.	Analysing
4.	To learn to use MS Excel to analyse real world business and economic data	Applying

UNIT I **Measures of Central Tendency and Dispersion** **(15)**

1. Graphical Representation of Categorical and Numerical Data.
2. Describing the Location of a Distribution: Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Mode, Deciles, Quartiles, Locating Median from Histogram.
3. Describing Dispersion of a Distribution: Range, Interquartile Range, Mean Deviation, Variance, and Standard Deviation.
4. Describing Shape of a Distribution: Skewness and Kurtosis.
5. Describing Individuals in Distribution: Percentile Ranks, Standard Scores
6. Data Analysis using MS Excel

UNIT II **Bivariate Analysis** **(15)**

1. Quantitative Description of Statistical Relation: Covariance
2. Karl Pearson's Correlation Coefficient, Spearman's Rank Correlation Coefficient.
3. Bivariate Analysis in MS Excel
4. Regression Analysis

List Of Recommended Reference Books

Basic Reference Books/ Reports/ Publications

1. David Anderson & Dennis Sweeny. Statistics for Business and Economics. Cengage. Eleventh Edition.
2. Bluman, A. (2014). *Elementary Statistics: A step by step approach 9e*. McGraw Hill.
3. S.C. Gupta & Indra Gupta, (2018) Business Statistics, Himalaya Publishing House; Second Edition.

Evaluation and Assessment: UAECO5001SE1

Evaluation (Theory): Total marks per course – 50 (for 2 credit course)
Continuous Internal Assessment (CIA) – 20 marks
End Semester Examination – 30 marks

Learning Levels	Remembering	Understanding	Analyzing	Application	Evaluation	Creation
% Weightage	10%	25%	30%	15%	15%	5%

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