SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Affiliated to the University of Mumbai

Programme: Humanities

ECONOMICS (Major and Minor) T.Y.B.A

Syllabus for the Academic Year 2025-2026

based on the National Education Policy 2020

SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

DEPARTMENT OF ECONOMICS

COURSE DETAILS FOR MAJOR

	SEMESTER 5				SEMESTER 6			
TITLE	Advanced Microeconomics	Economics of Development	Theory and Practice of Econometrics	Environmental Economics: Principles and Policies	Advanced Macroeconomics	Agricultural Economics	Financial Economics	International Economics: Theory & Policy
TYPE OF COURSE DSE/DSC	DSC	DSC	DSC	DSE	DSC	DSC	DSC	DSE
CREDITS	4	4	4	4	4	4	4	4

COURSE DETAILS FOR MINOR:

	SEMESTER 5	**SEMESTER 6**
TITLE	**Economics of Environment and Global Challenges**	**Agricultural Policy and Marketing in India**
TYPE OF COURSE DSC/DSE	DSC	DSC
CREDITS	4	4

SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Preamble:

In the study of economics, understanding the principles of Microeconomics, Macroeconomics, the Indian Economy, Development Issues of Maharashtra's Economy, and Human Development is crucial for comprehending the complexities of the growth and development process. The course on International and Environmental economics will expand the knowledge of students on important global issues and challenges. These courses delve into the fundamental theories, concepts, and practical applications that shape economic decision-making at both micro and macro levels. Students will gain valuable insights into the dynamics of markets, government policies, and socio-economic development. Quantitative economics helps students apply statistical and quantitative methods to economic data, enabling them to test theories, estimate relationships, and make evidence-based policy and research conclusions. Through a blend of theoretical knowledge and real-world case studies, these courses aim to equip students with the analytical tools and critical thinking skills that are important to adapt to the constantly changing world of economics and finance.

PROGRAMME OBJECTIVES

PO 1	**Enhance students' understanding of the contemporary socio-economic issues at the local, national and international level**
PO 2	**Apply critical thinking in the pursuit of everyday living**
PO 3	**Develop an in-depth understanding of various theories in economics, and impart skills in data analysis and interpretation**
PO 4	**Use analytical skills acquired through the programme to seek gainful employment**

PROGRAMME SPECIFIC OUTCOMES

PSO 1	**Gain a better understanding of the stream of economics**
PSO 2	**Apply the basic ideas of economic theory to understand the consumers and producers behaviour**

PSO 3	**Enable students to do basic calculations of economic concepts**
PSO 4	**Students will be able to apply their analytical skills, knowledge and improve their ability to respond sensitively while dealing with these socio-economic issues**
PSO 5	**Students will be able to analyse the implications of governments' policies critically and have an opinion on the same based on their competent knowledge in economics and skills in data analysis**

Programme: BA ECONOMICS **Economics Major 7**	**Semester – 5**
Course Title: ADVANCED MICROECONOMICS	**Course Code: AECO357MJ**

COURSE OBJECTIVES:

The course aims to:

1. Explain how firms behave in oligopolistic markets using different theoretical models.
2. Introduce students to game theory and its application to strategic decision-making.
3. Analyse market outcomes using general equilibrium and welfare frameworks.
4. Explore real-world issues like insurance, credit, and consumer decision-making using the tools of information economics.
5. Examine behavioural anomalies that challenge traditional economic assumptions.
6. Equip students with tools to apply economic reasoning in roles related to strategy, policy, finance, and digital markets.

COURSE OUTCOMES (COS):

By the end of this course, students will be able to:

1. Compare models of oligopoly and evaluate their relevance to real market behaviour.
2. Use game theory concepts to interpret strategic interactions in business, politics, and regulation.
3. Analyse economic efficiency and fairness through the lens of general equilibrium and welfare theory.
4. Apply insights from information and behavioural economics to explain market failures and design

better policy and business strategies.

Lectures per week (1 Lecture is 60 minutes)	**4**
Total number of hours in a Semester	**60**
Credits	**4**

Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Continuous Assessment	**--**	**50 marks**

Unit 1 Oligopoly and Market Power	1.1	Classical Oligopoly Models: Cournot, Bertrand, Stackelberg
	1.2	Kinked Demand Curve and Price Rigidity
	1.3	Cartel Formation and Collusive Outcomes
	1.4	Price Discrimination: Types and Applications
	1.5	Market Power in the Indian Digital Economy: E-commerce, Aggregators, and Platform Competition
Unit 2 Game Theory and Strategic Decision Making	2.1	Static Games, Payoff Matrices and Dominant Strategies
	2.2	Nash Equilibrium and Strategic Interdependence
	2.3	Repeated Games and Collusion Strategies (e.g. price wars, brand loyalty)
	2.4	Entry deterrence, commitment, and credibility
	2.5	Real-World Applications: Business Strategy, Political Campaigns
Unit 3 General Equilibrium and Welfare	3.1	Exchange Efficiency and Edgeworth Box
	3.2	General Equilibrium: Two-Good, Two-Consumer Framework
	3.3	Walras' Law and Stability of Equilibrium
	3.4	Pareto Optimality and Welfare Theorems

