COURSE STRUCTURE

[Choice Based Credit System (CBCS)]

FOR UNDERGRADUATE IN ECONOMICS (B.A. HONOURS & GENERAL)

2022

DEPARTMENT OF ECONOMICS

NAGALAND UNIVERSITY

HQ: LUMAMI

HONOURS COURSES

		110111	JUKS COURSES
CORE CO	URSES		
Semester	Code No.	Course Code	Course Title
I	CC 1	EC1.CC1	Introductory Microeconomics
	CC 2	EC1.CC2	Mathematical Methods for Economics – I
TT	CC 3	EC2.CC3	Introductory Macroeconomics
II	CC 4	EC2.CC4	Mathematical Methods for Economics – II
	CC 5	EC3.CC5	Intermediate Microeconomics – I
III	CC 6	EC3.CC6	Intermediate Macroeconomics – I
	CC 7	EC3.CC7	Statistical Methods for Economics
	CC 8	EC4.CC8	Intermediate Microeconomics – II
IV	CC 9	EC4.CC9	Intermediate Macroeconomics – II
	CC 10	EC4.CC10	Introductory Econometrics
N/	CC 11	EC5.CC11	Indian Economy – I
V	CC 12	EC5.CC12	Development Economics – I
VI	CC13	EC6.CC13	Indian Economy – II
V I	CC 14	EC6.CC14	Development Economics - II
	DISCIPLI	NE SPECIFIC EL	
		EC5.DSE-1.1	Political Economy – I
	*DSE – 1	EC5.DSE-1.2	Applied Econometrics
V		EC5.DSE-1.3	Economic History of India (1857 – 1947)
V		EC5.DSE-2.1	Economics of Health and Education
	*DSE-2	EC5.DSE-2.2	Money and Financial Markets
		EC5.DSE-2.3	Public Economics
		EC6.DSE-3.1	Political Economy – II
	*DSE – 3	EC6.DSE-3.2	Comparative Economic Development (1850-1950)
VI		EC6.DSE-3.3	International Economics
V I		EC6.DSE-4.1	Environmental Economics
	*DSE -4	EC6.DSE-4.2	Financial Economics
		EC6.DSE-4.3	Dissertation/Project
		HANCEMENT C	
III	SEC 1	EC3.SEC1	Methods of Data Analysis**
IV	SEC 2	EC4.SEC2	Computer Application in Data Analysis**
		ELECTIVE COL	
I	GE 1	EC1.GE1	Principles of Microeconomics–I ***
II	GE 2	EC2.GE2	Principles of Microeconomics–II***
III	GE 3	EC3.GE3	Principles of Macroeconomics–I***
IV	GE 4	EC4.GE4	Principles of Macroeconomics–II***
*From the	e given ontions	students are to choo	ose one paper each from DSE-1, DSE-2, DSE-3 and

^{*}From the given options, students are to choose one paper each from DSE-1, DSE-2, DSE-3 and DSE-4, respectively.

^{**}Students have the option to take SEC from the coomon pool of SEC courses across disciplines.

^{***}For Students of other departments who are taking up Economics as Generic Elective (GE)

[#] Subject specific semester wise course code: EC1= I semester, EC2= II semester, EC3=III semester, EC4=IV semester, EC5= V semester and EC6= VI semester

B.A. PASS COURSES

DISCIPLINE SPECIFIC COURSES (DSC)						
Semester	Code No.	Course Code	Course Title			
I	DSC 1A	EC1.DSC1A	Principles of Microeconomics-I			
II	DSC 1B	EC2.DSC1B	Principles of Microeconomics-II			
III	DSC 1C	EC3.DSC1C	Principles of Macroeconomics–I			
IV	DSC 1D	EC4.DSC1D	Principles of Macroeconomics-II			
	DISCIPLIN	E SPECIFIC ELECT	TIVE (DSE)			
	DISCH EII	EC5.DSE-1.1A	Political Economy – I			
	*DSE – 1	EC5.DSE-1. 2A	Indian Economy -I			
		EC5.DSE-1.3A	Economic History of India (1857 – 1947)			
V						
		EC5.DSE-2.1A	Development Economics – I			
	*DSE-2	EC5.DSE-2.2A	Economics of Health and Education			
		EC5.DSE-2.3A	Public Economics			
		EC6.DSE-3.1B	Political Economy – II			
	*DSE – 3	EC6.DSE-3.2B	Indian Economy -II			
		EC6.DSE-3.3B	Comparative Economic Development (1850-1950)			
VI						
	*DSE -4	EC6.DSE-4.1B	Development Economics – II			
		EC6.DSE-4.2B	International Economics			
		EC6.DSE-4.3B	Dissertation/Project			
		HANCEMENT COUR				
III	SEC 1	EC3.SEC1	Methods of Data Analysis **			
IV	SEC 2	EC4.SEC2	Computer Application in Data Analysis**			
V	SEC 3	EC5.SEC3	Financial Economics**			
VI	SEC 4	EC6.SEC4	Contemporary Economic Issues. **			
	GENERIC ELECTIVE PAPERS					
V	GE-1	EC5.GE1	Indian Economy – I***			
VI	GE-2	EC6.GE2	Indian Economy – II***			
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^{*}From the given options, students are to choose one paper each from DSE-1 or DSE-2, and DSE-3 or DSE-4.

Political Science/ Sociology/ History/ Business Management/ Commerce/ Mathematics/ Statistics/ Psychology/ Philosophy/ Geography/ Education.

Students from **both Economics honours and Pass** can choose Generic Electives (4 GE courses for Economics honours and 2 GE courses for BA pass) from across interdiscipilinary courses.

PoliticalScience/Sociology/History/BusinessManagement/Commerce/Mathematics/Statistic s/Psychology/Philosophy/Geography/ Education.

Subject specific semester wise course code: EC1= I semester, EC2= II semester, EC3=III semester, EC4=IV semester, EC5= V semester and EC6= VI semester.

^{**}Students have the option to take SEC from the common pool of SEC courses across disciplines.

^{***}For Students of other departments who are taking up Economics as Generic Elective (GE)

[❖] The students of B.A. (Pass) can choose any subject combinations from the subjects mentioned below:

CHOICE BASED CREDIT SYSTEM (CBCS)

SYLLABUS FOR UNDERGRADUATE ECONOMICS COURSE (BA HONOURS)

2022

NAGALAND UNIVERSITY
HQ: LUMAMI

Syllabus for B.A. (Honours) Economics Course Structure for B.A. (Hons.) Economics:

The B.A Economics Honours Programme consists of compulsory fourteen economics core courses that students are required to take across six semesters. In addition to core courses, four Discipline Specific Elective (DSE) Courses will be offered during the fifth and sixth semesters. It is recommended that colleges should offer at least three optional papers under each Discipline Specific Elective (DSE) Course to allow the students some minimal elements of choice. It is compulsory for the students to take two Skill Enhancement Courses (SEC) during third and fourth semester. Students have the option to take SEC from the courses offered by the department or the common pool of SEC courses across disciplines.

Further, the students of Economics are required to take four Generic Elective (GE) courses from across disciplines during first, second, third and fourth semesters. Likewise, the department also offers four GE courses for the students of other disciplines who choose Economics as Generic Elective (GE).

The syllabi for the Discipline Specific Elective (DSE) Courses are provisional and subject to revision.

Contact Hours: Each course has 5 lectures and 1 tutorial (per group) per week. The size of a tutorial group is 8-10 students.

Note on Course Readings: Given the nature of some courses, only selected readings can be specified in advance. Reading lists should be updated and topic-wise readings should be specified at regular intervals, ideally on an annual basis.

Annexure – II: New Course (CBCS Honours)

Semester	Code No.	Course Code	Course Title	Credits	Hours
I	CC 1	EC1.CC1	Introductory Microeconomics	6	90
	CC 2	EC1.CC2	Mathematical Methods for Economics – I	6	90
	AECC 1		AECC 1 (English/MIL)	2	30
	GE 1	EC1.GE1	Principles of Microeconomics–I***	6	90
п	CC 3	EC2.CC3	Introductory Macroeconomics	6	90
	CC 4	EC2.CC4	Mathematical Methods for Economics – II	6	90
	AECC 2		AECC 2 (EVS)	2	30
	GE 2	EC2.GE2	Principles of Microeconomics–II***	6	90
	CC 5	EC3.CC5	Intermediate Microeconomics – I	6	90
Ш	CC 6	EC3.CC6	Intermediate Macroeconomics – I	6	90
	CC 7	EC3.CC7	Statistical Methods for Economics	6	90
	SEC 1	EC3.SEC1	Methods of Data Analysis**	2	30
	GE 3	EC3.GE3	Principles of Macroeconomics–I***	6	90
IV	CC 8	EC4.CC8	Intermediate Microeconomics – II	6	90
	CC 9	EC4.CC9	Intermediate Macroeconomics – II	6	90
	CC 10	EC4.CC10	Introductory Econometrics	6	90
	SEC 2	EC4.SEC2	Computer Application in Data Analysis**	2	30
	GE 4	EC4.GE4	Principles of Macroeconomics–II***	6	90
V	CC 11	EC5.CC11	Indian Economy – I	6	90
	CC 12	EC5.CC12	Development Economics - I	6	90
	*DSE-1	EC5.DSE-1.1	Political Economy – I	6	90
		EC5.DSE-1.2	Applied Econometrics	6	90

		EC5.DSE-1.3	Economic History of India (1857 – 1947)	6	90
	*DSE-2	EC5.DSE-2.1	Economics of Health and Education	6	90
		EC5.DSE-2.2	Money and Financial Markets	6	90
		EC5.DSE-2.3	Public Economics	6	90
VI	CC13	EC6.CC13	Indian Economy – II	6	90
	CC 14	EC6.CC14	Development Economics - II	6	90
		EC6.DSE-3.1	Political Economy – II	6	90
	*DSE- 3	EC6.DSE-3.2	Comparative Economic Development (1850-1950)	6	90
		EC6.DSE-3.3	International Economics	6	90
		EC6.DSE-4.1	Environmental Economics	6	90
	*DSE-4	EC6.DSE-4.2	Financial Economics	6	90
		EC6.DSE-4.3	Dissertation/Project	6	90
1	Total Credit 140				

^{*}From the given options, students are to choose one paper each for DSE-1, DSE-2, DSE-3 and DSE-4, respectively.

Political Science/Sociology/History/BusinessManagement/Commerce/Mathematics/Statistics/Psychology/Philosophy/Geography/ Education.

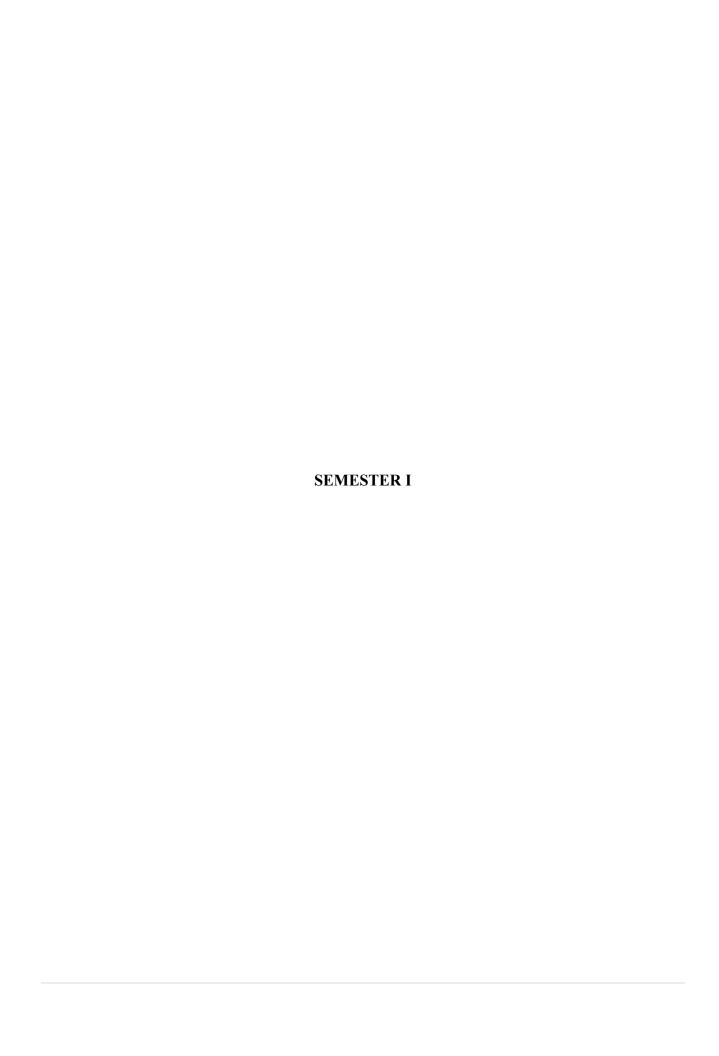
- ➤ CC = Core Course
- ➤ GE = Generic Elective
- ➤ AECC= Ability Enhancement Compulsory Course
- > SEC = Skill Enhancement Course
- > DSE = Discipline Specific Elective

Subject specific Code and Semester: EC1= I semester, EC2=II semester, EC3= III semester, EC4= IV semester, EC5= V semester and EC6= VI semester.

^{**}Students have the option to take SEC from the common pool of SEC courses across disciplines.

^{***}For Students of other departments who are taking up Economics as Generic Elective (GE

^{***} Students from **both Economics honours and Pass** can choose Generic Electives (4 GE courses for Economics honours and 2 GE courses for BA pass) from across interdisciplinary courses given below:



Introductory Microeconomics (Core Course 1)

Course code: EC1.CC1

Credit: 6

Total No. of hours: 90 Hrs.

Core Course 1: Introductory Microeconomics

Course description:

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

UNIT – 1: Exploring the Subject Matter Of Economics

Concept, scope and methodology of economics; the basic economic problems; science of economics; role of price mechanism; economic systems

UNIT – II: Demand and Supply

Law of demand and supply; determinants of individual demand and supply; Market versus individual demand and supply; shifts in the demand and supply curves; Elasticity and its applications. Consumer and producer surplus.

UNIT – III: Consumer Theory

Utility approach – cardinal and ordinal; consumer preferences; indifference curves; the marginal rate of substitution; revealed preference- theorem and hypothesis.

UNIT - IV: Costs and Revenue

Costs and cost curves: Derivation of Short and long run cost curves and their relationships. Revenue and revenue curves under perfect and imperfect markets.

UNIT - V: Market Structure

Concept and features of Perfect and imperfect competition; the production process; Equilibrium of a firm and industry under perfect competitive market: short run and long run

Reading List

- 1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
- 2. N.GregoryMankiw, *Economics: Principles and Applications*, Indiaedition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
- 3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

Mathematical Methods for Economics – I (Core Course 2)

Course code:EC1.CC2

Credit: 6

Total No. of hours: 90 Hrs.

Course description:

This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Unit - I Sets and Functions

Sets – Concepts and types; Venn diagram; numbers of elements and Cartesian products. Functions – types of function and its applications; system of equations.

Unit – II: Number system

Uses of numbers; axiomatic properties of real number and completeness; complex numbers; graphical representation of complex number.

Unit -III: Analytical Geometry

Application of straight line; points and lines; slope of the line curves; distance and section formulas; parabola; circle.

Unit-IV: Differentiation

Functions and limits, Differentation; Rules of differentiation, Marginal revenue, average revenue, total revenue, marginal cost, average cost and total cost, Maxima and Minima, profit maximisation.

