



UNIVERSITY OF CALICUT

Abstract

BA Economics Programme - Under Choice Based Credit Semester System - in School of Distance Education - syllabus revised - implemented with effect from 2013 - 14 admission onwards - approved - Orders issued

UNIVERSITY OF CALICUT (G & A - IV - B)

U.O.No. 1842/2013/CU

Dated, Calicut University.P.O, 30.05.2013

*Read:-*1. U.O No. GA1/J2/3601/08 dated 17-12-2010

2. U.O.No. GA1/J2/3601/08 Vol IV dated 10-05-2011

3. U.O.No. GAV/B1/269/2009 dated 19-08-2011

4. U.O.No. GAV/B1/269/2009 dated 21-12-2011

5. Minutes of the meeting of the Board of Studies in Economics (UG) held on 06-11-2012 (Item No 2)

6. Minutes of the meeting of the Faculty of Humanities held on 12-11-2012 (Item No.1)

7. Minutes of the meeting of the Academic Council held on 15-01-2013 vide item No.II B

8. Orders of Vice Chancellor in File No. GAV/B1/181/2012 dated 10-04-2013

ORDER

Vide paper read 1 above,Choice Based Credit Semester System and Grading has been introduced for UG Programmes under School of Distance Education / Private mode of University with effect from 2011 admission onwards.

Vide paper read 2 above,orders were issued to implement the additions to Clause 1 of the Regulations governing the ,Choice Based Credit Semester System, UG Programmes in School of Distance Education / Private mode as follows:

The syllabus of UG Programmes under Choice Based Credit Semester System will be the same for the Regular, School of Distance Education and Private mode. The number of courses and credits of School of Distance Education / Private mode will be the same as that of regular programme except for BA Programmes. For BA Programmes there will be one complementary course in each semester with 4 credits. The complementary course in 1st and 4th semesters and 2nd and 3rd semesters will be the same.

Vide paper read 3 above, orders were issued implementing the scheme and syllabus of BA Economics Programme under Choice Based Credit Semester System in School of Distance Education / Private mode of University with effect from 2011 admission onwards.

Vide paper read 4 above, orders were issued correcting the nomenclature of the Complementary courses offered by the Board of Studies in Economics(UG) for other BA Programmes.

Vide paper read five above, the meeting of the Board of Studies in Economics (UG) held on 06-11- 2012 vide item No 2 has resolved to adopt the revised syllabus for B.A Economics offered through the School of Distance Education to be implemented from 2013-14 admission.

Vide paper read 6 above,the minutes of the meeting of the Board of Studies in Economics (UG) held on 06-11- 2012 has been approved by the Faculty of Humanities at its meeting held on 12-11-2012 vide Item No. I 1.

Vide paper read 7 the Academic Council at its meeting held on 15-01-2013 while considering the minutes of the meeting of the Faculty of Humanities vide item No. II B has deferred the matter for detailed study.

As per the Orders of Registrar in File No. 4579/GAIV B1/2012/CU dated 03-04-2013 the minutes of the meeting of the Board of Studies in Economics (UG) held on 06-11- 2012(item No 2) was put up in File No.GAIV/B1/181/2012.

Vide paper read 8 above,the Vice Chancellor after having considered the matter and in view of urgency, has approved the minutes of the meeting of the Board of Studies in Economics (UG) held on 06-11- 2012 (item No 2) exercising the powers of the Academic Council subject to ratification by the Academic Council.

Sanction has therefore been accorded to implement the revised syllabus of B.A Economics offered through the School of Distance Education with effect from 2013-14 admission.

Orders are issued accordingly.

The syllabus is uploaded in the website.

Shanawaz T.P
Assistant Registrar

To

To

The Director, SDE

Copy to:PA to CE/ Ex Section/ EG Section/EX IV/ DR,AR-SDE/ EA II/ SDE Exam/System

Administrator witha request to upload the Syllabus in the University website/ GA I F

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Section Officer

**REVISED UNDERGRADUATE DEGREE CURRICULUM
AND SYLLABUS IN ECONOMICS
(For Distance/private Registration students)**

EFFECTIVE FROM 2013 – 2014 ADMISSION

**Towards a Revision of Curriculum and Syllabus of Undergraduate ECONOMICS
Programme**

Every branch of knowledge is evolving over time. This is the result of man's quest for knowing more about himself and his societal environment. Economics is no exception to this process of evolution. A number of developments in the form of new theories and applications have already taken place in economics during the past few decades with a view to understand the economy, its actors their behavior and the consequent outcomes of their actions.

Generally, curriculum brings out the academic programme's educational philosophy, specific objectives of learning and understanding of a discipline and implementation strategies as well as assessment and evaluation criteria. However, Syllabus traditionally represents the content of a given Course and specifies how this content is graded and sequenced. Syllabus refers to content or subject matter of a given discipline whereas Curriculum refers to the totality of the content to be taught and aims to be realised with in a given academic course period. Thus Curriculum subsumes a Syllabus.

Curriculum and Syllabus of Economics should, therefore, follow the above line of thinking. Regular updating of both Curriculum and Syllabus in Economics is unavoidable because the subject of Economics has a rapid growth as compared to most of the other social sciences and also being a discipline that touches the day-to-day human lives in every society. To quote the University Grants Commission: *“Renewing and updating of the curriculum is the essential ingredient of any vibrant university academic system. There ought to be the dynamic curriculum with necessary additions and changes introduced in it from time to time by the respective university with a prime objective to maintain updated curriculum and also providing therein inputs to take care of fast paced*

development in the knowledge of the subject concerned. Revising the curriculum should be a continuous process to provide an updated education to the students at large”.

To put it in a broad sense, higher education especially in the field of social science must aim at: (a) training students to understand the society, economy and the world at large, (b) equipping them with the right analytical skills to acquire a ‘vision’, and (c) enjoying life time learning. It is necessary to repeat that the goal of higher education is two fold: Knowledge Creation and its utilization through activities that are useful to the learners as well as the society.

Coming to the curriculum of Economics, our objective is to impart: (i) knowledge of fundamental concepts and theoretical propositions, (ii) a methodology by which economic ideas are framed, tested and modified, (iii) an understanding of the institutions, social, political and economic that influence economic issues, and (iv) an ability to present one’s own analysis of the problems and issues in the language of an ‘Economist’.

Teaching of Economics lack relevance if they do not help in the understanding of the laws of motion of the economy and society where one lives. The idea is to make the student at the undergraduate level understand correctly the basic concepts and terms used in Economics and to give him an exposure to the way economic problems and issues are to be looked at with out any bias. For this, what is needed is a set of CORE courses and ELECTIVE courses. The core course may consist of two parts (a) Basic Concepts, terms and theories and (b) Application areas. To achieve this aim, we will have Papers like MICRO ECONOMICS, MACRO ECONOMICS, PUBLIC ECONOMICS, INTERNATIONAL ECONOMICS and POLITICAL ECONOMY OF DEVELOPMENT with special reference to INDIA and KERALA etc in the core subjects. The elective courses will have, GENDER ECONOMICS, ENVIRONMENTAL ECONOMICS, HEALTH ECONOMICS, etc., to enable the students to get an exposure to the application of what he is going to learn in CORE courses.

ELECTIVE Courses shall be short courses. A few of them are to be framed to suit ECONOMICS students and others specially suited to non-Economics students. All elective courses should contain substantial active learning component to give depth to the curriculum. This includes writing reports and research projects. This will reinforce the empirical skills students have acquired in the course on quantitative methods.

Finally, we suggest that students do a final research project that would complete the Process of intellectual maturation. It will also provide further insight in the curriculum.

Suggested Courses:

We are offering 14 Core Courses, two Complementary Courses, one Open Course, three Electives and a Project work. The project work is to be supervised by the teachers empanelled by the University for the purpose. All these are presented in the Table given below.