Economics	3.5	Equity, Fairness, and Social Welfare
Unit 4 Information Economics and Behavioural Economics	4.1	Decision-Making Under Uncertainty
	4.2	Adverse Selection and Market Failures
	4.3	Moral Hazard and Incentive Design
	4.4	Behavioural Biases: Framing and Loss Aversion
	4.5	Policy Applications: Nudges and Behavioural

REFERENCES:

1. Varian, H.R. (2014). Intermediate Microeconomics: A Modern Approach (9th ed.). W.W. Norton.
2. Perloff, J.M. (2016). Microeconomics: Theory and Applications with Calculus (4th ed.). Pearson.
3. Pindyck, R. & Rubinfeld, D. (2018). Microeconomics (9th ed.). Pearson.
4. Nicholson, W. & Snyder, C. (2019). Microeconomic Theory: Basic Principles and Extensions (12th ed.). Cengage.
5. Thaler, R.H. (2016). Misbehaving: The Making of Behavioural Economics. Norton.
6. Kreps, D.M. (1990). A Course in Microeconomic Theory. Princeton University Press.
7. Akerlof, G.A. (1970). The Market for Lemons: Quality Uncertainty and the Market Mechanism. QJE.
8. Case Studies: McKinsey Reports on Platform Economics; World Bank Reports on Behavioural Interventions.

Programme: Humanities **Economics Major 8**	**Semester – 5**
Course Title: Economics of Development	**Course Code: AECO358MJ**

COURSE OBJECTIVES:

1. This course is designed to introduce students to various concepts related to economic growth and development.
2. To understand the various theories of development, study development indicators and Sen's views on development
3. Knowledge about structural issues related to the process of development.
4. An attempt is made to create an awareness about the pressing problems in the path of development, such as inequality, poverty and technological aspects and the policy options

to deal with these problems

COURSE LEARNING OUTCOMES:

The learner will be able to:

1. Think critically about the concepts related to growth and development. Also, they will become aware of the development achievements globally by different nations.
2. Understand theories of growth and development.
3. Critically evaluate the role of important indicators like health, education and infrastructure in facilitating the growth and development process of countries.
4. Understand the measures of poverty and inequality and the methods that can be adopted to eliminate them.
5. Assess the role of the informal economy in the development process.

Lectures per week (1 Lecture is 60 minutes)		**4**	
Total number of Hours in a Semester		**60**	
Credits		**4**	
Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Cumulative Assessment	**--**	**50 marks**

SYLLABUS:

Economics of Development		
Unit No.		Name of the Unit
Unit No.1 Concepts of Economic Growth and Development	1.1	Meaning of Growth and Development.Distinction between growth & development
	1.2	Concepts of human development- HDI, GDI, GEM
	1.3	MDPI
	1.4	Capabilities & functioning. Three core values of development
	1.5	Environment and Sustainable Development, Green GDP
Unit No. 2 Theories of	2.1	Rostow‘s stages of growth
	2.2	Lewis's model

Economics of Development		
Economic Growth and Development	2.3	Big push theory
	2.4	Schumpeter's theory of development
	2.5	Harrod-Domar, Solow's growth model, RCT
Unit No.3 Structural Foundations of Economic Development	3.1	Role of Education in Economic Development.
	3.2	Role of Health & nutrition in economic development
	3.3	Role of Infrastructure in Economic Development
	3.4	The Role of Technology in Economic Development: Labour-Intensive vs. Capital-Intensive Techniques. Schumacher's concept of Intermediate technology
	3.5	Informal economy
Unit No.4 Poverty, Inequality and Development	4.1	Meaning and Measurement of Poverty and Inequality
	4.2	Measures to alleviate poverty.
	4.3	Kuznets' inverted U-hypothesis.
	4.4	Concept of Inclusive Growth (with reference to India).
	4.5	Urbanisation

REFERENCES:

1. Meier, Gerald M. and James E. Rauch. Leading Issues in Economic Development, 8e. New Delhi: Oxford Univ. Press, 2006.
2. Misra and Puri. Economic Growth and Development, Himalaya Publishing, 2000.
3. Todaro, Michael P. and Stephen C. Smith. Economic Development, Delhi: Pearson Education. (latest Edition)
4. Thirlwall, A.P. Growth and Development 8e. New York: Palgrave MacMillan, 2005.
5. UNDP's Human Development Report.
6. https://www.niti.gov.in/sites/default/files/2023-07/Aggricultrue_Amritkal.pdf
7. https://hdr.undp.org/content/human-development-report-2025

Programme:Humanities **Economics Major 9**	**Semester – 5**
Course Title: Theory and Practice of Econometrics	**Course Code: AECO359MJ**

COURSE OBJECTIVES:

1. To equip students with a solid foundation in Classical Linear Regression Models (CLRM), including estimation techniques, assumptions, statistical properties, hypothesis testing, and interpretation of model fit.
2. To develop the ability to build, modify, and interpret multiple regression models using functional forms, dummy variables, and binary outcome models.
3. To enable students to identify and correct for violations of classical assumptions such as multicollinearity, heteroskedasticity, autocorrelation, and endogeneity using diagnostic tools and remedial methods.
4. To provide analytical skills for handling time series, panel data models and estimation of dynamic models.

