



केरल केंद्रीय विश्वविद्यालय
CENTRAL UNIVERSITY OF KERALA

(मंसद के अधिनियम, वर्ष 2009 द्वारा स्थापित / Established under the Act of Parliament in 2009)

No.CUK/ACA/AC Meeting /569/2018/

Dated, the 13th June, 2018

**Minutes of the 3rd Meeting of the IIIrd Academic Council held
on 1st June, 2018 at Conference Hall, Periy Campus**

The Vice Chancellor welcomed all the members to the meeting. In his introductory remarks it was mentioned about the successful conduct of inauguration of the newly built Campus Buildings of the University by Hon'ble Vice President of India, Shri. Venkaiah Naidu along with other dignitaries on 29th April 2018. He stressed the urgent need to move to the permanent academic buildings. He also mentioned the sad state of affairs leading to the dismissal of 05 students from the Hostel and one student from the University due to their misbehaviour violating hostel and campus regulations stipulated by University.

The Vice Chancellor also announced that hereafter the monthly attendance of PG/UG Students will be send by the HoDs regularly to the Controller of Examinations.

Time table for exams should also be prepared in co-ordination with Controller of Examinations and in consistency with the Academic Calendar.

The Vice Chancellor expressed the need to avoid delay in conducting examinations/additional examinations.

He pointed out that it is imperative to hold external evaluation as a part of valuation.

3:03:01 Approval of the minutes of the last Academic Council-reg:-

The Minutes of the last Academic Council (23.08.2017) was approved. Question was raised about the recognition of GIFT and MCC. It was replied that the Committee constituted for the purpose has not yet submitted the report. The Vice Chancellor has directed the committee to submit its report as early as possible.

3:03:02 Approval of the Action Taken Report- reg:-

The ATR of the last Academic Council Meeting decisions were approved.

3:03:03

(i) Counting past Services for direct Recruitment and promotion for teacher Reg.

Detailed deliberation was made on the subject. A committee is constituted for the purpose with Prof.(Dr.) K.C. Baiju, Chairman, Prof. (Dr.) K. Jayaprasad, Dr. Mohammedunni Aliaz Musthafa, Dr. Amruth .G. Kumar, Dr. Joseph T.J and Shri. Jayakrishnan (AR Admn.). The report of the committee was considered by Academic Council

Decision:

The report of the committee has been approved. The members have pointed out that the experience of state funded research institutions and industry experiences may be counted. It has been resolved that this issue may be referred to the committee, which may consider the issue and submit the report to next Academic Council for its consideration.

3:03:04

Swachhata - Action Taken - Reg.

The committee has considered the matter and suggested committee to prepare Action Plan for 'Swachhata' immediately and submit to UGC. It was also suggested to propose credit based curricular activities for the students of CUK in 'Swachhata'.

3:03:05

Approval of BoS Meeting Minutes and revised syllabus for the Academic year 2018- reg:-

The Academic Council has approved the BoS Meeting Minutes and revised Syllabus of the following Departments with the following suggestions:

(i) Economics

Approved with 01 Elective as inter-disciplinary as insisted by the earlier Executive Council.

(ii) Law

Approved the restructuring of courses on LLM. NRI Law has been proposed for introduction as Diploma Course. The Vice Chancellor specially appreciated the effort of Dept. of Law in launching Diploma programmes.

(iii) Public Administration and Policy Studies

The Academic Council unanimously decided to change the existing interdisciplinary course entitled : Governance in Kerala: Innovations and Experiments (Course Code 425) with a new course " Rural Governance in Kerala". The Academic Council also approved the



syllabus of this course. It will take effective from 2018-19 session onwards.

The Academic Council also resolved to start Internship in the 3rd Semester of MA (PA&PS) from the academic year 2017-19 batch.

(iv) Dept. of Animal Science

The syllabus has been approved by the Academic Council.

The proposal of changing of name of Animal Science to Zoology has been approved. The new name will be effective from 2019-20 only. The suggestion for change of title will be placed before Executive Council for approval. In this connection it is also suggested that the Dept. of Plant Science and Biochemistry and Molecular Biology may submit their proposal for title rationalization.

(v) Social Work

Approved the syllabus and Open elective course (semester wise)

(vi) International Relations and Politics

The Academic Council approved the revised syllabus. The earlier electives of 30 numbers has been curtailed to 16 numbers. One inter disciplinary course on Human Rights was introduced and approved by the Academic Council.

(vii) Malayalam.

Approved the syllabus. One new paper introduced namely 'Translational Studies in Malayalam'. However, it was also decided to rename the elective paper of Malayalam as Translation Theory and Practice and in Linguistics Department as 'Machine Translation'. This will be made effective from 2018-19 batch onwards.

(viii) Yoga.

A committee with Dr. Rajendra Pilankatta, Dr. Subramanya Pailoor, Dr. Mohan A.K and Dr. K.C. Baiju has been formed to relook the syllabus for its implementation subject to ratification by next Academic Council.

3:03:06 Funds for study tour and field work evolving a policy -Reg.

The Departments like Geology, Social Work and few science departments syllabus continuously involve field visit also.

The budget availability for study tour is Rs. 5,00,000/- for 06 departments and amount sanctioned in budget is as follows;



CENTRAL UNIVERSITY OF KERALA
School of Economics
Department of Economics

Minutes of the IInd Board of Studies of Department of Economics (PG Programme) held on
13th and 14th December 2017. Office Order No. CUK/ACA/BS/183/13/0969

IInd Board of Studies (PG Programme) of Department of Economics was held on 13th and 14th December 2017 in Conference Hall of the Central University of Kerala.

Members of the PG Board of Studies

- Chairman : **Prof. (Dr.) K.C.Baiju,**
Head, Dept. of Economics, Central University of Kerala.
- Subject Experts : **Prof. (Dr.) S.Harikumar,**
Head, Dept. of Economics, CUSAT, Cochin, Kerala.
- Prof. (Dr.) Vishwanatha,**
Chairman, Dept. of Economics, Mangalore University, Mangalore,
Karnataka.
- Prof.(Dr.) J.A.Arul Chellkumar,**
Chairman, School of Economics and Financial Studies,
Bharathidasan University, Tamil Nadu.
- Dr. Manju S Nair,**
Associate Professor, Dept. of Economics, University of Kerala,
Trivandrum, Kerala.
- Members of Faculty : **Dr. P. Abdul Kareem,**
Associate Professor, Dept. of Economics, Central University of Kerala.
- Dr. Syam Prasad,**
Assistant Professor, Dept. of Economics, Central University of Kerala

The members of the board of studies deliberated the matters involved in the course structure of the proposed syllabus, the same has been compared with the present syllabus (implemented form 2015-16 onwards), and the following outcomes have been materialized from their deliberations. First, it was decided that 13 papers will be offered as Core Courses similar to the present syllabus.

Prof. (Dr.) K.C.Baiju

Prof. (Dr.) S.Harikumar

Prof. (Dr.) Vishwanatha

Prof.(Dr.) J.A.Arul Chellkumar

Dr. Manju S Nair

Dr. P. Abdul Kareem

Dr. Syam Prasad



Analysis and Indian Economy were introduced as a replacement for Mathematics for Economic Analysis I & II, ~~Statistics~~ for Economic Analysis I & II and Indian Economy I & II. Further, Economics of Growth and Development, Regional Economics, Public Finance and Research Methodology were incorporated into the list of Core Courses and the final list of recommended Core Courses as follows:

Course Code	Courses	Credits
Semester - I		
EEC 5101	Microeconomic Theory I	4
EEC 5102	Macroeconomic Theory I	4
EEC 5103	Mathematics for Economic Analysis	4
EEC 5104	Economics of Growth and Development	4
EEC 5105	Indian Economy	4
Semester - II		
EEC 5201	Microeconomic Theory II	4
EEC 5202	Macroeconomic Theory II	4
EEC 5203	Statistics for Economic Analysis	4
EEC 5204	International Economics: Theory and Policy	4
EEC 5205	Regional Economics	4
Semester - III		
EEC 5301	Econometrics: Theory and Applications	4
EEC 5302	Public Economics	4
EEC 5303	Research Methodology	4
EEC 50--	Elective I	4
EEC 50--	Elective II	3
Semester - IV		
EEC 5401	Dissertation	6
EEC 50--	Elective III	4
EEC 50--	Elective IV	3
Total Credits		72

Second, the members of the board of studies rationalized the syllabus in terms of expurgated overlapping of subject content with in the module, between the module and among the core as well as elective papers. In addition, the content of the proposed courses were validated in according to the parameters of the NIRF criteria. The Core Course syllabus is approved by the Board of Studies as appended. The detailed syllabus of the elective courses proposed is to be approved by the Board of Studies. Then the compiled syllabus (Core and Electives) has to be placed in the forthcoming Academic Council of the Central University of the Kerala for approval.

Prof. (Dr.) K.C. Baijn

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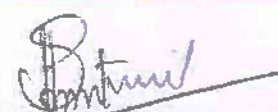
Elective courses offered shall be on the basis of availability of faculty specialization, workload, infrastructure and the logistics at the disposal of the department. Students will have to do at least one elective course as mandatory from other departments. While the elective courses selected and offered by the Department of Economics, special care may be taken to confine it with those departments having the reinforcing leverages to the students (Environmental Science, Geology, Public Administration, International Relations and Social Works) in their academic arena especially awareness building, ability to assess the relationship between their subject and electives and employability in a composite approach.

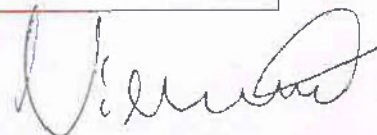
. Tourism Economics, Economics of Infrastructure, Economics of Insurance and India in the Global Economy are the new additions in the elective courses. Finalized 4 credits and 3 credits elective courses are as follows:

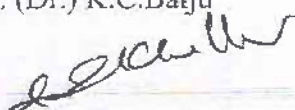
ELECTIVES COURSES

<u>Elective with 4 credits</u>	<u>Elective with 3 credits</u>
1. Industrial Economics	1. Monetary Economics
2. Advanced Econometrics	2. Population and Development
3. Agricultural Economics	3. International Political Economy
4. Health Economics	4. Gender and Development
5. Labour Economics	5. Economics of Education
6. Environmental Economics	6. India in the Global Economy
7. Financial Economics	7. Economics of Infrastructure
8. Institutional Economics	8. Finance and Capital Market
9. Tourism Economics	9. Decentralization and Development
10. Public-Private Partnership and Infrastructure	10. Economic Thoughts
	11. Welfare Economics
	12. Economics of Insurance



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Dr. Syam Prasad



Signature of the Board of Studies Chairman and Members

Sl. No.	Details	Name		Signature
1.	Head, Dept. of Economics, CUK.	Prof. (Dr.) K.C.Baiju	Chair Person	
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3.	Faculty Member	Dr. P. Abdul Kareem , Associate Professor, Dept. of Economics, Central University of Kerala.	Members	
		Dr. Syam Prasad , Assistant Professor, Dept. of Economics, Central University of Kerala	Members	

Date: 14/12/2017

Place: Periya, Kasaragod.





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Programme: MA (Economics) [2-year Programme]



Central University of Kerala

Department of Economics

School of Economics

M A Programme: Economics

Revised Syllabus w.e.f 2018-'19

Approved by the PG Board of Studies held on 13-14th December 2017 to be placed before the Academic Council

Programme: MA (Economics) [2-year Programme]

Programme Name: M.A. Economics

Programme Code: EEC05

Duration: 2 years

(As per Choice Based Credit System w.e.f. the academic year 2018-19)

Programme Outcome

After successful completion of MA programme in Economics, students will be able to:

- Inculcate the knowledge of optimum utilization of resources for the improvement and betterment of the society in a sustainable manner.
- Evaluate existing theoretical arguments in economics.
- Assess daily developments in the economy and social sectors.
- analyse economic data and produce research outputs.
- Suggest appropriate policy prescriptions for the development of the country.
- Successfully face competitive examinations and interviews.
- Prepare them to pursue higher studies such Ph.D.
- Successfully compete for job opportunities.
- Sensitive to sustainability of environment and gender equality.
- Responsible citizens with ethics.

PROGRAMME SPECIFIC OUTCOME

- PSO-01 To provide in-depth knowledge to students about economic theory and its applications for the optimum utilization and allocation of resources including labour, capital, natural resources and technology.
- PSO-02 To make the students able to assimilate how various markets function and the factors influencing the market dynamics.
- PSO-03 To impart clear understanding about the behaviour of regional, national and global economy.
- PSO-04 To enable the students to analyse macroeconomic policies including fiscal, monetary, and trade policies.
- PSO-05 To determine economic variables including inflation, unemployment, poverty, GDP, Balance of Payments using statistical and econometric methods.
- PSO-06 To understand the behaviour of financial and money markets and perform cost-benefit analysis for making investment decisions.
- PSO-07 To link daily developments in the economy with existing insights in economics.

Central University of Kerala
Department of Economics, School of Economics

M. A. (Economics)

Course Structure for MA Programme in Economics

Course Code	Courses	Credits	Lecture Hours per week	Tutorial Hours per week
<u>Semester – I</u>				
EEC 5101	Microeconomic Theory I	4	4	2
EEC 5102	Macroeconomic Theory I	4	4	2
EEC 5103	Mathematics for Economic Analysis	4	4	2
EEC 5104	Economics of Growth and Development	4	4	2
EEC 5105	Indian Economy	4	4	2
<u>Semester – II</u>				
EEC 5201	Microeconomic Theory II	4	4	2
EEC 5202	Macroeconomic Theory II	4	4	2
EEC 5203	Statistics for Economic Analysis	4	4	2
EEC 5204	International Economics: Theory and Policy	4	4	2
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EEC 5301	Basic Econometrics	4	4	2
EEC 5302	Public Finance	4	4	2
EEC 5303	Research Methodology	4	4	2
EEC 50--	Elective I	4	4	2
EEC 50--	Elective II	3	3	2
<u>Semester – IV</u>				
EEC 5401	Dissertation	6	-	-
EEC 50--	Elective III	4	4	2
EEC 50--	Elective IV	3	3	2
Total Credits		72		

ELECTIVE COURSES

Electives with 4 Credits

- EEC 5001: Industrial Economics
- EEC 5002: Advanced Econometrics
- EEC 5003: Agricultural Economics
- EEC 5004: Health Economics
- EEC 5005: Labour Economics
- EEC 5006: Environmental Economics
- EEC 5007: Financial Economics
- EEC 5008: Institutional Economics
- EEC 5009: Tourism Economics
- EEC 5010: Public –Private Partnership and Infrastructure

Electives with 3 Credits

- EEC 5011: Monetary Economics
- EEC 5012: Population and Development
- EEC 5013: International Political Economy
- EEC 5014: Gender and Development
- EEC 5015: Economics of Education
- EEC 5016: India in the Global Economy
- EEC 5017: Economics of Infrastructure
- EEC 5018: Finance and Capital Market
- EEC 5019: Decentralization and Development
- EEC 5020: Economic Thoughts
- EEC 5021: Welfare Economics
- EEC 5022: Economics of Insurance

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5101	Semester	I
Course Title	MICROECONOMIC THEORY - I		
Credits	4	Type	Core

Course Description

Aim of the course is to provide advanced microeconomic theories with analytical vigour by means of analyses and applications of microeconomic theories in contemporary issues.

Course Outcome

By the end of the course, students are expected to be able to:

- Identify and assess concepts and theories of the Microeconomics.
- Apply market issues with practical problems
- Engage in rigorous research on issues of microeconomics
- Suggest policy prescriptions

Course Structure

Module 1: Theory of Consumer Behaviour

An overview of Cardinal and Ordinal Approaches: Marshall's Approach - Indifference curve and its applications - Price, income and substitution effects - Slutsky theorem and derivation of demand curve - Revealed Preference Theory and derivation of demand and indifference curve - Consumer Surplus and Elasticity of Demand and its applications. Recent developments in demand theory: Pragmatic Approach - The Linear Expenditure systems - Indirect utility function. Consumer behaviour under risk and uncertainty: Bernoulli- Neumann-Morgenstern - Friedman-Savage Hypothesis - Markowitz Hypothesis.

Module 2: Theory of Production and Costs

Production: Basic concepts - Production functions (Cobb-Douglas, CES and VES, Fixed coefficient type and Translog) - Returns to scale and Returns to factors of production - Duality in production - Output maximization and cost minimization - Producer's equilibrium. Traditional Cost Theories: Basic concepts - Short-run and Long-run Costs, Envelope curve. Modern theories: Short-run and Long-run, L-shaped scale curve – Engineering cost curves – Economies of scale.

Module 3: Price and Output Determination in Perfect and Imperfect Markets

Perfect competition: Short-run and long-run equilibrium of the firm and industry – Dynamic changes and industry equilibrium. Monopoly: Short-run and long equilibrium - Price discrimination - Tax incidence - Pricing Techniques (Peak-load Pricing etc.)- Monopoly power - Control and regulation. Monopolistic competition: Behaviour of monopolistic competition - General and Chamberlin model - firm and group equilibrium with product differentiation.

