Inferential Statistics, 5th edition, University Press of America.
- Hogg, R., Tanis, E., Zimmerman, D. (2021) *Probability and Statistical inference*, 10TH Edition, Pearson

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Category II

B.A. Programmes with Economics as Major discipline

DISCIPLINE SPECIFIC CORE COURSE -3 (DSC-3) – : INTRODUCTORY MACROECONOMICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Introductory Macroeconomics ECON004	4	3	1	0	Class XII pass	NIL

Learning Objectives

The Learning Objectives of this course are as follows:
- To introduce students to the basic concepts of macroeconomics
- To discuss the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like GDP, savings, investment, money, inflation, unemployment and the balance of payments
- To introduce the simple analytical framework (e.g., the IS-LM model) for analysing the relationships among key macroeconomic variables

Learning outcomes

The Learning Outcomes of this course are as follows:
- The students would be able to familarise the broad macroeconomic concepts like GDP, inflation, money supply, interest rate and their inter-linkages and their interrelationships.
- By studying the course, the students will be able to critically evaluate various macroeconomic policies and their effects on output and interest rate in the economy.

SYLLABUS OF DSC-3

UNIT – I: Introduction to Macroeconomic issues and National Income Accounting (12 Hours)
Basic issues studied in macroeconomics; measurements of gross domestic product, income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for open economy, balance of payments accounts; cur- rent, capital and financial accounts.

UNIT – II: Money   (10 Hours)

Functions of money; quantity theory of money; demand for money; determination of money supply and demand; credit creation; tools of monetary policy.

UNIT – III: Simple Theory of Income Determination   (11 Hours)
Classical and Keynesian systems; simple Keynesian model of income determination

UNIT – IV: IS-LM Analysis and Aggregate Demand   (12 Hours)
Derivations of the IS and LM curves; fiscal and monetary multipliers; derivation of aggregate demand

Practical component (if any) - NIL

Essential/recommended readings:

- Andrew Abel, Ben Bernanke and Dean Croushore (2011). *Macroeconomics* (7th edition), Pearson.
- Richard T. Froyen (2013). *Macroeconomics: Theories and Policies* (10th ed.), Pearson.
- Blanchard, O. (2006). *Macroeconomics* (6th edition). Pearson
- Blanchard, O. (2017). *Macroeconomics* (7th edition). Pearson
- Dornbusch, R., S. Fischer and R. Startz. *Macroeconomics* (6th edition). McGraw- Hill
- Dornbusch, R., S. Fischer and R. Startz. *Macroeconomics* (11th edition). McGraw-Hill

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE – 4 (DSC-4): BASIC STATISTICS FOR ECONOMICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PREREQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Basic Statistics for Economics ECON022	4	3	1	0	Class XII pass	NIL

Learning Objectives

The Learning Objectives of this course are as follows:
- The course teaches students the basics of probability theory and statistical inference based on simple technical rigor. It includes introductory probability theories, sample

distribution and hypothesis testing that set a necessary foundation for the econometrics course taught as a General Elective.

Learning outcomes

The Learning Outcomes of this course are as follows:
- The student will be able to analyse the data using basic statistical concepts. They will understand sampling characteristics, estimation as well as examine the hypotheses using discrete and continuous distributions.

SYLLABUS OF DSC- 4

UNIT – I: Introduction and overview (09 Hours)
Populations and samples; sample statistics; Descriptive Statistics.

UNIT – II: Basic concepts of probability   (12 Hours)
Spaces and events; probability concepts, conditional probabilities

UNIT – III: Probability distributions and Sampling (12 Hours)
Random variables – discrete and continuous, various probability distributions - functions and characteristics; Commonly used distributions - uniform, binomial, exponential, Poisson, hypergeometric and Normal random variables. Jointly distributions- conditional distributions and expectations, covariance and correlation

Unit – IV: Estimation and Hypothesis testing   (12 Hours)
Estimation of population parameters - methods of moments and maximum likelihood procedures; properties of estimators; confidence intervals; Defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test

Practical component (if any) - NIL

Essential/recommended readings
- Larsen, R., Marx, M. (2011). *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall.
- James McClave, P. George Benson, Terry Sincich (2017), *Statistics for Business and Economics*, Pearsons Publication.
- Anderson D. R, Sweeney D.J. et. al (2019), Statistics for Business & Economics, 13th ed. Cengage Learning.
- Sheldon Ross (2017), Introductory Statistics, 4th Edition, Academic Press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.