COURSE LEARNING OUTCOMES:

The learner will be able to:

1. Apply and interpret Classical Linear Regression Models (CLRM), test underlying assumptions, and evaluate model fit using appropriate statistical metrics.
2. Formulate and interpret multiple regression models with various functional forms and categorical variables, and analyse binary outcomes using the Linear Probability Model.
3. Diagnose and address econometric issues such as multicollinearity, heteroskedasticity, autocorrelation, and endogeneity using suitable tests and corrective techniques.
4. Analyse economic data using time series and panel data models, and estimate dynamic relationships by applying appropriate econometric techniques.

Lectures per week (1 Lecture is 60 minutes)		**4**	
Total number of Hours in a Semester		**60**	
Credits		**4**	
Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Cumulative	**--**	**50 marks**

	Assessment		

UNIT 1 Classical Linear Regression Model (CLRM)	1.1	Two-variable linear regression: model, estimation, and interpretation
	1.2	Assumptions of the CLRM
	1.3	Properties of Ordinary Least Squares (OLS) estimators
	1.4	Hypothesis testing in the CLRM (t-test, F-test)
	1.5	Goodness-of-fit: R-squared and impact of changing units
UNIT 2 Multiple Regression Models, Model Specification, Dummy Variables, and Linear Probability Model	2.1	Multiple Linear Regression Model: Interpretation
	2.2	Functional Forms and Model Flexibility
	2.3	Assessing Model Fit and Predictive Power
	2.4	Dummy Variables and Differential Effects
	2.5	Binary Outcome Models and the Linear Probability Model (LPM)
UNIT 3 Violation of Assumptions of CLRM	3.1	Multicollinearity: consequences, detection and remedies
	3.2	Heteroscedasticity: consequences, detection and remedies
	3.3	Autocorrelation: consequences, detection and remedies
	3.4	Endogeneity: omitted variable bias, simultaneity bias and

		attenuation bias
	3.5	Instrumental variables
UNIT 4 **Time Series, Panel Data, and Dynamic Linear Models (DLM)**	4.1	Introduction to time series: stationarity, unit root tests
	4.2	Autoregressive and Moving Average models (AR, MA, ARMA)
	4.3	Introduction to panel data: fixed effects and random effects models
	4.4	Dynamic models: distributed lag models
	4.5	Estimation techniques in dynamic models

REFERENCES:

1. Wooldridge, J. M. (2019). *Introductory Econometrics: A Modern Approach* (7th ed.). Cengage Learning.
2. Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics* (5th ed.). McGraw-Hill Education.
3. Dougherty, C. (2016). *Introduction to Econometrics* (5th ed.). Oxford University Press.
4. Studenmund, A. H. (2016). *Using Econometrics: A Practical Guide* (7th ed.). Pearson.
5. Brooks, C. (2019). *Introductory Econometrics for Finance* (4th ed.). Cambridge University Press.
6. Salvatore, D. (2006). *Schaum's Outline of Statistics and Econometrics* (2nd ed.). McGraw-Hill Education.

SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Programme: BA ECONOMICS Economics Major DSE	Semester – 5
Course Title: Environmental Economics: Principles and Policies	Course Code: AECO351E

COURSE OBJECTIVES:

1. Provide students with a foundational understanding of the core concepts and scope of environmental economics, including the interaction between economic activity and the environment.
2. Enable students to analyse the causes and implications of market failures, with a focus on externalities, property rights, and public goods in environmental contexts.
3. Introduce students to various policy instruments for environmental protection, such as taxes, subsidies, and tradable permits, and the methods used for valuing environmental goods and services.
4. Equip students with the ability to apply cost-benefit analysis techniques to evaluate the effectiveness and efficiency of environmental policies and regulations.
5. Explore the economics of managing both exhaustible and renewable resources, using relevant models and empirical case studies.
6. Examine major environmental challenges, including pollution and climate change, and

the economic rationale for policy responses, innovation, and international cooperation.

COURSE OUTCOMES (COS):

On successful completion of the course, learners will be able to:

1. Identify and explain key concepts in environmental economics, including market failure, externalities, property rights, and the Environmental Kuznets Curve, using real-world examples and case studies.
2. Apply and compare different environmental valuation methods (such as contingent valuation, hedonic pricing, and travel cost methods) and conduct a basic cost-benefit analysis for a proposed environmental policy or regulation.
3. Analyse and evaluate the management of exhaustible and renewable natural resources using relevant economic models (e.g., Hotelling's Rule, Solow-Hartwick Rule) and propose strategies for addressing specific environmental problems like pollution or resource depletion.
4. Design and justify a climate change mitigation policy by assessing economic costs,

benefits, and the role of innovation, and critically evaluate the effectiveness of international cooperation and governance mechanisms.

Lectures per week (1 Lecture is 60 minutes)	**4**
Total number of hours in a Semester	**60**
Credits	**4**

Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Continuous Assessment	**--**	**50 marks**

Unit 1	1.1	Introduction to environmental economics: definitions and scope - Tragedy of the Commons, Environmental Resource as a Public Good.