Programme: MA (Economics) [2-year Programme]

Module 4: Oligopoly Market and Game Theory

Non- Collusive Oligopoly: Cournot - Bertrand – Stackelberg. Kinked demand curve. Collusive Oligopoly: Cartels and mergers - Price Leadership and Basic point price system. Theory of Games: Two-person and Zero-sum game - Pure and Mixed strategy - Saddle point solution – Nash equilibrium. Price Determination under Bilateral Monopoly.

Module 5: Alternative Methods of Pricing

Critique of Traditional theories of Pricing, Hall and Hitch Report. Pricing principle - Average cost pricing - Mark up pricing - Limit pricing theory - Bains version, Sylos-Labini model of limit pricing - Franco-Modigliani - Bhagwati - Pashigian model - Cross-subsidy free pricing - Public Sector Pricing.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

References

- Koutsoyiannis, A. (1979). *Modern Microeconomics* (2nd edition). Macmillan Press, London.
- Mankiw, N. G. (2009). *Principles of Microeconomics* (5th Edition). South-Western, Cengage Learning, USA.
- Pindyck, R.S. D.L. Rubinfeld, P.L Mehta (2009). *Microeconomics* (7th Edition). Pearson, New Delhi.
- Henderson, J.M., and Quandt, R.E. (2003). *Microeconomic Theory: A Mathematical Approach* (3rd Edition). Tata McGraw Hill, New Delhi.
- Varian, H. (2010). *Intermediate Microeconomic* (8th Edition). New York: W.W Norton.
- Varian, H.(1992). *Microeconomic Analysis* (3rd Edition). New York: W.W Norton.
- Stigler, G. (1996). *Theory of Price* (4th Edition). New Delhi: Prentice Hall of India.
- Samuelson, P.A. and Nordhaus, W.O. (1998). *Economics* (16th Edition). New Delhi: Tata McGraw Hill.
- Dominick Salvatore. (2011). *Schaum's Outline of Microeconomics* (4th Edition). New Delhi: Tata McGraw Hill.
- William J. Baumol, *Economic Theory and Operation Analysis* 4 th Edition Prentice Hall India, New Delhi 1982.
- Da Costa G. C., (1980) *Production, Prices and Distribution*, Tata Mc Graw Hill, New Delhi.
- Gravelle, H and Rees, R. (1981), *Microeconomics*, Longman, London, 2nd Edition.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5102	Semester	I
Course Title	MACROECONOMIC THEORY - I		
Credits	4	Type	Core

Course Description

This course deals with the economy as a whole, and examines the main principles of the determination of real income, employment, price level and inflation. It also discusses the conduct of macroeconomic policies. The course intends to provide a thorough understanding of the Classical, Keynesian, Monetarist analysis of the macro economy.

Course Outcome

At the end of the course, the students are expected to be able to:

- Examine the functioning of economy as a whole, and to get acquainted with policy instruments for macroeconomic management.
- Evaluate the functioning of goods market, money market and labour market in an economy.
- Analyse how the economic agents like consumers, producers and the external sector react to changes in macroeconomic policy environment.
- Assess the macroeconomic environment with a specific knowledge on India Economy to sharpen their understanding of some of these macro concepts and models, and policy instruments.

Course Structure

Module 1: National Income Accounting

Concepts- approaches and problems in National Income Accounting - Price Indices and GDP Deflator – Circular flow of income and expenditure

Module 2: Macro Economic Systems

Alternative approaches to the determination of employment, output and income- The Classical system – Money, prices and interest under the Classical system. Keynes' Critique on the Classical system – Keynes model of income determination – Money, interest and income under the Keynesian system. The Neo-classical synthesis - IS-LM analysis – extension of IS-LM with the government sector - policy analysis - relative effectiveness of monetary and fiscal policy- extension of IS-LM with labour market- Classical and Keynesian labour market analysis- Theoretical Controversies -Keynes Effect, Pigou effect and Real Balance effect.

Module 3: Behavioural Foundations of Macro Economics

Consumption and Savings function – Theories of consumption function – Current Income theories (Absolute, Relative Income Hypothesis) – Normal income theories (Life Cycle Hypothesis and Permanent Income Hypothesis). Endogenous income theorem – Empirical evidences. Investment function – Cost of capital and investment – user cost – Present value criterion - Marginal Efficiency of

Programme: MA (Economics) [2-year Programme]

Capital and Investment – Acceleration theory of investment – Neo-classical theory of investment – Tobin's Q-ratio.

Module 4: Demand for and Supply of money

Portfolio allocation and demand for assets – Demand for Money – Quantity theory approach – Keynes approach – Post Keynesian Theories of demand for money – Tobin-Baumol - Modern Quantity theory of money - Empirical evidences. Supply of Money – Behavioural model - H Theory of money supply – Methods of Monetary Control- Fisher effect.

Module 5: Open Economy Macro Model

Balance of Payments and Exchange rates – IS-LM analysis for an open Economy – Keynesian approach to current account- Mundel Fleming model – role of fiscal and monetary policies under alternative exchange rate regimes and capital mobility - Internal and External Balance - Policy dilemma- Monetary approach to balance of payments.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Presentation, Assignment, Midterm exam and final End semester examination.

References

- Andrew.B.Abel and Ben S. Bernanke, (2005), *Macroeconomics*, (5th Edition), Pearson Education, Inc, Singapore.
- Brian Snowdon and Howard.R.Vane (2002) *Modern Macroeconomics*, The origin, Development and current state, Edwal Elgar, U.K.
- Brian Snowdon, Howard R.Vane and Peter Wynarczyk (2001) *A Modern Guide to Macroeconomics : An Introduction to Competing Schools of Thought*, Edward Elgar Publishers.
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- G.K.Shaw, Michael J, McCroshie and David Greenway, *Macro economics, theory and Practice*, Blackwell.
- Gardner Ackley, *Macroeconomics, Theory and Problems* (1961), McMillan,London
- Gregory N Mankiw, (2002), *Macroeconomics*, (8th Edition), Worth Publishers, New York
- Levacic, Rosalined and Rebmann, Alexander (1982) *Macroeconomics : An Introduction to Keynesian Neo-classical controversies*, Macmillian Press Limited (2nd edition)
- Richard.T. Froyen (2002) *Macroeconomics, Theory and Practice* (7th Edition) Pearson Education Inc, Singapore.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5103	Semester	I
Course Title	MATHEMATICS FOR ECONOMIC ANALYSIS		
Credits	4	Type	Core

Course Description

This course is aimed at introducing the students of economics to certain basic concepts and techniques in mathematics which are considered to be indispensable to an understanding of economic theory.

Course Outcome

At the end of the course, the students are expected to be able to:

- Examine the functioning of economy as a whole, and to get acquainted with policy instruments for macroeconomic management.
- Evaluate the functioning of goods market, money market and labour market in an economy.
- Analyse how the economic agents like consumers, producers and the external sector react to changes in macroeconomic policy environment.
- Assess the macroeconomic environment with a specific knowledge on India Economy to sharpen their understanding of some of these macro concepts and models, and policy instruments.

Course Structure

Module 1. Linear and Non-linear Equations and Functions

Linear functions – graphical solutions to linear equations – simultaneous linear equations - macroeconomic equilibrium. Quadratic functions and their graphical presentations – Exponential functions and logarithms - Applications in economics.

Module 2. Derivatives and its Applications in Economics

Limit theorem – the differential and linear approximation – Rules of differentiation – Higher order derivatives and rule of maximum and minimum values – point of inflection – Convex and concave functions. Rules of partial derivatives – Maximization and minimization with two or more independent variables – Saddle points. Constrained optimization – The Lagrange multiplier method – Economic applications.

Module 3. Optimization using Linear Algebra

Vectors, matrices, and Matrix Operations - Rank of a Matrix, Transposition, the Determinant of a matrix – Matrix inversion - Cramer's rule – The Gaussian method. The Jacobian, Hessian, Discriminant – Bordered Hessian for Constrained Optimization – Characteristic roots and vectors – Applications in economics.

Module 4. Optimization using Linear Programming

Graphic solutions – Extreme point theorem – Slack and surplus variables. Simplex method of maximization and minimization – Marginal value or shadow pricing – The Dual theorem – Economic applications.

Programme: MA (Economics) [2-year Programme]

Module 5. Integration and Difference and Differential Equations

Rules of integrations - Definite integral and indefinite integral – Economic applications: area under a curve – consumer's surplus and producer's surplus. First-order differential equations and applications – Difference equations – Applications in economics.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Assignments, Exercises, Midterm exam and final End semester examination.

References

- Bradley, T. and Patton, P. *Essential Mathematics for Economics and Business*, Wiley publications.
- Renshaw, Geoff, *Maths for Economics*, 2nd edn., Oxford Publishers.
- Intriligator, M.D., *Mathematical Optimization and Economic Theory*, Prentice-Hall, 1971
- Chiang, A.C. and Wainwright, K., *Fundamental Methods of Mathematical Economics*, 4th edn., McGraw Hill Publishers (2005)
- Dowling, E.T., *Introduction to Mathematical Economics*, 2nd edn., Schaum's Outline Series, McGraw Hill, 1992.
- Allen, R.G.D, *Mathematical Analysis for Economists*, Macmillan Press
- Yamane, Taro, *Mathematics for Economists*, Prentice Hall of India
- Henderson, J.M. and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, 3rd edn., McGraw Hill, 1980.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5104	Semester	I
Course Title	ECONOMICS OF GROWTH AND DEVELOPMENT		
Credits	4	Type	Core

Course Description

The course provides concepts, theories and debates in the field of development economics. The course is divided into five modules. Basic concepts, tools and approaches are introduced in the first module while second module outlines established views and theories of development. Module 3 offers major growth strategies including principal indigenous theories and new growth theories are included in the module 4. Finally, a succinct understanding of Indian agriculture and labor market along with latest developments such as farm laws and labour codes are offered in the module 5.

Course Outcome

By the end of the course, students are expected to be able to:

- Identify and assess concepts and theories of the development.
- Outline methods for measuring poverty and inequality
- Apply measures of underdevelopment to practical problems
- Engage in rigorous research on issues of development
- Suggest policy prescriptions

Course Structure

Module I: Introduction to Development

Development economics – definition, origin and its significance- Basic challenges of development- concept of development gap- Poverty, inequality and their measurement, Inverted U-hypothesis, investing in, nutrition, education and health -human capital approach and capability approach to development, Role of institutions and governance

Module II: Theories of Development

Importance of Adam Smith's view in development, Schumpeterian theory of development, Poverty trap, Critical minimum Effort, Big push theory- Rostow's stages of growth, balanced v/s Unbalanced growth strategy, Lewis model of surplus labour and Fei Rains model,

Module III: Theories of Economic Growth

Mahalanobis model, Wage goods model, Harrod-Domar model, Solow model: capital, Population and technological progress, Growth convergence-conditional and unconditional convergence, Ms.Joan Robinson and concept of Golden Age.

Module IV: New Theories of growth and Development

Programme: MA (Economics) [2-year Programme]

Romer's endogenous growth model, Underdevelopment as co-ordination failure, Kremer's O-Ring theory of development, Dependency theories of underdevelopment, Path dependence in development- QWERTY, Geography and Development-Krugman's theory

Module V: Agriculture and Labour Market

Land size and productivity, ownership and tenancy, formal and informal rural credit markets, Farmer's access to agriculture inputs, infrastructure development in agriculture, agriculture market and reforms in India; Population growth, migration and urbanization, unemployment-Harris-Todaro model and labour turnover model. Unorganized labor market and labor market reforms in India

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

References

Required Text Books:

- Debraj Ray (1999) Development Economics, Oxford University Press
- Michael P. Todaro and Stephen C. Smith (2015) Economic Development, Pearson.

Additional references

- Daron Acemogulu and James A. Robinson (2012) Why Nations Fail: The origins of power, prosperity and poverty, Profile Books
- Amartya, Sen, (2000) Development as Freedom, Oxford University Press
- Uma Kapila (2017) Indian Economy since Independence, Academic foundation
- Thirlwall, (2006) Growth and development with special reference to developing countries, Palgrave Macmillan

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5105	Semester	I
Course Title	INDIAN ECONOMY		
Credits	4	Type	Core

Course Description

The objective of this course is to enhance students' understanding in important issues facing the economy including economic planning and reforms in different sectors of economic activity.

Course Outcome

At the end of the course, the students are expected to be able to:

- Assess the evolution of Indian economy from historical perspectives, including institutional changes.
- Evaluate the relevance of database on Indian economy.
- Examine sector-wise policy and performance of Indian economy.
- Analyse the major development issues and policy questions faced by Indian economy.

Course Structure

Module 1: Development Phases of Indian Economy

The Colonial legacy - State of the economy at independence - Policy of planned development - Growth and structural changes till 1980's - New Economic Policy (NEP) - Performance of the economy since 1991 - Major features of economic transformation - Recent developments.

Module 2: Agriculture and Rural Development Strategies

Agriculture: Role of agriculture in Indian Economy - Share of agriculture - Interrelationship between agriculture and industry. Technologies and institutional aspects: Land reforms - Green revolution - Agricultural inputs and shifts in production function (modern farm inputs and marketing) - Price policy - Subsidies - Rural credit. Rural development: Rural development programmes including poverty alleviation programmes - Development of economic and social infrastructure - New Rural Employment Guarantee Scheme.

Module 3: Industry, Service and Foreign Trade

Industry: Industrial development during the planning period - Some major industries of India - Small-Scale and Cottage industries - Industrial Policy - Public Sector in the Indian Economy - Privatization and Disinvestment - Private sector - Industrial Sickness - India's Labour Market and Reforms - Labour Relations, Social Security and Exit Policy. Service: Growth and contribution of services sector - Share of services in employment - Information and Communications Technology - India's IT and ITES Industry - Foreign trade and services. Foreign Trade: Salient features of India's foreign trade - Composition - Direction - Organization of trade - Recent changes in trade policy - Foreign Direct Investment - Balance of payments - Tariff policy - Exchange rate - India and WTO requirements.

Module 4: Financial Sector Reforms

Programme: MA (Economics) [2-year Programme]

Financial sector reforms - Organization of India's money market - Changing roles of the Reserve Bank of India - Commercial banks - Development finance institutions - Foreign banks and non-banking financial institutions - Indian capital market and SEBI - Development in Global Financial Market and its relationship with Indian Financial Sector.

Module 5: Measures of Poverty and Unemployment, Urbanization and Migration

Poverty and Unemployment: Estimates of inequality and poverty measures for India - Appraisal of Government measures - India's Human Development record in global perspective - India's population policy and development - Types of unemployment - Economic reforms and the incidence of unemployment - Strategies for employment generation. Urbanization and Migration: Different types of migratory flows and their impact on the economies of their origin and destination - Process of growth of urban settlements - Urban development strategies.

Testing & Evaluation

Continuous evaluation consisting of Assignments, Presentation, Midterm exam and final End semester examination.

References

- Ahluwalia, I.J. and I.M.D. Little (Eds.). (1999). India's Economic Reforms and Development. Oxford University Press, New Delhi.
- Puri, V.K., and Misra S.K. (2015). Indian Economy (33rd Edition). Himalaya Publishing House, New Delhi.
- Bawa, R.S. and P.S. Raikhy. (1997). Structural Changes in Indian Economy. Gurunanak Dev University Press, Amritsar.
- Chakravarty, Sukhamoy (1987), Development Planning: The Indian Experience, Oxford University press, New Delhi, Chapter 3.
- Bhagwati, Jagdish (1993), India in Transition: Freeing the Economy, Oxford University Press, New Delhi, PP 71-99.
- Rao, J. Mohan and Storm, Servaas (1998), Distribution and Growth in Indian Agriculture, in The Indian Economy: Major Debates since Independence, Edited by T J Byres, Oxford University press.
- Bhagwati, J N and T N Srinivasan (1976), Foreign Trade Regimes and Economic Development: India, NBER, New York.
- Panagariya, Aravind (2008), India: The Emerging Giant, Oxford University Press, New York.
- Carrasco, Bruno et al (Ed.) (2014), Managing Capital Flows, Oxford University press, New Delhi
- Dandekar, V.M and N. Rath (1976), Poverty in India, School of Political Economy, Pune.
- Datt, R. (2001), Second Generation Reforms in India, Deep and Deep Publication, New Delhi
- Kapila, Uma (2016), Indian Economy, Academic Foundations, New Delhi
- Economic Survey of India, 2016-17, Government of India

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5201	Semester	II
Course Title	MICROECONOMIC THEORY - II		
Credits	4	Type	Core

Course Description

This course offers advanced theories and approaches in the microeconomics to develop a solid background in advanced topics such as general equilibrium analysis in order to pursue research in the applied fields of economics and related disciplines, and for students wishing to specialize in economic theory.

Course Outcome

By the end of the course, students are expected to be able to:

- Evaluate advanced theories in the microeconomics.
- Analyze the business strategies undertaken by firms when there is interdependence among them.
- Analyze and present in a scientific way the markets for factors of production and apply comparative static analysis.
- Demonstrate knowledge and understanding of the issues concerning efficiency, general equilibrium and general welfare.
- Apply microeconomic theory and microeconomic models to real economic situations.
- Explain, analyze and predict the effects of interventions and structural changes in the economy on the welfare of individuals.