Unit-V: Integration of functions

Indefinite integrals - Rules of integration; Techniques of integration- substitution rule, integration by parts and partial fraction; Applications to economic problems; Derivation of total functions from marginal functions; Definite integrals - properties of definite integrals; Application in case of consumer's surplus and producer's surplus.

Reading List:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

GS Monga: Mathematics and Statistics for Economics.

Principles of Microeconomics–I (Generic Elective 1)

Course code: EC1.GE1

Credit: 6

Total No. of hours: 90 Hrs.

Course description:

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

UNIT – 1: Exploring the Subject Matter of Economics

Concept, scope and methodology of economics; the basic economic problems; science of economics; role of price mechanism; economic systems

UNIT – II: Demand and Supply

Law of demand and supply; determinants of individual demand and supply; Market versus individual demand and supply; shifts in the demand and supply curves; Elasticity and its applications. Consumer and producer surplus.

UNIT – III: Consumer Theory

Utility approach – cardinal and ordinal; consumer preferences; indifference curves; the marginal rate of substitution; revealed preference

UNIT - IV: Costs and Revenue

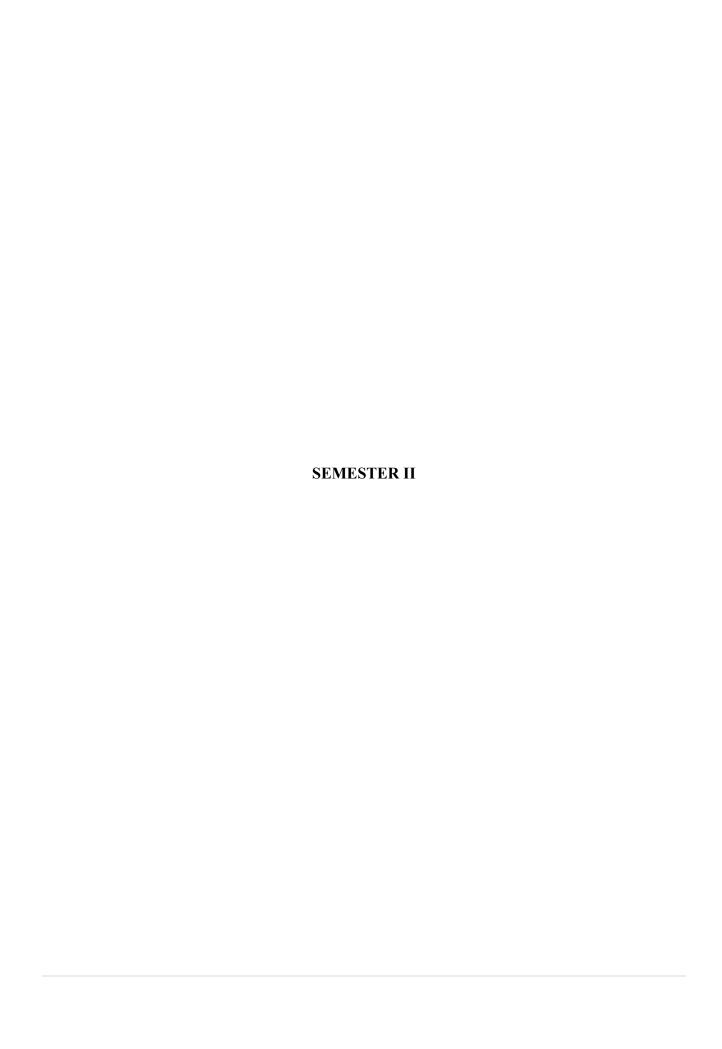
Costs and cost curves: Derivation of Short and long run cost curves and their relationships. Revenue and revenue curves under perfect and imperfect markets.

UNIT – V: Market Structure

Concept and features of Perfect and imperfect competition; the production process; Equilibrium of a firm and industry under perfect competitive market: short run and long run

Reading List

- 1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
- 2. N.GregoryMankiw, *Economics:Principles and Applications*,IndiaeditionbySouth Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition,2007.
- 3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.



Introductory Macro Economics (Core Course 3)

Course code: EC2.CC3

Credit: 6

Total No. of hours: 90 Hrs.

Course Outline:

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Unit -I: Introduction to Macroeconomics

Meaning: Nature and Scope of Macroeconomics.

Concepts, definition, importance and methods of measuring National Income; difficulties in measuring National Income; Circular Flow of income; two sector and three sector model.

Unit – II: Theories of Income and Employment.

The Classical Theory of Employment (Say's Law and Pigou's Wage Cut Policy). Keynesian systems- Simple Keynesian model of income determination; Aggregate Demand and Aggregate Supply, equilibrium aggregate output. Fiscal and Monetary multipliers.

Unit – III: Money

Definition of Money-Functions of Money: Quantity Theory of Money. Money Supply: Measures of Money Supply. Credit Creation: Tools of Monetary Policy.

Unit – IV: Inflation

Inflation – meaning, types, causes and effects; demand-pull and cost-push inflation, Inflationary gap. Deflation – meaning, effects; Inflation Vs. deflation; Hyperinflation - causes of hyperinflation, costs of hyperinflation; Anti-Inflationary Measures - Monetary policy and Fiscal policy, Trade-off between Inflation and Unemployment (Philip's Curve).

Unit -V. Balance of Payments

Meaning and components of BOP; Equilibrium; causes of disequilibrium in the BOP; measures to control deficit in the BOP; BOP and BOT. Adjustment mechanisms of BOPs.

Reading List

Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.

N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition,2010.

Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition,2009. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition,2005.

Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition,2011.

Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.

Paul R. Krugman, Maurice Obstfeld and Marc Melitz, International Economics, Pearson Education Asia, 9th edition, 2012.

Mathematical Methods for Economics – II (Core Course 4)

Course code: EC2.CC4

Credit: 6

Total No. of hours: 90 Hrs.

Course Outline:

This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Unit -1. Matrix Algebra

Matrix – different types and its elementary operations; Rank of Matrix, simultaneous solution; Determinants – basic operations, properties and solution, Cramer's rule.

Unit-II. Partial and total differentiation

Partial differentiation and marginal product; Further application of partial differentiation; Second order partial differentiation; Unconstrained optimization with two variables; Total differentiation.

Unit-III. Constrained optimization (with equality constraints)

Constrained optimization by substitution; Lagrange multiplier; constrained maximization and minimization with two variables; Constrained optimization with more than two variables two variables.

Unit-IV. Unconstrained optimization

First order for maximum and minimum; second order condition for maximum and minimum Profit maximization; Inventory control.

Unit-V. Differential and difference Equations.

Basic principles of differential equation; Solution of differential equation; first order of differential equation; Definition and Solution of Difference equation; first order of difference equation.

Reading List

Rosser Mike, 2003, Basic Mathematics for Economist, second edition, Routledge Publication. Monga GS, 2002, Mathematics and statistics for economics, second edition, Vikas Publication. Yamane Taro, 1998, mathematics for economist, second edition, Prentice hall India publication.

Principles of Microeconomics—II (Generic Elective 2)

Course code: EC2.GE2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This is a sequel to Principles of Microeconomics—I covered in the first semester. The objective of the course is the same as in Principles of Microeconomics I.

UNIT-I: Consumer Theory I

Preferences and Utility: Axioms of Rational Choice, Utility, Trades and SubstitutionsIndifference Curves, Utility Functions for Specific Preferences, The Many-Good case Utility Maximization and Choice: The Two-Good Case (Graphical Analysis), the n-Good Case, Indirect Utility Function, The Lump Sum Principle, Expenditure Minimization, Properties of Expenditure Function.

UNIT -II: Consumer Theory II

Income and Substitution Effects - under Normal, Inferior and Giffen goods (Hicksian and Slutsky's) Slutsky's equation, Compensated and ordinary demand curves; buying and selling; choice under risk and inter-temporal choice; revealed preference theory.

UNIT-III: Production function

Technological relationship between outputs and inputs, Basic Concepts: TP, AP, MP, Isoquant, properties of isoquant, Isoquant map, Marginal Rate of Technical Substitution, Elasticity of Substitution, Expansion path, returns to scale; Production with One Variable Input (labour) and with Two-Variable Inputs Special cases of Production Functions -Linear, Fixed Proportions, Cobb-Douglas.

UNIT-IV: Cost Theories

Traditional and modern theory of cost; recent development in cost theory; Analysis of economies of scale – real and pecuniary.

Unit-V: Labour Market

Labour markets: basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; labour demand curves; shifts in labour demand curves; competitive labour market and public policy.

Reading List:

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition, 2007.



Intermediate Microeconomics-1 (Core Course 5)

Course code: EC3.CC5

Credit: 6

Total No. of hours: 90 Hrs.

Course Outline:

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

Unit-I: Consumer Theory I

Preferences and Utility: Axioms of Rational Choice, Utility, Trades and Substitutions; Indifference Curves, Utility Functions for Specific Preferences, The Many-Good case

Utility Maximization and Choice: The Two-Good Case (Graphical Analysis), The n-Good Case; Indirect Utility Function, the Lump Sum Principle, Expenditure Minimization, Properties of Expenditure Function.

Unit-II: Consumer Theory II

Income and Substitution Effects - under Normal, Inferior and Giffen goods (Hicksian and Slutsky's) Slutsky's equation, Compensated and ordinary demand curves; buying and selling; choice under risk and inter-temporal choice; revealed preference theory.

Unit-III: Production function

Technological relationship between outputs and inputs, Basic Concepts: TP, AP, MP, Isoquants, properties of isoquants, Isoquant map, Marginal Rate of Technical Substitution, Elasticity of Substitution, Expansion path, returns to scale; Production with One Variable Input (labour) and with Two-Variable Inputs. Special cases of Production Functions -Linear, Fixed Proportions, Cobb-Douglas.

Unit -IV: Cost Theories

Traditional and modern theory of cost; recent development in cost theory; Analysis of economies of scale – real and pecuniary

Unit-V: Labour Market

Labour markets: basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; labour demand curves; shifts in labour demand curves; competitive labour market and public policy.

Reading List:

- Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
- C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
- B. Douglas Bernheim and Michael D. Whinston, *Microeconomics*, Tata McGraw-Hill (India), 2009.

Intermediate Macroeconomics-1 (Core Course 6)

Course code: EC3.CC6

Credit: 6

Total No. of hours: 90 Hrs.

Course Outline:

This course introduces the students to formal modeling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.

Unit-I: Consumption Function

Short run and long run consumption functions; APC, MPC, APS, MPS, Fundamental Psychological Law of Consumption and its Implications; Theories of Consumption - Absolute, Relative, permanent and life cycle hypothesis

Unit-II: Investment Function

Gross and Net, Induced and Autonomous Investment; Marginal Efficiency of Investment (MEI). Marginal Efficiency of Capital (MEC) and its measurement, short-run and long-run Factors, Investment multiplier and accelerator principle.

Unit III: Theories of Interest

The Classical theories of Interest, Loanable Fund theory, Keynes Liquidity Preference theory of Interest, Modern theory of Interest.

Unit IV: Theories of Trade Cycle

Meaning, phases of business cycle, Hawtray's Monetary theory of Trade cycle, Schumpeter theory of innovations, Kaldor's theory of trade cycle, Samuelson's model, Hicks model of trade cycle.

Unit V: Open Economy Model

Short Run Open Economy Model, Mundell Fleming model, Expenditure Switching policies, the Mint parity theory, and Purchasing Power Parity, Assets Market approach: Dornbuch's Overshooting Model, International Financial Markets.

Reading List

Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition,2010.

N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition,2010.

Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.

Steven M. Sheffrin, *Rational Expectations*, Cambridge University Press, 2ndedition, 1996.

Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.

Errol D'Souza, Macroeconomics, Pearson Education, 2009

Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Statistical Methods for Economics (Core Course 7)

Course code: EC3.CC7

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This is a course on statistical methods for economics. The course is basically concentrated of sampling and probability. The course begins with basic concepts that are fundamental to statistical analysis and inference followed the principal steps that are essential for sample survey and its methods are discussed. The concepts and theorems of probability are also taught which then follows with discussions on random variables. The course concludes with the study of probability distribution such as properties of discrete and continuous series.

Unit-I: Introduction to Statistics.

Basic concepts, importance and limitations of statistics; primary and secondary data, sampling and census; questionnaire, interview and observation methods of collecting data.

Unit- II: Sampling

Principal steps in a sample survey; methods of sampling (probability and non-probability); Merits and limitations of sampling, sampling and non-sampling errors.

Unit- III: Measure of Central Tendency and Dispersion

Measures of central tendency-Mean, Median and Mode, Measure of Dispersion: Range, Quartile deviation, Mean deviation, Standard deviation, Variance and Coefficient of variation, Moments, Skewness and Kurtosis.

Unit IV: Elementary Probability

Probability - concepts of Sample Space and Events, Probability of an Event, Addition and Multiplication Theorems, Conditional Probability and Independence of Events, Inverse Probability, Bayes' Rule, Mathematical Expectation.

Unit- V: Time Series and Index Numbers

Time series analysis- concept and components, measurement of trend, determination of seasonal variations. Index numbers- concept, methods of constructing index numbers (Laspeyers, Paaches and Fishers index, Family budget method, Chain index numbers), Problems in construction and limitation of index numbers.

Reading List:

Gupta, S. P. and V. K. Kapoor, (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi

Larsen, Richard J. and Morris L. Marx (2011), *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall.

Cochran, William G. (2007), Sampling Techniques, Jon Wiley.

Methods of Data Analysis [Skill Enhancement Course (SEC)-1]

Course code: EC3.SEC1

Credit: 2

Total No. of hours: 30 Hrs.

Course Description

This course introduces the student to collection and presentation of data. It also focuses on how data can be summarized and analyzed for drawing statistical inferences.

Unit- I: Sources of Data

Sources of data, Population census versus sample surveys, Random sampling.

Unit- I: Frequency distributions & measures of central tendency and dispersion

Univariate and Bivariate frequency distributions. Measures of central tendency: mean median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and kurtosis.

Unit- III: Correlation and Regression

Correlation and regression, Rank correlation.

Unit- IV: Probability Theory

Introduction to probability theory. Notions of random experiment, sample space, event, probability of an event. Conditional probability. Independence of events. Random variables and probability distributions. Binomial and normal distributions.

Unit-V: Index Numbers

Basics of index numbers, price and quantity index numbers.

Reading List:

P.H. Karmel and M. Polasek (1978), Applied Statistics for Economists, 4thedition, Pitman.

M.R. Spiegel (2003), Theory and Problems of Probability and Statistics (Schaum Series).

Principles of Macroeconomics-I (Generic Elective 3)

Course code: EC3.GE3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course aims to introduce the students to the basic concepts of Macroeconomics. This course focuses on the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Unit -I: Introduction to Macroeconomics

Meaning: Nature and Scope of Macroeconomics; Concepts, definition, importance and methods of measuring National Income; difficulties in measuring National Income; Circular Flow of income; two sector and three sector model.

Unit – II: Theories of Income and Employment.

The Classical Theory of Employment (Say's Law and Pigou's Wage Cut Policy). Keynesian systems- Simple Keynesian model of income determination; Aggregate Demand and Aggregate Supply, equilibrium aggregate output. Fiscal and Monetary multipliers.

Unit – III: Money

Definition of Money-Functions of Money: Quantity Theory of Money. Money Supply: Measures of Money Supply. Credit Creation: Tools of Monetary Policy.