Foundations of Environmental Economics	1.2	Market failure and externalities: Theory and examples
	1.3	Property rights and the Coase theorem
	1.4	Environmental Kuznets curve hypothesis
	1.5	Case studies of environmental degradation and policy responses
Unit 2 Environmental Valuation and Policy Analysis	2.1	Methods of environmental valuation: contingent valuation, hedonic pricing, and travel cost method
	2.2	Cost-benefit analysis of environmental regulations: case studies
	2.3	Environmental Policy Instruments: Approaches - Decentralised V Command and Control Instruments, Incentive-based Policies
	2.4	Tradable permits and public goods: theory and applications
	2.5	Class Activity on Environmental Policy-Making
Unit 3 Resource Economics and Environmental Problems	3.1	Economics of exhaustible resources: Hotelling's rule and Solow-Hartwick's rule
	3.2	Economics of renewable resources: fisheries and forestry models
	3.3	Sustainable development approaches and green accounting: Linking Environmental livelihoods to sustainability

	3.4	Balancing Profitability and Environmental Protection: ESG framework
	3.5	Group project on resource management strategies
Unit 4 Climate Change and Environmental Policy	4.1	Economics of climate change: costs, benefits, and policy options
	4.2	Climate change mitigation strategies: carbon pricing, green technologies
	4.3	The Role of Innovation and Technological Change in Sustainable Development: Insights from Basic Endogenous Growth Theory.
	4.4	Global climate governance and international cooperation
	4.5	Final project on designing a climate change mitigation policy

REFERENCES:

1. Field, B.C. & Field, M.K. (2024). Environmental Economics: An Introduction (9th Edition). McGraw-Hill Education.
2. Kolstad, C.D. (2011). Environmental Economics (2nd Edition). Oxford University Press
3. Hanley, N., Shogren, J.F., & White, B. (2019). Environmental Economics: In Theory and Practice (3rd Edition). Oxford University Press.

Additional Recommended Readings:

4. Bluffstone, R. (2025). Environmental Economics and Ecosystem Services. Routledge.
5. Tietenberg, T. & Lewis, L. (2018). Environmental and Natural Resource Economics (11th Edition). Pearson.
6. Smith, S. (2011). Environmental Economics: A Very Short Introduction. Oxford University Press.

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<table>
<tr><td colspan="2">Programme: Humanities
Economics Minor</td><td colspan="2">Semester – 5</td></tr>
<tr><td colspan="2">Course Title: Economics of Environment and Global Challenges</td><td colspan="2">Course Code:AECO355MN</td></tr>
<tr><td colspan="4"><u>COURSE OBJECTIVES:</u>
1. The course focuses on the evolution of environmental economics and the relationship between the environment and economic growth. Awareness about the concept of environmental accounting.
2. Knowledge about environment valuation methods.
3. To sensitise students about various environmental issues/challenges- urbanisation, climate change and trans-boundary environmental problems.</td></tr>
<tr><td colspan="4"><u>COURSE LEARNING OUTCOMES</u>:
The learner will be able to:
1. Understand the environment-economy linkage and methods of environmental accounting.
2. Understand various methods used for environmental valuation.
3. Analyse the local and global environmental challenges faced in the current scenario.</td></tr>
<tr><td colspan="2">Lectures per week (1 Lecture is 60 minutes)</td><td colspan="2">2</td></tr>
<tr><td colspan="2">Total number of Hours in a Semester</td><td colspan="2">30</td></tr>
<tr><td colspan="2">Credits</td><td colspan="2">4</td></tr>
<tr><td rowspan="2">Evaluation System</td><td>Summative Assessment</td><td>1 Hours</td><td>30 marks</td></tr>
<tr><td>Cumulative Assessment</td><td>--</td><td>20 marks</td></tr>
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SYLLABUS:

<table>
<tr><td colspan="3">Economics of Development</td></tr>
<tr><td>Unit No.</td><td></td><td>Name of the Unit</td></tr>
<tr><td>Unit No.</td><td></td><td>Name of the Unit</td></tr>
<tr><td rowspan="2">Unit No.1 Introduction to Environmental</td><td>1.1</td><td>Introduction, Definition, scope, evolution and growth of environmental economics, Rio Declaration, Agenda 21. Kyoto protocol.</td></tr>
<tr><td>1.2</td><td>Market failures and externalities in Environmental contexts.</td></tr>
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<table>
<tr><th colspan="3">Economics of Development</th></tr>
<tr><td rowspan="2">Economics</td><td>1.3</td><td>Economy & environment linkage. Environmental Kuznets curve.</td></tr>
<tr><td>1.4</td><td>Sustainable development.</td></tr>
<tr><td rowspan="5">Unit No.2
Methods of Environmental Measurement & Global Environmental Issues</td><td>2.1</td><td>Economic value of the Environment.
Measurement method: Contingent valuation, travel cost method, hedonic pricing method.</td></tr>
<tr><td>2.2</td><td>Environmental Accounting. Social cost-benefit analysis.
Concept of carbon credit.</td></tr>
<tr><td>2.3</td><td>Global environmental issues- Mitigation vs adaptation, differentiated responsibilities, global equity, Transboundary environmental problems.</td></tr>
<tr><td>2.4</td><td>Global climate change.</td></tr>
<tr><td>2.5</td><td>Environmental Challenges of urbanisation.(Indian context GOI initiative)</td></tr>
</table>

REFERENCES:

1. Barry C. Fields: Environmental Economics: An Introduction, McGraw Hill International Edition, 1997
2. Charles Kolstad: Environmental Economics, Oxford University Press, New York, 2000
3. Hanley Nick, Shogren Jason and white Ben: Introduction to Environmental Economics, Oxford University Press, New York, 2011
4. Kaltschmitt, Martin, Streicher, Wolfgang, Wiese, Andreas, Renewable Energy: Technology, Economics and Environment, Springer, Germany, 2007.
5. Smith Stephen: Environmental Economics: A very Short Introduction, Ist Edition, Oxford University Press, New York, 2011
6. United Nations Sustainable Development, UN Conference on Environment & Development, Rio de Janerio, Brazil, Agenda 21
7. https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf,1992.