Course Structure

Module I: Factor Pricing

Neo-Classical: Factor Pricing under Perfectly Competitive Markets. Factor pricing under imperfect competitive market: Monopolistic and Monopsonistic powers - Bilateral Monopoly - Elasticity of factor Substitution - Technological Progress and Income Distribution - Pricing of fixed factors - Non-homogenous factors and wage differentials - Product Exhaustion Theorem.

Module 2: General Equilibrium

Absolute versus relative prices, perfectly competitive price and general equilibrium models, General Equilibrium: Partial Equilibrium versus General Equilibrium analysis - Walrasian general equilibrium - Uniqueness and stability of equilibrium - Two-sector model.

Module 3: Welfare Economics

Welfare Economics- Welfare theorems, - Pareto Optimality - Kaldor-Hicks Compensation Criteria – Scitovsky, Bergson Criteria – Social Welfare Functions: Maximization of Social Welfare- Arrow's Impossibility Theorem - Theory of Second Best- Rawl's theory of social justice

Module 4: Markets with Asymmetric Information

Programme: MA (Economics) [2-year Programme]

Economics of Information: Informational asymmetries and Market for lemons - Adverse selection and Insurance market - Solution to principal agent problem - Moral Hazard - Signaling and Screening.

Module 5: Economics of Risk and Uncertainty

Investment behaviour under risk and uncertainty - Expected utility - Risk aversion (demand for insurance) - Risk pooling and risk spreading - Mean-variance analysis - Measuring risk - Counterparty risk - Equilibrium in a market for risky assets.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

References

Required Text Books:

- Koutsoyiannis, A. (1979). Modern Microeconomics (2nd edition). Macmillan Press, London.
- Dominick Salvatore (2003) Microeconomics: Theory and Applications, Oxford University Press

Additional references

- Varian, H. (2010). Intermediate Microeconomic (8th Edition). New York: W.W Norton.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5202	Semester	II
Course Title	MACROECONOMIC THEORY - II		
Credits	4	Type	Core

Course Description

The course selectively covers theoretical issues and recent developments in open economy. The topics covered will include post Keynesian macroeconomics, the new classical macroeconomics, the new classical macroeconomics, the new Keynesian school and business cycles. The course will also include structuralist critiques of mainstream macroeconomic policy proposals.

Course Outcome

By the end of the course, students are expected to be able to:

- Clarity about different schools of modern macroeconomics
- Recent developments in theories of unemployment, business cycle and inflation
- Macroeconomic stabilisation and role of budget, fiscal policy and monetary policy

Course Structure

Module 1: Theories of Inflation and Unemployment

Classical, Keynesian and monetarist approaches of inflation - Philips Curve analysis - the NAIRU hypothesis Policies to control Inflation and Unemployment - adaptive expectations and rational expectations - NRU and hysteresis hypothesis - New Micro Economics in Labour market - Search Theory - DMP paradox.

Module 2 : Business Cycles

Cyclical behaviour of economic variables – direction and timing – Aggregate demand shocks and aggregate supply shocks – Business Cycle theories of Samuelson, Hicks and Lucas - Real business cycle theory – Great Depression, Financial Crisis and Global Slowdown of 2008 – Alternative Explanations of economists - Eugene Fama, Paul Krugman, Joseph Stiglitz etc.

Module 3: Recent Developments in Macroeconomics: Classical

The counter revolution – Monetarism – Rational Expectation revolution – New Classical Macro Economics – Views of Muth, Wallas, Sargent and Lucas – Supply side economics – The Dynamically Stochastic General Equilibrium model (DSGE).

Module 4: Recent Developments in Macroeconomics: Keynesian

The Keynesian counter revolution – Re-interpretation of Keynes by Clower and Leijonhufvud – The dual decision hypothesis – Post Keynesians – Minsky's financial instability theory- The New Keynesian Economics – The New Political Macroeconomics.

Module 5: Macroeconomic Stabilization Policies

Programme: MA (Economics) [2-year Programme]

Monetary Policy – conduct of monetary policy – rules vs. discretion – Taylor Rule - The Time inconsistency proposition – Monetary targeting and inflation targeting – Fiscal policy – Budget deficits – Seigniorage – Ricardian debt equalization problem – Alternative strategies - Gradualism vs cold Turkey – Disinflation and sacrifice ratio – Okun’s Law.

Testing & Evaluation

Internal Evaluation consisting of Seminar, Group discussions, Assignment, Mid-term exam and final end semester examination.

References

Required Text Books:

- Brawn Snowdon and Howard.R.Vane, (2006), Modern Macroeconomics, The origin, Development and current state, Edwal Elgar, U.K.
- Dornbush, R, Stanley Fischer and Richard Startz (1998) Macroeconomics, (7thedn.), Tata McGraw Hill, New Delhi.
- Errol D’Souza (2008) Macroeconomics, Pearson.
- G.K.Shaw, Michael J., McCrostie and David Greenway (1997) Macro Economics, Theory and Practice, Blackwell Publishers
- Gardner Ackley, Macroeconomics, (1969), Theory and Problems (1stedn.) McMillan, London
- Levacic, Rosalined and Rebmann, Alexander (1982) Macroeconomics: An Introduction to Keynesian Neo-classical controversies, Macmillian Press Limited (2ndedn.)
- Mankiw N. Gregory (2012), Macroeconomics, (8thedn), Worth Publishers, New York.

Additional References

- Oliver Blanchard (2011) Macro Economics, (4thedn), Pearson Education, Inc.
- Richard T.Froyn (2005) Macroeconomics, Theory and Practice (8thedn.) Pearson Education, Inc.
- Andrew.B.Abel and Ben S. Bernanke, (2005), Macroeconomics, (5th Edition), Pearson Education, Inc, Singapore.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5203	Semester	II
Course Title	STATISTICS FOR ECONOMIC ANALYSIS		
Credits	4	Type	Core

Course Description

This course is aimed at introducing the students of economics to certain basic concepts and techniques in statistics which are considered to be Very useful to an understanding of economics. This course is intended to give an idea on fundamentals of sampling Distribution and inferential statistics with its applications

Course Outcome

By the end of the course, students are expected to be able to:

- Evaluate advanced theories in the statistics
- Teach applications of statistics in Economics
- Training in Statistical Packages in STATA and SPSS

Course Structure

Module1: Elements of Probability

Set Theory-Principles of Counting-concept of factorial-permutation and combinations-event-random excise-simple probability-joint probability-conditional probability-bayes theorem-cumulative Distribution Function-Mathematical Expectation-theorems of expectation-theory of variance

Module 2: Understanding Distribution

Discrete and continuous Distribution- Theoretical distribution of Binomial, Poisson and Normal distributions; Log normal Distribution, Pareto Distribution, Chi-square distribution – F distribution sampling distribution of a statistic-law of statistical regularity-inertia of large number-central limit theorem- Testing Normality.

Module 3: Theory of Estimation

Concept of estimation-estimator-types and properties-point and interval estimation-standard errors of estimators-confidence limits for a population parameter

Module 4: Inferential statistics

Formulation of statistical hypothesis – Null and alternative hypothesis; Goodness of fit; Confidence intervals and level of significance-one tailed and two tailed test-Types of Errors; Type 1 and Type 2 errors. Hypothesis testing based on Z, t, F, Chi-square) for both large and small samples and F tests-ANOVA- Practical Exercises

Module 5: Non-Parametric Methods

Definition-non parametric data-concept and use-tests for non-parametric Data-Lickert Scale, Sign Test, Kuskner value, Kendall's Coefficient of Concordance - practical exercises

Programme: MA (Economics) [2-year Programme]

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

Readings:

- Speigal. M.R. (1992), Theory and Problems of Statistics, McGraw Hill, London.
- Croxton, Frederick E., Dudley J. Cowden and Sidney Klein (1988): *Applied General Statistics*, Prentice-Hall of India Private Ltd., New Delhi.
- Hamilton, Lawrence C. (1990) *Modern Data Analysis: A First Course in Applied Statistics*, Brooks/Cole, California.
- Anderson, Sweeney, and Williams, *Statistics for Business and Economics*, 8e, CENAGE learning, 2010
- Marsh, Catherine (2009) *Exploring Data: An Introduction to Data Analysis for Social Scientists*, Polity Press, UK, Second Edition
- Myatt, Glenn J. (2007): *Making Sense of Data: A Practical Guide to Exploratory Data Analysis and Data Mining*, Wiley-Interscience, New Jersey.
- Nagar, A.L. and R. K. Das (1987) *Basic Statistics*, Oxford University Press, New Delhi.
- Sanders, Donald H. (1990): *Statistics: A Fresh Approach*, McGraw-Hill Publishing Company, New York.
- Myles Hollander, Douglas A. Wolfe, Eric Chicken (2013) *Nonparametric Statistical Methods*, Wiley

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5204	Semester	II
Course Title	INTERNATIONAL ECONOMICS: THEORY AND POLICY		
Credits	4	Type	Core

Course Description

This course deals with the theoretical and empirical aspects of international trade and finance. The topics covered include Hecksher-Ohlin, factor price equalisation theorem, monopolistic competition in international trade, theory of immiserising growth, forms of economic integration as well as fundamentals of international finance.

Course Outcome

Upon completion of this course, the students are expected to:

- Critically evaluate the contributions of various theories in explaining the patterns, directions, and gains from international trade.
- Assess the controversies related to the political economy and welfare effects of trade policy.
- Describe the role of world trading system and critically analyse the issues related to the WTO negotiations and the regional trading arrangements.
- Analyse the recent developments in the field of international economics.

Course Structure

Module 1: Classical Trade Theory

Pure theory of International Trade- Theories of Absolute advantage and comparative advantage – Opportunity cost approach- Specific factor model-Specific factors and income distribution – Heckscher-Ohlin model - Factor price equalisation theorem – Rybisinski theorem – Empirical testing of H.O theorem- Leontief Paradox – Factor intensity reversal- Theory of immiserising growth-Demand and supply- offer curves-terms of trade.

Module 2: Modern Trade Theory

Monopolistic competition and international trade – Technology differences and trade- Trade based on product differentiation- Intra industry trade –imitation gap and product cycle models- empirical test of intra industry trade.

Module 3: Trade Barriers

The case for free trade and protection – Trade restriction – Tariff and non-tariff barriers- Effects of trade – Partial Equilibrium Analysis- Effective Rate of Protection –General Equilibrium Analysis- Small Country and Large Country Cases - Optimum Tariff - Stolper-Samuelson Theorem-Metzler Paradox – Lerner Symmetry Theorem

Module 4: Balance of Payments

Programme: MA (Economics) [2-year Programme]

Anatomy of Balance of payments (BoP)- Function of Foreign Exchange Markets- Hedging, Speculation, Interest arbitrage, Exchange rate determination- Purchasing power parity theory- Fixed and flexible exchange rates – Foreign Exchange Management - BoP disequilibrium- Adjustment mechanism- Automatic mechanism-Price and income adjustments under fixed and flexible exchange rate system- Policy measures- Devaluation- Revaluation- Elasticity approach- J curve effect- Absorption approach- Monetary approach and devaluation.

Module 5: World Trading System

Forms of economic integration- Free Trade Agreement (FTA), Common Market, Economic Union, Trade creating and trade diverting custom union – The working of integration in the present world- European Union- ASEAN-UNCTAD-WTO emerging issues- WTO rounds- SAARC- Role of trade in emerging less developed countries.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Presentation, Assignment, Midterm exam and final End semester examination.

References

- Dominick Salvatore (2011), International Economics.
- Paul Krugman and Maurice Obstfeld (2003), International Economics: Theory and Policy.
- Bo Sodersten, Geoffrey Reed (2011), International Economics.
- Peter Dicken (2007), Global shift: Mapping the changing contours of the world economy.
- Jagdish Bhawati, V N Balasubramanyam (1988), Writings on International economics.
- David Greenaway (1983), International Trade Policy.
- T N Srinivasan (1999), Developing countries in the world trading system.
- Michael W.Klein (2009), Exchange Rate Regimes in the Modern Era.
- C P Kindleberger (1976), International Economics.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5205	Semester	II
Course Title	REGIONAL ECONOMICS		
Credits	4	Type	Core

Course Description

The objective of the course is to familiarize the students with the basic tenets of subnational governments in the Federal structure of Indian economy. This course aims to give insight to the students in the concepts of regional development and growth. It broadly comprises the models, theories and policies of regional growth and development.

Course Outcome

At the end of the course, the students are expected to be able to:

- Appreciate the diversity and challenges involved in the growth potentials and the actuals of each region in India.
- Conceive alternative ideas on state specific development challenges and way forward.

Course Structure

Module 1: Concepts, Definition and Scope

Objectives and scope of Regional Economic Analysis - Difference between Region and a nation - Regional income, Leontief Input output Accounting - indicators of regional development - Regional economic problems - Economics of Geography (Krugman).

Module 2: Regional Economic Theories - I Theories of Regional /Economic development

Cumulative Causation (Perroux, Myrdal, Hirschman) - Export Base Theory - Central Place theory (Christaller) - Sector theory (Colin Kuznets) - stages theory (Rostow).

Module 3: Regional Economic Theories II

Theories of location: Growth Foci - Weber's – Florence - Migration and Regional Development - Three Dimensions of Regional Development (Density, Distance and Economic Divisions).

Module 4: Regional Disparities and Regional Economic Planning in development.

Regional disparities: Interstate variations of poverty and unemployment - Intra- Regional concentration - Problems of developing the backward areas. Urban decentralization: Housing market - Urban transportation - Role of migration. Regional planning in India and Kerala – Need for local level data base in Regional Planning - Integration of local development plans with the District development plan.

Module 5: Regional Economy of Kerala

Kerala: Socio Economic profile of Kerala - Inter district disparity in development. Regional backwardness in development: Perspectives - Challenges and opportunities - Sectorial performance of Kerala by district level analysis - Human Development Reports by district in Kerala- implications and

Programme: MA (Economics) [2-year Programme]

Policy interventions - Case study of Panchayath Development Reports for local level planning and development.

Testing & Evaluation

Continuous evaluation consisting of Assignments, Presentation, Midterm exam and final End semester examination.

References

- Mishra J and Chakadar Sinha (1988), Planning and Regional Development in India (Guarav Publishing House, Jalandhar).
- Mishra R P (2002), Regional Development Planning in India (Vikas, New Delhi)
- Harry W Richardson- Elements of Regional Economics, Penguin Modern Economic Text
Harvey Armstrong and Jim Taylor (1978), Regional Economic Policy and its Analysis, First Edition, Philip Allan Publishers Limited, Oxford OX5 4SE
- Myrdal G (1968), Economic Theory and under developed Region, Vora, New Delhi. Maccann (2013), Urban and Regional Economics, second edition. Oxford University Press. Rakhee Bhattacharya (2015), Regional Development and Public Policy Challenges in India, first edition, springer.
- Jagdish Bhagwati and Arvind Panagariya (2014), Why Growth Matters: How Economic Growth in India reduced Poverty and the Lesson for other Developing Countries, first edition, Public Affairs, U.S.
- Thomas Piketty (2015), The Economics of Inequality, Harvard University Press.
- Joseph Stiglitz (2013), the Price of Inequality, Penguin UK.
Misra R P (1974), Regional Development Planning in India, Vikas, New Delhi.
- BA Praksash
- M. Kuttapan(2017): Data base for Decentralised governance. A hand book mannas publishing house - Trivananthapuram

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5301	Semester	III
Course Title	BASIC ECONOMETRICS		
Credits	4	Type	Core

Course Description

The course is to introduce basic econometrics to the students and to equip them with basic tools of Econometric analysis. Course will be supplemented by Practical Class by using STATA and Gretl Software.

Course Outcome

By the end of the course, students are expected to be able to:

- Understanding in basic concepts application of econometrics
- Construction of simple econometric models
- Applications of software and interpretation of result

Course Structure

Module 1: Introduction to Different Methods in Econometrics: Basic Concepts and Methodology of Econometrics-Single Equation Regression Model- The Problem of Estimation-The method of Ordinary Least Squares - The Gauss-Markov Theorem-assumptions - Properties of OLS Estimators- Normality Assumption-Hypothesis Testing. Maximum Likelihood Method.

Module 2: Multiple Regression and Estimation: Multiple regression: estimation, testing the significance of coefficients– ANOVA-F test- The Coefficient of Determination and adjusted R^2

Module 3: Model Diagnostics: The Problems of Non-Linearity, Multicollinearity, Heteroscedasticity and Autocorrelation - Detection and Remedial Measures –Specification Problem-- Errors in Measurement.

Module 4: Regression with Dummy Variables: Dummy independent variables –uses-slope and intercept-Dummy Variable trap- Interactive Effects; Seasonal Analysis-Piecewise linear regression – Structural Stability- Chow Test and its applications- Dummy Dependent Variable- Logit, Probit, Tobit models.

Module 5: Introduction to Time series: Introduction to time series - seasonality issues - Stationarity and Non-Stationarity-Test for Nonstationary– cointegration. Prerequisites

Testing & Evaluation

Internal Evaluation consisting of Seminar, Assignment, Lab, Mid-term exam and final end semester examination.

References

Required Text Books:

- Dougherty, Christopher, Introduction to Econometrics, Oxford University Press.