Table: Suggested Courses and Their Short Objectives

Course Code	Course Code	Course Objectives
Semester I		
Common Course I	EC1 A01 (English)	<i>Detailed syllabi and objectives are to be provided by the University Separately</i>
Common Course II	EC1 A02 (English)	
Common Course III	EC1 A03 (Second Language)	
Core Course I	Micro Economics -1 EC1 B01	Teaches the fundamentals of Micro economics required for proper understanding of other courses.
Complementary I	EC1 C01 Political Science/Indian Constitution and Politics	<i>Detailed syllabi and objectives are to be provided by the concerned Board.</i>
Semester II		
Common Course IV	EC2 A04 (English)	<i>Detailed syllabi and objectives are to be provided by the University Separately</i>
Common Course VI	EC2 A05 (English)	
Common Course VI	EC2 A06 (Second Language)	
Core Course II	Macro Economics I EC2 B02	Teaches the fundamentals of Macro economics required for proper understanding of other courses.
Complementary II	EC2 C02 Modern Indian History/Mathematics for Economic Analysis	<i>Detailed syllabi and objectives are to be provided by the concerned Board.</i>

Semester III		
Common Course VII	EC3 A07 (English)	<i>Detailed syllabi and objectives are to be provided by the University Separately</i>
Common Course VIII	EC3 A08(Second Language)	
Core Course III	Quantitative Methods for Economic Analysis-I EC3-B03	Teaches mathematical tools required for the study of undergraduate economics
Core Course IV	Micro Economics II EC3-B04	Develops the tools for further economic analysis.
Complementary III	EC3 C03 Modern Indian History/Mathematics for Economic Analysis	<i>Detailed syllabi and objectives are to be provided by the concerned Board.</i>
Semester IV		
Common Course IX	EC4 A09 (English)	<i>Detailed syllabi and objectives are to be provided by the University</i>
Common Course X	EC4 A10 (Second Language)	
Core Course V	Quantitative Methods for Economic Analysis-II EC4 B05	Teaches Statistical tools required for the study of undergraduate economics
Core Course VI	Macro Economics II EC4 B06	To develop the tools for further economic analysis.
Complementary IV	EC4 C04 Political Science/Indian Constitution and Politics	<i>Detailed syllabi and objectives are to be provided by the concerned Board.</i>
Semester V		
Core Course VII	Computer Application for Economic Analysis EC5 B07	Develops the tools for further economic analysis.
Core Course VIII	Indian Economy EC5 B08	Introduces the Political economy of Development of Indian economy.
Core Course IX	History of Economic Thought EC5 B09	Introduces the chronological development of the science of economics
Core Course X	Kerala Economy EC5 B10	Introduces the macro aspects of the Development of Kerala Economy.
Open Course (For Non-Economics Students)	Basic Principles of Economics EC5 D01	Introduction to the fundamental principles of Economics.

Semester VI		
Core Course XI	Mathematical Economics & Econometrics EC6 B11	Introduces basic econometric and Mathematical Economic methods that will be applied in subsequent courses.
Core Course XII	Public Finance EC6 B12	Introduces the role of Public / Governmental activities expenditure in the functioning of an economy.
Core Course XIII	International Economics EC6 B13	Introduces the theories, and policies related to international economic relations.
Core Course XIV	Political economy of development and Planning EC6 B14	Introduces the basic theories and issues of development and planning.
Elective Course (For Economics Students)	Gender Economics EC6 E01	Introduces the fundamental principles of gender awareness
	Health Economics EC6 E02	Teaches the fundamental aspects of Health and its emerging issues
	Economics of Business and Finance EC6 E03	Introduces the students to the basics of business, managerial and financial Economics.
Project Work	EC6 B15 (Pr.)	Application of what is taught. (Individual project work)

Complementary Courses for Economics

The students of B.A. Economics programme can select any of the following two complementary courses conventionally accepted as part of the UG Economics Curriculum. They are, (i) Modern Indian History/Mathematics for Economic Analysis, and (ii) Political Science/Indian Constitution and Politics.

Complementary course for other programmes

The complementary course for other programmes viz., B.A. History and Political Science offered by us is **General Economics**. In the CCSS regular Programme, the title of the course is Essentials of Economics. The syllabus of both the titles is one and the same.

Suggested Contents:

The contents of each course listed above cover most of the *important and the latest theoretical and empirical developments* in their respective fields.

Suggested Reference:

We propose a list of *books* as the required textbooks for each course. We also provide additional reading list for every course. Students are also encouraged to make use of internet resources.

Suggested Teaching Method:

The current practice of teaching Economics is to give lectures that dominate theories. This method often gives students a mistaken impression that economics is devoid of any practical and real-life use or applications. So we suggest incorporating as many *real-life examples* as possible in the process of teaching. Reference books contain plenty of examples from different fields of the subject. One can improve this with the aid of modern communication devices.

Suggested Assessment and Evaluation Methods:

We follow the directions of the University with regard to *assessment and evaluation*. As per these directions, there will be examinations conducted by the University at the *end* of each semester. There will be an internal *assessment* that carries *20 per cent weightage*. *The external evaluation has 80 per cent weightage*. With respect to evaluation, performance of a student is evaluated in terms of *grades*. The University follows *direct-grading* with a *5-point* scale under the Choice Based Credit Semester System (CCSS).

Detailed Syllabi

CORE COURSES

Semester I	Micro Economics I	EC1 B01
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a. Introduction:

Education in Economics begins with a study of the most fundamental ideas that govern economic activities. A beginner normally commences the study of these ideas with two courses in the methodology and principles of economics. The first course covers the simple relations that are concerned with the economic behavior of individual economic agents. This course is called microeconomics I. It will introduce the students to the basic ideas and tools that will be utilized throughout in other courses of the degree programme.

b. Objectives:

This course is intended to provide students a basic idea in microeconomics and its methodology. The main objective of this course is to equip students with the basic idea of economic analysis.

c. Learning Outcome:

With this course, students are expected to learn the simple relationships and ideas in the theory of consumption, production, cost and revenue.

d. Syllabus

Module -1: Introduction to Social Sciences:

Relevance of Social Sciences in understanding and solving cotemporary problems at regional, national and global levels

Module-II: Introduction to Micro Economic Theory

Micro Economics and its scope, Wants & scarcity, Functions of Economic system, Circular flow of economic activity – price determination and functions of prices-concept of margin, Economic models, Methodology, Value judgement, Positive and normative analysis

Module-III: Basic demand supply analysis

Market analysis-market demand and market supply-market equilibrium-adjustment to changes in demand and supply / static and dynamic analysis- comparative static analysis, Algebraic explanation to market equilibrium, market demand and elasticity, Types of elasticity-price, income & cross elasticity, measurement of elasticity, MR and price elasticity, Elasticity of supply. Determinants of elasticity, uses of elasticity,

Module IV: Consumer Behaviour and Demand

Utility Analysis – Total and Marginal Utility – Cardinal & Ordinal Utility. Indifference Curves- Characteristics, MRS-Special Types of Indifference Curves, Consumer's Income-Price Constraints- Budget Line-Changes in Income and Prices and Budget line, Consumer's choice, Utility Maximisation, The Changes in demand and Engel's Curve, Changes in Price Substitution Effect and Income Effect / Hicksian and Slutsky's Analysis Normal, Inferior and Giffen Goods, (Application of Indifference Curve Analysis.) Revealed preference theory. Strong Ordering and Weak Ordering. Fundamental Theorem of Consumption Theory, Derivation of Demand Curve under Cardinal, Ordinal and Revealed Preference Theory –.

Module V: Production/ Cost and Revenue

Production function – AP and MP Production with one variable input, Production with two variable inputs, Isoquants – MRTS-elasticity of factor substitution. Iso-cost line - Ridge Line, Returns to Scale, . Cobb Douglas Production function. Cost of Production, Nature of Production, Costs, Short run and Long run Costs, Isocost lines. Least cost input Combination, Expansion path, Derivation of LAC and LMC, Introduction to Modern Cost Curves. Concepts of revenue – AR, MR, TR; Break even point.