Unit – IV: Inflation

Inflation – meaning, types, causes and effects; demand-pull and cost-push inflation; Inflationary gap. Deflation – meaning, effects; Inflation Vs. deflation; Hyperinflation - causes of hyperinflation, costs of hyperinflation; Anti-Inflationary Measures - Monetary policy and Fiscal policy, Trade-off between Inflation and Unemployment (Philip's Curve).

Unit -V: Balance of Payments

Meaning and components of BOP; Equilibrium; causes of disequilibrium in the BOP; measures to control deficit in the BOP; BOP and BOT. Adjustment mechanisms of BOPs.

Reading Lists:

Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition,2010.

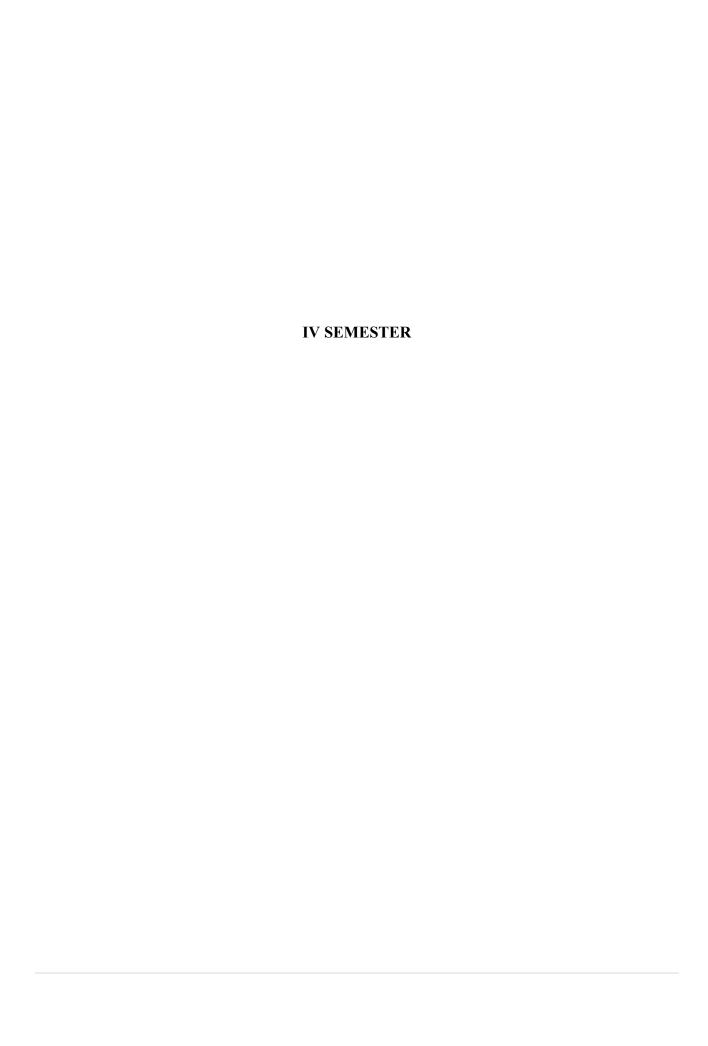
N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition,2010.

Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.

Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.

Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.

Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.



Intermediate Microeconomics – II (Core Course 8)

Course code: EC4.CC8

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course is a sequel to Intermediate Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.

Unit- I: Wages and Rent

Wage differential; marginal productivity theory of wages; modern theory of wage. Rent- concepts; scarcity rent, differential rent; quasi rent; Ricardian theory of rent

Unit- II: Interests and Profits

Interest: Classical and neo-classical; Profits: innovation, risk and uncertainty

Unit- III: Welfare Economics

General equilibrium analysis; Equilibrium and efficiency under pure exchange and production; Equity and efficiency, the efficiency of competitive markets; Welfare economics - Nature, scope and concept; criterion of measuring social welfare - Paternalist, Cardinalist, Pareto and Bentham, welfare maximization; value judgment

Unit- IV: Imperfect Market Structure

Monopoly: pricing with market power; price discrimination. Monopolistic competition: short-run and long-run, Chamberlin. Oligopoly: Cournot and Sweezy.

Unit-V: Market Failure

Meaning of Externalities, externalities in consumption and production, externalities and allocative inefficiency. Solutions to the externality problem - the Coase theorem; Public goods, Government intervention of public goods; Asymmetric information - complex contracts, principal-agent problem, hidden actions, owner manager relationships, moral hazards, adverse selection, signalling.

Reading List

Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, 8thedition, W.W. Norton and Company/Affiliated East-West Press (India), 2010. The workbook by Varian and Bergstrom could be used for problems.

C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India),2010.

Intermediate Macroeconomics-II (Core Course 9)

Course code:EC4.CC9

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course is a sequel to Intermediate Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

Unit-I: Supply of Money

Financial Intermediation; Money supply and High-Powered Money; money multiplier; Mechanistic model of bank deposit determination, Behavioural model of money supply determination

Unit- II: Post Keynesian Theories of Demand for Money

Patinkin's Real Balance Effect, Tobin portfolio approach, Baumol Inventory Approach Friedman Quantity Theory Approach

Unit- II: Monetary Policy

Monetary policy objectives and targets, 'H' Theory of Money, Money Multiplier, RBI's monetary policy. Role of Monetary policy, Recent Development in Indian Monetary System.

Unit-IV: Fiscal Policy

Fiscal policy objectives and targets, Role of Fiscal policy and economic stabilisation; crowding-out Effect and effectiveness of Fiscal policy; Recent Developments in Indian Fiscal System.

Unit- V: Banking Sector

Central Bank, Commercial banks, Regional Rural Banks, Cooperative and Non-Banking Financial Corporations and Microfinance Institutions.

Reading List

Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition,2010. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition,2010. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition,2009. Charles I. Jones, *Introduction to Economic Growth*, W.W. Norton & Company, 2nd edition,2002.

Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.

Errol. D'Souza, *Macroeconomics*, Pearson Education, 2009.

Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011.

Introductory Econometrics (Core Course 10)

Course code: EC4.CC10

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course provides a comprehensive introduction to basic econometric concepts and techniques. The course adopts a step-by-step approach of introducing students to the concepts and techniques of econometric analysis. The course begins with an introduction to the definitions and scope of econometrics. Then students will be introduced to simple and multiple regression models and the issues involved in Classical Linear Regression Modelling. There is a separate unit to discuss the use of dummy variables in econometric analysis. The course also covers the consequences of and tests for misspecification of regression models.

Unit-I: Introduction

Definition and scope of econometrics; Methodology of econometric research; Historical origin of the term regression and its modern interpretation; Statistical vs. deterministic relationship; regression vs. causation, regression vs. correlation; Terminology and notation; The nature and sources of data for econometric analysis.

Unit- II: Statistical Concepts

Normal distribution; chi-sq, t- and F-distributions; estimation of parameters; properties of estimators; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test; tests for comparing parameters from two samples.

Unit- III: Simple Linear Regression Model

Two Variable Case Estimation of model by OLS method: Assumptions; Properties of Least Square Estimators (BLUE) in SLRM: Gauss-Markov Theorem; Testing of regression coefficient; Test for regression as a whole: Coefficient of determination.

Unit- IV: Multiple Linear Regression Model

Multiple Regression Analysis: The problem of estimation, notation and assumptions; meaning of partial regression coefficients; the multiple coefficients of determination: R^2 and the multiple coefficients of correlation; R^2 and adjusted R^2 ; partial correlation coefficients; interpretation of multiple regression equation.

Unit-V: Relaxing the Assumptions of CLRM

Introduction to Multicollinearity, Heteroscedasticity & Autocorrelation: the nature of the problem; its detection and corrective measures.

Reading List:

Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2014). *Essentials of Statistics for Business and Economics*. Boston: Cengage Learning.

Gujarati, D. N., Porter, D.C., &Gunasekar, S. (2017). *Basic Econometrics*. (5thed.). New Delhi: McGraw-Hill.

Gupta, S. P. and V. K. Kapoor, (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.

Sharma, J. K. (2010). Fundamentals of Business Statistics. (2nded.). New Delhi: Vikas Publishing House.

Studenmund, A. H. (2016). Using Econometrics: A Practical Guide. (7thed.). New Delhi: Pearson.

Koutsoyiannis, A. (1973). Theory of Econometrics. New York: Harper & Row.

Wooldridge, J. M. (2014). *Introductory Econometrics: A Modern Approach* (4thed.). New Delhi: Cengage Learning.

R. Carter Hill, William E Grifiths and George Judge, Undergraduate Econometrics.

Computer Application in Data Analysis [Skill Enhancement Course (SEC)- 2]

Course code: EC4.SEC2

Credit: 2

Total No. of hours: 30 Hrs.

Course Description:

This is a course on computer application in data analysis. The students will be given hands on training on using statistical and computing software to better visualize and understand data concepts.

Unit- I: Introduction and Overview

Meaning; Scope of statistics; Importance and limitation of statistics Collection of Data; Classification of data: Meaning, methods of classification; Tabulation of data: meaning, role, parts of a table; General rules of tabulation.

Unit-II: Data Management with MS-excel

Excel Basics, Cell Referencing (Relative, Absolute, Mixed), Cell Formatting, Functions in excel (SUM, AVERAGE, COUNT, MAX, MIN, IF), sorting data, filtering data (Auto and Advanced), Hyper linking. Measures of Central Tendency: Mean, Median and Mode; Geometric and Harmonic means; Measures of Dispersion: Range, interquartile range and quartile deviation, mean deviation, standard deviation, Moments, Skewness and Kurtosis; Partition Values: Software applications using MS-Excel.

Unit-III: Data representation and Visualisation

Presentation of data; Diagrams and graphs: General rules for construction a diagram; Types of diagrams; Types of graphs- line graph, bar graph, pie chart, histogram, scatter plot; Software applications using MS-Excel. MS-power point preparation and presentation

Unit-IV: Correlation and Linear Regression Model

Correlation Analysis: Meaning, types of correlation; Methods of studying correlation: Scatter diagram method, Karl Pearson's coefficient of correlation, Spearman's rank method; Testing the significance of the correlation coefficient; Method of least squares: Introduction, estimation, the standard error of estimate, the coefficient of determination, properties of the OLS estimator. Software applications using MS-Excel.

The evaluation and mark distribution pattern for this paper will be as follows:

Theory: 40 marks Practical: 60 marks.

Reading List:

Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2014). *Essentials of Statistics for Business and Economics*. Boston: Cengage Learning.

Englewood Cliffs, N.J., Techniques and Applications, Prentice Hall

Levine, D. M. (2005). Statistics for Managers Using Microsoft Excel (5th ed.). New York: Prentice

Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.

Sanders D.H. (1988), Computers Today, McGram Hill (3rd Edition) Intrilligator, M.D. (1978), Economic Models.

Principles of Macroeconomics—II (Generic Elective 4)

Course code: EC4.GE4

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This is a sequel to Principles of Macroeconomics–II. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy.

Unit-I: Consumption Function

Short run and long run consumption functions; APC, MPC, APS, MPS. Fundamental Psychological Law of Consumption and its Implications. Theories of Consumption - Absolute, Relative, permanent and life cycle hypothesis

Unit-II: Investment Function

Gross and Net, Induced and Autonomous Investment. Marginal Efficiency of Investment (MEI). Marginal Efficiency of Capital (MEC) and its measurement, Short run and Long run Factors, Investment multiplier and accelerator principle.

Unit- III: Theories of Interest

The Classical theories of Interest, Loanable Fund theory, Keynes Liquidity Preference theory of Interest, Modern theory of Interest.

Unit- IV: Theories of Trade Cycle

Meaning, phases of business cycle, Hawtray's Monetary theory of Trade cycle, Schumpeter theory of innovations, Kaldor's theory of trade cycle, Samuelson's model, Hicks model of trade cycle.

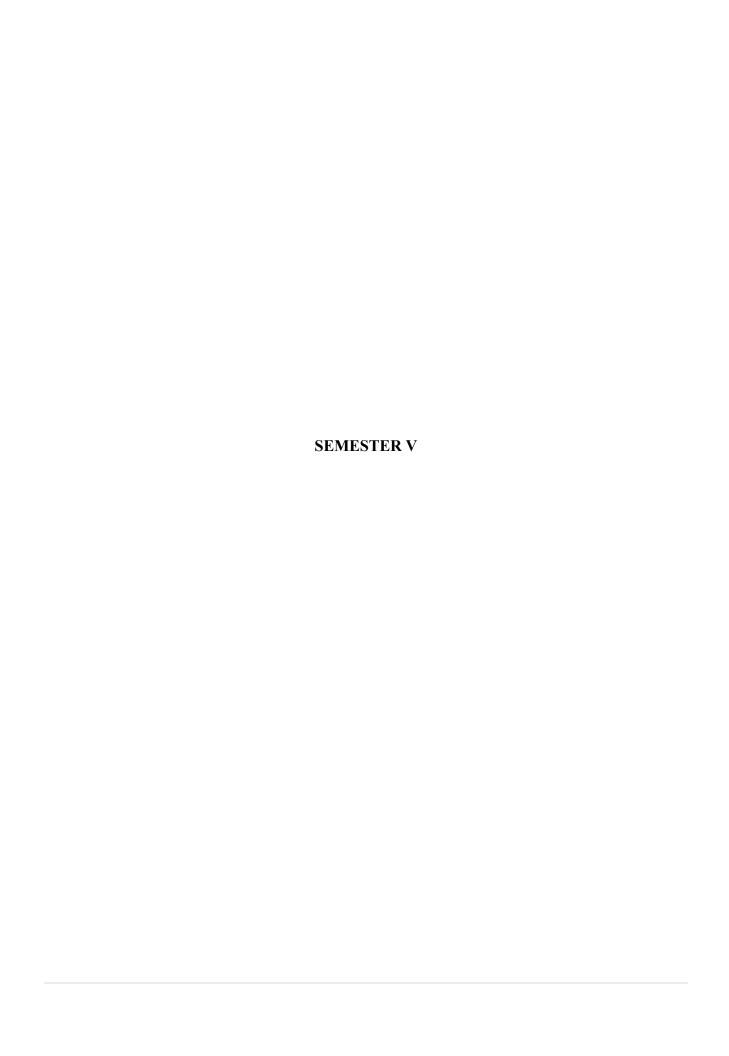
Unit- V: Open Economy Model

Short Run Open Economy Model, Mundell Fleming model, Expenditure Switching policies, the Mint parity theory, and Purchasing Power Parity, Assets Market approach: Dornbuch's Overshooting Model, International Financial Markets.

Reading List:

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition,2007.

Sikdar, Shoumyen, *Principles of Macroeconomics*, 2nd Edition, Oxford University Press,India



Indian Economy – I (Core Course 11)

Course code: EC5.CC11

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

Using appropriate analytical framework, this course reviews major trends in economic indicators. And policy debates in India in the post-Independence period with particular emphasis on paradigm shifts and turning points.

Unit- I: Economic Development Strategy since Independence

Characteristics of Indian Economy –dualistic, mixed and a planned developing economy; determinants of economic growth and developments; key and strategic role of PSUs; economic crises and NEP 1991

Unit – II: Demographic Features

Theory of Demographic Transition, Demographic features: Population size, growth, sex ratios, trends and policies. Rural – Urban Migrationand occupational structure.

Unit-III: Growth and Distribution

Poverty- Concept and Incidence of Poverty in India, Poverty estimates, Strategy of Poverty Alleviation Inequality- Income inequality in India - Magnitude and Nature, causes of income inequality, Government policies and measures, Unemployment- Nature and types of unemployment in India, Causes of unemployment and Government policies and measures.