Programme: MA (Economics) [2-year Programme]

- Studenmund, A.H. (2006): *Using Econometrics: A Practical Guide*, Pearson Addison Wesley, New York.
- Angrist, Joshua D. and Jorn-Steffen Pischke (2008) : *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, New Jersey, USA.
- Greene, William H. (2003): *Econometric Analysis*, 5th Edition, Pearson Education, Inc., New Jersey.
- Gujarati, D. N. and Sangeetha (2007): *Basic Econometrics*, , 4th Edition, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
- Johnston, J. and John DiNardo, (1997): *Econometric Methods*, 4th Edition, McGraw-Hill Companies, Inc., London.
- Judge, G. et al. (1988): *Introduction to the Theory and Practice of Econometrics*, 2nd Edition, John Wiley & Sons, New York.
- Kmenta, Jan (1986): *Elements of Econometrics*, Macmillan Publishing Company, New York.
- Lardaro, Leonard (1993): *Applied Econometrics*, HarperCollins College Publishers, New York.
- Maddala, G. (1977): *Econometrics*, McGraw Hill Kogakusha, Ltd., Tokyo.
- Mukherjee, Chandan, Howard White and Marc Wuyt (1998): *Econometrics and Data Analysis for Developing Countries*, Routledge, London.
- Wooldridge, Jeffrey M. (2003): *Introductory Econometrics: A Modern Approach*, Second Edition, Thomson South Western, USA.

Additional References & Data Sources

- Dandekar, V. M. (ed.) (1972): *Database of the Indian Economy, Vol. II*, Statistical Publishing Society, Calcutta.
- Government of India (1999): *Guide to Official Statistics*, 4th Edition, Central Statistical Organisation, New Delhi.
- Government of India (1989): *National Accounts Statistics: Sources and Methods*, Central Statistical Organisation, New Delhi.
- Krishna, K. L. (1997): *Econometric Applications in India*, OUP, New Delhi.
- Minhas, B. S. (ed) (2002): *National Income Accounts and Data Systems*, Oxford University Press, New Delhi.
- Mukherjee, M. (1969): *National Income of India: Trends & Structure*, Statistical Publishing Society, Calcutta.
- Rao, C. R. (ed.) (1972): *Database of the Indian Economy, Vol. I*, Statistical Publishing Society, Calcutta.
- Roy Choudhury, Uma Dutta (1995): *National Income Accounting*, Macmillan, New Delhi
- www.rbi.org.in
- http://mospi.nic.in/mospi_nssso_rept_pubn.htm
- <http://development.thinkingwithdata.com>

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5302	Semester	III
Course Title	PUBLIC FINANCE		
Credits	4	Type	Core

Course Description

Role of the government in the modern economy has been a born of contention in the economics. Given such a background, this course is primarily intended to expose students to the fundamental concepts and principles in the public economics. In addition to this, this course will also be useful to enhance the understanding of the students about various aspects of the role played by the government and thereby prepare them to analyze issues in the public sector and suggest appropriate measures to deal with them. Particular emphasis is given to recent developments in public economics, including GST, GST council and subsidy reforms

Course Outcome

By the end of the course, students are expected to be able to:

- Explores the role of government in the economy
- Applying tools of microeconomics to answer important policy questions.
- Discuss critically key issues in public finance
- Demonstrate a familiarity with a range of policy issues and relevant analytical and empirical tools

Course Structure

Module 1: Introduction to Public Finance

The role of government in the economy: Allocation - Distribution - Stabilization. Public goods: Market failure - Public goods - Free-rider problem - Externalities - Information asymmetry - Merit goods. Social choice: Social choice- Preference revelation - Majority voting paradox and Arrow's impossibility theorem, Public-Private Partnership (PPP).

Module 2: Public Revenue

Taxation - Types of taxes - Types of non-tax revenue , Theories of taxation - Desirable features of good taxation - Approaches to division of tax burden - Horizontal and vertical equity - Efficiency and dead weight loss - Incidence and effects of taxation on consumers and producers, Theory of optimal taxation - Tax reforms and GST in India.

Module 3: Public Expenditure

Public expenditure: Various concepts - Principles of public expenditure - Peacock-Wiseman Hypothesis - Wagner's theory - Samuelson's Pure Theory of public expenditure – Structure and Growth of Public Expenditure in India - Effects and evaluation of public expenditure - Subsidy- Targeting - Leakages and reforms - Fiscal Crisis and Fiscal Reforms in India - Fiscal consolidation and FRBM Act and its relevance

Module 4: Budget and Public Debt

Programme: MA (Economics) [2-year Programme]

Budget: Types of budget, Overview of latest budget of union government, Theories of Public debt: Growth of public debt in India – Sources and structure of public debt in India - Management of Public Debt - Deficit financing and implication – Public Debt Policy.

Module 5: Federal Finance

Fiscal federalism: Principles and hypothesis - Fiscal federalism in India - Finance Commission, recent developments in the Centre-State relations in India- GST Council and Financial devolution under 15th finance commission.

References

Required Text Book

- Joseph E Stiglitz, The Economics of Public Sector, 3rd edition, Norton
- Richard A Musgrave and Peggy B Musgrave, public finance in theory and practice, 5th edition, McGraw-Hill.

Additional References

- Amaresh Bagchi, Readings in Public Finance, OUP, 2005
- Govinda Rao M. and T. K. Sen, Fiscal Federalism in India: Theory and Practice, 1996
- Economic Survey, 2020-21, Govt of India.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5303	Semester	III
Course Title	RESEARCH METHODOLOGY		
Credits	4	Type	Core

Course Description

The purpose of this course is to enhance the students' knowledge to formulate a research question and translate it into an empirical step-by-step approach for working with data.

Course Outcome

Upon completion of this course, the students are expected to:

- Develop the most appropriate methodology for the research studies in social sciences.
- Familiarize and differentiate the use of various research methods and techniques.
- Define a research problem and prepare the appropriate research design for the research problem.
- Illustrate the data collection techniques and data analysis and presentation.
- Demonstrate the sampling techniques and its fundamentals.
- Familiarize the task of interpretation and the art of writing research reports.

Course Structure

Module 1: Introduction to Research

The meaning of research - types of research - importance of research- research and policy- specific characteristics of Research in Social Sciences - Methods of Research – Deductive and Inductive Reasoning – Steps of scientific methods in research – Qualitative and Quantitative Approach - Mixed Methods.

Module 2: Steps in Research

The Research Process: Formulation of a Research problem – Guiding principles in the choice of a Research topic and Formulation of Research Questions –Writing a Proposal - Role of Review Literature –Theoretical and Conceptual Framework-Formulation of Research Design – Hypothesis; concept, definition, formulation and testing.

Module 3: Survey based research

Sampling Techniques - field survey - Primary Data Collection - Tools – Observation, Schedule, Questionnaire – principles underlying construction of a questionnaire – data processing and Analysis – Use of Statistical packages.

Module 4 Introduction to Secondary Database

Introduction to databases: Important Secondary data sources: NSSO, CSO, Economic survey, Season & Crop Report, Agricultural Census, Livestock Census, Annual Survey of Industries, RBI Reports, CMIE PROWESS database.

Module 5: Writing a Research Report

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Writing a Research report - research paper – Bibliography - reference styles - Ethics in Research - Plagiarism - Writing a thesis - Do's and Dont's.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Presentation, Research Proposal, Midterm exam and final End semester examination.

References

Selected References:

- Kothari C.R., *Research Methodology*, New Age International, New Delhi, 2008.
- Wilkinson T.S., and Bhandarkar P.L.: *Methodology and Techniques of Social Science Research*, Himalaya Publishing House, New Delhi, 2006.
- Panneerselvam, R., *Research Methodology*, Prentice Hall of India Pvt Ltd, 2009.
- Young P.V., *Scientific Social Surveys and Research*, Prentice Hall of India Pvt Ltd, 2008.
- Parsons C.J., *Thesis and Project Work*, Allen &Unwin., 2006.
- Dipak Kumar Bhattacharya, *Research Methodology*, Excel Books, 2006.
- Cochran W.G., *Sampling Techniques*, John Wiley, New York, 1963.
- Babbie, Earl. R. 2013. "The Practice of Social Research." Cengage Learning, Canada.
- John W. Creswell. 2014. "Research Design: Qualitative, Quantitative and Mixed Methods Approaches." Sage Publication, Washington, USA.
- Goode J. William and Hatt K. Paul. 1952. "Methods in Social Research." McGraw-Hill Publishers, New York.
- Kate L. Turabian. 2006. "A Manual for Writers of Term papers, Theses and Dissertations." The University of Chicago press, Chicago.
- Blaug, Mark. 1994. "The Methodology of Economics." Cambridge University Press, Cambridge.
- Daniel M. Hausman. 2007. "The Philosophy of Economics: An Anthology." Cambridge University Press, Cambridge.

ELECTIVE COURSES

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5001	Semester	III/IV
Course Title	INDUSTRIAL ECONOMICS		
Credits	4	Type	Elective

Course Description

The objective is to provide a thorough knowledge about the economics of industry in a cogent and analytical manner, particularly in the Indian context.

Course Outcome

Upon completion of this course, the students are expected to:

- Evaluate the role of industries in economic development.
- Explore the motives of mergers and diversification.
- Conceptualize the industrial organization forms and the ownership structure in industrial sector.
- Assess the industrial policies in India.

Course Structure

Module 1: Framework of Industrial Economics:

Meaning and scope of industrial economics – Industrial efficiency: concepts and measurement – Industrial classifications – Concepts of plant, firm and industry – Role of industries in economic development.

Module 2: Industrial Location:

Theories of industrial location: Weber's theory of location, Sargant Florence theory – Factors influencing location – Balanced regional development of industries – Diversification – Integration and merger of industrial units.

Module 3: Organizational Form and Industrial Productivity:

Industrial organization and ownership structure – Public, private, joint and co-operative sectors – Industrial productivity: Measurement and determinants.

Module 4: Major Industries:

Structure of large-scale industries in India – Sugar, Cotton, Iron and Steel, Agro processing industries – Small and medium enterprises – Rural industrialization – Emerging global competition and Indian industry – Impact of liberalization, privatization and globalization on industrial development.

Module 5: Industrial Policies in India:

Capital markets in India – Industrial financing – Role of IFCI, SFC's NIDC, SIDC, ICICI and IDBI in industrial development – Recent industrial policies in India.

Programme: MA (Economics) [2-year Programme]

Testing & Evaluation

Continuous evaluation consisting of assignments, presentations, Midterm exam and final End semester examination.

References

- Barthwal, R.R., *Industrial Economics – An Introductory Textbook*, New Age Intl. Publishers.
- Cherunilam, F. (1994), *Industrial Economics : Indian Perspective* (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), *Industrial Economy in India* (3rd Edition), Himalaya Publishing House, Mumbai.
- Kuchhal, S.C. (1980), *Industrial Economy of India* (5th Edition), Chaitanya Publishing House, Allahabad.

Programme: MA (Economics) [2-year Programme]

Course Code	EEC 5002	Semester	IV
Course Title	ADVANCED ECONOMETRICS		
Credits	4	Type	Elective

Course Description

The main objectives of the course are to introduce students to the advanced econometrics techniques and to prepare them to do their own applied work. Students are encouraged to think of the course as a preparation toward their PG dissertation. The prerequisites of the course are thorough knowledge in statistics and basic econometrics. The knowledge of some computer-programming is welcome.

Course Outcome

Upon completion of this course, the students are expected to:

- Develop the most appropriate methodology for the research studies in social sciences.
- Familiarize and differentiate the use of various research methods and techniques.
- Define a research problem and prepare the appropriate research design for the research problem.
- Illustrate the data collection techniques and data analysis and presentation.
- Demonstrate the sampling techniques and its fundamentals.
- Familiarize the task of interpretation and the art of writing research reports.

Course Structure

Module 1: Simultaneous Equation Models:

Structural and Reduced form equations - The Simultaneous equation bias – The identification problem – Rules of identification – Test of simultaneity - Estimation of Simultaneous equations – Indirect Least Squares method – 2SLS method.

Module 2: Dummy Variable Regression Models and Qualitative Response Models:

ANOVA models and ANCOVA models – Dummy variable and Chow test – Interaction effects – Piecewise Linear Regression. Nature of Qualitative Response Models – Linear Probability Model – Logit Model – Probit model – Tobit model

Module 3: Dynamic Econometric Models:

Distributed-lag models – Koyck approach to distributive lag models – Rationalization of Koyck model – Estimation of autoregressive model – Durbin h-test.

Module 4: Time-series Analysis:

Stochastic process – Stationary and Non-stationary – Spurious regression - Integrated Stochastic Processes – Test of stationarity - Unit root test –Transforming non-stationary time series – Cointegration analysis.

Module 5: Panel Data Analysis:

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Panel data estimation issues – Panel data estimation models: Fixed Effect Model and Random Effect Model – The Hausman Specification Test - Panel cointegration tests

Testing & Evaluation

Continuous evaluation consisting of Quiz, Assignments, Practical Exercises, Midterm exam and final End semester examination.

References

- Jeffrey M. Wooldridge - Econometric Analysis of Cross Section and Panel Data-The MIT Press (2001)
- James Douglas Hamilton - Time Series Analysis-Princeton University Press (1994)
- Damodar Gujarati, - Basic Econometrics-McGraw-Hill Education (2008)
- Damodar Gujarati - Econometrics by Example-Palgrave (2014)
- Badi Baltagi - Econometric Analysis of Panel Data-J. Wiley & Sons (2005)
- Panchanan Das - Econometrics in Theory and Practice: Analysis of Cross Section, Time Series and Panel Data with Stata 15.1-Springer Singapore (2019)
- Vijayamohanan Pillai N. - Panel Data Analysis with Stata Part 1
- Jonathan D. Cryer, Kung-Sik Chan - Time Series Analysis_ With Applications in R-Springer (2008)

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Course Code	EEC 5004	Semester	III/IV
Course Title	HEALTH ECONOMICS		
Credits	4	Type	Elective

Course Description

Health economics is a growing field of economics primarily dealing with issues relating to scarcity in the allocation health and health care. The aim of this proposed course is to familiarize the students with economic ideas and motivate them into undertaking future research and build their careers in health economics. This is an introductory course giving the application of economic principles to policy relevant questions in the arena of health and health care. The course begins with an overview of health economics and students will learn about the health care sector and how to apply economic tools in analyzing structure and performance of health care sector.

Course Outcome

By the end of the course, students are expected to be able to:

- Explores the role of health system
- Applying tools of microeconomics to answer important policy questions.
- Discuss critically key issues in health economics
- Demonstrate a familiarity with a range of policy issues and relevant analytical and empirical tools

Course Structure

Module 1 Introduction to Health Economics: concepts in Economics– Utility, Demand and supply analysis, Elasticity, Expenditure Function, Production Possibility Frontier (PPF), Externalities and Market Failure: Approaches to Economics-Positive and Normative, Welfare economics and health.

Module 2 Economic Evaluation: What is economic evaluation? Various types of economic evaluation used in health care, measuring outcome, Cost effectiveness analysis (CEA), Cost-Benefit Analysis (CBA), Divergence between social and private costs and benefits in health care, Limitations of economic evaluation, Consumer Impact Assessment. The importance of costing in Health Economics, Alternative definitions of cost, types of cost - monetary and non-monetary, measurement and valuation issues in cost, production cost and discounting, Constraints in measuring health cost.

Module 3. Concepts and Measures of Health Inequalities: Defining health inequality, Why measure health inequality; Health equity and inequality: Concept and definitions; Understanding of the concepts such as need, access and utilisation; cardinal and ordinal health variables; Presence of inequality: Review of some elementary measures of health inequality: Index based approach Axiomatic approach to measurement; Individual-mean and inter-individual comparison; WHO Index, Coefficient of Variation, Generalised Entropy Index, Lorenz Curve and Gini Coefficient\

Module 4. Health Financing and Health Insurance: Health care financing system, source of health care spending, The Health Insurance – intermediary agent, The private health insurance, Regulation of health insurance, Government as health insurer in India, Equity in health care finances, Future investment strategies in health sector, Willingness to pay for health care, User charges as determinant

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of health financing, Health financing and insurance in India, Health Policies and NHRM

Module 5. Global Pandemic and Development: Plague, Cholera, Spanish Flue and COVID 19

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

References

Essential

- Rexford E. Snterre and Stephen P. Neun, Health Economics: Theories, Insights and Industry Studies, Thompson South – Western, 3rd Edition (614, San/Hea, 073226) Note: 4th Edition is out in 2007 (ISBN: 032432068X; ISBN13: 9780324320688)
- Paul J Feldstein, Economics of Health Care, CENGAGE learning, 2011
- Drummond MF, Sculpher MJ, Torrance GW, O'Brien B, Stoddart GL, eds. Methods for economic evaluation of health care programmes, Third Edition, Oxford University Press, 2005.
- O'Donnell O, Doorslaer E v, Wagstaff A and Lindelow M. Analyzing Health Equity Using Household Survey Data, AGuide to Techniques and Their Implementation
- Gold Marthe R, Joanna E Siegel, Lousie B russel, and Milton C Weinstein, 1996, Cost effectiveness in health and medicine, new York: Oxford University Press. <http://www.sciencedirect.com/science/handbooks/15740064>

Reading List: Suggested

- Zweifel and Breyer, 1997, Health Economics, Oxford University Press)
- Health economics: 3rd Edition by Phelps
- The economics of health and health care, 2nd edition by Folland, Goodman and Stono (FGS)
- Handbook of Health Economics (Anthony J. Culyer and Joseph P Newhouse eds., Elsevier Science, 2000: Available online at:
- Culyer A J and J P Newhouse, 2000, The state and scope of health economics, Handbook of Health Economics, Volume 1A, Eds. Culyer and Newhouse, Elsevier, 2000, pages 1-7.