Reference

1. Dominick Salvatore: Microeconomics: Theory and Applications', Oxford University Press, New Delhi.
2. A. Koutsoyannis : Modern Microeconomics, - Macmillan
3. Hunt, Elgin, F (2008) Social Science and its methods in Social Science: An Introduction to the Study of Society: Allen and Bacon
4. Abhijit Kundu (2009): Methodology and Perspectives of Social Science – Pearson Education

Additional Readings

1. Dominick Salvatore 'Microeconomic Theory' Schaum's Outline series: Tata Magrahill.
2. Lipsey R. and A Chrystal – Economics (11th Edition) Oxford University Press New Delhi.

Semester II	Macroeconomics -I	EC2 B02
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a. Introduction:

The study of economics begins with the fundamental ideas of economic actions. The second fundamental course i.e. macroeconomics. I offer the students a view on the economy as a whole. This course will introduce the students to the basic ideas and tools that will be utilized throughout in the other courses of the degree programme.

b. Objectives:

This course is intended to provide students with the basic ideas in classical and Keynesian macroeconomics.

c. Learning Outcome:

With this course, students are expected to learn the relationships and ideas in the measurement of national income, the theory of income determination, fiscal and monetary policies, the government and its role in the functioning of the economy, etc.

d. Syllabus**Module I: Why study Economics**

A Methodological framework of studying Economics – Its relevance and importance

Module 2: Macro Economic Concepts & Models

Micro Economics and Macro Economics - National Income concepts Potential GNP - Actual GNP - GDP Gap – Green GNP Macro - Economic Models – Exogenous, Endogenous, ex-ante, ex-post, Nominal, real, dependent and independent variables – Identities and Equations.

Module 3: Classical Macro Economic Model

Say's Law of Markets – Wage – Price Flexibility – Classical Model of Output and Employment – Quantity Theory of Money – Fisher's Equation of Exchange – Cash Balance Approach – Neutrality of Money – Money illusion – Pigou effect – Real Balance effect – Classical dichotomy – Concept of full employment – voluntary unemployment.

Module 4: Keynesian Macro Economic Model

Consumption function – Psychological Law of Consumption – Determinants of Consumption – APC and MPC – APS and MPS – Paradox of thrift – Income, Consumption and Saving relationship – Investment function – determinants of investment – MEC, MEI and the role of Expectations – Principle of Effective Demand – Underemployment equilibrium – Wage. Price rigidity – Determination of Income in two and three sectors (using Keynesian Cross diagrams and algebra)

Module 5: Elementary IS LM Model (Two Sector only)

Definition & Derivation of IS and LM curves – General Equilibrium using IS & LM curves.

References:

1. Edward Shapiro : 'Macro economics' Oxford University press.
2. Gregory Mankiw : 'Macro economics' – 6th Edn. Tata McGraw Hill.
- 3 Richard T. Frogmen: 'Macro economics', Pearson education.
- 5 Eugene Diulio :Macro economic Theory, Shaum's Outline series. Tata McGraw Hill
- 6 Errol D'Souza : 'Macro Economics' – Pearson Education, 2008.
- 7 Abhijit Kundu (2009) : Methodology and Perspectives of Social Science – Pearson Education

Additional Readings

Dominick Salvatore : 'Microeconomic Theory' Schaum's Outline series : Tata McGraw-Hill.

Lipsey R. and A Chrystal – Economics (11th Edition) Oxford University Press, New Delhi.

Semester III	Quantitative Methods for Economic Analysis - 1	EC3 B03
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a. Introduction

Students of economics today need a variety of statistical skills to collect and analyse and interpret empirical data. They also require these skills for advanced studies in empirical-oriented fields. Statistical skills have become an essential toolkit for most branches of economics.

b. Objectives

This course is intended to provide students an introduction to statistical methods and tools that are used in the study of economics at undergraduate level. The aim of this course is to develop skill in statistical techniques that are required for a meaningful study of applied economics and for carrying out empirical research.

c. Learning Outcome

Students are expected to acquire statistical skills that are necessary for further study in most branches of economics.

d. Syllabus

Module I. Description of Data and Sampling

Statistics-Meaning and limitations-Data: Elements, Variables, Observations-Scale of Measurement-Types of Data: Qualitative and Quantitative; Cross-section, Time series and Pooled Data-Frequency Distributions: Absolute and relative-Graphs: Bar chart, Histogram etc. Summary Measure of Distributions: Measures of Central Tendency, Variability and Shape-Sampling: Population and Sample, Methods of Sampling.

Module II. Correlation and Regression Analysis

Correlation-Meaning, Types and Degrees of Correlation- Methods of Measuring Correlation- Graphical Methods: Scatter Diagram and Correlation Graph; Algebraic Methods: Karl Pearson's Coefficient of Correlation and Rank Correlation Coefficient - Properties and Interpretation of Correlation Coefficient

Module III. Index Numbers and Time Series Analysis

Index Numbers: Meaning and Uses- Laspeyre's, Paasche's, Fisher's, Dorbish-Bowley, Marshall-Edgeworth and Kelley's Methods- Tests of Index Numbers: Time Reversal and Factor Reversal tests -Base Shifting, Splicing and Deflating- Special Purpose Indices- Wholesale Price Index, Consumer Price Index and Stock Price Indices: BSE SENSEX

and NSE-NIFTY. Time Series Analysis-Components of Time Series, Measurement of Trend by Moving Average and the Method of Least Squares.

Module IV. Nature and Scope of Econometrics

Econometrics: Meaning, Scope, and Limitations - Methodology of econometrics-Modern interpretation-Stochastic Disturbance term- Population Regression Function and Sample Regression Function-Assumptions of Classical Linear regression model.

References:

- 1) Anderson, Sweeney and Williams, Statistics for Business and Economics, Thomson Education
- 2) Richard Levine and David S Rubin, Statistics for Management, Pearson Education
- 3) Damodar Gujarati, Basic Econometrics, McGraw Hill International
- 4) A. Koutsoyiannis, Theory of econometrics: An introductory exposition of econometric methods
- 5) Lind D.A., W.G. Marchal and S.A Wathen., Statistical Techniques in Business and Economics, Tata Mc Graw Hill, New Delhi.
- 6) Gupta S. P, Statistical Methods, Sultan Chand and Sons, New Delhi.

Semester III	Microeconomics -II	EC3 B04
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a. Introduction:

This part of the syllabus focuses on the particulars of the market- It attempts to explain how a particular market functions;

b. Objectives:

It is designed to introduce undergraduate students to the fundamental concepts of the markets and its structures. The objective of the course is to apply principles of microeconomic analysis to the day-to-day decision-making of firms and market.

c. Learning Outcome:

It is expected to develop skills in students in understanding the functioning of various types of market. This crucial skill will certainly help students in understanding and solving economic problems of the society, make policy.

d. Syllabus

Module 1: Market Structure – Perfect Competition:

Price determination in the market period – Short period and long period / Equilibrium of the firm – Efficiency implications of the firm.

Module 2: Imperfect Competition – Monopoly:

Price and output under monopoly – sources of monopoly – Types of monopoly – market demand curve under monopoly – short run and long run equilibrium of the monopolist – (MC -MR approach) – social cost of monopoly –Degrees of price discrimination – Equilibrium of discriminating monopolist – dumping – regulation of monopoly – A comparison of perfect competition and monopoly.

Module 3: Monopolistic Competition:

Monopolistic competition price and output determination – short run and long run – Product differentiation – selling cost – non-price competition – Chamberline’s group equilibrium and the concept of excess capacity.

Module 4: Oligopoly:

Features and types of oligopoly – Kinked demand curve theory.

Module 5: Factor pricing

Input pricing and employment under perfect competition – profit maximization and optimal employment – demand curve of a firm for an input – market demand curve for an input and its elasticity – Supply curve of an input – pricing and employment of an input.

Recommended Readings:

Dominick Salvatore : Microeconomics : Theory and Applications’, Oxford University press, New Delhi.
A. Koutsoyannis : Modern Microeconomics, Mac Millan

Additional Readings:

Dominick Salvatore: ‘Microeconomic Theory’ Schaum’s Outline series : Tata McGraw-Hill.
Lipsey R. and A Chrystal – Economics (11th Edition) Oxford University Press New Delhi.