Unit – IV: Economic Planning and National Income

Meaning and rational of Planning, Basic strategies, objectives and achievements of planning, inclusive development - NITI Aayog. Measures for growth performance, national income by industrial origin.

Unit – V: External Sectors

Role of Foreign Trade; Trends in export and imports; Composition and Direction of India's foreign trade; BOP crises; Export promotion measures and the new trade policy; Foreign capital - FDI and MNCs.

Readings List:

Jean Dreze and AmartyaSen, 2013. An uncertain Glory: India and its Contradictions, Princeton University Press.

PulapreBalakrishman, 2007, The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.

Himanshu, 2010, Towards New Poverty Lines for India, Economic and Political Weekly, January.

Development Economics – I (Core Course 12)

Course code: EC5.CC12

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This is the first part of a two-part course on economics of growth and development. The course begins with the fundamental concepts on growth and development. It then proceeds to aggregate model of growth and development and cross-national comparison of the growth experience that can help evaluate these models. The course ends by studying on investment and planning.

Unit – I: Concepts of Growth and Development

Meaning of economic development and underdevelopment; distinction between economic growth and development; measurement and indicators of economic development; factors affecting growth; importance of agriculture; industry and infrastructure in economic development

Unit – II: Theories of Economic Development

Classical theory of development – Adam Smith, Ricardo, Malthus and J. S. Mill; Karl Marx and Schumpeter; Development as freedom – Sen's view

Unit – III: Theories of Economic Growth

Harrod-Domar, Solow, Joan Robinson, Kaldor, Romar and convergence hypothesis

Unit – IV: Partial Theories of Growth and Development

Circular causation; Stages of growth; Big push theory; Balanced and Unbalanced growth

Unit – V: Investment and Planning

Meaning and need for planning, types of planning; Investment criterion, choice of technique in LDC; Project evaluation – cost – benefit analysis

Reading List:

Debraj Ray, Development Economics, Oxford University Press, 2009.

ParthaDasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.

Abhijit Banerjee, Roland Benabou and DilipMookerjee, *Understanding Poverty*, Oxford University Press, 2006.

KaushikBasu, The Oxford Companion to Economics in India, OUP, 2007.

AmartyaSen, Development as Freedom, OUP, 2000.

Daron Acemoglu and James Robinson, *Economic Origins of Dictatorship and Democracy*, Cambridge University Press, 2006.

Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, 1994

Political Economy – I [Discipline Specific Elective (DSE-1.1)]

Course code: EC5.DSE-1.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course explores changes in the organisation of production, labour market institutions and corporate structure. It goes on to study the consequences of globalization, especially of financial flows, for the role of the state, economic performance, gender issues, environment, human welfare and development.

Unit – I: Introduction and Overview

Introduction and Historical Overview Perspective on political economy with a historical overview: capitalist development in the pre-second world war period, "the golden age" and later.

Unit - II: Changing Dynamics in Production

Changing Dynamics of Capitalist Production, Organisational Form and Labour Process Fordist and Post-Fordist production; changing dynamics of organisation of production, markets and labour process; the changing nature of job security and labour rights.

Unit – III: Era of Globalisation

The State in the Era of Globalisation: Welfare, Development and Autonomy Globalisation and the limits of the welfare state, development and state autonomy.

Unit – IV: Social Dimensions

The Social Dimension, Globalisation and uneven development – growth, inequality and exclusion.

Unit – V: New Perspectives

New Perspectives Gender in work, accumulation and globalisation; issues in environment and sustainability; alternatives ahead.

Reading List:

Michel Beaud, A History of Capitalism, 1500-2000, trans. by Tom Dickman and Anny Lefebvre, New York: Monthly Review Press, 2001.

Ash Amin (ed.), Post-Fordism: A Reader, Blackwell, 1994.

Fran Tonkiss, Contemporary Economic Sociology: Globalisation, Production, Inequality, Chapter 4 (Fordism and After), Routledge India 2008 reprint, 2006.

Applied Econometrics [Discipline Specific Elective (DSE-1.2)]

Course code: EC5.DSE-1.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This course provides a comprehensive introduction to some of the advanced econometric concepts and techniques. The course begins with an introduction to lag modelling and covers distributed as well as dynamic models. Then the students will be introduced to the world of Simultaneous Equation Models and deals in depth with the issue of simultaneity and its solutions. The students will then be introduced to the analysis of two major types of data used in econometric analysis viz. time series and panel data. The course also covers different approaches to econometric forecasting. Some of the important testing procedures such as Granger Causality, Unit root tests, Seasonality tests, Structural break test, Co-integration test and Model stability tests will be introduced to the students during this course. The modules will be delivered using econometric software applications such as EViews, SPSS or STATA.

Unit- I: Regression Diagnostics and Specification

Specification Errors; types, Consequences and test of specificationerrors, Errors of measurements, incorrect specification of the stochastic error terms, Model selection Criteria; R2 criterion, AIC, SIC and Mallow's Cp criterion.

Unit-II: Panel Data Regression Model

Introduction to panel data; Constant coefficient model; Fixed effect LSDV model; Fixed effect WG model; Random effects model, Properties of estimators.

Unit-III: Dynamic Econometric Models

Lags in econometric models; Distributed lag model; Autoregressive lag model; Reasons for lags; Estimation of distributed-lag model, The Koyck Approach to distributed-lag model; Rationalisation of Koyck model: The adaptive expectations model, partial adjustment model; Estimation of autoregressive models; The method of instrument variable (IV); Causality in economics: The granger causality test.

Unit-IV: Simultaneous Equation Models

Nature of simultaneous equations models; Simultaneous equation bias; Structural models; Reduced form models; Identification problem; Rules of identification; Tests for simultaneity and exogeneity; Method of indirect least squares (ILS); Method of two-stage least squares.

Unit-V: Basic Concepts of Time Series Econometrics

Introduction to time series; Stationary and non stationary time series; Spurious regression; Unit root tests: Dickey fuller and Augmented dickey fuller tests; Transforming non-stationary time series; Co-integration: Testing for co-integration, error correction mechanism.

Reading List:

Jeffrey M. Wooldridge, *Econometrics*, CENGAGE learning, India Edition, 2009.

Dimitrios Asteriou and Stephen Hall, *Applied Econometrics: A Modern Approach*, Palgrave Macmillan, 2007.

Damodar Gujarati, Econometrics by Example, Palgrave Macmillan, 2011.

Economic History of India 1857-1947 [Discipline Specific Elective (DSE-1.3)]

Course code: EC5.DSE-1.3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course leads directly to the course of India's economic development after independence in 1947.

Unit - I: Colonial India

Background: Colonial Trade in India during pre-1857, Overview of colonial economy: drain of wealth; economic, social and religious impacts of colonisation in India.

Unit – II: Macro Trends

National income; Population; Occupational structure

Unit – III: Agriculture

Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines

Unit – IV: Railways and Industry

Railways: Role of railways in the colonial period. The deindustrialization debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the inter-war period; constraints to industrial breakthrough

Unit – V: Economy and State in the Imperial context

The imperial priorities and the Indian economy; International trade – direction and composition; Capital flows and the colonial economy – changes and continuities; Government and fiscal policy

Reading List:

- L. Subramaniam, History of India 1707-1857, Ch. 4, pp 129-179.
- C. A. Bayly, Indian Society and the Making of the British Empire, The New Cambridge Eco History of India. Orient Longman, 1987, Conclusion, pp 200-206.
- A.K. Bagchi, "Deindustrialisation in India in the Nineteenth Century: Some theoretical implications", Journal of Development Studies, 1976 (pp. 135-145)

[This reading should be used as an essential background to P. Parthasarathy's article in Section 4.]

Economics of Health and Education [Discipline Specific Elective (DSE-2.1)]

Course code: EC5.DSE-2.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course allows making decisions to improve health outcomes and lifestyles through the study of interactions between different stakeholders. In broad terms, health economists study the functioning of healthcare systems and factors determining health and quality of life of individuals. Health economics generally deals with the purpose and planning of budgeting which is required to be done in the health care delivery system for providing care.

Unit – I: Health, Education and Human Development

Concepts - Human development indices; linkages - income on human development, human development on income, education on agriculture, health on income, women and human development;

Unit - II: Education: An Investment in Human Capital

Rate of return to education; private and social investment on health; theories of discrimination; gender and caste in India; Education towards health care

Unit – III: Evaluation of Health Care

Health system; Costing, cost effectiveness and cost-benefit analysis; burden of diseases.

Unit - IV: Overview - Health and Education in India

Importance of health and education; health outcomes – life expectancy, infant mortality rate; growth of health institutions – private and public; education outcomes – literacy rate (gender-wise), enrolment ratio, growth of educational institutions – private and public.

Unit - V: Economic Growth and Human Development in India

State-wise -per capita income, NSDP, human development index, gender-related development index, human poverty index; happiness index;

Reading List:

Phelps, C. E. (2012). Health Economics. (5th ed.). London: Routledge.

Saterre, R. E, &Neun S P. (2007). *Health Economics: Theories, Insights and Industry Studies*. (5th ed.). New Delhi: Cengage Learning India Private Limited.

William, Jack, Principles of Health Economics for Developing Countries, World Bank Institute Development Studies, 1999.

World Development Report, Investing in Health, The World Bank, 1993.

Ronald G., Ehrenberg and Robert S., Smith, Modern Labor Economics: Theory and Public Policy, Addison Wesley, 2005.

Vero Y. Economic Growth and Human Development in Nagaland, Heritage Publishing House, Dimapur, 2016.

Money and Financial Markets [Discipline Specific Elective (DSE-2.2)]

Course code: EC5.DSE-2.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This course exposes students to theory and functioning of the monetary and banking sectors of the economy, with exclusive discussions on the Indian context. It discusses the monetary institutions, functions and determinants of money supply, commercial banking and monetary policy and interest rates.

Unit – I: Money

Evolution, concepts and functions of money, role of money, measurement; theories of money - demand and supply determination

Unit - II: Commercial Banks

Functions, role, credit creation and its limitations. Bank nationalization – rationale and review.

Unit – III: Central Banking and Monetary Policy

Functions and role in developed and developing economies; targets and constraints of monetary policies; instruments of monetary controls; monetary management in an open economy and current monetary policy in India

Unit – IV: Banking System

- a. Balance sheet and portfolio management objectives and theories of portfolio management
- b. Indian banking system; changing role and structure; banking sector reforms

Unit – V: Interest Rates

Determination, sources of interest rate differential; theories of term structure of interest rate; interest rates in India.

Reading Lists

Ball, L. (2011). Money, Banking and Financial Markets. Macmillan.

Burton, M., & Brown, B. (2014). Financial System of the Economy: Principles of Money and Banking: Principles of Money and Banking. Routledge.

Durlauf, S. N., and Blume, L. (2010). Monetary Economics. Palgrave McMillan

Handa, J. (2009). Monetary Economics. Routledge.

- Jayadev, M. (2013). Basel III Implementation: Issues and Challenges for Indian banks. IIMB Management Review, 25(2), 115-130.
- Mishkin, F. S. (2007). The Economics of Money, Banking, and Financial Markets. Pearson Education.
- Reinhart, C. M., & Rogoff, K. S. (2009). This Time is Different: Eight Centuries of Financial Folly. Princeton University Press.
- Sen, S., & Ghosh, S. K. (2005). Basel Norms, Indian Banking Sector and Impact on Credit to SMEs and the Poor. Economic and Political Weekly, 40(12), 1167-1180

Public Economics (Discipline Specific Elective (DSE-2.3)]

Course code: EC5.DSE-2.3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The paper is divided into two sections, one dealing with the theory of public economics and the other with the Indian public finances.

Unit - I: Introduction

Public Finance: meaning and scope, distinction between public and private finance; public good verses private good; Market failure and role of government, Externalities.

Unit- II: Public Expenditure

Theories of public expenditure- Wagner's law of increasing state activities – Peacock Wisemans hypothesis- Principle of Maximum Social advantage –Growth and pattern of public expenditure, Effects of public expenditure-Cost benefit analysis.

Unit- III: Taxation & Public Debt

Approaches to taxation- Benefit approach, Ability to pay approach and Neutrality approach Elasticity and buoyancy of taxation-incidence and shifting of taxation-Types and classification of taxes and VAT, Approaches to public debt.

Unit- IV: Fiscal Policy & Federal Finance

Definition of fiscal policy and its objectives; Fiscal Policies for redistribution of income and wealth and stabilization – fiscal policies in a developing country, federal financial structure and its main features – Direct taxes-Income tax-Corporate tax. Indirect tax structure- Union excise duties, customs duties, sales tax –VAT, Centre-State financial Relations.

Unit- V: Budget

Budget – Classification of budgets –Economic, Functional, organizational, classification of budgets- performance programming and zero based budgets- surplus, balanced and deficit budgets- Concepts of budget deficit and their implications – State and Central budgets. Fiscal crisis and Fiscal sector reforms in India; Reports on Finance Commissions in India.

Reading List

Atkinson, A Band J.E Siglitz (1980) :Lecturers on Public Economics, Tata McGraw Hill, New York..

Buchanan, J M (1970): The Public Finances, Richard D Irwin, Homewood.

Goode, R (1986): Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.

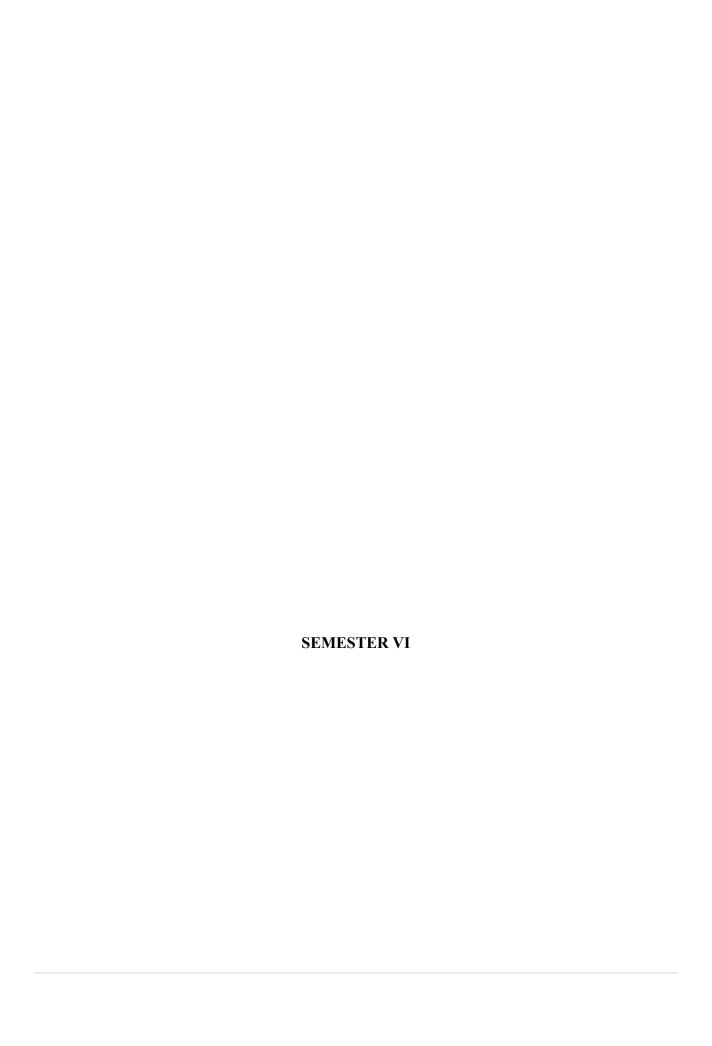
Houghton, J M (1970): The Public Finance: Selected Readings, Penguin, Harmondsworth.