Recommended Journals:

- Health Policy and Planning
- Health Policy
- Inequalities in Health
- Bulletin of the World Health
- The Lancet

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Course Code	EEC 5006	Semester	III
Course Title	ENVIRONMENTAL ECONOMICS		
Credits	4	Type	Elective

Course Description

Aim of the course is to make the students enable to understand the role of economics to solve environmental issues, estimate the monetary value of environment resources and services and necessity of balance between economic growth and environmental quality.

Course Outcome

By the end of the course, students are expected to be able to:

- Inter-linkages between and economy and environment
- Identify and analyse the environmental issues and related theories
- Applications of economic valuation and environmental resources
- Issues of sustainable development and policies

Course Structure

Module 1: Economic System and Environmental System

Economic System and Environmental System: Inter-linkages - Material Balance Model. Types of Pollution: Cumulative and non-cumulative - Local, regional and global - Point source and non-point source. Welfare Effects of Pollution: Air Pollution (acid rain, ozone depletion, global warming) - Water Pollution - Municipal Solid Waste - Bio-Medical Waste.

Module 2: Market Failure, Government Failure and the Environment

Market: Conditions for efficient functioning of markets - Market failure - Environmental damage as an externality - Environmental goods as public goods - Asymmetric information and environmental damage - Adverse selection - Moral hazard - Property rights and environmental damage (Coase theorem) - "Government failure" and Environmental damage. Pollution Control Policies: Command-and-control policy - Market based instruments (pollution taxes, tradable permits and subsidies).

Module 3: Economic Valuation of Environmental Resources

Cost-Benefit Analysis - Types of environmental value and need for environmental valuation. Methods of Environmental Valuation: Revealed preference methods - Hedonic pricing method - TCM - Stated preference approach - CVM.

Module 4: Renewable, Non-Renewable and Common Property Resources

Types of natural resources and Mckelvey classification - Measuring Resources Scarcity: Resource lifetime - Unit cost measures - Real prices - Economic rent. Allocation of Non-Renewable Resources: The Hotelling theorem. Renewable Resources: Forests (Frontier and Immiserisation Models of Deforestation) - Consequences of deforestation - Fisheries ("Efficient Sustainable Yield") - Water

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(Efficient Allocation of Surface and Ground Water). Common Property Resources: Characteristics - Tragedy of the Commons - Ostrom's principles for sustainable local CPR governance.

Module 5: Economic Growth and Sustainable Development

Economic Growth and Environment: The environmental Kuznet curve - The "Limits to Growth" Club of Rome model. Economics of Sustainable Development: Definition - Weak and strong sustainable development - Sustainability rules (Hartwick Rule) - Safe minimum standard - Measuring the sustainable development (Green National Accounting) - Link between poverty and environmental degradation - Economics of climate change.

Testing & Evaluation

Internal Evaluation consisting of Seminar, Assignment and final end semester examination.

References

Required Text Books:

- Hanley, Nick, J.F. Shogren, and Ben White. (2001). Introduction to Environmental Economics (2nd Edition). Oxford University Press, Oxford, UK.
- Karpagam M. (1998). Environmental Economics (1st Edition). Sterling Publishers, New Delhi, India.
- Hanley, Nick, J.F. Shogren, and Ben White. (1997). Environmental Economics: In Theory and Practice (1st Edition). Macmillan Publishers, Chennai, India.
- Kolstad, Charles D. (2010). Environmental Economics (2nd Edition). Oxford University Press, Oxford, UK.

Additional References

- Sankar U. (2001). Environmental Economics. Oxford University Press, New Delhi, India.
- Gopal K. Kadekodi. (2004). Environmental Economics in Practice: Case Studies in India. Oxford University Press, Oxford, UK.
- Field, Barry C. (2001). Natural Resource Economics: An Introduction. Tata McGraw Hill, London.

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Course Code	EEC5007	Semester	III/IV
Course Title	LABOR ECONOMICS		
Credits	4	Type	Elective

Course Description

This course aims to acquaint students with traditional and contemporary topics in labor economics and to encourage the development of independent research interests. The class provides a systematic development of the theory of labor supply, labor demand, human capital, compensating wage differentials, worker mobility, discrimination in the labor market, role of unions and unemployment. Beside, each and every concepts and theories in the course outlined below would be evaluated based on the Indian labour market experiences. Learners are expected to contrast what they study in the course with empirical evidences from Indian economy as part of their course requirements such as assignment

Course Outcome

By the end of the course, students are expected to be able to:

- Evaluate concepts and developments in the real labor market in the economy-both domestic and global
- Analyse the inherent strengths and weakness of the labor market.
- to undertake advanced studies and researches in the field of Labor Economics
- appraise pressing issues in the macroeconomics and suggest appropriate policy suggestions

Course Structure

Module 1: Introduction and basic concepts: labor force, unemployment, working of labor market, Applications of theory, demand for labor, profit maximisation, demand for labour in competitive and monopolistic product market, maximising monopoly profits and Policy application: impact of pay roll tax and employment subsidies.

Module 2: Elasticity of labor demand, wage elasticity, Hick-Marshall law and its application, Cross elasticity of demand and application of law of derived demand, minimum wage law and its theoretical and employment effects, minimum wage and poverty reduction.

Module 3: Frictions in the labour market and law of one price, supply of labor and the decision to work, labor market participation- trend, the theory of decision to work and labour- leisure choice, income and substitution effects, the reservation wage, policy applications.

Module 4: Household production model, basic model for an individual and applications, labor supply decisions within an household, specialisation function, role of productivity, labor supply in recession-discouraged versus added worker effect, life cycle aspects of labor supply, child labor, empirical evidences.

Module 5: Compensating wage differentials and labor markets, job matching, the role of worker

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preferences and information, hedonic wage theory and risk of injury, hedonic wage theory and employee benefits, the joint determination of wages and benefits. Investment in human capital - human capital investments, present value, demand for education, education and earnings

References

Main Text Book

- Ronald G Ehrenberg and Robert S Smith (2012) Modern Labor Economics, Theory and Public Policy, 11th edition, Pearson

Additional References

- McConnell, Brue and Macpherson (2009) Contemporary Labor Economics, 8th edition, McGraw-Hill
- Paul McNulty (1984) The Origin and Development of Labor Economics, MIT Press.

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Course Code	EEC 5012	Semester	III/IV
Course Title	POPULATION AND DEVELOPMENT		
Credits	3	Type	Elective

Course Description

This course is aimed to explain (i) the divergent views on Population and Development by discussing the theories and debates; (ii) the paradigm shift in concept and definition of development; (iii) population and development linkage: challenges, trends and programmatic responses; and (iv) the socio-economic implications of population growth, taking case studies from developing countries.

Course Outcome

By the end of the course, students are expected to be able to:

- Introducing basic issues in Demography
- Demonstrate a familiarity with a range of policy issues and relevant analytical and empirical tools

Course Outline

MODULE I Concepts and Measures of Population Changes: Meaning and scope of demography – Components of population growth and their interdependence measures of population change – Growth, structure and distribution and sources of population data – Demographic data in India – Censuses, Civil Registration system and sample surveys – Sample registration – Methods and drawbacks – Measure of fertility and mortality – Standardize birth rates and death rates – concepts of life table – Meaning of its column and uses – Population distribution.

MODULE II Trends in Population: Trends in growth, composition and distribution of population – Regional variations in rates of growth – African, Asian, Latin American, North American, Europe, Russia, Oceania and estimates of sizes and rates of growth – ‘shifting proportions of human population in recent years and density in different regions – Population projections – stable stationary and quasi stable population.

MODULE III Sex and Age Structure: Patterns of sex and age structure in developed and less developed countries – Determinants of sex and age structure – Demographic effects of sex and age structure – Ageing and younging of population – Long term projections of sex and age structure of population.

MODULE IV Fertility, Nuptiality, Mortality: *Fertility*: Levels and Trends – Factors affecting fertility in developed and LDCs – Differential fertility – Ecological factors regional differences – Urban-rural – Socio-economic factors – Educational attainment, economic status, occupation of husband, employment status of wife, religion, caste, race, etc. *Nuptiality*: Concepts – Analysis of marital status from Census – Mean age at marriage – Synthetic and decadal synthetic cohort methods – Mean age at widowhood and divorce – Trends in age at marriage – Change in age pattern of marriage. *Mortality*: Level and trends of mortality in developed and LDCs – Sex and age patterns of mortality – Fetal and infant mortality – Still birth, abortion and perinatal mortality, levels and

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trends of infant mortality – Factors affecting – Mortality differentials – Rural, urban – Geographical, occupational, ethnic, etc. – Factors in mortality declines in developed and LDCs.

MODULE V Migration: Basic concepts and definitions – Importance of migration in the study of population – Types of migration – Internal, international, temporary, international migration – Levels, trends and differentials in developed and LDCs – Effects of immigration and emigration – Economic, social - Social-economic aspects of migration – Theories concerning internal migration – Costs and benefits of internal migration and outmigration.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

Readings

- Birdsall, N, A.C. Kelley and S.W. Sinding (eds.) (2001). *Population Matters: Demographic Change, Economic Growth and Poverty in the Developing World*, OUP.
- Birdsall, N. (1988) "Analytical approaches to population growth", in H. Chenery & T. N. Srinivasan (eds.), *Handbook of development economics, vol. 1*.
- Bloom, David, E at al. (2003), *The Demographic Dividend: A new Perspective on the Economic Consequences of Population Change*, *Population Matters*, Rand, USA.
- Caldwell, J and P. Caldwell (1986). "Routes to low mortality in poor countries *Population and Development Review*, 12.
- Cassen, R. (1994). *Population and Development: Old debates and new conclusions*, Washington, D.C. Overseas Development Council.
- Dasgupta, P. (1995) "The population problem: Theory and evidence", *Journal of economic Literature* 33, 1879-1902.
- Demeny, Paul and McNicoll, Geoffrey (1998), *The Earthscan Reader in Population and Development*, Earthscan Publications Ltd. UK.
- Dyson, Tim. (2001), "A partial theory of world development: the neglected role of the demographic transition in the shaping of modern society", *International Journal of Population Geography*, 7, 67-90.
- Dyson, Tim, R.Cassen and Leela Visaria. (eds.) (2004), *Twenty-First Century India: Population, Economy, Human Development and Environment*, Oxford University Press.
- Harris, J.R and Michael P. Todaro (1970) Migration, Unemployment and Development: A Two-Sector Analysis *The American Economic Review*, Vol. 60, No. 1. (1970), pp. 126-142.
- Kelley, A.C. (1988) "Economic consequences of population change in the Third World", *Journal of Economic Literature* 26.
- World Bank,(1984) *World development Report 1984: Population*, World Bank, Washington DC.
- World Bank(2000) *Beyond Economic Growth Chapter III on 'World Population Growth'*.

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Course Code	EEC 5016	Semester	III/IV
Course Title	INDIA IN THE GLOBAL ECONOMY		
Credits	3	Type	Elective

Course Description

This course is aimed to introduce the students to India's position and role in the Global economy. India is expected to lead a surge in emerging-market growth in recent years. The main objective of the course is to enable the students to assess how much India matter for the global economy.

Course Outcome

By the end of the course, students are expected to be able to:

- Describe the process of globalization and its impacts.
- Assess India's role in global economy and its emergence as a global economic power.
- Evaluate trade policies in India in the context of various international economic crises.
- Explain the pattern of international factor movements.

Course Outline

Module I. Introduction to Globalization: Concepts and definitions – Evolution – Objectives – Why globalization? – Process, dimensions and features – How to measure the extent of globalization? – Advantages and disadvantages – Gainers and losers of globalization.

Module II. India and Global Economy: India's role in global economy – Share in global trade and capital flows – BoP position – Dependence on capital inflows – FDI and FPI – Impact of Global Economic Crisis – WTO and Indian economy – Regional and other trade blocks – SAARC, BRICS, RICS, IBSA, and G20 – India as an emerging global power.

Module III. Trade Policy in India: Trade problems and policy changes in India – Trade reforms since 1991 – Implications on BoP, exchange rate, and factor movements – East Asian crisis and India – International reserves and foreign debt problem in India – Working of MNCs and their regulation – EXIM policy – WTO and competitiveness of Indian trade – Agenda for future trade policy.

Module IV. International Factor Movements: International capital and labour movements – Foreign Direct Investment (FDI), its composition, direction and trends – Factors determining FDI – MNCs and their operations – International trade in services and knowledge-based industries – GATS, TRIPS, TRIMS – Trade problems of developing countries.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

References

- Shahid Yusuf, Simon Everett, Weiping Wu (ed) (2001), Facets of Globalization: International and Local Dimensions of Development, The World Bank.

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- Joseph E Stiglitz (2003), *Globalization and Its Discontents*, W. W. Norton & Company.
- Goldin, Ian; Reinert, Kenneth. (2006), *Globalization for Development: Trade, Finance, Aid, Migration, and Policy*. Washington, DC: World Bank and Palgrave Macmillan.

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Course Code	EEC 5020	Semester	III/IV
Course Title	ECONOMIC THOUGHT		
Credits	3	Type	Elective

Course Description:

This course reviews the evolution of economic thought, beginning with that in ancient civilizations. The course concludes with a consideration of the 'Epic' recession and the recent financial crisis. Throughout the course, economic theories will be examined in the light of the interrelationships between theory, policies and conditions, including responses to the current financial and economic global crises. To increase the students understanding and appreciation of the development, progression, and regression of human understanding of how humans do and should act in "the ordinary business of life". Beginning with ancient civilizations we will progress historically (as far as we are able) to the present day, taking a broad view of what constitutes 'economic thought', (e.g., a mixture of institutional, philosophical, policy oriented, and 'purely' theoretical) put into the general historical context of human affairs.

Course Outcome

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

Course Outline

Module I: Introduction and Early Economic Thought: Why study History of Economic Thought? – Economic Ideas of Aristotle, Plateau – Iben Khaldun - St. Thomas Aquinas – Main Economic Ideas of Mercantilists and Physiocrats (mention important economists of Mercantilism and Physiocracy and their major works. Need not go into the details).

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 School: Difference between classical and neo-classical approach – important ideas of Carl Menger, Leon Walra, Frederich List, Veblen, Wilfredo Pareto, A.C. Pigou, W.W. Rostow. Importance of Alfred Marshall in Neo-classical economics (avoid micro-economic theories).

Module IV: Keynes and Post-Keynesians: Keynes as a critic of Classical Economics (introduce important books of Keynes). Keynesian concept of Welfare State Post-Keynesian developments – monetarism, rational expectation school, neoliberalism, dependency school and neo-institutionalism (details are not expected).

Module V: Indian Economic Thought: Mention the economic ideas of Kautilya and Thiruvalluvar. Drain theory of Dadabhai Navroji. Trusteeship and other economic ideas of Gandhiji – economic ideas of

Programme: MA (Economics) [2-year Programme]

Ambedkar. Introduce important Indian economist like MG Ranade, DR Gadgil, CN Vakil, PR Brahmanada, Pranab Bardhan, KN Raj, PC Mahalanobis, VKRV Rao, IG Patel, Sukhamoy Chakraborty, Amartya Sen, CT Kurian, Krishna Bharadwaj.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

Suggested Readings

- Schumpeter, Joseph Alois, (1954) *History of Economic Analysis*, Oxford University Press, USA.
- Blaug, Mark, (1997) *Economic Theory in Retrospect, 5th Edition*, Cambridge University Press, Cambridge, UK.
- Rothbard, Murray N., (1995) *Economic Thought Before Adam Smith: An Austrian Perspective on the History of Economic Thought (Vol. I)*, Edward Elgar Publishers, UK.
- Rothbard, Murray N., (2006) *An Austrian Perspective on the History of Economic Thought (Vol. II)*, Ludwig von Mises Institute, Auburn, Alabama.
- Brian Snowdon, Howard A. Vane and Peter Wynarczyk, (1994) *A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought*, Edward Elgar Publishers, USA.
- Backhouse, Roger E., (2004) *The Ordinary Business of Life: A History of Economics from the Ancient World to the Twenty-First Century*, Princeton University Press, Princeton, New Jersey.
- Brue, Stanley L., (2000) *The Evolution of Economic Thought, 6th ed.*, Dryden Press, Oak Brook, Illinois, USA.
- Canterbury, E. Ray, (2003), *The Making of Economics, 4th ed.*, World Scientific Publishing Co. Ltd., Singapore.
- Coleman, William Oliver, (2002) *Economics and Its Enemies: Two Centuries of Anti-Economics*, Palgrave MacMillan, New York.
- Ekelund, Robert B., (1996) *A History of Economic Theory & Readings in Economic Thought*, McGraw-Hill, UK.
- Ekelund, Robert B. and Herbert, Robert F., (1997) *A History of Economic Theory and Method*, McGraw-Hill, UK.