Semester IV	Quantitative Methods for Economic Analysis – II	EC4 B05
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a. Introduction:

Economics is increasingly becoming quantitative in nature. Students of economics today need a variety of quantitative skills. Mathematical skills have also become an essential element in the toolkit for higher education.

b. Objectives

The students are to develop skills in mathematical techniques that are required for a meaningful study of both theoretical and applied economics.

c. Learning Outcome

This course in quantitative methods will cover the essential topics in mathematics needed for Economic analysis.

d. Syllabus

Module I- Preliminaries

Logic and Mathematical Proof-Concept of Sets-Set operations, Finite and Infinite Sets, Cartesian Product, Relations, Functions, Ordered sets, Linear Point sets-Exponents, Logarithms and progression.

Module II Functions and Graphs

Types of Functions-functional form-Linear and Quadratic-Solution to system of equations up to three unknowns- Rectangular Co-ordinate System and graphs of functions.

Module III- Basic Matrix Algebra

Matrices-Types, Matrix manipulations and their rules, Order of Matrix, Transpose of Matrix-Determinants up to order 3×3 - Properties and Value of determinant, Minor and Cofactor, Inverse and Cramer's Rule.

Module IV –Differential Calculus

Limits and Continuity-Derivative-Rules of Differentiation- Higher Order Derivatives-Differentials-Logarithms-Derivative of Logarithmic and Exponential Functions. Function of two variables: Partial, total differential, Higher order differentials and Total Derivatives, Implicit functions-Homogeneous functions and their properties-Euler's Theorem. Maxima and Minima of Functions- Curvature Properties-Convexity and Concavity.

References:

- 1) Taro Yamane, Mathematics for Economists: An Elementary Survey, Prentice Hall of India
- 2) Sydsaeter K and P. Hammond, Essential Mathematics for Economic Analysis, Financial Times- Prentice Hall, London, 2002.
- 3) Holden. K and A.W. Pearson, Introductory Mathematics for Economics and Business, Macmillan, 2002.
- 4) Barauh.S, Basic Mathematics and Its Application in Economics, Macmillan, 2002. Allen R.G.D, Mathematical Analysis for Economist, Macmillan, 1986.
- 5) Dowling E.T, Mathematical Methods for Business and Economics, Schaums Outline Series, McGraw Hill, 1993.
- 6) Allen R.G.D, Mathematical Analysis for Economist, Macmillan, 1986.

a. Introduction:

Policy makers all over the world use macroeconomic theories and related empirical results to frame policies. Similarly, business firms, use these theories and results to formulate their strategies. A sound understanding of macroeconomic principles and their applications is essential for students of Economics.

b. Objectives:

The objective is to familiarise the students in the application of principles of macroeconomic analysis to the day-to-day decision-making in the aggregate economy.

c. Learning Outcome :

This course is expected to develop skill in economic reasoning. This vital skill is expected to help them in understanding and solving aggregate economic problems.

d. Syllabus**Module 1: Theories of Money**

Nature and Functions of Money - Types of Money: Near money, inside money and outside money. 1. Theories of Demand for money - Defining demand for money - Classical theory of demand for money - Friedman's re-statement of Quantity Theory of Money - Liquidity Preference theory and Keynesian Liquidity Trap. 2. Theories of Supply of money: - Defining supply of money - Measuring supply of money - High powered money & money multiplier

Module 2: Theories of Inflation and Unemployment

Meaning, Types and Theories of Inflation. - Cost of inflation and sacrifice ratio. - Measurement of Inflation in India - Meaning and types of unemployment. - Cost of unemployment and Okun's Law - Measurement of unemployment in India. - Concept of Stagflation - Concept of Philips Curve.

Module 3: Macro economic Instability and Policy:

Business Cycle: meaning, types and phases. - Monetary, Fiscal, and income policy - Meaning and Instruments.

Module 4: Open Economy Macro Economics:

a. Foreign trade multiplier - Four sector macro economic model Using IS-LM-Balance of Payment Schedule

Reference:

1. Edward Shapiro – 'Macro economic Analysis' Oxford University press.
2. Gregory Mankiw – 'Macro economics' – 6th Edn. Tata McGraw Hill.
3. Richard T. Frogmen – 'Macro economics', Pearson education.
4. Eugene Diutio – Macro economic Theory, Shaum's Outline series. Tata McGraw Hill
5. Errol D'Souza – 'Macro Economics' – Pearson Education 2008.

Semester V	Computer Applications in Economics	EC5 B07
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a. Introduction:

Information technology has revolutionized the way we live and work. Economics is relatively more quantitative in nature than many other social sciences. Thus computer application has assumed utmost significance in Economics. Many of the large models in macroeconomics such as input-output models, national income estimation models, etc., require applications of computer programmes. Similarly, Computer application will facilitate in-depth studies in other branches of Economics.

b. Objectives:

This course will provide the students with a skill that is .that is useful both in job market and in academia.

c. Learning Outcome:

It is expected to provide the students with those computing skills that are, necessary for success. This course will arm the students with the knowledge of fundamentals of computers.

d. Syllabus

Module 1: Philosophical foundations of Computing

Software - Philosophy of open source software – social computing – Operating systems

Module 2: Creation and Manipulation of Documents

Word processor basics. New blank document and toolbars. Manipulation of the first document. Editing the document. Designing and redesigning the document. Working with graphs, pictures and video in documents. Records and mail merge.

Module 3: Data Analysis

Spreadsheet basics. Excel environment. Insertion of rows and columns. Entering data. Excel toolbars. Creation and manipulation of charts and graphs. Manipulation of data. Mathematical and statistical calculations. Excel functions. Changing the layout. Applications in economics using simple examples.

Module 4: Database Management

Introduction to database. Defining database. Meaning and functions of database management system. Creation and manipulation of tables. Updating tables. Working with forms. Handling queries. Generating reports. Applications in economics using simple examples.

Module 5: Preparation of Presentations

Introduction to PowerPoint. Starting PowerPoint. AutoContent Wizard. Working with texts, graphs, pictures, audio and video in slides. Design templates. Adding transition effects to slides. Adding animation in slides. Previewing the contents.

Module 6: The Internet and e-Commerce

Meaning and scope of the Internet; Creating, sending and receiving e-mails. Browsing the WWW; Downloading from and uploading to the Internet. Online shopping and e-business/e-commerce., e-market. (Concepts)

Reference

1. Vikas Gupta – *Comdex Computer Course Kit* – Dream Teck Press
2. Sharma D - *Foundations of IT*- Excel books
3. Rajaraman, V., *Fundamentals of Computers*, Prentice-Hall, New Delhi.
4. Henry Chan et.al., *e-Commerce-Fundamentals and Applications* , Wiley India, Delhi.
5. Alexis Leon and Mathews Leon., *Computers for Everyone*, Leon Vikas, Chennai.

Semester V	Indian Economy	EC5 B08
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a. Introduction:

Indian economy has already undergone much changes. This transformation is still taking place in every sector of the economy. However, many of the basic problems of the economy still Existing . These include poverty, inequality, unemployment, infrastructural bottlenecks, demographic issues, and so on. A student of economics must have a clear understanding of the extent of success and failures of the economy.

b. Objective:

This course aims at giving students a reasonable introduction to Indian economy. The course will concentrate on both the achievements and the issues of the economy.

c. Learning Outcome:

The students will, acquaint with a good understanding of the structure achievements ,issues and prospects of Indian economy.

d. syllabus:

Module 1: Resource Base and Structure of Indian Economy

Economic Geography of India – Basic features - Human Resource: Demographic features, extent of unemployment, poverty, and inequality: Recent trends and conceptual issues. HDI of India.- Trend in National Income and Percapita income. - Sectoral composition (output and employment) Primary, Secondary and Tertiary Sectors.

Module 2: Agriculture

Trends and Composition of Output of major crops - Trends in Investment, Credit and Agricultural Subsidy. - New Agricultural strategy of 1960s (Green Revolution) – Food

security and PDS in India - Evaluating Land Reforms in India - New Agricultural Policy (In the context of liberalization.)