Jha, R (1998): Modern Public Economics, Routledge, London.

Menutt, P (1996): The Economics of Public Choice, Edward Elgar, U.K.

Musgrave, R A and P.B. Musgrave (1976): Public Finance in Theory and Practice, McGraw Hill,

Kogakusha, Tokyo.



Indian Economy - II (Core Course 13)

Course code: EC6.CC13

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course examines sector specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. The course ends by studying the Nagaland Economy. Given the rapid changes in the country, the reading list will have to be updated annually.

Unit-I: Macroeconomic Policies and their Impact

Fiscal reform measures in the context of India's New Economic Policy, Fiscal Responsibility and Budget Management (FRBM) Act, Goods and Service Tax(GST)- objectives and performance, Monetary Reforms and its impact, Black money and Parallel economy in India- consequences and corrective government intervention,.

Unit-II: Policies and Performance in Agriculture

Changing structure of Indian Agriculture, Growth and productivity of Agriculture, Sustainable agriculture- concept and constraint, Diversification of Agriculture, Capital formation, Role of technology, Green revolution, Institutions- land reforms, rural credit, agricultural marketing, and price policy and WTO and Agriculture

Unit-III: Policies and Performance in Industry

Pattern of Industrialization, Industrial growth and productivity in the post reform period, Diversification of industries, Public Sector reforms, Disinvestment and Privatization, MSME Sector, Industrial Policy reforms, Foreign Investment in the Industrial sector,

Unit-IV: Trends and Performance in Services

Role of the service sector in the Indian Economy, Growth and composition of the service sector Composition and direction of foreign trade, Trend in merchandise trade and invisibles, Balance of payments position- Pre and Post Reform period, Trade in services and WTO

Unit - V: Economy of Nagaland

Natural resources; population and occupational structure; PCI and NSDP;Structural composition; infrastructure (Physical and Social); agricultural and industrial development –problems and prospects.

Reading list:

NUTA, Economic Development in Nagaland; Prospects and Constriants.

Misra S.K. and Puri V.K. – Indian Economy. Its Development and Experiences. Himalayan Publishing House.

Vero, Y. 2018 - Nagaland Economy: Its Elementary Features, Rainbow Publications, Guwahati.Rakesh Mohan, 2010,-India's Financial Sector and Monetary Policy Reforms, lin Shankar

Acharya and Rakesh Mohan, editors, *India's Economy:Performances and Challenges:* Development and Participation, Oxford UniversityPress.

PulapreBalakrishnan, Ramesh Golait and PankajKumar, 2008,-Agricultural Growth in India Since 1991, *RBI DEAP Study no.27*.

B.N. GoldarandS.C. Aggarwal, 2005,-Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.

P. Goldberg, A. Khandelwal, N. Pavcnikand P. Topalova, 2009, – Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May. Kunal Sen, 2010, – Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.

Development Economics – II (Core Course 14)

Course code: EC6.CC14

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

Unit – I: Poverty and Inequality

Concept and Measures of poverty- Head count ratio, Sen's Index, HPI, MPI Inequality measures-Gini Coefficient and Lorenz Curve, PQLI, HDI, GDI, GEM Connections between inequality and development Mechanisms that generate poverty traps and path dependence of growth processes.

Unit – II: Dualism and Economic Development

Dualism – geographic, social and technological Myrdal's theory of cumulative causation The regional inequalities in the context of economic development Inverted U relationship between spatial inequality and economic development; the centre periphery thesis

Unit – III: Financing Economic Development

Saving, capital formation and economic development; Financial sector and economic development; Micro credit and economic development; Taxation, public borrowing and economic development

Unit – IV: Environment and Sustainable Development

Development and Environment inter-linkage, Environment-Development Kuznet's U shape relationship, Economic activity and climate change, environmental externalities and state regulations of the environment, Concept of Green G.D.P and Sustainable development

Unit – V: Globalisation

Globalisation in historical perspective, the economics and the politics of multilateral agreements, trade, production patterns and world inequality; financial instability in the globalised world

Reading List

Debraj Ray, Development Economics, Oxford University Press, 2009.

ParthaDasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.

Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty,

Oxford University Press, 2006.

Thomas Schelling, *Micromotives and Macrobehavior*, W. W. Norton, 1978.

Albert O. Hirschman, Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations

and States, Harvard University Press, 1970.

RaghuramRajan, Fault Lines: How Hidden Fractures Still Threaten the World Economy, 2010. ElinorOstrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, 1990.

DaniRodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.

Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press,2003.

Political Economy -II [Discipline Specific Elective (DSE- 3.1)]

Course code: EC6.DSE-3.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

Employing perspectives from alternative schools of thought, this course explores the development of the structure and institutions of capitalist economies and their relationship to social and political forces. Students are expected to read some classic texts as well as more recent commentaries.

Unit – I: Social Change in Historical Perspective

Analysing Social Change in Historical Perspective, The method of historical materialism; the transition from feudalism to capitalism; capitalism as a historical process – alternative perspectives.

Unit – II: Perspectives of Capitalism

Capitalism as an Evolving Economic System Basic features; accumulation and crisis; the modern corporation; monopoly capitalism— alternative perspectives.

Unit – III: The State and the Economy

The State in Capitalism, the state and the economy – contestation and mutual interdependence; the state as an arena of conflict; imperialism – the basic foundations.

Unit – IV: Role of Finance

The Changing Role of Finance, the changing role of finance in capital accumulation and corporate structure; finance and globalisation - financialisation, financial liberalisation and financial crisis.

Unit - V: Global Economic Instability and Crisis

The 2008 global economic crisis – Prelude, Immediate and Long-term structure and causes

Readings List:

- J. Gurley, "The Materialist Conception of History", Ch.2.1 in R. Edwards, M. Reich and T. Weisskopf (ed.), The Capitalist System, 2nd edition, 1978.
- O. Lange, Political Economy, vol. 1, 1963, Chapters 1 and 2.
- E.K. Hunt, History of Economic Thought, M.E. Sharpe, Indian edn, Shilpi Publications, 2004. Irfan Habib, 1995, "Capitalism in History", Social Scientist, Vol. 23: 15-31.
- R.L. Heilbroner, "Capitalism", in The New Palgrave Dictionary of Modern Economics, Macmillan, 1987. Also reprinted as Chapter 2 in Behind the Veil of Economics by R.L. Heilbroner, W.W. Norton, 1988.
- P. Sweezy, The Theory of Capitalist Development, Monthly Review Press, 1942.

Comparative Economic Development 1850 to 1950 [Discipline Specific Elective (DSE- 3.2)]

Course code: EC6.DSE3.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course investigates selected issues in comparative historical perspective over the 19th century and the first few decades of the 20th century. The course focuses on a set of countries, which followed clearly diverse trajectories and patterns of growth to achieve their industrial transition and compares the outcomes of these diverse trajectories on sectoral change, inter-sectoral relations, labour processes and industrial relations and also compares the role of the state in facilitating the respective trajectories.

Unit I: Comparative Economic Development

Introduction and perspective on Comparative Economic Development of Great Britain and Japan. An overview of Economic Development of the countries selected for case studies- Great Britain and Japan.

Unit II: Agriculture

Agrarian surplus and the role of the peasantry in economic development of Great Britain and Japan.

Unit III: Industry

The Industrial Revolution in Britain; Industrialization in late Industrializers.

Unit IV: Factory System and Working Class

The factory System and making of the Industrial working Class. Division of labour, Structure of Industrial Authority, Organization of work and Industrial Production, relationship between workers and managers.

Unit V: Role of the State in Industrial Development

The role of the state in industrial and developmental transition of Great Britain and Japan.

Reading List

- E.J. Hobsbawm, World of Labour: Further studies in the history of labour, London Weidenfeld & Nicholson, 1984.
- E.J. Hobsbawm, *Industry and Empire: An Economic History of Britain since 1750*, Weidenfeld & Nicholson, 1968.

Peter Mathias, *The First Industrial Nation, An Economic History of Britain, 1700-1914*. 2nd edition Methuen, 1983.

T. Nakamura, *Economic Growth in Pre-War Japan*, Tr. by Robert A Feldman, Yale University Press, 1983.

Okochi, Karsh and Levine, Workers and Employees in Japan, The Japanese Employment Relations System, University of Tokyo, 1965.

Y. Hayami, A Century of Agricultural Growth in Pre-War Japan: Its Relevance to Asian Development, University of Minnesota Press, 1975.

Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy* 1925-1975, Stanford University Press, 1982.

International Economics[Discipline Specific Elective (DSE- 3.3)]

Course code: EC6. DSE3.3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

Unit I: Introduction:

Meaning, Features and importance of International Trade. Inter-Regional and International Trade; Terms of trade; an overview of world trade.

Unit II: Theories of International Trade

The Ricardian, Specific Factors and Heckscher - Ohlin Models, New Trade Theories (The product cycle theory and The Krugman Model), Firms in the Global Economy- outsourcing and Multi-National Enterprises.

Unit III: Trade Policies

Instruments of Trade Policies, Political Economy of Trade Policies, Controversies in Trade Policies.

Unit IV: International Macroeconomic Policy

Fixed versus Flexible Exchange Rates, International Monetary System, Financial Globalisation; import quota

Unit V: International Economic Institutions and Trading Blocks

International Monetary Fund (IMF), World Bank, World Trade Organisation (WTO), Asian Development Bank (ADB), ASEAN (Look East Policy).

Reading List

Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.

Environmental Economics[Discipline Specific Elective (DSE- 4.1)]

Course code: EC6.DSE4.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Unit –I: Introduction

Environmental economics: meaning, definition, nature and scope and limitation. Economy and Environment linkages, population and environment linkages.

Unit –II: Theories of externality

Pareto optimality and market failure in the presence of externalities, property rights and Coase Theorem, public goods and public bads market failure.

Unit – III: Evolution and implementation of environmental policy

Evolution of environmental regulation, environmental legislation/policies in India. Instruments for Pollution control. Command and control policy versus market-based instruments.

Unit – IV: Environmental valuation methods and Applications

Total economic valuation of environmental goods, concept of willingness to pay (WTP) and willingness to Accept (WTA). Stated preference methods and Revealed preference methods

Unit –V: Sustainable Development

Evolution, concept, definitions, indicators, measurements, perspective from Indian experience.

Readings list:

Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, "Natural Resource and Environmental Economics", Pearson Education/Addison Wesley, 4th edition, 2011. Charles Kolstad, "Intermediate Environmental Economics", Oxford University Press, 2nd edition, 2010.

Robert N. Stavins (ed.), "Economics of the Environment: Selected Readings", W.W. Norton, 6th edition, 2012.

Robert Solow, "An Almost Practical Step toward Sustainability," Resources for the Future 40th anniversary lecture,1992.

Kenneth Arrow et al., "Are We Consuming Too Much?" Journal of Economic Perspectives, 18(3): 147-172, 2004.

IPCC (Intergovernmental Panel on Climate Change), Fifth Assessment Report (forthcoming 2014).

Financial Economics [Discipline Specific Elective (DSE- 4.2)]

Course code: EC6.DSE4.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

The course introduces students to the conceptual and practical operations of the financial markets, institutions and instruments network in Indian context. The course gives a brief understanding of the topics of portfolio analysis, CAPM, Options and Derivatives, hedging and corporate finance.

Unit I: Theory of Interest

Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curve; spot rates and forward rates.

Unit II: Portfolio Analysis

Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

Unit III: Capital Asset Pricing Model (CAPM)

The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

Unit IV: Options and Derivatives

Introduction to derivatives and options; forward and futures contracts; options; other derivatives; forward and future prices; stock index future; interest rate futures; the use of futures for hedging; duration-based hedging strategies; option markets; call and put options; factor affecting option prices; put-call parity; option trading strategies: spreads; straddle; strips and straps; strangles; the principle of arbitrage; discrete processes and the binomial tree model; risk-neutral valuation.

Unit V: Corporate Finance

Patterns of corporate financing: common stock; debt; preferences; convertibles; capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani-Miller theorem.

Reading List

David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7th edition, 2002.

Burton G. Malkiel, A Random Walk Down Wall Street, W.W. Norton & Company, 2003.

Simon Benninga, Financial Modeling, MIT Press, USA, 1997.

Bharti, P. (2018). Indian Financial System, 5/e. Pearson Education India.

Madura, Jeff. (2015). Financial Institutions and Markets (11th ed.), Cengage Learning, USA.

Bailey, R. E. (2005). The economics of financial markets. Cambridge University Press.

Fisher, E. Donald., & Jordan, J. Roland. (1995). *Security Analysis and Portfolio management* (6th ed.), Pearson India.

Hull, J. C., (2016). Futures, Options and other Derivatives (9thed.), Pearson.

Khan, M. Y. (2013). Indian financial system. Tata McGraw-Hill Education.

L. M. Bhole., & J. Mahakud.(2009). Financial Institutions and Markets (5thed.), McGraw-Hill.

Machiraju, H. R. (2010). *Indian financial system*. Vikas Publishing House.

Ross, S. A., Westerfield, R., & Jordan, B. D. (2017). *Fundamentals of Corporate Finance* (11thed.), McGraw-Hill.

Dissertation [Discipline Specific Elective (DSE- 4.3)]

Course code: EC6.DSE-4.3

Credit: 6

Total No. of hours: 90 Hrs.

Step – I: Formulation of Project work (Theory) – Identification of problems, objectives and hypothesis of study; analysis, report writing and presentation.

Step – II: Data Collection – Primary (Field survey) and secondary data collection

Step –III: Data Analysis

Step – IV: Report Writing

Step – V: Presentation and Viva

Evaluation pattern and marks distribution for this course will be as specified by the University.

Reading List

Cargan, L. (2007). Doing Social Research. Lanham, MD: Rowman & Littlefield Publishers.

Kothari, C. R. (2014). *Research Methodology: Methods and Techniques* (2nd ed.). New Delhi: New Age International Publishers.

Walliman, N. (2016). Social Research Method: The Essentials. London: SAGE Publications.

Wellington, J. & Szczerbiński, M. (2007). Research Methods for the Social Sciences. New York: Continuum International Publishing Group.

CHOICE BASED CREDIT SYSTEM (CBCS)

SYLLABUS FOR UNDERGRADUATE ECONOMICS COURSE (BA PROGRAMME – PASS COURSE)

2022

NAGALAND UNIVERSITY
HQ: LUMAMI

Syllabus for B.A Economics (Pass Course).