CENTRAL UNIVERSITY OF KERALA
Department of Economics

2-12-2014

To
Members of Board Of Studies
Central University of Kerala,
Kasaragod - 671316.

Sub: Meeting of Board Of studies

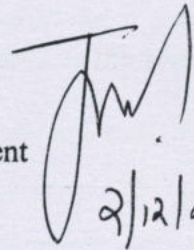
Respected Sir,

The Department of Economics has decided to convene meeting of PG board of Studies on 6th and 7th January 2015. Meeting is intended to update Curriculum with New adaptation of Syllabus with focus on new competitive Academic World. Hence I request All to Attend meeting and to provide Valuable inputs.

Thanking you,

Yours faithfully,

Head of the Department


2/12/2014

विभागाध्यक्ष, अर्थशास्त्र विभाग
Head, Department of Economics
केरल केंद्रीय विश्वविद्यालय
Central University of Kerala
कासरगोड /Kasaragod-671123



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CENTRAL UNIVERSITY OF KERALA
KASARAGOD

No.CUK/ACA/BS/183/2013

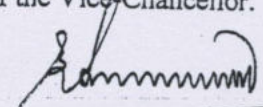
Dated, the 9th January, 2014

NOTIFICATION

1. In terms of provisions contained in Ordinance 36, the PG Board of Studies of the Department of Economics is constituted as follows:

1.	Head, Dept. of Economics	Dr. Abdul Kareem	Chairperson
2.	All Professors in the Department	Vacant	Members
3.	Two Associate Professors of the department	a. Dr. K C Baiju b. Vacant	Members
4.	One Assistant Professor from the Department	Dr. Anver Sadath C	Member
5.	One Member of Faculty from another Department within the School	Dr. Girish Kumar R, HoD, IR	Member
6.	Four Experts in the discipline	a. Prof. K P Mani, Professor, Dept. of Economics, Dr. John Mathhai Centre, University of Calicut, Aranattukara, Thrissur - 680618 b. Prof. B Kamaiah, Professor, Dept. of Economics, University of Hyderabad, Hyderabad - 500046 c. Prof. S. Subramanian, Honorary Professor, Madras Institute of Development Studies, Adayar, Madras - d. Dr. M H Suryanarayana, Professor, Indira Gandhi Institute of Development Research, Goragaon, East-Mumbai - 95	Members

2. The term of office of the members of the Board of Studies is for a period of three years.
3. The Chairperson shall have powers to co-opt experts, as special invitees, to attend specific meetings of the Board, as and when necessary, with the prior permission of the Vice-Chancellor.
4. This is issued with the approval of the Vice-Chancellor.



Deputy Registrar (Aca) 16/1/14

Memo No.CUK/ ACA/BS/183/2013 /1018

Dated, the 17 January, 2014

Copy to:

1. PS to Vice-Chancellor
2. PS to Registrar
3. PS to Finance Officer
4. Dean, SGS
5. All Members
6. Office copy


Deputy Registrar (Aca) 16/1/14

Recommendations of the Board of Studies (Economics)

What follows is by way of being a record of the meetings of the Board of Studies and members of the Economics Faculty, held on January 6th and 7th 2015.

The Board of Studies (Economics) and members of the Economics Faculty met on January 6th and 7th 2015 in order to review the Course Syllabus and to recommend such amendments, additions and deletions as were considered appropriate. S. Subramanian was requested to chair the meetings. The following individuals were present at the meetings:

Board Members: B. Kamaiah, K. P. Mani, S. Subramanian, and M. H. Suryanarayana, P. Abdul Kareem, Anver Sadath C., K.C. Baiju.

Faculty Members: T. J. Joseph, Syam Prasad and Vineeth M.

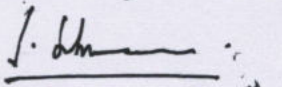
The members participating in the meeting discussed the issues involved in deciding on a course structure at length, and the following consensus emerged from their discussions. First, in terms of the existing structure of Core Courses on offer, it was decided to retain the number of courses on offer at 13. Some of the existing Core Courses were also de-recommended, and a set of new ones suggested. The deleted courses are: Global Governance, International Political Economy, Public Economics, Research Methodology, and Growth and Development. The courses retained are: Microeconomics, Macroeconomics, Econometrics, and Indian Economy. The final list of recommended courses is as follows (the titles with an asterisk refer to new courses not contained in the original syllabus):

Course Title	Number of Courses
Microeconomic Theory	2
Macroeconomic Theory	2
Mathematics for Economic Analysis *	2
Statistics for Economic Analysis*	2
Indian Economy	2
Basic Econometrics	1
International Trade: Theory & Policy	1
Perspectives on Development*	1
Total	13

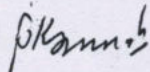
Insofar as the Elective Courses are concerned, the existing list was left unaltered. However, the original list of 40 courses has, on the basis of prior experience with faculty availability and course popularity, been reduced to an essential list of 8 courses, with the remaining 30 being available if they should be

called into play by both demand and supply-side considerations. The shortlist of 8 Elective Courses is the following: Public Economics, Industrial Economics, Advanced Econometrics, Agricultural Economics, Health Economics, Labour Economics, Energy and Environmental Economics, and Gender and Development.

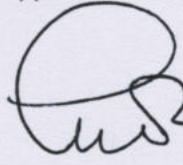
Appendix 1 furnishes the course outlines for the recommended Core Courses, and Appendix 2 the recommended reading lists for these courses. Nothing additional has been recommended in respect of the Elective Courses. It should be stated that owing to constraints on time Appendix 2, in its present form, is somewhat incomplete, and the references have not been provided in full. This exercise will be completed by the Economics Faculty, and a final draft will be circulated for eventual approval. The minutes of the meetings as herein recorded have the approval of the participants in the meeting.



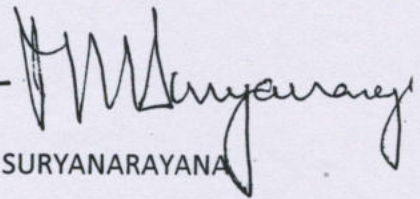
S. SUBRAMANIAN



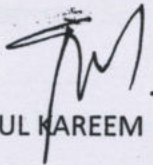
B. KAMAIAH



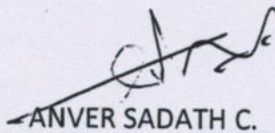
K. P. MANI



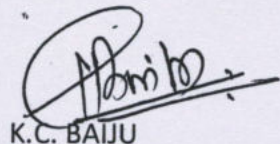
M. H. SURYANARAYANA



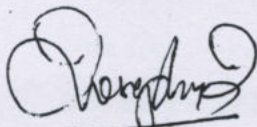
P. ABDUL KAREEM



ANVER SADATH C.



K.C. BAIJU



T. J. JOSEPH



SYAM PRASAD



VINEETH M.



Central University of Kerala
Department of Economics
School of Global Studies

M A Programme: Economics
Revised Syllabus w.e.f 2015-'16

Approved by the PG Board of Studies held on 6th and 7th January 2015
to be placed before the Academic Council

Central University of Kerala
Department of Economics, School of Global Studies
M. A. (Economics)

Course Structure for MA Programme in Economics

	Courses	Lecture Hours per week	Tutorial Hours per week	Credits
	<u>Semester I</u>			
GEC 5101	Microeconomic Theory I	4	2	4
GEC 5102	Macroeconomic Theory I	4	2	4
GEC 5103	Mathematics for Economic Analysis I	4	2	4
GEC 5104	Statistics for Economic Analysis I	4	2	4
GEC 5105	Perspectives on Development	4	2	4
	<u>Semester II</u>			
GEC 5201	Microeconomic Theory II	4	2	4
GEC 5202	Macroeconomic Theory II	4	2	4
GEC 5203	Mathematics for Economic Analysis II	4	2	4
GEC 5204	Statistics for Economic Analysis II	4	2	4
GEC 5205	Indian Economy I	4	2	4
	<u>Semester III</u>			
GEC 5301	International Trade: Theory and Policy	4	2	4
GEC 5302	Basic Econometrics	4	2	4
GEC 5303	Indian Economy II	4	2	4
GEC 50--	Elective I	4	2	4
GEC 50--	Elective II	3	2	3
	<u>Semester IV</u>			
GEC 50--	Elective III	4	2	4
GEC 50--	Elective IV	3	2	3
	Dissertation	--	--	6
	Total Credits			72

16 instructional weeks in a semester

ELECTIVE COURSES

Electives with 4 credits

GEC5001: Industrial Economics
GEC 5002: Public Economics
GEC 5003: International Finance
GEC 5004: Research Methodology
GEC 5005: Institutional Economics
GEC 5006: Advanced Econometrics
GEC 5007: Labour Economics
GEC 5008: Agricultural Economics
GEC 5009: Energy and Environmental Economics
GEC 5010: Health Economics
GEC 5011: Financial Economics
GEC 5012: International Business

Electives with 3 credits

GEC 5013: History of Economic Thought
GEC 5014: Information Economics
GEC 5015: Foreign Direct Investment and the Multinational Corporation
GEC 5016: Monetary Economics
GEC 5017: Time Series Econometrics
GEC 5018: Advances in Panel Data
GEC 5019: Economics of Technology and Innovation
GEC 5020: Migration, Diaspora and Development
GEC 5021: International political economy
GEC 5022: Population and Development
GEC 5023: Economics of Education
GEC 5024: Economics of Infrastructure
GEC 5025: Quantitative Optimization Techniques
GEC 5026: Financial instruments and Markets
GEC 5027: Decentralization and Local Development
GEC 5028: Philosophy of Economics
GEC 5029: Social Cost Benefit Analysis
GEC 5030: Welfare Economics

Central University of Kerala
Department of Economics
M. A. (Economics)

Detailed Course Outline

SEMESTER I

GEC 5101: MICROECONOMIC THEORY I

(Core course: 4 credits)

This course attempts to develop an understanding of the theoretical structure and basic principles of microeconomics. It is intended to improve student's analytical skills and ability to solve problems, which will be useful in several areas of economics. Examples and exercises would be provided to give a flavour of various microeconomic applications. This course does not require any previous knowledge of microeconomics. Familiarity with calculus and optimization theory will be helpful. Relevant mathematical tools will be introduced to the students during the course whenever necessary

Module 1: Consumer Theory and Demand Analysis

Consumer Preference, Indifference Curves, Utility Function, Budget Constraints, Consumer Choice, Individual and Market Demand. Price, Income and Cross Elasticity of demand and supply. Normal versus Inferior Goods, Engel Curve, Duality in Consumer theory, Income and Substitution Effects, Substitution effect according to Hicks and Slutsky, Theory of Revealed Preference, Index Numbers, Consumer Surplus, Veblen, Bandwagon and Snob effects.

Module 2: Theory of Production, Cost and Revenue

Production Functions, Average and Marginal Products, Stages of Production, Isoquants, Marginal Rate of Technical Substitution, Returns to Scale, Producer Equilibrium, Expansion path, Euler's Theorem. Cost Functions, Measuring Costs, Short-run versus Long-run Costs, Isocosts, Economies and Diseconomies of Scale and Scope, Profit Maximization, Cost Minimization. Revenue concepts - AR, MR and TR, Revenue and cost relationships.

Module 3: Price and Output in Perfect and Imperfect Markets

Assumptions of Perfect Competition, Short-run and Long-run Equilibrium of Firm, Constant, Increasing and Decreasing Cost Industries, Effect of Tax on Output of Firm and Industry,

Market Efficiency; Monopoly: Monopoly power, Short-run and Long-run Equilibrium under Monopoly, Regulation of Monopoly, Price Discrimination – First, Second and Third degree Price Discrimination; Monopolistic Competition: Short-run and Long-run Equilibrium under Monopolistic Competition.

Module 4: Oligopoly Market and Basic Game Theory

Oligopoly: Non-Collusive Oligopoly models- Cournot Model, Bertrand Model, Edgeworth Model, Chamberlin Model, Kinked-demand curve, Collusive oligopoly and cartel, Price leadership. Game Theory: Non-Cooperative versus Cooperative games, Dominant Strategy, Nash Equilibrium, Prisoner's Dilemma.

Readings

- Pindyck, R. S., and D. L. Rubinfeld, *Microeconomics*, (8th Edition), Pearson Publishers.
- Varian, H. R., *Intermediate Microeconomics*, (2nd Edition), W.W. Norton & Co., 1999.
- Deaton, A. and Muellbauer, *Economics and Consumer Behaviour*, Cambridge University Press, 1993.
- Salvatore, D., *Microeconomics: Theory and Applications*, Oxford University Press, 2008.

GEC 5102: MACROECONOMIC THEORY – I

(Core course: 4 credits)

This course is an introduction to macroeconomics. This subdivision of economics deals with the economy as a whole, and examines the main principles of the determination of real income, employment, price level and inflation. It also discusses the conduct of macroeconomic policies. The course intends to provide a thorough understanding of the Classical, Keynesian, Monetarist, New Classical and Neo Keynesian analyses of the macro economy.

Module 1: National Income Accounting and Income Determination

Aggregate demand and aggregate supply- Circular flow of income and expenditure – Concepts, approaches and problems in National Income Accounting – Equilibrium output and employment under classical theory - Keynes’ rejection of Say’s Law - Keynesian model of income determination - consumption function, saving function, paradox of thrift - Keynesian theory of investment – Expenditure multipliers - Marginal efficiency of capital and investment- The accelerator and investment behaviour.

Module 2: Money and Inflation

Roles of Central Bank and commercial banks in money supply- High powered money and money multiplier - Classical approach to demand for money — Quantity theory approach, Fisher’s equation, Cambridge quantity theory - Keynes’s liquidity preference approach, transaction, precautionary and speculative demand for money — aggregate demand for money - Neo-classical and Keynesian views on interest - Liquidity trap - Derivation of LM curve.

Module 3: Neo-classical - Keynesian Synthesis and Macro Economic Policies

The IS-LM model - Extension of IS-LM model with government sector –Fiscal policy instruments and budget – Fiscal deficit and its implications – Crowding out effect - Monetary policy instruments - Relative effectiveness of monetary and fiscal policies - Extension of IS-LM models with labour market and flexible prices -Pigou’s effect and Real Balance Effect

Module 4: Macroeconomics in an Open Economy

Balance of Payment statement – Current account and capital account convertibility - Foreign exchange and exchange rate determination – Foreign exchange market intervention and sterilization policies – J-curve, Marshall-Lerner condition - fixed versus

floating exchange rate, price adjustment -Mundell-Fleming model -Role of fiscal and monetary policies under alternative exchange rate regimes and capital mobility -The Impossible Trinity - Purchasing power parity concept.

Module 5: Inflation and Unemployment trade off

Unemployment and labour market: Neo-classical labour market equilibrium – Keynesian labor market - Classical, Keynesian and Monetarist approaches to inflation - Seigniorage – Inflation and interest rate – Causes, cost and measure of inflation. Phillips curve controversy - Samuelson and Solow — the natural rate of unemployment hypothesis; Tobin’s modified Philips curve; Adaptive expectations and rational expectations; Policies to control inflation.

Readings:

- Froyen, Richard T., *Macroeconomics – Theory and Policies*, 8th edn., Pearson Education (2008).
- Mankiw, Gregory N., *Macroeconomics*, 6th edn., Worth Publishers (2012).
- Levacic, R. and Rebmann, A., *Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies*, Mcmillan (1983)
- Dornbusch, R., Fischer, S., and Startz, R., *Macroeconomics*, 9th edn., Tata McGraw-Hill (2008).

Additional Readings

- Blanchard, O., *Macroeconomics*, 4th edn., Pearson Education (2008).

GEC 5103: MATHEMATICS FOR ECONOMIC ANALYSIS – I

(Core course: 4 credits)

This course is aimed at introducing the students of economics to certain basic concepts and techniques in mathematics which are considered to be indispensable to an understanding of economic theory. The number of courses has been increased from 1 to 2, so that the teaching and learning can both be more relaxed and productive than appears now to be the case.

Module 1. Linear Equations and Functions

Basic algebra – Index numbers – Powers and roots. Manipulation and simplification of equations – variables and parameters – linear and non-linear equations. Functions – linear functions – intercept and slope – graphical solutions to linear equations – simultaneous linear equations - Demand and supply functions – inverse demand function – macroeconomic equilibrium.

Module 2. Non-linear Equations and Functions

Quadratic functions and their graphical presentations – simultaneous quadratic equations – Cubic equations and functions – the Rectangular Hyperbola – Limits and continuity – The circle and ellipse and their applications - Inequalities and their applications - Exponential functions and logarithms – Properties and graphs of exponential functions – Properties and graphs of logarithmic functions - Applications in economics.

Module 3. Mathematics of Finance and Growth

Simple and compound interest – finding compound growth – discrete and continuous growth – Present discount value – calculation of present and future values Graphs and applications. Continuous growth and natural exponential functions – Limitations of discrete compound growth – Continuous growth and its applications – discounting and present value – semi-log scale – Graphs and applications.