Module 3: Industry

Industrial structure in India: Traditional, SSI, Village, Cottage and Modern industries. - Industrial Policy Resolution in India till 1991 - New Industrial Policy and its impacts.

Module 4: External Sector

Trends and composition of India's Imports - Trends and direction of India's Exports - EXIM Policy of India in relation to trade liberalization and its impacts-FDI, FII and MNCs in India - External Borrowing and BOP problem in India – International Institutions (IMF, WB, ADB, WTO) and the Indian Economy.

Reference:

1. Uma , Kapila, (2008), 'Indian Economy: Performance & Policies', 8th Ed. Academic Foundation, New Delhi
2. Prakash, B.A. (Ed.) (2009), 'Indian Economy Since 1991: Economic Reforms and Performance, Sage Publications new Delhi.
3. Bhalla, G.S. (2008) 'Indian Agriculture since Independence (2008), NBT. New Delhi
4. Amit Bhaduri, Development with Dignity. (2005) NBT New Delhi Additional Reading:
5. IC. Dhingra : Indian Economy Environment and policy – Sultan chant and sons.

Additional Reading

1. EPW, Various issues
2. Hindu Business Line, daily.
3. Social scientist
4. Kurein CT, The Economy an Interpretative Introduction. – Sage publication, 1994
5. SK Misra and UK Puri : Indian Economy- The development Experience, Himalaya Publications.

Semester V	History of Economic Thought	EC5 B09
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a. Introduction :

History of Economic thought is concerned with chronological or school wise listing of major contributions that took place in the science of economics. This course provides the students solid background to the development of theories and problems of contemporary economics.

b. Objectives

The course is expected to develop a strong understanding of the development of important concepts, theories and ideas of economics

c. Learning outcome

The students will have a thorough understanding of the development of economic ideas. It will also help to understand the theoretical framework Economics.

d. Syllabus

Module I: Introduction and Early Economic Thought

Why study History of Economic Thought? – Economic Ideas of Aristotle, Plato – Ibn Khaldun - St. Thomas Aquinas – Main Economic Ideas of Mercantilists(Thomas Mun,William Petty) and Physiocrats (Francis Quesnay, Turgot).

Module II: Classical, Socialist and Marxian School

Important contributions of: **a) Adam Smith** – naturalism and optimism, division of labour, theory of value, concept of laissez-faire **b) David Ricardo** – theory of value, stationary state **c) J.B. Say** - law of market **d) Malthus** – population theory and theory of glut **e) J.S. Mill** – reciprocal demand. **F) Jeremy Bentham** – utilitarianism **Early Socialists:** ideas of Owen, Fourier, saint Simon, Sismondi. **Basic tenets of Marxian Political Economy:** stages of development – theory of surplus value, theory of capitalist crisis

Module III: Marginalism and Neo-Classical Thought: Contributions of Carl Menger, Leon Walras, Frederich List, Pareto, Pigou, W.W. Rostow-Alfred Marshall and Neo-classical Economics.

Module IV: Keynes and Post –Keynesians.

Keynes as a critic of classical economics (introduce important books of Keynes) – Post Keynesian developments-Monetarism, Rational expectations school.

Module V : Indian Economic Thought.

Mention the economic ideas of Kautilya and Thiruvalluvar- Drain theory of Dadabhai Navoroji- economic ideas of Gandhiji and Ambedkar- important Indian economist like Ranade, Mahalanobis, Amartya Sen, C.T. Kurian, K.N. Raj, C.N. Vakil, J.N. Bhagawathi, Amith Baduri and Prabath Patnaik.

Reference :

1. Louise Haney - History of economic Thought – Surjith publication New Delhi
2. Eric Roll – History of Economic thought – Faber Lendon
3. Mar Blaug – Economics Theory in retrospect
4. AK Das Guptha – Indian Economic Thought
5. Brue SL and RR Grant (2007) – The evolution of Economic thought
6. Scrapanti E and S Zamagiri (2005) A n Out line of the Economic thought (OUP Newdelhi)
7. Spengler joseph – Economic of Islam – Ibn Khalbun , Cotemporary studies in society and History No 3 ,1964.
8. Hajela TN - History of Economic Thought – Ane’’s Student Edition.

Semester V	Kerala Economy	EC5 B10
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a. Introduction:

Kerala Economy is famous of her ‘Model of Development) A student of any economics programme on Kerala is expected to possess a good understanding of Kerala Economy

b. Objectives

The Course provides an introduction to the performance, prospects and problems of the Kerala economy. The course is aimed at understanding issues related to the society and polity of the state of Kerala.

c. Learning Outcome

Students are expected to develop a knowledge of the broad frame work of the economy of Kerala.

d. Syllabus

Module I : Structure of Kerala Economy

Structural composition – Primary, Secondary and Tertiary Sectors – changes over the years NSDP, GSDP and PCI. Contribution of productive vs. service sectors. Poverty profile in Kerala.

Module II: Development Experience:

Economic development vs. social development – PQLI & HDI. Concept of “Kerala Model:- Decentralized Planning & Development–Peoples Planning in Kerala.

Module III: Population and Demography

Demographic transition in Kerala – Features of population as per the latest census report. Employment, unemployment work participation rate.

Module IV Feature of Development sectors

a) Agriculture: Cropping pattern – Area and production of major crops – Paddy, Coconut, Rubber - Land Reforms in Kerala, an overview. b) Industry: Ownership and types of industries, traditional and modern. c) Trade: Imports and Exports, major items. d) Education:- Features of primary, secondary, higher & professional Education in Kerala - New Challenges. e) Health: Changes in the Health Profile of Kerala – Emerging issues.

Module –V: Impact of Emigration and migration.

Reference

1. Centre for Development Studies – Poverty Unemployment and Development Policy - Trivandrum
2. CDS and Kerala State Planning Board – Human Development Report Kerala -2007.
3. V.K. Ramachandran, On Keralas Development Achievements. In Sen & Dreeze – India Selected Regional Perspectives. - Oxford

4. Kannan. K.P – Health and Development In Rural Kerala. KSSP, Ko zhikode.
5. Kunhikannan. T.P & Aravindran K.P : Health Transition in Rural Kerala. KSSP Kozhikde
6. K. C. Sackaria et.al Kerala is Gulf Connections. –CDS Thiruvandapuram.
7. Various Issues of - Economic Review, Census Report, Statistics for Planning.
8. Rajan K (Ed) – Kerala Economy: Trends during the post Reform period – Serials Publications

Semester VI	Mathematical Economics	EC6 B11
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a. Introduction

Mathematical economics is an approach to economic analysis where mathematical symbols and theorems are used. Modern economics is analytical and mathematical in structure. Thus the language of mathematics has deeply influenced the whole body of the science of economics. Every student of economics must possess a good proficiency in the fundamental methods of mathematical economics. One of the significant developments in Economics is the increased application of quantitative methods and econometrics. A reasonable understanding of econometric principles is indispensable for further studies in economics.

b. Objectives

This course is aimed at introducing students to the most fundamental aspects of mathematical economics and econometrics. The objective is to develop skills in these. It also aims at developing critical thinking, and problem-solving, empirical research and model building capabilities.

c. Learning Outcome

The students will acquire mathematical skills which will help them to build and test models in economics and related fields. The course will also assist them in higher studies in economics..

d. Syllabus

Module I. Introduction to Mathematical Economics

Mathematical Economics: Meaning and Importance- Mathematical Representation of Economic Models- Economic functions: Demand function, Supply function, Utility function, Consumption function, Production function, Cost function, Revenue function, Profit function, saving function, Investment function

Module II. Marginal Concepts

Marginal utility, Marginal propensity to Consume, Marginal propensity to Save, Marginal product, Marginal Cost, Marginal Revenue, Marginal Rate of Substitution, Marginal Rate of Technical Substitution. Relationship between Average Revenue and Marginal Revenue- Relationship between Average Cost and Marginal Cost - Elasticity:

Demand elasticity, Supply elasticity, Price elasticity, Income elasticity, Cross elasticity-Engel function.