<table>
<tr><td>Programme: BA ECONOMICS
Economics Major 10</td><td>Semester – 6</td></tr>
<tr><td>Course Title: Advanced Macroeconomics</td><td>Course Code: AECO3610 MJ</td></tr>
<tr><td colspan="2"><u>COURSE OBJECTIVES</u>: The course aims to:

Equip students with the ability to derive and analyse IS-LM curves and understand fiscal and monetary policy impacts within a closed economy.
Enable application of the Mundell-Fleming model to study goods and financial market equilibria and policy impacts under various exchange rate regimes in open economies.
Provide comprehensive knowledge of the historical evolution and macroeconomic implications of international monetary systems and exchange rate regimes.
Develop understanding of the causes, consequences, and policy responses to financial crises, including the roles of key international institutions.
</td></tr>
<tr><td colspan="2"><u>COURSE OUTCOMES</u>:
The learner will be able to:

Explain and derive IS-LM curves, and analyse the effects of fiscal and monetary policies in the closed economy context.
Analyse goods and financial market equilibrium in open economies and understand policy effectiveness under various exchange rate regimes.
Trace the history of international monetary systems, understand the exchange rate regime choices and their macroeconomic implications.
Analyse the factors causing financial crises and evaluate institutional roles and policy responses in crisis management.
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<tr><td>Lectures per week (1 Lecture is 60 minutes)</td><td>4</td></tr>
<tr><td>Total number of hours in a Semester</td><td>60</td></tr>
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Credits	**4**

Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Continuous Assessment	**--**	**50 marks**

Unit 1: Goods and Financial Markets in the Closed Economy	1.1	IS Curve: derivation (algebraic & graphical), Factors influencing the IS curve slope and position.
	1.2	Fiscal and monetary policy impact on the IS Curve
	1.3	LM Curve: derivation (algebraic & graphical), Factors influencing the LM curve slope and position
	1.4	Fiscal and monetary policy impact on the LM Curve
	1.5	General equilibrium in the IS-LM model and the equilibrium nature. Policy efficacy & the effect of slopes on fiscal and monetary policy.
Unit 2: Goods and Financial Markets in the Open Economy and Mundell-Fleming Model	2.1	Equilibrium GDP and trade imbalance.
	2.2	IS and LM equations for an open economy
	2.3	Uncovered Interest Parity (UIP) condition and exchange rate determination.
	2.4	IS-LM-UIP model combined analysis.
	2.5	Fiscal and monetary policies under fixed and flexible exchange rates, the Mundell-Fleming trilemma.

Unit 3: Post Keynesian Synthesis and Business Cycles	3.1	Post Keynesian Synthesis and Aggregate Demand: Exploring extensions of IS-LM, including Aggregate Supply, Labour Market, and Price Flexibility concepts.
	3.2	Phillips Curve and Inflation Dynamics: Natural Rate Hypothesis, Expectations-Augmented Phillips Curve, Friedman's and Tobin's contributions.
	3.3	Expectations and Monetary Policy: Adaptive vs Rational Expectations, Policy Ineffectiveness, Lucas Critique.
	3.4	Business Cycle Theories: Overview of trade cycle phases, classical and Keynesian interpretations, and modern theories.
	3.5	Stabilisation Policies and Control Measures: Fiscal and Monetary policy tools to manage cycles, automatic stabilisers, and policy debates.
Unit 4: Financial Crises and Policy Challenges	4.1	The relation between exchange rate crises and banking, debt, and financial crises.
	4.2	Causes and Consequences of Currency and Banking Crises.
	4.3	Contemporary issues in global financial stability
	4.4	Policy responses and crisis management strategies.
	4.5	Brief history: Gold Standard, Inter-War Period, Bretton Woods system, collapse, Flexible exchange rates and currency instability since 1971.

REFERENCES:

1. Blanchard, Olivier. (2017). *Macroeconomics* (7th Edition). Pearson.
2. Dornbusch, Rudiger, Fischer, Stanley, & Startz, Richard. (2014). *Macroeconomics*. McGraw-Hill Education.
3. Mankiw, N. Gregory. (2018). *Macroeconomics* (10th Edition).Worth Publishers.

4. Krugman, Paul R., Obstfeld, Maurice, & Melitz, Marc J. (2018). *International Economics: Theory and Policy* (11th Edition). Pearson.
5. Eichengreen, Barry. (2008). *Globalising Capital: A History of the International Monetary System* (2nd Edition). Princeton University Press.
6. Kindleberger, Charles P., & Aliber, Robert Z. (2011). *Manias, Panics and Crashes: A History of Financial Crises* (6th Edition). Palgrave Macmillan.
7. International Monetary Fund (IMF) & World Bank (2023-2025). Recent Reports and Working Papers.

Programme: BA Economics Major 11	**Semester – 6**
Course Title: Agricultural Economics	**Course Code: AECO3611MJ**

<u>COURSE OBJECTIVES:</u>

1. Aims at providing an overview of the role of agriculture in the Economic development of the country and the salient features associated with agricultural productivity. To examine various issues related to the agriculture sector and agricultural labour. Reforms in the sector.
2. The pertinent aspects related to agricultural credit and agricultural marketing. Role of WTO and agriculture
3. Discuss the features of agricultural policy relating to price and agricultural inputs.
4. Food security implementation in India.
5. Discuss the issue of agrarian crisis and farmers' suicide.

