

U.G. 2nd Semester

Paper: ECO201C (Core) Introductory Macroeconomics

Credits: 5 = 4 + 1 + 0 (64 Lectures)

Course Description

This course introduces students to the basic concepts in Macroeconomics. Macroeconomics deals with the aggregate economy. In this course the students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payments. The course also discusses various theories of determining GDP in the short run.

Unit 1. Introduction: (7)

What is macroeconomics? Macroeconomic issues in an economy.

Unit 2. National Income Accounting: (12)

Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; concept of green GDP, limitations of the GDP concept

Unit 3. Determination of GDP: (15)

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

Unit 4. National Income Determination in an Open Economy with Government (15)

Fiscal Policy: impact of changes in government expenditure and taxes; net exports function; net exports and equilibrium national income.

Unit 5. Money in a Modern Economy: (15)

Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money: Fisher, Cambridge, Friedman; liquidity preference and rate of interest:

Unit 6. Money (Continued)

Money supply and credit creation; monetary policy

Readings:

- Eugene Diulio, *Theory and Problems on Macroeconomics*, 3rd edition, Schaums Outline Series
- Wilfred Beckerman, *An Introduction to National Income Analysis*, Universal Book Stall, New Delhi, 1993
- Suraj B. Gupta, *Monetary Economics: Institutions, Theory and Policy*, S.Chand and Company, 1999
- Davi W Pearce, *The Dictionary of Modern Economics*, ELBS, McMillan, (latest edition)

Paper: ECO202C (Core)

Mathematical Methods for Economics-II

Credits: 5 = 4+1+0 (64 Lectures)

Unit 1: Difference and Differential Equations: (12)

First order difference equations – The Cobweb model; first order differential equations – the Domar economic growth model.

Unit 2: Multi- variable optimization (17)

Unconstrained optimization: geometric characterizations, characterizations using calculus and economic applications: Discriminating Monopoly (Restricted to two variables)

Constrained optimization with equality constraints: geometric Characterizations, Lagrange characterization using calculus and economic applications: consumer's equilibrium and producer's equilibrium.

Unit 3: Elements of Linear Programming: (11)

Inequality Constraint and formulation of Linear Programming Problem – Graphical Solution, Simplex Method.

Unit 4 : Introduction to Game Theory :(16)

Introduction and concepts; Two- person Zero-sum game: pure strategies with saddle point, games without saddle point – the rules of dominance- solution of Games- solution of games without saddle point- mixed strategies, Prisoner's Dilemma.

Unit 5: Integration: (8)

Methods of Integration- Integration by parts, Integration by substitution; Derivation of total function from marginal function; Definite Integrals; application in the case of consumer's surplus and producer's surplus.

Readings:

- A. C. Chiang & K. Wainwright (2005) Fundamental Methods of Mathematical Economics, Mcgraw Hill Education.
- K.Sydsaeter P. Hammond, Mathematics for Economic Analysis , Pearson Educational Asia: Delhi,2002.
- Prof. S. Barua, (2000), Basic Mathematics and its Economic Applications, Macmillan.
- R. Gibbons (1992). Game Theory for applied Economists, Princeton University Press; Reprint edition.

Paper: ECO203G (General Elective)
Introductory Macroeconomics
Credits: 4 = 3+1+0 (48 Lectures)

Unit 1. Introduction to Macroeconomics and National Income Accounting: (12)

Basic issues studied in macroeconomics; circular flow of national income; concepts of GDP, GNP, NDP, NNP, GDP deflator; Three Methods of Calculation of National Income, GDP as an indicator of economic performance of a country

Unit 2. Money: (12)

Functions of money; quantity theory of money; determination of money supply and demand (Classical and Keynesian)

Unit 3: The Simple Keynesian Model: (12)

Model of income determination, Consumption Function, Multiplier analysis with autonomous investment

Unit 4: Macro Economic Instability: (12)

Inflation- concept, causes of inflation, effects of inflation; anti-inflationary measures; unemployment: Meaning and types

Reference Books:

- N. Gregory Mankiw (2007), *Principles of Economics*, 6th Edn., Thompson
- Karl. E. Case and Ray C. Fair (2006), *Principles of Economics* 6th Edn., Pearson Prentice Hall
- Robert. S. Pindyck and D. I. Rubinfeld (2012), *Micro Economics*, Pearson Education
- Dornbusch, Fischer & Startz (2005) *Macro Economics*, Tata McGraw-Hill Education
- H.L. Ahuja, *Macroeconomics – Theory and Policy*, S. Chand, 20th Edition
- David W. Pearce (Ed. 2010). *A Modern Dictionary of Economics*, ELBS Macmillan, 2010