Module III. Constraint Optimisation

Constraint optimisation Methods: Substitution and Lagrange Methods-Economic applications: Utility Maximisation, Cost Minimisation, Profit Maximisation.

Module IV Production Function and Linear Programming

Production Functions: Linear, Homogeneous, and Fixed production Functions- Cobb Douglas production function. Linear programming: Meaning, Formulation and Graphic Solution.

Module V. Market Equilibrium

Market Equilibrium: Perfect Competition- Monopoly- Discriminating Monopoly

Reference:

1. Chiang A.C. and K. Wainwright, Fundamental Methods of Mathematical Economics, 4th Edition, McGraw-Hill, New York, 2005.(cw)
2. Dowling E.T, Introduction to Mathematical Economics, 2nd Edition, Schaum's Series, McGraw-Hill, New York, 2003(ETD)
3. R.G.D Allen, Mathematical Economics
4. Mehta and Madnani -Mathematics for Economics
5. Joshi and Agarwal- Mathematics for Economics
6. Taro Yamane- Mathematics for Economics

Semester VI	Public Finance	EC6 B12
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a. Introduction:

Public finance or fiscal economics deals with the fisc of the country. It is related to decision making in the public sector or finance of the governmental agencies. A training in public finance will help students in decision making and in higher studies.

b. Objectives:

The basic aim of this course is to introduce students to the application of the techniques, methods and principles of Economics to decision making in public finance.

c. Learning Outcome:

The students are expected to learn how the principles of economics can be applied to sound decision making in public finance. They are expected to learn all the important economic issues that government agents face.

d. Syllabus

Module I: Meaning and Scope of Public finance

Public finance – Meaning and Scope – Public and Private Finance – Principles of Maximum Social Advantage – Public Goods, Private Goods, Mixed Goods and Merit Goods (Concept only)

Module II: Public Expenditure

Meaning and Importance – Reasons for the Growth of Public Expenditure – Wagner’s Hypothesis, Peacock - Wiseman Hypothesis, Canon’s of Public Expenditure – Effects of Public Expenditure.

Module III: Public Revenue

Sources of public revenue Taxes -Classification of Taxes - Canons of Taxation, Principles of Taxation. Ability, Benefit and cost of service- Impact, Incidence and shifting of Tax Burden — Effects of Taxation – Major Taxes in India. Value Added Tax in India , The concept of goods and service tax (GST)

Module IV: Public Debt and Budget

Public Debt: Meaning, Types of Public Debt, Debt Redemption. **Budget**, Meaning, Types of Budget: Revenue and Capital Budget, Revenue Expenditure and capital expenditure, Revenue Deficit, Fiscal Deficit, Primary Deficit - Budget Deficit – Fiscal Policy – Contra Cyclical Fiscal Policy – Deficit financing - Preparation of Budget in India – (Introduce the latest Central and State Budgets to the students.)

Module V: Federal Finance

Meaning – Principles of Federalism – Finance Commission (Finance Commission Report – Latest) - Importance of Local finance in India

References

- (1) R.A Musgrave and PB Musgrave – Public finance – Tata Macgrail
- (2) Govinda Rao and Singh - Political Economy of Federalism in India – Oxford.
- (3) Govinda Rao – State Finances in India Issues and Challenges (Article) EPW – 03-08-2002.
- (4) Shankar Acharya – Thirty Years of Tax Reforms in India (Article) EPW – 14-05-1995.
- (5) Bhatia HL – Public Finance – Vikas Publishing.
- (6) Lekhy Public Finance and Public Economics – Kalyani publications,

Additional Reading

1. Economic Review – Government of Kerala
2. Economic survey- Government of India

Semester VI	International Economics	EC6 B13
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a. Introduction:

International economics deals with the economic relations – among nations - both trade and financial. A good understanding of international economics is necessary of student of Economics and those who wish to work in these areas or governmental organizations.

b. Objectives:

The basic aim of this introductory course on international economics is to present before the students the questions, and answers, related to international economic relations.

c. Learning Outcome:

The students are expected to acquire skill that will help them to take rational decisions in Issues related international economics.

d. Syllabus**Module 1: Introduction to International Economics**

Importance of International Trade - Internal Trade and International Trade

Module 2: Theories of International Trade

Classical Theory: Absolute and Comparative cost Advantage theories, - .Heckscher - Ohlin. Theory and Leontief Paradox.

Module 3: Theory of Commercial Policy:

Arguments for and against Free Trade - Arguments for and Against Protection - Methods of Trade Restriction: Tariff – Non-Tariff trade barriers – Dumping, export subsidy and Countervailing duties. (Concept only) - Economic Integration EU, NAFTA, ASEAN, SAARC, WTO.

Module 4: Foreign Exchange:

Defining foreign exchange and exchange rate - Components of foreign exchange reserve. - Different systems of exchange rate determination: gold standard (Mint Parity), PPP, Floating exchange rate, Fixed and Flexible Exchange rate. (Concepts only) - Devaluation, revaluation, depreciation and appreciation.

Module 5: Balance of Payments

Defining Balance of Trade and Balance of Payment. - Equilibrium and disequilibrium in BOP - Measures to correct BOP disequilibrium. - BOP in India.

Reference:

1. Salvatore, Dominick, 'International Economics', Wiley India New Delhi.
2. C.P. Kindle Berger 'International Economics'
3. Bo Soderstein and Geoffrey Reed 'International Economics' Macmilon
4. Francis Cherumilam - 'International Economics'
5. Mannur, H.G. 'International Economics'
6. Errol D'Souza, 'Macro Economics', Pearson Education 2008 (For BOP in India)
7. RBI bulletin, various issues.

Semester VI	The Political Economy of Development and Planning	EC6 B14
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a. Introduction :

This course on the political economy of development and planning attempts to answer questions related to economic development in a comprehensive manner. Students who wish to take up position in formulation and implementation of public policy must have a reasonably good understanding of its political economy aspects

b. Objectives :

The main objective of this course is to introduce the students of such fundamental topics in development and planning with their inter relations. This course is expected to provide students

a comprehensive approach towards issues related to development and planning.

c. Learning Outcome :

The students are expected to develop an interrelated approach to resource use, the relationship between man and man and man and nature.

d. Syllabus

Module I: Perspectives on Development Economics

Why study Development economics? Growth and Development-measurement of development – GDP, PCI, PQLI, HDI, HPI, GDI, GEM, Sen’s Capability Approach, Multi Dimensional Poverty index etc

Module II: Theories of Development

Low-level equilibrium trap, vicious circle of poverty, critical minimum effort, Big Push theory, Balanced versus Unbalanced growth theory

Module III: Economic Planning

Concept, meaning and types of planning, Relevance of planning in the context of globalization- **Economic Planning India:** Indian planning in a historical perspective:- Bombay plan, Gandhian Plan, People’s plan. Five-year plans in India – an overview. Details of current five-year plan

Module IV: Issues in development

Poverty – measurement and classification, Inequality and its measurement (Kuznet’s Ratio, Lorenze curve, and Gini coefficient), Gender issues – the concept of missing women. Environment versus development – the concept of sustainable development, limits to growth, global warming.

Reference:

1. A.P. Thirlwal ‘Growth and Development’, palgrave
2. M.P. Todaro SC Smith ‘Economic Development’ Pearson Education
3. Subrato Ghatak ‘Introduction to Development Economics’ - Routledge

4. Amir Kumar Bagchi - The Political Economy of Development – Orient Longman
5. Lester R Brown – Eco Economy – Orient Long man
6. Donella Meadows et.al – Limits to Growth – the Thirty Years update- Viva Publications.

Semester VI	Project Work	EC6 B15(Pr)
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Detailed guidelines for the conduct of the project work as approved by the University as per the order No.GA IV/J2/3601/10 Vol 4(iv) dt. 29-08-2011 is available in the website.