Core and Discipline Specific Elective (DSE) Courses in Economics

Semester	Course Code	Subject Spec	cific Course Code	Course	Credit	Hours
Semester I				English -I	6	90
	AECC - I			AECC - I	2	30
	DSC 1A	EC1.DSC1A		Principles of Microeconomics-I	6	90
	DSC 2A			Interdisciplinary Subjects #	6	90
Semester II				MIL/Alt English I	6	90
	AECC – II			AECC – II	2	30
	DSC 1B	EC2.DSC 1B		Principles of Microeconomics-II	6	90
	DSC 2B			Interdisciplinary Subjects#	6	90
				English - II	6	90
Somostor III	DSC1C	EC3.DSC1C		Principles of Macroeconomics-I	6	90
Semester III	DSC 2C			Interdisciplinary Subjects#	6	90
	SEC 1	EC3.SEC1		Methods of Data Analysis**	2	30
			<i>b</i> - <i>b</i>	90		
Somostor IV	DSC 1D	EC4.DSC1D		Principles of Macroeconomics-II	6	90
Semester IV	DSC 2D			Interdisciplinary Subjects#	6	90
	SEC 2	EC4.SEC2		Computer Application in Data Analysis**	2	30
			EC5.DSE-1.1A	Political Economy – I	6	90
Semester V	DSE-1A	* EC5.DSE-1	EC5.DSE-1. 2A	Indian Economy -I		90
			EC5.DSE-1.3A	EconomicHistory of India (1857 – 1947)		90
			EC5.DSE-2.1A	Development Economics-II	6	90
	DSE-2A		EC5.DSE-2.2A	Economics of Health and Education		90
			EC5.DSE-2.3A	Public Economics		
	SEC3	EC5.SEC3	1	Financial Economics**	2	30
	GE1	EC5.GE1		Indian Ecoinomy –I***	6	90

Semester			EC6.DSE-3.1B	Political Economy – II	6	90
VI	DSE-3B	* EC6.DSE- 3	EC6.DSE-3.2B	ComparativeEconomic Development (1850-1950)		90
			EC6.DSE-3.3B	Indian Economy -II		90
			EC6.DSE-4.1B	Development Economics-II	6	90
	DSE-4B	* EC6.DSE-4	EC6.DSE-4.2B	International Economics		90
		EC6.DSE-4.3B	Dissertation/Project		90	
	SEC4	EC6.SEC4		Contemporary Economic Issues. **	2	30
	GE2	EC6.GE2		Indian Economy –II***	6	90
				Total Credit	120	

^{*}From the given options, students are to choose one paper each for DSE-1, DSE-2, DSE-3 and DSE-4, respectively.

The students of B.A. (Pass) can choose any subject combinations from the subjects mentioned below:

Political Science/ Sociology/ History/ Business Management/ Commerce/ Mathematics/ Statistics/ Psychology/ Philosophy/ Geography/ Education.

*** Students from **both Economics honours and Pass** have to choose Generic Electives (4 GE courses for Economics honours and 2 GE courses for BA pass) from across interdiscipilinary courses mentioned below:

Political Science/ Sociology/ History/ Business Management/ Commerce /Mathematics/ Statistics /Psychology /Philosophy /Geography / Education.

Subject specific Code and Semester

EC1= I semester, EC2=II semester, EC3= III semester, EC4= IV semester, EC5= V semester and EC6= VI semester.

^{**}Students have the option to take SEC from the common pool of SEC courses across disciplines.

^{***}For Students of other departments who are taking up Economics as Generic Elective (GE)



Principles of Microeconomics-I

(Discipline Specific Course DSC-1A)

Course code: EC1.DSC1A

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

UNIT – 1: Exploring the Subject Matter of Economics

Concept, scope and methodology of economics; the basic economic problems; science of economics; role of price mechanism; economic systems

UNIT – II: Demand and Supply

Law of demand and supply; determinants of individual demand and supply; Market versus individual demand and supply; shifts in the demand and supply curves; Elasticity and its applications. Consumer and producer surplus.

UNIT – III: Consumer Theory

Utility approach – cardinal and ordinal; consumer preferences; indifference curves; the marginal rate of substitution; revealed preference

UNIT - IV: Costs and Revenue

Costs and cost curves: Derivation of Short and long run cost curves and their relationships. Revenue and revenue curves under perfect and imperfect markets.

UNIT – V: Market Structure

Concept and features of Perfect and imperfect competition; the production process; Equilibrium of a firm and industry under perfect competitive market: short run and long run

Reading List

Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.

N.GregoryMankiw, *Economics: Principles and Applications*, Indiaedition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.

Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company,Inc., New York, International Student Edition, 4th Edition,2007.



Principles of Microeconomics-II

(Discipline Specific Course DSC-1B)

Course code: EC2.DSC1B

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This is a sequel to Principles of Microeconomics-I covered in the first semester. The

objective of the course is the same as in Principles of Microeconomics I.

UNIT-I: Consumer Theory I

Preferences and Utility: Axioms of Rational Choice, Utility, Trades and Substitutions Indifference

Curves, Utility Functions for Specific Preferences, The Many-Good case Utility Maximization and

Choice: The Two-Good Case (Graphical Analysis), The n-Good Case, Indirect Utility Function, The

Lump Sum Principle, Expenditure Minimization, Properties of Expenditure Function.

UNIT -II: Consumer Theory II

Income and Substitution Effects - under Normal, Inferior and Giffen goods (Hicksian and Slutsky's)

Slutsky's equation, Compensated and ordinary demand curves; buying and selling; choice under

risk and inter-temporal choice; revealed preference theory.

UNIT-III: Production function

Technological relationship between outputs and inputs, Basic Concepts: TP, AP, MP, Isoquants,

properties of isoquants, Isoquant map, Marginal Rate of Technical Substitution, Elasticity of

Substitution, Expansion path, returns to scale; Production with One Variable Input (labour) and with Two-Variable Inputs Special cases of Production Functions -Linear, Fixed Proportions, Cobb-

Douglas.

UNIT-IV: Cost Theories

Traditional and modern theory of cost; recent development in cost theory; Analysis of economies

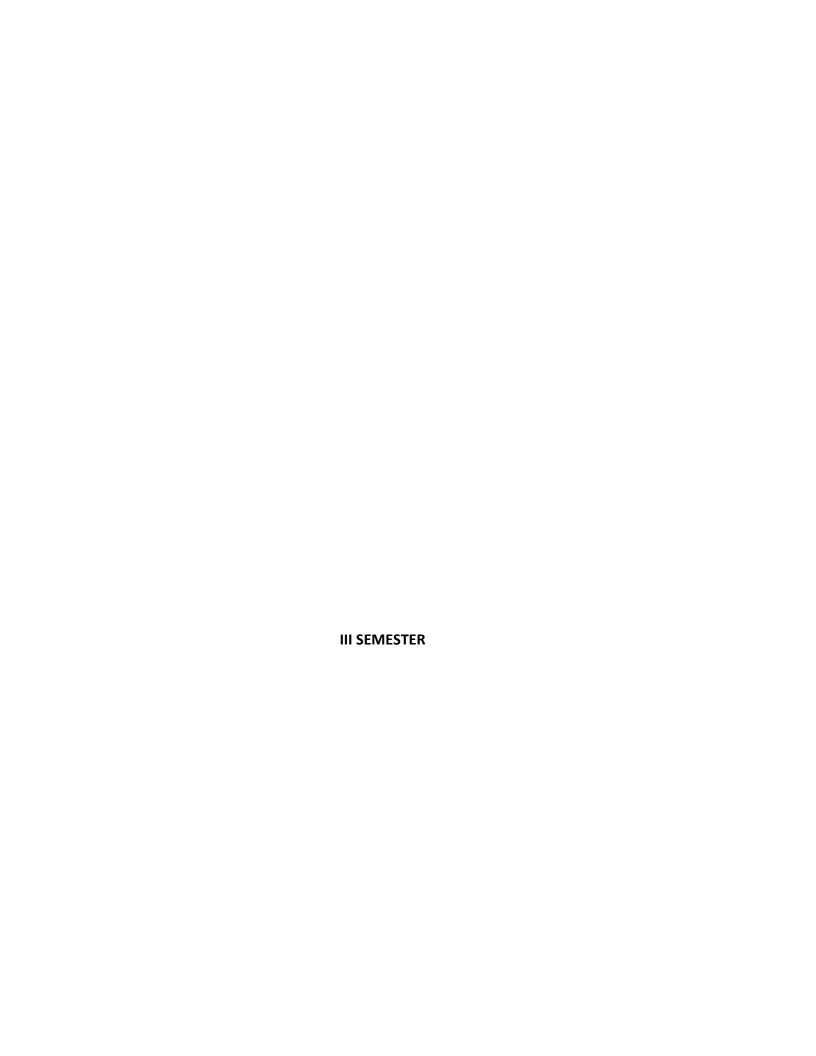
of scale – real and pecuniary.

Unit-V: Labour Market

Labour markets: basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; labour demand curves; shifts in labour demand curves; competitive labour market and public policy.

Reading List:

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition, 007.



Principles of Macroeconomics-I

[Discipline Specific Course (DSC-1C)]

Course code: EC3.DSC1C

Credit: 6

Total No. of hours: 90 Hrs.

Course Outline:

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Unit -I: Introduction to Macroeconomics

Meaning: Nature and Scope of Macroeconomics; Concepts, definition, importance and methods of measuring National Income; difficulties in measuring National Income; Circular Flow of income; two sector and three sector model.

Unit – II: Theories of Income and Employment.

The Classical Theory of Employment(Say's Law and Pigou's Wage Cut Policy). Keynesian systems-Simple Keynesian model of income determination; Aggregate Demand and Aggregate Supply, equilibrium aggregate output. Fiscal and Monetary multipliers.

Unit – III: Money

Definition of Money-Functions of Money: Quantity Theory of Money. Money Supply: Measures of Money Supply. Credit Creation:Tools of Monetary Policy.

Unit - IV: Inflation

Inflation – meaning, types, causes and effects; demand-pull and cost-push inflation; Inflationary gap. Deflation – meaning, effects; Inflation Vs. deflation; Hyperinflation - causes of hyperinflation, costs of hyperinflation; Anti-Inflationary Measures - Monetary policy and Fiscal policy, Trade-off between Inflation and Unemployment (Philip's Curve)

Unit -V: Balance of Payments

Meaning and components of BOP; Equilibrium; causes of disequilibrium in the BOP; measures to control deficit in the BOP; BOP and BOT. Adjustment mechanisms of BOPs.

Reading Lists:

Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition,2010.

N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.

Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.

Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition,2005.

Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.

Errol D'Souza, Macroeconomics, Pearson Education, 2009.

Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Methods of Data Analysis

[Skill Enhancement Course (SEC)-1]

Course code: EC3.SEC1

Credit: 2

Total No. of hours: 30 Hrs.

Course Description:

This course introduces the student to collection and presentation of data. It also focus on how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to introduce the students will be

introduced to important data sources that are available.

Unit-I: Sources of Data

Sources of data, Population census versus sample surveys, Random sampling.

Unit- I: Frequency distributions & measures of central tendency and dispersion

Univariate and Bivariate frequency distributions. Measures of central tendency: mean median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and

kurtosis.

Unit-III: Correlation and Regression

Correlation and regression, Rank correlation.

Unit- IV: Probability Theory

Introduction to probability theory. Notions of random experiment, sample space, event, probability of an event. Conditional probability. Independence of events. Random variables and

probability distributions. Binomial and normal distributions.

Unit-V: Index Numbers

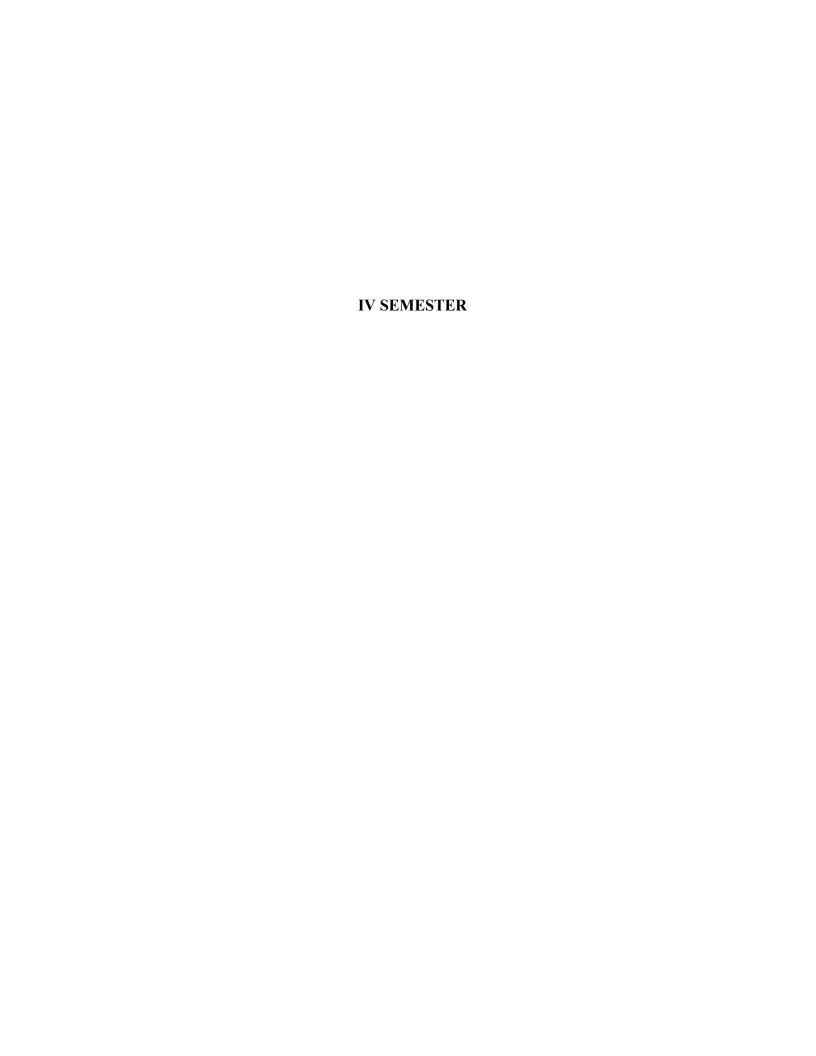
Basics of index numbers, price and quantity index numbers.

Readings:

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P.H. Karmel and M. Polasek (1978), Applied Statistics for Economists, 4thedition, Pitman.

M.R. Spiegel (2003), Theory and Problems of Probability and Statistics (Schaum Series).



Principles of Macroeconomics-II

[Discipline Specific Course (DSC-1D)]

Course code: EC4.DSC1D

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This is a sequel to Principles of Macroeconomics–II. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy.

Unit-I: Consumption Function

Short run and long run consumption functions; APC, MPC, APS, MPS. Fundamental Psychological Law of Consumption and its Implications. Theories of Consumption - Absolute, Relative, permanent and life cycle hypothesis

Unit-II: Investment Function

Gross and Net, Induced and Autonomous Investment. Marginal Efficiency of Investment (MEI). Marginal Efficiency of Capital (MEC) and its measurement, Short run and Long run Factors, Investment multiplier and accelerator principle.

Unit-III: Theories of Interest

The Classical theories of Interest, Loanable Fund theory, Keynes Liquidity Preference theory of Interest, Modern theory of Interest.

Unit- IV: Theories of Trade Cycle

Meaning, phases of business cycle, Hawtray's Monetary theory of Trade cycle, Schumpeter theory of innovations, Kaldor's theory of trade cycle, Samuelson's model, Hicks model of trade cycle.

Unit- V: Open economy model

Short Run Open Economy Model, Mundell Fleming model, Expenditure Switching policies, the Mint parity theory, and Purchasing Power Parity, Assets Market approach: Dornbuch's Overshooting Model, International Financial Markets.

Reading list:

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition,2007.

Sikdar, Shoumyen, *Principles of Macroeconomics*, 2nd Edition, Oxford University Press, India

Computer Application in Data Analysis

[Skill Enhancement Course (SEC)- 2]

Course code: EC4.SEC2

Credit: 2

Total No. of hours: 30 Hrs.

Course Description:

This is a course on computer application in data analysis. The students will be given hands on training on using statistical and computing software to better visualize and understand data concepts.