<u>COURSE LEARNING OUTCOMES</u>:

The learner will be able to:

1. Understand the role of agriculture in economic development and issues related to the sector, like causes of low agricultural productivity, labour and capital formation.
2. Understanding of causes and problems of agricultural finance.
3. Comprehend practical real-life problems of agricultural marketing.
4. Critically analyse the agricultural price policy in India. Appraise the existing policies on agricultural inputs like fertiliser and power.

<table>
<tr><td colspan="4">5. Evaluate the important agrarian issues of India such as- food security and farmers crisis.</td></tr>
<tr><td colspan="2">Lectures per week (1 Lecture is 60 minutes)</td><td colspan="2">4</td></tr>
<tr><td colspan="2">Total number of Hours in a Semester</td><td colspan="2">60</td></tr>
<tr><td colspan="2">Credits</td><td colspan="2">4</td></tr>
<tr><td rowspan="2">Evaluation System</td><td>Summative Assessment</td><td>2 Hours</td><td>50 marks</td></tr>
<tr><td>Cumulative Assessment</td><td>--</td><td>50 marks</td></tr>
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UNIT 1	**Role of Agriculture in India's Economic Development: Productivity, Patterns, and Reforms.**
1.1	Role of agriculture in economic development. Bird's-eye view of diversification in cropping patterns. Land holding. Soil health card
1.2	Agricultural Productivity, Causes of Low Productivity in Agriculture (Green Revolution & its positive and impact)- Measures taken to improve the Agricultural Productivity in India
1.3	Farm mechanisation, Capital formation in agriculture
1.4	Agricultural labour-Gender, Problems and suggestions.
1.5	Land reforms in India
UNIT 2	**Agricultural Finance**
2.1	Need, importance and problems of agricultural credit in India.
2.2	Institutional and Non-Institutional Sources of Credit. Co-operative Credit Structure and Agriculture.
2.2	Commercial Banks and Regional Rural Banks. MFI
2.3	Rural Indebtedness- causes, consequences and solutions
2.4	NABARD
2.5	New initiatives- Kisan credit card and crop insurance. Weather derivatives.
Unit 3	**Agricultural Marketing**
3.1	Meaning and Types of Agricultural Marketing.
3.2	Problems of Agricultural Marketing and Measures to Correct Them. FPO

3.3	Agri-infrastructure- storage and warehousing facilities, Grading and Standardisation and Derivative market
3.4	National Agricultural Market. Commodity Boards.
3.5	WTO and Indian Agriculture.
UNIT 4	**Agricultural Policy and Challenges in India: Pricing, Reforms, and Food Security**
4.1	Agricultural Price Policy in India and Its Evaluation.
4.2	Subsidies on Agricultural Inputs.
4.3	New Agricultural Policy & recent developments in agricultural policy.
4.4	Food Security in India.(Changes in cropping patterns).modern developments.
4.5	Agricultural Crisis and Farmers' Suicide. Impact of climate change

1. Acharya S S, Agarwal N.L. Agricultural Marketing in India. CBS Publishers, 2021. 7th Edition
2. Alagh Yoginder K. The Future Of Indian Agriculture. National Book Trust India, 2023
3. A.N. Sadhu, Amarjit Singh, Prof. Jasbir Singh. Fundamentals of Agricultural Economics.Himalaya Publishing House, New Delhi, 2022.
4. Bilgram, S.A.R. Agricultural Economics, Himalaya Publication House, Delhi, 2018.
5. Raj K.N. Essays in Commercialisation of Indian Agriculture, Oxford University Press, New Delhi, 1988.
6. Datt and Sundaram. Indian Economy, S.Chand & Company, New Delhi. *(latest edition)*
7. Memoria C. B. Tripathi B.B.Agricultural Problems of India, Kitab Mahal Allahabad, 2013.
8. Reddy Subba, Raghu Ram, et al. Agricultural Economics. Oxford and IBH Publishing Co. pvt.ltd, New Delhi, 2019.
9. Mishra and Puri. Indian Economy, Himalaya Publishing House, New Delhi.*(latest edition)*

10. World Development Report 2008: Agriculture for Development.
11. Sharma Naveen Kumar, Rai Pradeep, et.al.Indian Agriculture: Challenges, Priorities and Solutions. Springer, 2025.

Web resources:

- https://makaam.in/status-papers-and-latest-research-related-to-women-farmers/
- Feminisation of Indian Agriculture and Status of Women Farmers: Itishree Pattnaik & Kuntala Lahiri-Dutt, GIDR, Gujarat (ANU-ICSSR funded project)
- Land Rights and Tribal Women. Status Paper on Women Farmers and Farm Workers: NesarAhmad, Budget Analysis & Research Centre, Rajasthan.
- RBI
- Transforming Agriculture for Challenges of the 21st Century. NITI Aayog

  https://www.niti.gov.in › Presidential_Address by R Chand · 2019.