Module 4. Derivatives and Applications

Slope of a curved line– limit theorem – the differential and linear approximation – Rules of differentiation - Use of derivatives in optimization – Second derivatives and rule of maximum and minimum values – point of inflection – Convex and concave functions. Economic applications of functions and derivatives – cost functions, Revenue functions,

Profit function – Point and arc elasticities of demand and supply – elasticity and slope – marginal revenue and elasticity of demand.

Module 5. Optimization with two or more Independent Variables

Rules of partial derivatives – Maximization and minimization with two or more independent variables – Saddle points -Production functions, utility functions, macroeconomic equilibrium, etc. Constrained optimization – The Lagrange multiplier method – Economic applications. Returns to scale and homogeneous functions – partial elasticities, growth accounting, logarithmic scales, etc.

Readings

- Bradley, T. and Patton, P. *Essential Mathematics for Economics and Business*, Wiley publications.
- Renshaw, Geoff, *Maths for Economics*, 2nd edn., Oxford Publishers.
- Intriligator, M.D., *Mathematical Optimization and Economic Theory*, Prentice-Hall, 1971
- Allen, R.G.D, *Mathematical Analysis for Economists*, Macmillan Press
- Yamane, Taro, *Mathematics for Economists*, Prentice Hall of India

GEC 5104: STATISTICS FOR ECONOMIC ANALYSIS – I

(Core course: 4 credits)

This course is aimed at introducing the students of economics to certain basic concepts and techniques in statistics which are considered to be indispensable to an understanding of economic theory. The number of courses has been increased from 1 to 2, so that the teaching and learning can both be more relaxed and productive than appears now to be the case. Along with it we also intended to teach computer applications.

Module 1. Introduction to Statistics

Scale of Measurement-Nominal –Ordinal-Cardinal (Ratio-Scale, Interval): Statistics- need of subject-Measurement-datasets-scale of measurement- issues in measurement-errors in measurement.

Module 2. Data Collection and Presentation

Descriptive Statistics-Data Collection- Data Presentation-tabulation-Graphical Representation: understanding data- data presentation- frequency table-graphical tools-Boxplot-outliers- removal of outliers-bivariate graphs and tables-Data entry to spread sheets-introduction of Stata and SPSS with lab exercise

Module 3. Measures of Central Tendency

Measures of Central Tendency: mean-various types-median-positional averages-mode-properties-calculation and uses-weighted means

Module 4. Measures of Deviation

Measures of Dispersion-measures of spread-deviations from mean-variance-SD-Sample from population-Pseudo SD-comparing variability of distribution-application in economics-Skewness- Kurtosis

Module 5. Elements of Probability

Elements of Probability Theory-concept of factorial-permutation and combinations-event-random excise-simple probability-joint probability-conditional probability-bayes theorem-cumulative Distribution Function-Mathematical Expectation-theorems of expectation-theory of variance

Readings

- Croxton, Frederick E., Dudley J. Cowden and Sidney Klein (1988): *Applied General Statistics*, Prentice-Hall of India Private Ltd., New Delhi.
- Freund, John E. and Ronald E. Walpole (1987): *Mathematical Statistics*, Prentice-Hall of India Private Ltd., New Delhi.
- Krishnaji, N. (1976): *Statistical Methods for Economic Analysis: A Work Book*, Centre for Development Studies, Thiruvananthapuram
- Myatt, Glenn J. (2007): *Making Sense of Data: A Practical Guide to Exploratory Data Analysis and Data Mining*, Wiley-Interscience, New Jersey.
- Nagar, A.L. and R. K. Das (1987) *Basic Statistics*, Oxford University Press, New Delhi.
- Sanders, Donald H. (1990): *Statistics: A Fresh Approach*, McGraw-Hill Publishing Company, New York.

GEC 5105: PERSPECTIVES ON DEVELOPMENT

(Core course: 4 credits)

The course provides an advanced treatment of development economics with a strong focus on theory and application. The course is divided into five modules: the first three modules introduce students to the basic concepts and theories in development economics, including Classical and Marxian theories, Amartya Sen's capability approach and social capital theory. The fourth and fifth modules have strong applied focus. The aim is to develop student's research capabilities by examining a large number of topics chosen from the forefront of development economics research. The mode of assessment consists of written examination, oral presentation and submission of an extended essay.

Module 1. Classical theories of development

Introduction- Growth and Development-classical theories from Smith to Schumpeter with classical concepts of Development-partial theories of development- Critical minimum effort thesis-Lewis model of surplus labour -Rostow's stages in economic growth-Balanced growth-Unbalanced growth- Theory of 'big push'-Myrdal on economic growth- Dualism-Neo-Marxist Development theories Social capital theory, Path of growth-ways to achieve it-Different Strategies

Module 2 Poverty and Inequality

Development Gap-poverty-Different approaches-money metric-tools of measurement-Poverty line-issues in measuring poverty in India- Capability Approach-HDI and HPI-inequality-Horizontal and Vertical-tools of measuring inequality-Decomposition-inverted U shape-inclusive Growth-Globalization and inequality in India

Module 3. Demographic Indicators

population as a challenge-Malthusian notion - Simon's Challenge-demographic indicators - Demographic Dividend-New Challenges-Changing Demographic structure

Module 4. Urbanization, Migration, Livelihoods, and Employment

Migration and development- Todaro model-Push Pull hypothesis-Structuralist approach- Migration and poverty-Migration and Inequality-Migration and its impact on destination countries/regions-Migration and its impact on sending countries/regions-Urbanization-informalization-changing structure of Employment-unorganized sector-needs for social protection

Module 5. Development, Disparity and Provisions

Development-As freedom-Democracy-Human Development-Human rights-Need based vs right based Provisioning-Caste and Gender issues-Land issues-Constitutional provisioning-Education-Role of state and Market

Readings

- Y.Hayami, (2001) *Development Economics: From Poverty to the Wealth of Nations*, 2nd Edition, OUP
- K.Basu, (1997) *Analytical Development Economics*, MIT Press
- Debraj Ray, (1999) *Development Economics*, Oxford University Press
- Sen, Amartya, 2000, *Development as Freedom*, Oxford University Press, New Delhi.
- AK sen,1970, *Growth economics*, Penguin
- Thirlwall, 2006, *Growth and development with special reference to developing countries*, Palgrave Macmillan.

Additional Readings

- S Subbramnian 2012, *The Poverty Line* (Oxford India Short Introductions Series). Oxford University Press: Delhi.
- Ehrman and T.N Sreenivasan, *Handbook of Economic Development*, Vol.3, Elsevier Amsterdam.
- Debraj Ray, 1998, *Development Economics*, Oxford University Press, Calcutta.
- Ghatak S, 2003, *An Introduction to Development Economics*, Routledge, London.
- Krugman, 1995, *Development, Geography and economic theory*, MIT press
- Meier and James E Rauch, 2005, *Leading Issues in Economic Development*, Oxford University Press, New York.
- S Subramanian 2006 *Rights, Deprivation, and Disparity: Essays in Concepts and Measurement* (Collected Essays Series). Oxford University Press: Delhi.
- K. Srinivasan. 2001, *Basic Demographic Techniques and Applications* SAGE Publications.
- KP Kannan,2013, *Interrogating Inclusive Growth : Poverty and Inequality in India*, Routledge India.
- Bina Aggarwal,1994 *A Field of One's Own*, Cambridge Press.
- Surinder S Jodka, 2012, *Caste*, OUP, New Delhi.

SEMESTER II

GEC 5201: MICROECONOMIC THEORY – II

(Core course: 4 credits)

This is the second part of the core Microeconomics sequence. This course builds on the fundamental concepts and topics in microeconomic theory. It will cover roughly five topics: Alternative Theories of Firm, Theory of General Equilibrium, Welfare Economics, Externalities and Public Goods, and Economics of Information. The aim is to be as thorough as possible in a single semester time period. The theoretical concepts discussed in these topics are essential in different fields in economics.

Module 1: Alternative Theories of Firm

Critical evaluation of Marginal Analysis, Baumol's Sales Revenue Maximization model, Williamson's model of Managerial Discretion, Marris model of Managerial Enterprise, Behavioural model of Cyrt and March.

Module 2: Theory of General Equilibrium

Partial Equilibrium versus General Equilibrium analysis; An elementary General Equilibrium model – the Robinson Crusoe Economy; Edgeworth Box, Contract Curve, General Equilibrium of Exchange, General Equilibrium of Production, Production Possibilities Frontier, Simultaneous General Equilibrium of Production and Exchange.

Module 3: Welfare Economics

Meaning of Welfare Economics, Utility Possibility Curve, Grand Utility Possibility Curve, Social Welfare Function, Pareto Criterion, Kaldor-Hicks criterion, Scitovsky criterion, Bergson Social Welfare Function, Arrow's Impossibility Theorem, Economic Efficiency: Economic Efficiency of Competitive Markets, Efficiency and Equity, First and Second Theorems of Welfare Economics.

Module 4: Externalities and Public Goods

Positive and Negative Externalities, Externalities and Market Failure, Ways of Correcting Market Failure, Externalities and Property Rights, Common Property Resources, Nature of Public Good, Efficiency and Public Good, Public Goods and Market Failure.

Module 5: Economics of Information

Search Costs, Search and Advertising, Asymmetric Information, Market for Lemons, Adverse Selection, Market Signaling, Problem of Moral Hazard, Principal Agent Problem, Asymmetric Information and Labour Market: Efficiency Wage Theory.

Readings

- Baumol, W. J., *Economic Theory and Operations Analysis*, (4th Edition), Phi Learning, 2009.
- Koutsoyiannis, A., *Modern Microeconomics*, (2nd Edition), Macmillan Press, 1979.
- Pindyck, R. S., and D. L. Rubinfeld, *Microeconomics*, (7th Edition), Pearson India, 2009.
- Salvatore, D., *Microeconomics: Theory and Applications*, (5th Edition), Oxford University Press, 2008.
- Sen, A., *Microeconomics: Theory and Application*, Oxford University Press, 1999.
- Varian, H. R., *Intermediate Microeconomics*, (2nd Edition), W.W. Norton & Co., 1999.
- Varian, H. R., *Microeconomic Analysis*, (3rd Edition), W.W. Norton & Co., 2010.

Additional Readings

- Nicholson, W., *Microeconomic Theory: Basic Principles and Extensions*, eighth edition, South Western Thomson Learning, 2002
- Henderson, M. and R.E. Quandt, *Microeconomic Theory: Mathematical Approach*, McGraw Hill, 1980
- Mas-Colell, A., M.D. Whinston, and J. Green, *Microeconomic Theory*, Oxford University Press, 1995

GEC 5202: MACROECONOMIC THEORY – II

(Core course: 4 credits)

The course will selectively cover theoretical issues and recent developments in open economy macroeconomics. The topics covered will include post Keynesian macroeconomics, the new classical macroeconomics, the new Keynesian school, growth theory and business cycles. The course will also include structuralist critiques of mainstream macroeconomic policy proposals.

Module 1. Post-Keynesian Demand for Money

Post-Keynesian approaches to demand for money — Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory; Crisis in Keynesian economics and the revival of monetarism.

Module 2. Expectations and Macroeconomic Adjustments

Expectations formations – Adaptive and rational expectations hypothesis, partial adjustment model, Lucas critique, Phillips curve, rules versus discretion, time consistency, inflation targeting, Central Bank independence, interest rate rules, effects of spending and taxes in models with flexible and sticky prices, perverse effects of fiscal expansion.

Module 3. Growth Theory

Solow model of growth, empirics of economic growth, technological progress, growth accounting and total factor productivity - Foundation of neoclassical growth, applications of neoclassical growth model - Basics of endogenous growth, the AK-Model, human capital and economic growth, product variety and innovation, learning by doing, role of R&D and economic growth.

Module 4. Business Cycle

Business cycle indicators, coincident, forward and leading indicators, Control of business cycles — relative efficacy of monetary and fiscal policies, empirical analysis of business cycle models with special emphasis on India, macro-economic models in India and forecasting.

Module 5. Recent Advances in Macroeconomic Thought

Critiques of mainstream macroeconomic policy prescriptions - Problems of effective demand and distribution - Structuralist theories of finance and money - Ricardian debt

equivalence, political economy of budget deficits - The new classical critique of micro foundations, the new classical approach.

Books

- Snowdon, B. and Vane, H.r., *Modern Macroeconomics – Its Origins, Development and Current State*, Edward Elgar, 2005.
- Romer, D., *Advanced Macroeconomics*, second edition, McGraw-Hill, 2001.
- Blanchard and Fischer, *Lectures on Macroeconomics*, MIT Press, 1989.
- Barro, R.J., *Macroeconomics*, Fifth edition, MIT Press 1997.
- Sargent, T., *Macroeconomic Theory*, Academic Press, 1987.

Additional Readings

- Pandit, V.N. and K. Krishnamurty, *Macro econometric Models for India*, Oxford University Press, 2005.
- Mankiw, Gregory N., '*Macroeconomics*', 6thedn., Worth Publishers (2012).

GEC 5203: MATHEMATICS FOR ECONOMIC ANALYSIS – II

(Core course: 4 credits)

This course is aimed at introducing the students of economics to certain basic concepts and techniques in mathematics which are considered to be indispensable to an understanding of economic theory. The number of courses has been increased from 1 to 2, so that the teaching and learning can both be more relaxed and productive than appears now to be the case.

Module 1. Elements of Linear Algebra

Vectors, matrices, elementary Vector and Matrix Operations - Rank of a Matrix, Transposition, the Determinant of a matrix - Matrix inversion - Cramer's rule - The Gaussian method.

Module 2. Special Determinants and Matrices

The Jacobian, Hessian, Discriminant - Bordered Hessian for Constrained Optimization - Applications in economics - Derivation of Marshallian demand functions - Input-Output Analysis - Characteristic roots and vectors.

Module 3. Linear Programming

Graphic solutions - Extreme point theorem - Slack and surplus variables. Simplex method of maximization and minimization - Marginal value or shadow pricing - The Dual theorem - Economic applications.

Module 4. Integral Calculus

Rules of integrations - Definite integral and indefinite integral - Economic applications: finding total function from marginal function - area under a curve - consumer's surplus and producer's surplus - Improper integrals - present value of continuous stream.

Module 5. Difference and Differential Equations

Discrete and continuous time First-order differential equations and Higher-order differential equations - Dynamic stability of a market - Simultaneous differential equations and Difference equations - Applications in economics - The Cobweb model of supply and demand

Readings

- Chiang, A.C. and Wainwright, K., *Fundamental Methods of Mathematical Economics*, 4th edn., McGraw Hill Publishers (2005)
- Dowling, E.T., *Introduction to Mathematical Economics*, 2nd edn., Schaum's Outline Series, McGraw Hill, 1992.
- Intriligator, M.D., *Mathematical Optimization and Economic Theory*, Prentice-Hall, 1971
- Allen, R.G.D, *Mathematical Analysis for Economists*, Macmillan Press
- Yamane, Taro, *Mathematics for Economists*, Prentice Hall of India.
- Henderson, J.M. and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, 3rd edn., McGraw Hill, 1980.

GEC 5204: STATISTICS FOR ECONOMIC ANALYSIS – II

(Core course: 4 credits)

This course is aimed at introducing the students of economics to certain basic concepts and techniques in statistics which are considered to be indispensable to an understanding of economic theory. The number of courses has been increased from 1 to 2, so that the teaching and learning can both be more relaxed and productive than appears now to be the case. This course is intended to give an idea on fundamentals of sampling Distribution and inferential statistics with its applications

Module 1. Theoretical Distribution

Discrete and continuous Distribution- Theoretical distribution of Binomial, Poisson and Normal distributions; Chi-square distribution – F distribution.

Module 2. Sampling Theory and Distributions

Population and sample-parametric and statistic-census and sampling methods for data collection-methods of sampling-Random and Non-random-Techniques for sampling-sampling and non-sampling error-sampling distribution of a statistic-law of statistical regularity-inertia of large number-central limit theorem-designing a survey-conduct of survey-practical exercise

Module 3. Theory of Estimation

Concept of estimation-estimator-types and properties-point and interval estimation-standard errors of estimators-confidence limits for a population parameter.

Module 4. Inferential statistics

Formulation of statistical hypothesis – Null and alternative hypothesis; Goodness of fit; Confidence intervals and level of significance-one tailed and two tailed test-Types of Errors; Type 1 and Type 2 errors. Hypothesis testing based on Z, t, F, Chi-square) for both large and small samples and F tests-ANOVA-Practical Excises in LAB

Module 5. Non-Parametric Methods

Definition-non parametric data-concept and use-tests for non-parametric Data-Lickert Scale, Sign Test, Kuskner value, Kendall's Coefficient of Concordance, Principle Component Analysis and Factor Analysis-practical excises

Readings

- Speigal. M.R.(1992), Theory and Problems of Statistics, McGraw Hill, London.
- Croxton, Frederick E., Dudley J. Cowden and Sidney Klein (1988): *Applied General Statistics*, Prentice-Hall of India Private Ltd., New Delhi.
- Hamilton, Lawrence C. (1990) *Modern Data Analysis: A First Course in Applied Statistics*, Brooks/Cole, California.
- Marsh, Catherine (2009) *Exploring Data: An Introduction to Data Analysis for Social Scientists*, Polity Press, UK, Second Edition
- Myatt, Glenn J. (2007): *Making Sense of Data: A Practical Guide to Exploratory Data Analysis and Data Mining*, Wiley-Interscience, New Jersey.
- Nagar, A.L. and R. K. Das (1987) *Basic Statistics*, Oxford University Press, New Delhi.
- Sanders, Donald H. (1990): *Statistics: A Fresh Approach*, McGraw-Hill Publishing Company, New York.
- Myles Hollander, Douglas A. Wolfe, Eric Chicken (2013) *Nonparametric Statistical Methods*, WILEY

GEC 5205: INDIAN ECONOMY – I

(Core course: 4 credits)

This is a course on the political economy of Indian development, dealt with at an aggregate level, and is structured as follows.