Unit- I: Introduction and Overview

Meaning; Scope of statistics; Importance and limitation of statistics Collection of Data; Classification of data: Meaning, methods of classification; Tabulation of data: meaning, role, parts of a table; General rules of tabulation,

Unit-II: Data Management with MS-excel

Excel Basics, Cell Referencing (Relative, Absolute, Mixed), Cell Formatting, Functions in excel (SUM, AVERAGE, COUNT, MAX, MIN, IF), sorting data, filtering data (Auto and Advanced), Hyper linking. Measures of Central Tendency: Mean, Median and Mode; Geometric and Harmonic means; Measures of Dispersion: Range, interquartile range and quartile deviation, mean deviation, standard deviation, Moments, Skewness and Kurtosis; Partition Values: Software applications using MS-Excel.

Unit-III: Data representation and Visualisation

Presentation of data; Diagrams and graphs: General rules for construction a diagram; Types of diagrams; Types of graphs-., line graph, bar graph, pie chart, histogram, scatter plot; Software applications using MS-Excel. MS-power point preparation and presentation

Unit-IV: Correlation and Linear Regression Model

Correlation Analysis: Meaning, types of correlation; Methods of studying correlation: Scatter diagram method, Karl Pearson's coefficient of correlation, Spearman's rank method; Testing the significance of the correlation coefficient; Method of least squares: Introduction, estimation, the standard error of estimate, the coefficient of determination, properties of the OLS estimator. Software applications using MS-Excel.

The evaluation pattern for this paper will be as follows:

Theory: 40 marks Practical: 60 marks.

Reading Lists:

Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2014). *Essentials of Statistics for Business and Economics*. Boston: Cengage Learning.

Englewood Cliffs, N.J., Techniques and Applications, Prentice Hall

Levine, D. M. (2005). *Statistics for Managers Using Microsoft Excel* (5th ed.). New York: Prentice

Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.

Sanders D.H. (1988), Computers Today, McGram Hill (3rd Edition) Intrilligator, M.D. (1978), Economic Models.



Political Economy – I

[Discipline Specific Elective (DSE-1.1)]

Course code: EC5.DSE-1.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course explores changes in the organisation of production, labour market institutions and corporate structure. It goes on to study the consequences of globalization, especially of financial flows, for the role of the state, economic performance, gender issues, environment, human welfare and development.

Unit – I: Introduction and Overview

Introduction and Historical Overview Perspective on political economy with a historical overview: capitalist development in the pre-second world war period, "the golden age" and later.

Unit – II: Changing Dynamics in Production

Changing Dynamics of Capitalist Production, Organisational Form and Labour Process Fordist and Post-Fordist production; changing dynamics of organisation of production, markets and labour process; the changing nature of job security and labour rights.

Unit - III: Era of Globalisation

The State in the Era of Globalisation: Welfare, Development and Autonomy Globalisation and the limits of the welfare state, development and state autonomy.

Unit - IV: Social Dimensions

The Social Dimension, Globalisation and uneven development – growth, inequality and exclusion.

Unit – V: New Perspectives

New Perspectives Gender in work, accumulation and globalisation; issues in environment and sustainability; alternatives ahead.

Reading List:

Michel Beaud, A History of Capitalism, 1500-2000, trans. by Tom Dickman and Anny Lefebvre, New York: Monthly Review Press, 2001.

Ash Amin (ed.), Post-Fordism: A Reader, Blackwell, 1994.

Fran Tonkiss, Contemporary Economic Sociology: Globalisation, Production, Inequality, Chapter 4 (Fordism and After), Routledge India 2008 reprint, 2006.

Indian Economy - I

[Discipline Specific Elective (DSE-1.2)]

Course code: EC5.DSE-1.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

Using appropriate analytical framework, this course reviews major trends in economic indicators.

And policy debates in India in the post-Independence period with particular emphasis on paradigm

shifts and turning points.

Unit-I: Economic Development strategy since Independence

Characteristics of Indian Economy –dualistic, mixed and a planned developing economy;

determinants of economic growth and developments; key and strategic role of PSUs; economic

crises and NEP 1991.

Unit – II: Demographic Features

Theory of Demographic Transition, Demographic features: Population size, growth, sex ratios, trends

and policies. Rural – Urban Migrationand occupational structure.

Unit-III: Growth and Distribution

Poverty- Concept and Incidence of Poverty in India, Poverty estimates, Strategy of Poverty

Alleviation Inequality- Income inequality in India - Magnitude and Nature, causes of income

inequality, Government policies and measures, Unemployment- Nature and types of unemployment

in India, Causes of unemployment and Government policies and measures.

Unit – IV: Economic Planning and National income

Meaning and rational of Planning, Basic strategies, objectives and achievements of planning,

inclusive development - NITI Aayog. Measures for growth performance, national income by

industrial origin.

Unit – V: External Sectors

Role of ForeignTrade; Trends in export and imports; Composition and Direction of India's foreign

trade; BOPcrises; Export promotion measures and the new trade policy; Foreign capital - FDI and

MNCs.

Readings List:

Jean Dreze and AmartyaSen, 2013. An uncertain Glory: India and its Contradictions, Princeton University Press.

PulapreBalakrishman, 2007, The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.

Himanshu, 2010, Towards New Poverty Lines for India, Economic and Political Weekly, January.

Economic History of India 1857-1947

[Discipline Specific Elective (DSE-1.3)]

Course code: EC5.DSE-1.3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of

colonial rule. This course leads directly to the course of India's economic development after

independence in 1947.

Unit - I: Colonial India

Background: Colonial Trade in India during pre-1857, Overview of colonial economy: drain of wealth;

economic, social and religious impacts of colonisation in India.

Unit – II: Macro Trends

National income; Population; Occupational structure

Unit – III: Agriculture

Agrarian structure and land relations; agricultural markets and institutions - credit, commerce and

technology; trends in performance and productivity; famines

Unit – IV: Railways and Industry

Railways: Role of railways in the colonial period. The deindustrialization debate; evolution of

entrepreneurial and industrial structure; nature of industrialisation in the inter-war period;

constraints to industrial breakthrough

Unit – V: Economy and State in the Imperial context

The imperial priorities and the Indian economy; International trade – direction and composition;

Capital flows and the colonial economy – changes and continuities; Government and fiscal policy

Reading List:

- L. Subramaniam, History of India 1707-1857, Ch. 4, pp 129-179.
- C. A. Bayly, Indian Society and the Making of the British Empire, The New Cambridge Eco History of India. Orient Longman, 1987, Conclusion, pp 200-206.

A.K. Bagchi, "Deindustrialisation in India in the Nineteenth Century: Some theoretical implications", Journal of Development Studies, 1976 (pp. 135-145)

[This reading should be used as an essential background to P. Parthasarathy's article in Section 4.]

Economics of Health and Education

[Discipline Specific Elective (DSE-2.1)]

Course code: EC5.DSE-2.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course allows to make decisions to improve health outcomes and lifestyles through the study of interactions between different stakeholders. In broad terms, health economists study the functioning of healthcare systems and factors determining health and quality of life of individuals. Health economics generally deals with the purpose and planning of budgeting which is required to be done

in the health care delivery system for providing care.

Unit - I: Health, Education and Human Development

Concepts - Human development indices; linkages - income on human development, human development on income, education on agriculture, health on income, women and human

development;

Unit – II: Education: An Investment in Human Capital

Rate of return to education; private and social investment on health; theories of discrimination;

gender and caste in India; Education towards health care

Unit - III: Evaluation of Health Care

Health system; Costing, cost effectiveness and cost-benefit analysis; burden of diseases.

Unit - IV: Overview - Health and Education in India

Importance of health and education; health outcomes — life expectancy, infant mortality rate; growth of health institutions — private and public; education outcomes — literacy rate (gender-wise), enrolment ratio, growth of educational institutions — private and public.

Unit – V: Economic Growth and Human Development in India

State-wise –per capita income, NSDP, human development index, gender-related development index, human poverty index; happiness index;

Reading List:

Phelps, C. E. (2012). *Health Economics*. (5th ed.). London: Routledge.

Saterre, R. E, & Neun S P. (2007). *Health Economics: Theories, Insights and Industry Studies*. (5th ed.). New Delhi: Cengage Learning India Private Limited.

William, Jack, Principles of Health Economics for Developing Countries, World Bank Institute Development Studies, 1999.

World Development Report, Investing in Health, The World Bank, 1993.

Ronald G., Ehrenberg and Robert S., Smith, Modern Labor Economics: Theory and Public Policy, Addison Wesley, 2005.

Vero Y. Economic Growth and Human Development in Nagaland, Heritage Publishing House, Dimapur, 2016.

Development Economics - I

[Discipline Specific Elective (DSE-2.2)]

Course code: EC5.DSE-2.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This is the first part of a two-part course on economics of growth and development. The course begins with the fundamental concepts on growth and development. It then proceeds to aggregate model of growth and development and cross-national comparison of the growth experience that can

help evaluate these models. The course ends by studying on investment and planning.

Unit - I: Concepts of growth and development

Meaning of economic development and underdevelopment; distinction between economic growth

and development; measurement and indicators of economic development; factors affecting growth;

importance of agriculture; industry and infrastructure in economic development

Unit – II: Theories of Economic Development

Classical theory of development - Adam Smith, Ricardo, Malthus and J. S. Mill; Karl Marx and

Schumpeter; Development as freedom – Sen's view

Unit – III: Theories of Economic Growth

Harrod-Domar, Solow, Joan Robinson, Kaldor, Romar and convergence hypothesis

Unit – IV: Partial theories of growth and development

Circular causation; Stages of growth; Big push theory; Balanced and Unbalanced growth

Unit – V: Investment and Planning

Meaning and need for planning, types of planning; Investment criterion, choice of technique in LDC;

Project evaluation – cost – benefit analysis

Reading List:

Debraj Ray, Development Economics, Oxford University Press, 2009.

ParthaDasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.

Abhijit Banerjee, Roland Benabou and DilipMookerjee, *Understanding Poverty,* Oxford University Press, 2006.

KaushikBasu, The Oxford Companion to Economics in India, OUP,2007.

AmartyaSen, Development as Freedom, OUP,2000.

Daron Acemoglu and James Robinson, *Economic Origins of Dictatorship and Democracy*, Cambridge University Press, 2006.

Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press,1994

Public Economics

[Discipline Specific Elective (DSE-2.3)]

Course code: EC5.DSE-2.3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The paper is divided into two sections, one dealing with the theory of public economics and the other with the Indian public finances.

Unit - I: Introduction

Public Finance: meaning and scope, distinction between public and private finance; public good verses private good; Market failure and role of government, Externalities.

Unit-II: Public Expenditure

Theories of public expenditure- Wagner's law of increasing state activities – Peacock Wisemans hypothesis- Principle of Maximum Social advantage –Growth and pattern of public expenditure, Effects of public expenditure-Cost benefit analysis.

Unit- III: Taxation & Public Debt

Approaches to taxation- Benefit approach, Ability to pay approach and Neutrality approachElasticity and buoyancy of taxation-incidence and shifting of taxation-Types and classification of taxes and VAT, Approaches to public debt.

Unit- IV: Fiscal Policy & Federal Finance

Definition of fiscal policy and its objectives; Fiscal Policies for redistribution of income and wealth and stabilization — fiscal policies in a developing country, federal financial structure and its main features — Direct taxes-Income tax-Corporate tax. Indirect tax structure- Union excise duties, customs duties, sales tax —VAT, Centre-State financial Relations.

Unit- V: Budget

Budget – Classification of budgets –Economic, Functional, organizational, classification of budgets-performance programming and zero based budgets- surplus, balanced and deficit budgets- Concepts of budget deficit and their implications – State and Central budgets. Fiscal crisis and Fiscal sector reforms in India; Reports on Finance Commissions in India.

Reading List:

Atkinson, A Band J.E Siglitz (1980): Lecturers on Public Economics, Tata McGraw Hill, New York...

Buchanan, J M (1970): The Public Finances, Richard D Irwin, Homewood.

Goode, R (1986): Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.

Houghton, J M (1970): The Public Finance: Selected Readings, Penguin, Harmondsworth.

Jha, R (1998): Modern Public Economics, Routledge, London.

Menutt, P (1996): The Economics of Public Choice, Edward Elgar, U.K.

Musgrave, R A and P.B. Musgrave (1976): Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.

Financial Economics

[Skill Enhancement Course (SEC)- 3]

Course code: EC5.SEC3

Credit: 2

Total No. of hours: 30 Hrs

Course Description

This course introduces students to the economics of finance. The course does not require any prior knowledge of economics. This course should be accessible to anyone with an exposure to elementary mathematics. The course is designed to impart the essential aspects of financial asset valuation. The students will be introduced to numerical techniques in finance using spreadsheet programmes such as Microsoft Excel. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and businessjournalism.

UNIT I: Theory of Interest

Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curve; spot rates and forward rates.

UNIT II: Portfolio Analysis

Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

UNIT III: Capital Asset Pricing Model (CAPM)

The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

UNIT IV: Options and Derivatives

Introduction to derivatives and options; forward and futures contracts; options; other derivatives; forward and future prices; stock index future; interest rate futures; the use of futures for hedging; duration-based hedging strategies; option markets; call and put options; factor affecting option prices; put-call parity; option trading strategies: spreads; straddle; strips and straps; strangles; the principle of arbitrage; discrete processes and the binomial tree model; risk-neutral valuation.

UNIT V: Corporate Finance

Patterns of corporate financing: common stock; debt; preferences; convertibles; capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani-Miller theorem.

Reading List:

David G. Luenberger, Investment Science, Oxford University Press, USA,1997.

Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7thedition,2002.

Burton G. Malkiel, A Random Walk Down Wall Street, W.W. Norton & Company, 2003.

Simon Benninga, Financial Modeling, MIT Press, USA, 1997.

Indian Economy - I

(Generic Elective 1)

Course code: EC5.GE1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

Using appropriate analytical framework, this course reviews major trends in economic indicators. And policy debates in India in the post-Independence period with particular emphasis on paradigm

shifts and turning points.

Unit- I: Economic Development strategy since Independence

Characteristics of Indian Economy –dualistic, mixed and a planned developing economy; determinants of economic growth and developments; key and strategic role of PSUs; economic

crises and NEP 1991.

Unit – II: Demographic Features

Theory of Demographic Transition, Demographic features: Population size, growth, sex ratios, trends

and policies. Rural – Urban Migration and occupational structure.

Unit-III: Growth and Distribution

Poverty- Concept and Incidence of Poverty in India, Poverty estimates, Strategy of Poverty

Alleviation Inequality- Income inequality in India - Magnitude and Nature, causes of income inequality, Government policies and measures, Unemployment- Nature and types of unemployment

in India, Causes of unemployment and Government policies and measures.

Unit – IV: Economic Planning and National income

Meaning and rational of Planning, Basic strategies, objectives and achievements of planning,

inclusive development - NITI Aayog. Measures for growth performance, national income by

industrial origin.

Unit – V: External Sectors

Role of Foreign Trade; Trends in export and imports; Composition and Direction of India's foreign

trade; BOP crises; Export promotion measures and the new trade policy; Foreign capital - FDI and

MNCs.

Readings List:

Jean Dreze and AmartyaSen, 2013. An uncertain Glory: India and its Contradictions, Princeton University Press.

PulapreBalakrishman, 2007, The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.

Himanshu, 2010, Towards New Poverty Lines for India, Economic and Political Weekly, January.