Open Course for Non-Economics Students

Semester V	Basic principles of Economics	EC5 D01
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EC 5 D01: Basic Principles of Economics

Module 1: Basic Concepts and the Methods of Economics

Why study economics? - Meaning of microeconomics- Resource scarcity, choice, opportunity cost and the production possibility curves- Central Problems of an economy. Inductive and Deductive methods-Positive and normative Economics.

Module 2: Demand, Supply Price Determination and Consumer Behaviour

Demand – nature, demand function, demand schedule, demand curve, shifts in Demand curve- Supply –supply function, supply curve, shifts in supply curve- market equilibrium, price determination and imbalances- Elasticity of demand – Price Elasticity-Income elasticity-Cross elasticity- Utility- Law of diminishing marginal utility- Law of Equi-marginal Utility.

Module 3: Theory of Production, Costs and Market Structures

Production and production function- costs and profits- Profit maximization and cost minimization-Market structures – features of perfect competition, monopoly, monopolistic competition and oligopoly.

Module 4: Macro Economics and the Measurement of National Income:

Meaning of Macroeconomics –Macro economics paradox-National income concepts – Importance-Measurement of national income.

Module 5: Income Determination, Inflation and Fiscal and Monetary Policies

Say's law of market- consumption function, saving function- investment multiplier- Inflation – meaning, types and effects - Fiscal and monetary policies: meaning and instruments.

Reference

1. Anintya Sen - Micro Economics – Oxford
2. Saumyan Sikdar – Principles of Macro Economics. – Oxford

Elective Courses to Economics Students

Semester VI	Gender Economics	EC6 E01
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Module I - Introduction

Definition of Gender- Gender and sex - Gender Equity and Gender Equality-Gender Development- Human Development Index and Gender Development index-Gender Disparity Index-Gender Empowerment Measure- Gender Status in India and Kerala -Sex Ratio-Concept of Missing Women.

Module II - Gender Discrimination in India and Kerala

Gender Discrimination in Labour Force Participation- Occupational Segregation and Wage Differences- Gender Discrimination in Education, Health, Employment, Political Participation and Decision Making.

Module III - Gender Budgeting

Gender awareness in planning- Invisibility of Women's Work in Budgeting- How to Adjust our Budgeting Policies to Reduce Gender Disparities.

Module IV - Gender Issues in Contemporary World

Women and Globalisation- Social and Economic Empowerment of Women- Technology and Gender:, for example Internet and Blogs.

References:

1. Gita Sen and Canen Crown; Gender and Class in Development Experience
2. Leela Gulati and Ramalingam; Kerala Women: A profile
3. Neera Desai and Maithreyi Krishnaraj; Health-A Gender Issue in India
4. Lourdes Beneria and Savithri Biswanath; Gender and Development: Theoretical, Empirical and Practical Approaches.

5. Lekha Chakraborti; Invisibility of Women's Work in Budgeting.
6. National Institute of public Finance and policy (NIPFP); Gender Budgeting in India, www.nipfp.org.in.
7. UNDP - Human Development Reports.

Semester VI	Health Economics	EC6 E02
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Module 1: Introduction to Health Economics:

Defining Health Economics. Importance of Health Economics – Essential Features. Concepts: Health, Health Care, Birth rate, Fertility rate, Death rate, IMR, CMR, MMR, Morbidity rate (Acute and Chronic), Disability Adjusted Life Year (DALY), Quality Adjusted Life Year (QUALY), Sex Ratio.

Module 2: Demand and Supply of Health Care:

Demand for Health Care – Case of Health Care Accessibility – Socio Economic and Cultural Features, Determining Health Status – Supply of Health, Health Care Delivery System – Pricing of Health Care.

Module 3: Health Financing & Policy::

Health Expenditure – Public & Private – Direct and Indirect – Health Insurance – Concept of User Cost – Health Policy of WHO, National Health Policy – NRHM, Health as a State Subject.

Module 4: Health Statistics in India and Kerala:

Infrastructure and Health Status of India & Kerala using informations from NSSO, NFHS, CRS and SRS.

References :

- 1) V. Ramankutty – A Premier of Health System Economics (2007) Allied publications New Delhi
2. Kannan KP,et.al..... (1991) Health Development in Rural Kerala – (KSSP, Thiruvanthapuram)..
3. Henderson JW - Health Economics and Policy – Thomson learning.

Semester VI	Economics of Business and Finance	EC6 E03
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Module 1: Introduction:

Basic concept of Business Economics-Financial Economics and Managerial Economics.

Module II: Investments:

Meaning, nature and importance. Considerations in Investment decision and investment process – Investment alternatives – Capital Budgeting – Introduction and methods

Module III:

Organising Financial asset, various financial assets and securities. Introduction to Balance Sheets – Evaluation of Balance Sheets – Break even Analysis – Linear and non-linear – time value money, Future Value and Compounding – present value of discounting.

Module IV:

Introduction to Demand Estimation, Demand forecasting – Production Function and its importance – Cost estimation, Cost functions – Economies of Scale, Cost cuts and estimation, Cartel ,price leadership, price discrimination, pricing strategies.

References:

1. Kettell, Brian – Financial Economics – Making sense of Market information, Financial Time, Prentice Hall, London – 2001.
2. Nellis J., and D. Parker – Principles of Business Economics 2nd Edition – Pearson Education, London.
3. Griffith A. and S. Wall = Economics for Business and Management – Pearson Education, London (2004)
4. Keat P.G. and P.K.Y. Young – Managerial Economics – Tools for Today’s Decision matters – Pearson Education New Delhi – 2006.

Complementary Course for other Programmes

I. GENERAL ECONOMICS

Semester II	General Economics-I
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Module I: Introduction to Economics

What Economics is about? – Importance of the study of economics; relation with other social sciences (History, Political Science, Law, Psychology, Sociology) ; Basic Problems; Micro versus Macro.

Module II: Theory of Demand

Utility; utility function; marginal utility; law of diminishing marginal utility; demand; law of demand; Elasticity of demand and its types.

Module III: Theory of Supply

Cost; cost function; opportunity cost; variable cost; fixed cost; total cost; marginal cost; average cost; supply; supply function; supply curve; Elasticity of supply and its types; Equilibrium price; market and its classification.

Module IV: Theory of Production

Production Function-Types of production function (short run and long run)- Economies of scale.

Module V: National Income Concepts and Meaning

GDP and GNP; NDP and NNP; GDP at factor cost and market price; GNP at market price and factor cost; NDP at market price and factor cost; NNP at market price and factor cost; Personal Income; Disposable income; Per-capita income; importance of the estimation of National Income- difficulties in estimation of national income.

Module VI: Major Classical Postulates

Say's Law of Market; Full employment; wage-price flexibility; Laissez-faire.

Module VII: Major Keynesian Concepts

Effective Demand; Consumption; Savings; Under-employment Equilibrium; Wage Price Rigidity.

References

1. Diwedi DN 'Macroeconomics Theory and Policy' Tata McGraw-Hill
2. Dominick Salvatore 'Microeconomic Theory', Schuam's Outline Series
3. Edward Shapiro : 'Macro economics' Oxford University press.
4. Gregory Mankiw : 'Macro economics' – 6th Edn. Tata McGraw Hill.
5. A. Koutsoyannis : Modern Microeconomics, - Macmillan

Semester III	General Economics -II
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Module I: Money

Definitions and functions of money; Demand for and supply of money; Fischer's Quantity theory of money; Inflation and deflation.

Module II: Banking

Role and functions of commercial banks and central bank; Monetary policy and its instruments; credit instruments (Cheque, Draft etc)

Module III: Public Finance

Public revenue and its sources; public expenditure; public debt; deficit financing; fiscal policy; budget; finance commission.

Module IV: Trade

Internal and External Trade; Why international trade?; balance of trade and balance of payment; foreign exchange rate; devaluation; revaluation; depreciation; appreciation.

Module V: India as a Developing Economy

Major Issues: poverty, unemployment and inequality - causes and remedies

Module VI: Major Sectors of Indian Economy

Importance; contribution and problems of agricultural sector; green revolution; land reforms; Industry: importance; contribution and problems; Services: contribution to the national economy- Impact of economic reforms on major sectors.