Programme:Humanities Economics Major 12	**Semester – 6**
Course Title: Financial Economics	**Course Code: AECO3612MJ**

COURSE OBJECTIVES:

1. Equip students with an understanding of the principles of time value of money, risk and return, and the construction of efficient portfolios using diversification and modern portfolio theory.
2. Enable students to perform fundamental securities analysis, interpret financial statements, calculate key financial ratios, and apply various equity valuation techniques.
3. Develop skills to value fixed income securities, understand concepts such as yield, interest rate risk, duration, and apply methods for pricing and analyzing bonds and other debt instruments.
4. Provide students with comprehensive knowledge of derivative instruments, markets, contract types, and their roles in financial risk management.

COURSE LEARNING OUTCOMES:

The learner will be able to:

1. Construct an optimal investment portfolio by calculating risk and return, apply the Capital Market Line (CML) and Capital Asset Pricing Model (CAPM) for asset pricing.
2. Conduct fundamental analysis of equities, interpret financial statements, compute financial ratios, and compare valuation methods for stocks.
3. Value a range of fixed-income securities by applying time-value-of-money principles, analyse their risk-return characteristics using yield measures and the yield curve and assess their interest rate sensitivity through duration and convexity.
4. The learner will be able to identify, classify, and explain the different types of derivatives (forwards, futures, swaps, options), describe the main features of derivative contracts, and discuss their applications in financial markets for hedging and risk management.

Lectures per week (1 Lecture is 60 minutes)		**4**	
Total number of Hours in a Semester		**60**	
Credits		**4**	
Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Cumulative Assessment	**--**	**50 marks**

UNIT 1 Portfolio Theory	1.1	Concept of TVM, risk and return
	1.2	Portfolio Return and Portfolio Risk
	1.3	Diversification, Efficient portfolio construction
	1.4	CML, CAPM
	1.5	Measures of risk aversion

UNIT 2 Equity Valuation	2.1	Fundamental analysis of a security Macroeconomic Analysis
	2.2	Industry Analysis
	2.3	Reading Financial Statements
	2.4	Calculating financial ratios
	2.5	Equity Valuation
UNIT 3 Valuation of Fixed Income Securities	3.1	Concept of Interest, present value and future values of streams, internal rate of return
	3.2	Fixed income securities: treasury bills, bonds, perpetuities and other types of bonds
	3.3	Bond Pricing and price of perpetuity
	3.4	YTM and Yield Curve
	3.5	Interest Rate Risk and Duration – concept, Macaulay duration, and convexity
UNIT 4 Financial Derivatives	4.1	Derivatives market: significance and users of the derivatives market
	4.2	Forward contract
	4.3	Futures contract
	4.4	Swaps
	4.5	Options

REFERENCES:

1. Merton, R. C. (1992). *Finance*. Prentice Hall.
2. Chandra, P. (2017). *Investment Analysis and Portfolio Management*. McGraw-Hill.

3. Luenberger, D. G. (1997). *Investment Science*. Oxford University Press.
4. Bodie, Z., Kane, A., & Marcus, A. J. (2023). *Investments* (13th ed.). McGraw-Hill.
5. Hull, J. C. (2022). *Options, Futures, and Other Derivatives* (11th ed.). Pearson.

DEPARTMENT OF ECONOMICS

Programme: BA ECONOMICS Economics Major DSE	**Semester – 6**
Course Title: International Economics: Theory and Policy	**Course Code: AECO651E**

<u>COURSE OBJECTIVES:</u>

1. To develop a comprehensive understanding of classical and modern international trade theories, including their microfoundations and the implications of firm heterogeneity.
2. To analyse trade policies alongside contemporary challenges such as digital commerce, global value chains, and environmental concerns.
3. To understand international factor movements, including migration, FDI, and the role of multinational enterprises.
4. To examine exchange rate mechanisms, open economy macroeconomic models, and international financial markets, including crises and policy responses.

SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

COURSE OUTCOMES: The learner will be able to: 1. Explain and critically analyse classical, neoclassical, and modern international trade theories, including their microfoundations and implications of firm heterogeneity. 2. Evaluate trade policy instruments and contemporary global trade issues, including digital trade, global value chains, and sustainability concerns, using economic reasoning 3. Analyse international factor movements such as labour migration and capital flows, along with multinational corporate strategies and associated policy challenges. 4. Demonstrate understanding of exchange rate determination, balance of payments, open economy macroeconomic models, and global financial systems, including crises and governance frameworks.

Lectures per week (1 Lecture is 60 minutes)	**4**
Total number of hours in a Semester	**60**
Credits	**4**

Evaluation System	**Summative Assessment**	**2 Hours**	**50 marks**
	Continuous Assessment	**--**	**50 marks**

Unit 1: International Trade Theories and Microfoundations	1.1	Ricardian model and comparative advantage
	1.2	Heckscher-Ohlin theorem and factor price equalisation
	1.3	Stolper-Samuelson and Rybczynski effects
	1.4	New Trade Theory: economies of scale, imperfect competition
	1.5	Firm heterogeneity and the Melitz model