VI – SEMESTER

Political Economy -II

[Discipline Specific Elective (DSE- 3.1)]

Course code: EC6.DSE-3.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

Employing perspectives from alternative schools of thought, this course explores the development of the structure and institutions of capitalist economies and their relationship to social and political

forces. Students are expected to read some classic texts as well as more recent commentaries.

Unit - I: Social Change in Historical Perspective

Analysing Social Change in Historical Perspective, The method of historical materialism; the

transition from feudalism to capitalism; capitalism as a historical process – alternative

perspectives.

Unit - II: Perspectives of Capitalism

Capitalism as an Evolving Economic System Basic features; accumulation and crisis; the modern

corporation; monopoly capitalism— alternative perspectives.

Unit - III: The State and the Economy

The State in Capitalism, the state and the economy – contestation and mutual interdependence; the

state as an arena of conflict; imperialism – the basic foundations.

Unit - IV: Role of Finance

The Changing Role of Finance, the changing role of finance in capital accumulation and corporate

structure; finance and globalisation - financialisation, financial liberalisation and financial crisis.

Unit – V: Global Economic Instability and Crisis

The 2008 global economic crisis – Prelude, Immediate and Long-term structure and causes

Readings List:

- J. Gurley, "The Materialist Conception of History", Ch.2.1 in R. Edwards, M. Reich and T. Weisskopf (ed.), The Capitalist System, 2nd edition, 1978.
- O. Lange, Political Economy, vol. 1, 1963, Chapters 1 and 2.
- E.K. Hunt, History of Economic Thought, M.E. Sharpe, Indian edn, Shilpi Publications, 2004. Irfan Habib, 1995, "Capitalism in History", Social Scientist, Vol. 23: 15-31.
- R.L. Heilbroner, "Capitalism", in The New Palgrave Dictionary of Modern Economics, Macmillan, 1987. Also reprinted as Chapter 2 in Behind the Veil of Economics by R.L. Heilbroner, W.W. Norton, 1988.
- P. Sweezy, The Theory of Capitalist Development, Monthly Review Press, 1942.

Comparative Economic Development 1850 to 1950 [Discipline Specific Elective (DSE- 3.2)]

Course code: EC6.DSE3.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course investigates selected issues in comparative historical perspective over the 19th century and the first few decades of the 20th century. The course focuses on a set of countries, which followed clearly diverse trajectories and patterns of growth to achieve their industrial transition and compares the outcomes of these diverse trajectories on sectoral change, inter-sectoral relations, labour processes and industrial relations and also compares the role of the state in facilitating the respective trajectories.

Unit I: Comparative Economic Development

Introduction and perspective on Comparative Economic Development of Great Britain and Japan. An overview of Economic Development of the countries selected for case studies- Great Britain and Japan.

Unit II: Agriculture

Agrarian surplus and the role of the peasantry in economic development of Great Britain and Japan.

Unit III: Industry

The Industrial Revolution in Britain; Industrialization in late Industrializers.

Unit IV: Factory System and Working Class

The factory System and making of the Industrial working Class. Division of labour, Structure of Industrial Authority, Organization of work and Industrial Production, relationship between workers and managers.

Unit V: Role of the State in Industrial Development

The role of the state in industrial and developmental transition of Great Britain and Japan.

Reading List

E.J. Hobsbawm, World of Labour: Further studies in the history of labour, London

Weidenfeld & Nicholson, 1984.

E.J. Hobsbawm, *Industry and Empire: An Economic History of Britain since 1750*,

Weidenfeld & Nicholson, 1968.

Peter Mathias, The First Industrial Nation, An Economic History of Britain, 1700-

1914. 2nd edition Methuen, 1983.

T. Nakamura, Economic Growth in Pre-War Japan, Tr. by Robert A Feldman, Yale

University Press, 1983.

Okochi, Karsh and Levine, *Workers and Employees in Japan, The Japanese Employment Relations System,* University of Tokyo, 1965.

Y. Hayami, A *Century of Agricultural Growth in Pre-War Japan: Its Relevance to Asian Development*, University of Minnesota Press, 1975.

Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy* 1925-1975, Stanford University Press, 1982.

Indian Economy - II

[Discipline Specific Elective (DSE- 3.3)]

Course code: EC6.DSE3.3

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course examines sector specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence.

The course ends by studying the Nagaland Economy. Given the rapid changes in the country, the

reading list will have to be updated annually.

Unit-I: Macroeconomic Policies and Their Impact

Fiscal reform measures in the context of India's New Economic Policy, Fiscal Responsibility and

Budget Management (FRBM) Act, Goods and Service Tax(GST)- objectives and performance,

Monetary Reforms and its impact, Black money and Parallel economy in India- consequences and

corrective government intervention,.

Unit-II: Policies and Performance in Agriculture

Changing structure of Indian Agriculture, Growth and productivity of Agriculture, Sustainable

agriculture- concept and constraint, Diversification of Agriculture, Capital formation, Role of

technology, Green revolution, Institutions- land reforms, rural credit, agricultural marketing, and

price policy and WTO and Agriculture

Unit-III: Policies and Performance in Industry

Pattern of Industrialization, Industrial growth and productivity in the post reform period,

Diversification of industries, Public Sector reforms, Disinvestment and Privatization, MSME

Sector, Industrial Policy reforms, Foreign Investment in the Industrial sector,

Unit-IV: Trends and Performance in Services

Role of the service sector in the Indian Economy, Growth and composition of the service sector Composition and direction of foreign trade, Trend in merchandise trade and invisibles, Balance of

payments position- Pre and Post Reform period, Trade in services and WTO

Unit - V: Economy of Nagaland

Natural resources; population and occupational structure; PCI and NSDP;Structural composition; infrastructure (Physical and Social); agricultural and industrial development –problems and prospects.

Reading list:

NUTA, Economic Development in Nagaland; Prospects and Constriants.

Misra S.K. and Puri V.K. – Indian Economy. Its Development and Experiences. Himalayan Publishing House.

Vero, Y. 2018 - Nagaland Economy: Its Elementary Features, Rainbow Publications, Guwahati.Rakesh Mohan, 2010,-India'sFinancial Sector and MonetaryPolicyReforms,∥in Shankar Acharya and Rakesh Mohan, editors, *India's Economy:Performances and Challenges: Development and Participation*, Oxford UniversityPress.

PulapreBalakrishnan, Ramesh Golait and PankajKumar, 2008,-Agricultural Growth in India Since 1991, *RBI DEAP Study no.27*.

B.N. Goldarand S.C. Aggarwal, 2005,-Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.

P. Goldberg, A. Khandelwal, N. Pavcnikand P. Topalova, 2009, -Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May.

KunalSen, 2010,-Trade, Foreign DirectInvestmentandIndustrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.

Development Economics – II

[Discipline Specific Elective (DSE- 4.1)]

Course code: EC6.DSE4.1

Credit: 6

Total No. of hours: 90 Hrs.

Course Description:

This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

Unit – I: Poverty and Inequality

Concept and Measures of poverty- Head count ratio, Sen's Index, HPI, MPIInequality measures-GiniCoefficient and Lorenz Curve, PQLI, HDI, GDI, GEMConnections between inequality and developmentMechanisms that generate poverty traps and path dependence of growth processes.

Unit – II: Dualism and Economic Development

Dualism – geographic, social and technological Myrdal's theory of cumulative causation

The regional inequalities in the context of economic development Inverted U relationship between spatial inequality and economic development; the centre periphery thesis

Unit – III: Financing Economic Development

Saving, capital formation and economic development; Financial sector and economic development; Micro credit and economic development; Taxation, public borrowing and economic development

Unit – IV: Environment and Sustainable Development

Development and Environment inter-linkage, Environment-Development Kuznet's U shape relationship, Economic activity and climate change, environmental externalities and state regulations of the environment, Concept of Green G.D.P and Sustainable development

Unit – V: Globalisation

Globalisation in historical perspective, the economics and the politics of multilateral agreements, trade, production patterns and world inequality; financial instability in the globalised world

Reading List

Debraj Ray, Development Economics, Oxford University Press, 2009.

ParthaDasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.

AbhijitBanerjee,RolandBenabouandDilipMookerjee,UnderstandingPoverty,

Oxford University Press, 2006.

Thomas Schelling, Micromotives and Macrobehavior, W. W. Norton, 1978.

Albert O. Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States,* Harvard University Press,1970.

RaghuramRajan, Fault Lines: How Hidden Fractures Still Threaten the World Economy, 2010.

ElinorOstrom, *Governing the Commons: The Evolution of Institutions for Collective Action,* Cambridge University Press,1990.

DaniRodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.

Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press, 2003.

International Economics

[Discipline Specific Elective (DSE- 4.2)]

Course code: EC6. DSE4.2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course develops a systematic exposition of models that try to explain the composition,

direction, and consequences of international trade, and the determinants and effects of trade

policy. It concludes with an analytical account of the causes and consequences of the rapid

expansion of international financial flows in recent years. Although the course is based on

abstract theoretical models, students will also be exposed to real-world examples and case

studies.

Unit I: Introduction:

Meaning, Features and importance of International Trade. Inter-Regional and International Trade;

Terms of trade; an overview of world trade.

Unit II: Theories of International Trade.

The Ricardian, Specific Factors and Heckscher - Ohlin Models, New Trade Theories

(The product cycle theory and The Krugman Model), Firms in the Global Economy-

outsourcing and Multi-National Enterprises.

Unit III: Trade Policies

Instruments of Trade Policies, Political Economy of Trade Policies, Controversies in Trade Policies.

Unit IV: International Macroeconomic Policy.

Fixed versus Flexible Exchange Rates, International Monetary System, Financial Globalisation;

import quota

Unit V: International Economic Institutions and Trading Blocks.

International Monetary Fund (IMF), World Bank, World Trade Organisation (WTO), Asian

Development Bank (ADB), ASEAN (Look East Policy).

Reading List

Paul Krugman, Maurice Obstfeld, and Marc Melitz, International Economics: Theory and

Policy, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012.

Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.

Dissertation

[Discipline Specific Elective (DSE- 4.3)]

Course code: EC6.DSE-4.3

Credit: 6

Total No. of hours: 90 Hrs.

Step — I: Formulation of Project work (Theory) — Identification of problems, objectives and hypothesis of study; analysis, report writing and presentation.

Step – II: Data Collection – Primary (Field survey) and secondary data collection

Step –III: Data Analysis

Step – IV: Report Writing

Step – V: Presentation and Viva

Evaluation pattern and marks distribution for this course will be as specified by the University.

Reading List

Cargan, L. (2007). Doing Social Research. Lanham, MD: Rowman & Littlefield Publishers.

Kothari, C. R. (2014). *Research Methodology: Methods and Techniques* (2nd ed.). New Delhi: New Age International Publishers.

Walliman, N. (2016). Social Research Method: The Essentials. London: SAGE Publications.

Wellington, J. & Szczerbiński, M. (2007). *Research Methods for the Social Sciences*. New York: Continuum International Publishing Group.

Contemporary Economic Issues

[Skill Enhancement Course (SEC)- 4]

Course code: EC6.SEC4

Credit: 2

Total No. of hours: 30 Hrs

Course Description

The course seeks to familiarize students with basic concepts related to the Economic Survey and Union Budget. It aims to equip students with sufficient knowledge and skills to analyse these

documents. Learners will have the capability to understand government policies and will in general

be informed participants in economic decision making.

UNIT - I: Concepts of Fiscal policy and its terminology

Fiscal policy, areas of government spending in India; Capital and revenue expenditure, plan and non-

plan expenditures; Deficits - fiscal, primary and revenue; impact of fiscal deficits on the economy;

capital receipts, revenue receipts

UNIT – II: Concepts of Taxation

Tax and non-tax revenue, direct and indirect taxes, need for rationalisation of tax structure, Goods

and Services Tax (GST);

UNIT – III: Concepts of Budgeting

Actual, revised and budget estimates; Zero-base budgeting; Gender budgeting; Fiscal devolution and

centre-state financial relations

UNIT – IV: The Economic Survey

Analysis of current and past policy emphasis in India; Revenue, expenditure and deficits of Nagaland

in recent years

UNIT – V: The Union Budget

Need for the budget, understanding the process of budget making in India; Analysis of fiscal and revenue deficits; Analysis of sources of revenue and expected growth in revenue, tax simplification, improvement in administration, expansion of tax net and other measures to improve revenue receipts, steps proposed to ensure effective spending

Reading List

Chakraborty, P. (2015). Intergovernmental fiscal transfers in India: Emerging trends and realities. In P. Patnaik (ed.): Macroeconomics Oxford University Press.

Dasgupta, D., De, S. (2012). Fiscal deficit in the new Oxford companion to economics in India, Oxford University Press.

Directorate of Statistics, Economic Survey Reports of Nagaland

Kapila, U. (2016). Fiscal and budgetary developments in Indian economy since independence. Academic Foundation.

Ministry of Finance, Economic Survey Reports

Union Budget and Governance Accountability, Recent Reports.

Indian Economy – II

(Generic Elective 2)

Course code: EC6.GE2

Credit: 6

Total No. of hours: 90 Hrs.

Course Description

This course examine sector specific policies and their impact in shaping trends in key economic

indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence.

The course ends by studying the Nagaland Economy. Given the rapid changes in the country, the

reading list will have to be updated annually.

Unit-I Macroeconomic Policies and Their Impact

Fiscal reform measures in the context of India's New Economic Policy, Fiscal Responsibility and

Budget Management (FRBM) Act, Goods and Service Tax(GST)- objectives and performance,

Monetary Reforms and its impact, Black money and Parallel economy in India- consequences and

corrective government intervention,.

Unit-II Policies and Performance in Agriculture

Changing structure of Indian Agriculture, Growth and productivity of Agriculture, Sustainable

agriculture- concept and constraint, Diversification of Agriculture, Capital formation, Role of

technology, Green revolution, Institutions- land reforms, rural credit, agricultural marketing, and

price policy and WTO and Agriculture

Unit-III Policies and Performance in Industry

Pattern of Industrialization, Industrial growth and productivity in the post reform period,

Diversification of industries, Public Sector reforms, Disinvestment and Privatization, MSME

Sector, Industrial Policy reforms, Foreign Investment in the Industrial sector,

Unit-IV Trends and Performance in Services

Role of the service sector in the Indian Economy, Growth and composition of the service sector

Composition and direction of foreign trade, Trend in merchandise trade and invisibles, Balance of payments position- Pre and Post Reform period, Trade in services and WTO

Unit - V: Economy of Nagaland

Natural resources; population and occupational structure; PCI and NSDP;Structural composition; infrastructure (Physical and Social); agricultural and industrial development –problems and prospects.

Reading list:

NUTA, Economic Development in Nagaland; Prospects and Constriants.

Misra S.K. and Puri V.K. – Indian Economy. Its Development and Experiences. Himalayan Publishing House.

Vero, Y. 2018 - Nagaland Economy: Its Elementary Features, Rainbow Publications, Guwahati.Rakesh Mohan, 2010,-India'sFinancial Sector and MonetaryPolicyReforms, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy:Performances and Challenges: Development and Participation*, Oxford UniversityPress.

PulapreBalakrishnan, Ramesh Golait and PankajKumar, 2008,-Agricultural Growth in India Since 1991, *RBI DEAP Study no.27*.

B.N. Goldarand S.C. Aggarwal, 2005,-Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.

P. Goldberg, A. Khandelwal, N. Pavcnikand P. Topalova, 2009, -Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May.

KunalSen, 2010,-Trade, Foreign DirectInvestmentandIndustrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.