Module 1: Indian Economy: The Colonial Period

Alternate views on the impact of colonialism on Indian economy; the various phases of the colonial subjugation of the Indian economy; the beginnings of modern industry in India from the 1850s

Module 2: Indian Economy: The Planning Era

Early ideas on Indian planning; Major features of Indian planning; the debate on industrial stagnation in India from the mid-1960s

Module 3: Indian Economy during the Period of Economic Reforms

Industrial growth recovery of the 1980s; the road to structural adjustment programme of 1991; major features of India's economic reforms

Module 4: Agriculture

Agriculture and Indian planning; The Green revolution and its impacts, Agriculture during the period of reforms

Module 5: Industry, Foreign trade and investment

Trade policy regimes in India; Changing policies on foreign investment

Module 6: Money and Finance in India

Selected Readings

Habib, Irfan (1975), 'Colonization of the Indian Economy, 1757-1900', *Social Scientist*, Vol.3, No.8, pp. 23-53.

Morris, Morris D. (1983), 'The Growth of Large-Scale Industry to 1947' in Kumar, Dharma (ed.) (1983), *The Cambridge Economic History of India – Volume II: c. 1757-2003*, Cambridge University Press, Cambridge, Expanded Edition published in 2003 by Orient Longman Private Limited, New Delhi.

Chakravarty, Sukhamoy (1987), *Development Planning: The Indian Experience*, Oxford University Press, New Delhi. Ch. 3

- Nayyar, Deepak (1978), 'Industrial Development in India: Some Reflections on Growth and Stagnation', *Economic and Political Weekly*, Special Number August reprinted in Nayyar Deepak ed (1994), *Industrial Growth and Stagnation- The Debate in India*, Oxford University Press, Delhi.
- Ahluwalia, I.J. (1985), *Industrial Growth in India – Stagnation since the Mid - Sixties*, Oxford University Press, Delhi (Chapters 5, 8 and 9).
- Bhagwati, Jagdish (1993), *India in Transition: Freeing the Economy*, Oxford University Press, New Delhi. Ch.3, pp. 71-99.
- Chandrasekhar, C.P and Ghosh, Jayati (2004), *The Market that Failed: Neoliberal Economic Reforms in India*, LeftWord Books, New Delhi., Ch. 2, pp.9-18.
- Drèze, Jean and Sen, Amartya (2002), *India: Development and Participation*, Oxford University Press, New Delhi, Ch.3 titled 'India in a Comparative Perspective'.
- Drèze, Jean and Sen, Amartya (1989), *Hunger and Public Action*, Oxford University Press, New Delhi, Ch. 2 titled 'Entitlement and Deprivation'
- Rao, J. Mohan and Storm, Servaas (1998), 'Distribution and Growth in Indian Agriculture', chapter in *The Indian Economy: Major Debates since Independence* edited by T. J. Byres, Oxford University Press (Sections 1, 2.1, 3.1, 4.1, 4.2, and 5.1)
- Panagariya, Arvind (2008), *India: The Emerging Giant*, Oxford University Press, New York. Ch.12 ('International Trade: Carrying Liberalization Forward'), especially pp. 259-68 and 276-81.

SEMESTER III

GEC 5301: INTERNATIONAL TRADE: THEORY AND POLICY

(Core course: 4 credits)

This course deals with the theoretical and empirical aspects of international trade and finance. The topics covered include Heckscher-Ohlin factor price equalization theorem, monopolistic competition in international trade, theory of immiserising growth, forms of economic integration, as well as the fundamentals of international finance. As a requirement for this course, the student is expected to have completed a course in open economy macroeconomics.

Module 1: Classical Trade Theory

Pure theory of International Trade- Theories of Absolute advantage and Comparative advantage- Opportunity cost approach- Specific factor model-Specific factors and income distribution- Heckscher-Ohlin model-Factor price equalization theorem- Rybczynski theorem-Empirical testing of H.O theorem-Leontief Paradox-Factor intensity reversal- Theory of immiserising growth-Demand and supply capital-offer curves-terms of Trade

Module 2: Modern Trade Theory

Monopolistic competition and international trade- Technology differences and trade- Trade based on product differentiation-Intra industry trade- Imitation gap and product cycle models- empirical test of intra industry trade

Module 3: Trade Barriers

The case for free trade and protection-Trade restriction-Tariff and non-tariff barriers- Effects of trade-Partial Equilibrium analysis-Effective Rate of Protection-General Equilibrium Analysis-Small country and Large country cases- Optimum Tariff-Stolper-Samuelson theorem-Metzler Paradox-Lerner Symmetry theorem

Module 4: Trade Arrangements

Forms of economic integration-Free trade agreement (FTA), Common Market, Economic union, trade creating and trade diverting Customs union- Customs union and conditions for increasing welfare- Regional Trading blocks in practice.

Module 5: Balance of Payments

Anatomy of Balance of payments (BOP) - Function of foreign exchange markets-Hedging, Speculation, Interest arbitrage, Exchange rate determination-Purchasing power parity theory-Fiscal and flexible exchange rates-BOP disequilibrium-Adjustment mechanism-Automatic mechanism-Price and income adjustments under fixed and flexible exchange rate system-Policy measures-Devaluation-Revaluation-Elasticity approach-J curve effect- Absorption approach-monetary approach and devaluation

Readings:

- Paul Krugman and Maurice Obstfeld (2003) *International Economics: Theory and Policy*
- Peter Dicken (2007) *Global Shift: Mapping the Changing Contours of the World Economy*
- Jagdish Bhagwati, V. N. Balasubramanyam (1998) *Writings on International Economics*
- Luis A. Rivera-Batiz, Maria-A. Oliva (2004) *International Trade: Theory, Strategies, and Evidence*
- Dominick Salvatore (2007) *International Economics*
- Michael W. Klein (2009) *Exchange Rate Regimes in the Modern Era*

GEC 5302: BASIC ECONOMETRICS

(Core course: 4 credits)

Module 1. Introduction to different methods in Econometrics

Basic Concepts and Methodology of Econometrics-Single Equation Regression Model-Two Variable regression Model-The Problem of Estimation-The method of Ordinary Least Squares-The Classical Linear Regression Model and Assumptions underlying the Method of Least Squares-The Gauss-Markov Theorem-Normality Assumption-Properties of OLS Estimators- Hypothesis Testing. Introduction to Maximum Likelihood Method; Methods of Moments.

Module 2. Multiple Regression and Estimation

The Problem of Inference-Testing the Significance of the Sample Regression- Analysis of Variance- The F-test-The Coefficient of Determination-Restricted Least Squares. Interaction Effects-Seasonal Analysis-Piecewise Linear Regression.

Module 3. Classical Linear regression Model and Some Issues

The Problems of Multicollinearity, Heteroscedasticity and Autocorrelation - Detection and Remedial Measures – Errors in Measurement, model diagnostics, stochastic repressors, outliers.

Module 4. Regression with Dummy Variables

Dummy Variables- Structural Stability. Introduction to Logit, Probit and Tobit models.

Module 5. Simultaneous Equation System

Introduction to Simultaneous Equation System-Identification Problem- Rules of Identification- Rank Order Conditions – Zero Restriction ion the Non-Stochastic Case – Recursive System – Indirect Least Squares – 2SLS – Instrumental variables – 3SLS.

Readings

- Dougherty, Christopher, Introduction to Econometrics, Oxford University Press.
- Studenmund, A.H. (2006): *Using Econometrics: A Practical Guide*, Pearson Addison Wesley, New York.
- Angrist, Joshua D. and Jorn-Steffen Pischke (2008) : *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, New Jersey, USA.
- Greene, William H. (2003): *Econometric Analysis*, 5th Edition, Pearson Education, Inc., New Jersey.

- Gujarati, D. N. and Sangeetha (2007): *Basic Econometrics*, , 4th Edition, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
- Johnston, J. and John DiNardo, (1997): *Econometric Methods*, 4th Edition, McGraw-Hill Companies, Inc., London.
- Judge, G. et al. (1988): *Introduction to the Theory and Practice of Econometrics*, 2nd Edition, John Wiley & Sons, New York.
- Kmenta, Jan (1986): *Elements of Econometrics*, Macmillan Publishing Company, New York.
- Lardaro, Leonard (1993): *Applied Econometrics*, HarperCollins College Publishers, New York.
- Maddala, G. (1977): *Econometrics*, McGraw Hill Kogakusha, Ltd., Tokyo.
- Mukherjee, Chandan, Howard White and Marc Wuyt (1998): *Econometrics and Data Analysis for Developing Countries*, Routledge, London.
- Wooldridge, Jeffrey M. (2003): *Introductory Econometrics: A Modern Approach*, Second Edition, Thomson South Western, USA.

Data Sources & References:

- Dandekar, V. M. (ed.) (1972): *Database of the Indian Economy, Vol. II*, Statistical Publishing Society, Calcutta.
- Government of India (1999): *Guide to Official Statistics*, 4th Edition, Central Statistical Organisation, New Delhi.
- Government of India (1989): *National Accounts Statistics: Sources and Methods*, Central Statistical Organisation, New Delhi.
- Krishna, K. L. (1997): *Econometric Applications in India*, OUP, New Delhi.
- Minhas, B. S. (ed) (2002): *National Income Accounts and Data Systems*, Oxford University Press, New Delhi.
- Mukherjee, M. (1969): *National Income of India: Trends & Structure*, Statistical Publishing Society, Calcutta.
- Rao, C. R. (ed.) (1972): *Database of the Indian Economy, Vol. I*, Statistical Publishing Society, Calcutta.
- Roy Choudhury, Uma Dutta (1995): *National Income Accounting*, Macmillan, New Delhi
- www.rbi.org.in
- http://mospi.nic.in/mospi_nssso_rept_pubn.htm

Relevant web sites:

<http://development.thinkingwithdata.com>

GEC 5303: INDIAN ECONOMY - II

(Core course: 4 Credits)

This course presents a view of the Indian Economy which is sensitive to the regional picture and takes a more disaggregated picture of the subject than the Indian Economy I course. The course is structured as follows.

Module 1 Outcomes: Indicators of Growth and Human Development at the state level- Spatial inequality.

Growth and Human Development- Human Development Approach - Human Development Measurements - Human Development in India - Human Development Reports in India - Inequality-adjusted Human Development Index (IHDI) - Successful strategies to Human Development according to States - Challenges/constraints to Human Development experienced by States - Spatial and Social Inequalities in Human Development - Trends in Economic Growth and Spatial Inequality in Indian states - Income differentials across the states - Variations in Consumption Expenditure and Poverty-Education and Health - Access to Basic Amenities

Module 2 Outcomes: Environment and Sustainability

Environment- Scope of Environmental Economics-Environment and Economic Development-Population, resources and environment in Indian states- Environmental policy in India- Bio-Diversity conservation and Environment in India - Economic Development and Environmental Degradation - Climate Change - Concept of Sustainability - Political economy of sustainability- Strategies for Sustainable development in India- Green Marketing: Opportunities and challenges

Module 3- Processes: Public Action, Public policy and Governance

Public Action and development of Indian States - Land reform and Public action In Kerala - Public movements in Indian States - Public policy- Institutional Measures- Concept of Governance - Public Service Delivery and Good Governance :Initiatives in India - E-governance: Options and Opportunities - Governance and Public Management: Challenges and prospects

Module 4- Processes: Decentralized Planning and Local Governance

Decentralized planning and Local Development; decentralization of governance and development - Scope for Decentralized planning - Top down Vs Bottom up planning- Spatial and Sectoral planning-Evolution of decentralized planning in India - 73rd and 74th

Constitutional Amendment Act - Devolution of functions, functionaries, finance and freedom of planning- Approach in Decentralization - Subjects transferred to Rural and Urban local governments - Committees and participatory forums in local governments - Extent of decentralization - New institutional mechanisms- processes in local planning and capacity building- Decentralized planning and State level status in India-New policy Initiatives

Module 5- Processes: Case studies

Indian States - Gujarat, Kerala, BIMARU states and North East states: Social and Economic development

References

- Amartya Sen (1999) *Hunger and Public Action*, Oxford University Press, New Delhi
- Amitabh Kundu, P. C. Mohanan and K. Varghese(2013),*Spatial and Social Inequalities in Human Development: India in the Global Context*, UNDP
- Ashish Bose(2007), *Beyond Population Projections: Growing North-South Disparity*, Economic and Political Weekly, Vol. 42, No. 15 , pp. 1327-1329
- Anand S., (1997), "The measurement of Income Inequality", in S. Subramanian, (ed.), 'Measurement of Inequality and Poverty', Delhi Oxford University Press, pp. 81-105.
- Ashish Bose(2006), *Falling Fertility and Rising Anaemia?*,Economic and Political Weekly, Vol. 41, No. 37 pp. 3923-3926
- Anil kumar Thakur & Dalip Kumar,(2011) "Disparities In India And Development Perspective", Edt, Indian Economic Association ,New Delhi
- Gopal & Suman, (2005) "Human Development In India", Ane Books, New Delhi.
- Government Of India, (2011) "India Infrastructure Report".
- Kator Singh & Anil Shishodia (2007) "Environment Economics", Sage Publication New Delhi.
- Kannan Chopra & Vikram Dayal (2009) "Hand Book Of Environment Economics ". Edt, Oxford City Publication, New Delhi
- Jeemol Unni et al (2010) *Social income and insecurities: A study of Gujarat* Routledge publications, New Delhi
- E. Vayunathan and Dolly Mathew (2003) *Good Governance initiatives in India*, Prentice Hall of India, New Delhi
- Misra and Puri (2011) *Indian Economy*, Himalaya Publications, New Delhi
- N. Somorendro Singh(2006) *Integration And Development In North-East India: An Assessment*, The Indian Journal Of Political Science, Vol. 67, No. 2 Pp. 329-342

- Jayanta Madhab(1999) North-East: Crisis of Identity, Security and Underdevelopment, Economic and Political Weekly, Vol. 34, No. 6 pp. 320-322
- Montek S. Ahluwalia, State-Level Performance under Economic Reforms in India, Planning Commission
- Shibani Kinkar Chaube, Sunil Munsri and Amalendu Guha(1975) ,Regional Development and the National Question in North-East India, Social Scientist ,Vol. 4, No. 1, 40-66.
- Kalyan Sundar Som and Prof. R.P. Mishra (2014),BIMARU States: Need a Rethinking, IOSR Journal Of Humanities And Social Science (IOSR-JHSS) Volume 19, Issue 7,
- V. Ratna Reddy(2003) Irrigation: Development and Reforms ,Economic and Political Weekly, Vol. 38, No. 12/13 pp. 1179-1189
- Pinstrup-Andersen,and Fuzhi Cheng (2009),Case Studies in Food Policy for Developing Countries: Ed Work Cornell university press ,U S A
- India Development Report (2013) UNDP, New Delhi
- T. M. Thomas Isaac and Richard W. Franke(2002), Local Democracy and Development: The Kerala People's Campaign for Decentralized Planning, Rowman and Littlefield Publishers, U S A
- M. A. Oommen (2007) A Decade of Decentralisation in Kerala: Experience and Lessons Ed., Har-Anand Publications
- T. R. Raghunandan(2012), Decentralisation and Local Governments: The Indian Experience, Orient Blackswan, Hyderabad
- Vijayanand, S. M. (2005) Preparation of development plans. Thiruvananthapuram, Kerala State Planning Board, pp. 1-9.
- World Bank Report (2011) Social Protection for a change in India, Volume-2, World Bank
- Péter Tamás Bauer (1972) Dissent on development: studies and debates in development economics Harvard University Press, U S A
- Alkire and Foster (2007) Counting and Multidimensional Poverty Measurement, Journal of Public Economics, Pp-476-487
- Government of Kerala (2005), Human development Report-2005, State planning board, Government of Kerala, Thiruvanthapuram
- Government of India (2013) Economic Survey of India, GOI, New Delhi
- K S Prabu (2011)Inequality adjusted Human Development Index for Indian States, U N D P, New Delhi
- B K Prakash (2009) The Indian Economy since 1991: Economic reforms and performance, Pearson Publications

ELECTIVE I
(Elective with 4 Credits)

ELECTIVE II
(Elective with 3 credits)

SEMESTER IV

ELECTIVE III
(4 credits)

ELECTIVE IV
(3 credits)

DISSERTATIONS
(6 credits)