Unit 2: Trade Policy and Contemporary Global Trade Issues	2.1	Instruments of trade policy: tariffs, quotas, subsidies, NTBs
	2.2	Political economy of protectionism and free trade
	2.3	Trade agreements: WTO, regional trade blocs, G20
	2.4	Digital trade, global supply chains, and sustainability in trade
	2.5	Trade wars, inward-looking strategies, and the resurgence.
Unit 3: Factor Movements and International Corporate Strategies	3.1	International labour migration: economic causes and effects.
	3.2	Capital Movements: Foreign Direct Investment (FDI) & Foreign Institutional Investments (FII)
	3.3	Socio-political and behavioural aspects of factor mobility.
	3.4	Policy challenges: migration regulation, investment treaties.
	3.5	Implications of globalisation - Transfer Pricing,
Unit 4: Global Financial Systems and Policy Frameworks	4.1	Exchange rate determination: Purchasing Power Parity (PPP), Interest Rate Parity (IRP), floating vs fixed regimes
	4.2	Balance of payments and capital flows
	4.3	Open economy macro models
	4.4	International financial crises and policy responses

	4.5	Global Financial Governance: The IMF, World Bank, Digital Currencies, and Fintech Innovations.

REFERENCES:

Unit 1

1. Krugman, P.R., Obstfeld, M., Melitz, M.J. (2018). *International Economics: Theory and Policy* (11th Edition). Pearson.
2. Melitz, M.J. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 2003.

Unit 2

3. Baldwin, R. & Evenett, S.J. (eds.) (2020). *The WTO and the Future of Multilateralism*. VoxEU.org/CEPR Press.
4. Anderson, J.E. and van Wincoop, E. "Gravity with Gravitas: A Solution to the Border Puzzle," *American Economic Review*, 2003.

Unit 3

5. Markusen, J.R. (2002). *Multinational Firms and the Theory of International Trade*. MIT Press.
6. UNCTAD (annual). *World Investment Report*.

Unit 4

7. Obstfeld, M., Rogoff, K. (2009). *Foundations of International Macroeconomics* (updated). MIT Press.
8. Eichengreen, B. (2019). *Globalising Capital: A History of the International Monetary System* (2nd Edition). Princeton University Press.
9. IMF Global Financial Stability Reports (annual).

SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

<table>
<tr><td colspan="2">Programme: Humanities
Economics Minor</td><td colspan="2">Semester – 6</td></tr>
<tr><td colspan="2">Course Title: Agricultural Policy and Marketing in India</td><td colspan="2">Course Code: AECO366</td></tr>
<tr><td colspan="4"><u>COURSE OBJECTIVES:</u>
1. Introduces students to key aspects of Indian agriculture, focusing on policy frameworks, marketing systems, and food security.
2. Covers issues such as price support, input subsidies, farmer welfare, marketing reforms, and the WTO’s role in agriculture.
3. Aims to build a foundational understanding of the challenges and institutional responses shaping the Indian agricultural sector.</td></tr>
<tr><td colspan="4"><u>COURSE LEARNING OUTCOMES</u>:
The learner will be able to:
1. Understand key agricultural policy measures and their impact
2. Identify challenges faced by Indian agriculture in areas of marketing and infrastructure.
3. Analyse India’s food security system and global trade concerns</td></tr>
<tr><td colspan="2">Lectures per week (1 Lecture is 60 minutes)</td><td colspan="2">2</td></tr>
<tr><td colspan="2">Total number of Hours in a Semester</td><td colspan="2">30</td></tr>
<tr><td colspan="2">Credits</td><td colspan="2">4</td></tr>
<tr><td rowspan="2">Evaluation System</td><td>Summative Assessment</td><td>1 Hours</td><td>30 marks</td></tr>
<tr><td>Cumulative Assessment</td><td>--</td><td>20 marks</td></tr>
</table>

SYLLABUS:

<table>
<tr><td colspan="3">Economics of Development</td></tr>
<tr><td>Unit No.</td><td></td><td>Name of the Unit</td></tr>
<tr><td rowspan="4">Unit No.1
Agricultural Policy and Food Security in India</td><td>1.1</td><td>Agricultural Policy in India: objectives and instruments.</td></tr>
<tr><td>1.2</td><td>Input subsidies and their economic impact.</td></tr>
<tr><td>1.3</td><td>New Agricultural Policy and recent developments.</td></tr>
<tr><td>1.4</td><td>Food Security: PDS, National Food Security Act (NFSA).</td></tr>
</table>

Economics of Development		
	1.5	Agricultural Crisis and Farmer Suicides: Causes and Policy Responses. Gender
Unit No.2 Agricultural Marketing and Trade	**2.1**	Meaning and types of agricultural marketing.
	2.2	Problems in agri-marketing and corrective measures.
	2.3	Agri-infrastructure: storage, warehousing, grading, and standardisation.
	2.4	National Agricultural Market (e-NAM) and Commodity Boards.
	2.5	WTO and Indian Agriculture

REFERENCES:

1. Acharya S S, Agarwal N.L. Agricultural Marketing in India. CBS Publishers, 2021. 7th Edition
2. Alagh Yoginder K. The Future Of Indian Agriculture. National Book Trust India, 2023
3. A.N. Sadhu, Amarjit Singh, Prof. Jasbir Singh. Fundamentals of Agricultural Economics.Himalaya Publishing House, New Delhi, 2022.
4. Bilgram, S.A.R. Agricultural Economics, Himalaya Publication House, Delhi, 2018.
5. Raj K.N. Essays in Commercialisation of Indian Agriculture, Oxford University Press, New Delhi, 1988.
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9. Mishra and Puri. Indian Economy, Himalaya Publishing House, New Delhi.*(latest edition)*
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- Land Rights and Tribal Women. Status Paper on Women Farmers and Farm Workers: Nesar Ahmad,

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