Module VII: Planning

Economic planning and its objectives; five year planning in India – achievements and failures

Module VIII: Kerala Economy

Unique features, Sectoral contribution, land reforms, decentralized planning, people's planning, achievements and challenges in Health and Educational Sectors, Role of Migration and remittances, tourism and development.

Reference

1. Diwedi DN 'Macroeconomics Theory and Policy" Tata Mc-Grawhill
2. Salvatore. D and E.A. Diulio – Principals of Economics Schuam's Outline Series
3. Salvatore. D – International Economics Schuam's Outline Series
4. Uma Kapila – (Ed) Indian Economy since Independence – Academic Foundation – New Delhi
5. Keralapadanam – Kerala Sastra Sahitya Parishad, Kozhikode
6. Rajan K (Ed) – Kerala Economy: Trends during the post Reform period – Serials Publications

2. Mathematics for Economic Analysis

Semester II

Mathematics for Economic Analysis-I
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Chapter 1: Theory of Sets:

1.1 Kinds of sets, 1.2 Operations of sets, 1.3 Venn Diagrams, 1.4 Cartesian Products, 1.5 Relations – Types of Relations, 1.6 Functions.

Chapter 2: Fundamental of Linear Algebra – Matrices:

2.1 The Role of Linear Algebra, 2.2 Definitions and terms, 2.3 Addition and Subtraction of Matrices, 2.4 Scalar Multiplication, 2.5 Vector Multiplication, 2.6 Multiplication of Matrices, 2.7 Commutative, Associative and Distributive Laws in Algebra. 2.8 Identity and Null Matrices 2.9 Matrix Expression of a Set of Linear Equations. 2.10 Row Operation.

Chapter 3: Matrix Inversion:

3.1 Determinants and Nonsingularity, 3.2 Determinants, 3.3 Properties of a Determinant, 3.4 Minors and Cofactors, 3.5 Cofactor and Adjoint Matrices, 3.6 Inverse Matrices 3.7 Solving Linear Equations with the Inverse, 3.8 Cramer's Rule for Matrix Solutions, 3.10 Rank of a Matrix.

Chapter 4: Basic Mathematical Concepts:

4.1 Exponents, 4.2 Polynomials, 4.3 Factoring, 4.4 Equations : Linear and Quadratic, 4.5 Completing the Square, 4.6 Simultaneous Equations, 4.7 Functions, 4.8 Graphs, Slopes, and Intercepts, 4.9 Graphs of Nonlinear Function.

Chapter 5: Economic Applications of Graphs and Equations:

5.1 Isocost Lines, 5.2 Supply and Demand Analysis, 5.3 Production – Possibility Frontiers.

Basic Reading

1. Taroyamane, Mathematics for Economists (Prentice Hall)
2. Edward T. Dowling, Introduction to Mathematical Economics (2nd Edition), Schaum's Outline Series, McGRAW-HILL.

Additional Readings

1. Maths for Economics, Geoffrey Renshaw, 2nd Edition, Oxford University Press
2. Chiang A C, Fundamentals Methods of Mathematical Economics, McGraw Hill
3. Michael Hoy, John Livernois, Mathematics For Economics, 2nd Edition, Phi Learning
4. Mathematics for Economics and Business, Bhardwaj R S, 2nd Edition, Excel Books

Note : 1. This course is a complementary course and is intended for students of B.A. Economics course who may not have sound knowledge of advanced mathematical concepts. Hence questions may be confined to intermediary level. 2. Derivations and proofs not required.

Semester III	Mathematics for Economic Analysis-II
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Chapter 1: The Derivative and The Rules of Differentiation:

1.1 Limits, 1.2 Continuity, 1.3 The Slope of a Curvilinear Function, 1.4 The Derivative, 1.5 Differentiability and Continuity 1.6 Derivative Notation 1.7 Rules of Differentiation 1.8 Higher-Order Derivatives 1.9 Implicit Differentiation. *Uses in Mathematics and Economics:* 1.10 Increasing and Decreasing Functions, 1.11 Concavity and Convexity, 1.12 Relative Extreme, 1.13 Inflection Points, 1.14 Curve Sketching, 1.15 Optimization of Functions.

Chapter 2: Calculus and Multivariable Functions:

2.1 Functions of Several Variables and Partial Derivatives, 2.2 Rules of Partial Differentiation, 2.3 Second-Order Partial Derivatives, 2.4 Optimization of Multivariable Functions, 2.5 Constrained Optimization with Lagrange Multipliers, 2.6 Significance of the Lagrange Multiplier, 2.7 Differentials, 2.8 Concept of Total and Partial Differentials, 2.9 Concept of Total Derivatives, 2.10 Implicit and Inverse Function Rules, 2.11 Application of Calculus of Multivariable Functions in Economics.

Chapter 3: Special Determinants and Matrices in Economics:

3.1 The Jacobian, 3.2 The Hessian, 3.3 The Discriminant, 3.4 Higher-Order Hessians, 3.5 The Bordered Hessian for Constrained Optimization.

Chapter 4: Integral Calculus : The Indefinite Integral:

4.1 Integration, 4.2 Rules of Integration, 4.3 Initial Conditions and Boundary Conditions, 4.4 Integration by Substitution, 4.5 Integration by Parts, 4.6 Economic Applications.

Chapter 5 : Integral Calculus : The Definite Integral:

5.1 Area under a Curve, 5.2 The Definite Integral, 5.3 Area between curves

Chapter 6: Introduction to Differential Equations and Difference Equations:

6.1 Definitions and Concepts of Differential Equations 6.2 Definition and Concepts of Difference Equations.

Basic Reading

1. Edward T. Dowling, Introduction to Mathematical Economics (2nd Edition), Schaum's Outline Series, McGRAW-HILL.

Additional Readings

1. Maths for Economics, Geoffrey Renshaw, 2nd Edition, Oxford University Press
2. Chiang A C, Fundamentals Methods of Mathematical Economics, McGraw Hill
3. Taroyamane, Mathematics for Economists (Prentice Hall)
4. Michael Hoy, John Livernois, Mathematics For Economics, 2nd Edition, Phi Learning
5. Mathematics for Economics and Business, Bhardwaj R S, 2nd Edition, Excel Books

Note : 1. This course is a complementary course and is intended for students of B.A. Economics course who may not have sound knowledge of advanced mathematical concepts. Hence questions may be confined to intermediary level. 2. Differentiation / Integration of Trigonometric functions, logarithmic functions etc., are not to be included.

Distribution of Credit under the UG Economics (CCSS)

Semester	Course Title	Subject	Credit
I	Common Course 1	English	3
	Common Course 2	English	3
	Common Course 3	Second Language	4
	Core Course 1	Micro Economics 1	4
	Complementary 1	Political Science/Indian Constitution and Politics	4
II	Common Course 4	English	4
	Common Course 5	English	4
	Common Course 6	Second Language	4
	Core Course 2	Macro Economics 1	4
	Complementary 2	Modern Indian History/Mathematics for Economic Analysis	4

III	Common Course 7	English	4
	Common Course 8	Second Language	4
	Core Course 3	Micro Economics II	4
	Core Course 4	Quantitative Methods for Economic Analysis -I	4
	Complementary 3	Modern Indian History/Mathematics for Economic Analysis	4
IV	Common Course 9	English	4
	Common Course 10	Second Language	4
	Core Course 5	Macro Economics II	4
	Core Course 6	Quantitative Methods for Economic Analysis -II	4
	Complementary 4	Political Science/Indian Constitution and Politics	4
V	Core course 7	Computer Application	4
	Core course 8	Indian Economy	4
	Core course 9	History of Economic Thought	4
	Core course 10	Kerala Economy	4
	Open course	Basic Principles of Economics	4
	Core course 11	Mathematical Economics & Basic Econometrics	4
VI	Core course 12	Public Finance	4
	Core course 13	International Economics	4
	Core course 14	Political Economy of Development and Planning	4
	Elective course	Gender Economics/ Health Economics/ Economics of Business and Finance	2
	Project Work	Individual activity	4
Total credit			120

