

School of Undergraduate Studies

Ambedkar University Delhi

Course Outline

Time Slot-_____

Course Code: SUS1EC104

Title: Statistical Methods for Economics

Type of Course: Discipline (Economics)

Cohort for which it is compulsory: BA Honours Economics

Cohort for which it is elective: All other Majors except Mathematics and Psychology

No of Credits: 4

Semester and Year Offered: II

Course Coordinator and Team: TBA

Email of course coordinator:

Pre-requisites: Mathematics at the 10+2 level.

Aim: The course aims to train the students to use the techniques of statistical analysis, which are commonly applied to understand and analyse economic problems. This paper also deals with simple tools and techniques, which will help the students in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

Brief description of modules/ Main modules:

Data and Methods of Describing Data: Where, why and How data are collected and organized; Graphs, Charts, and Tables -Describing the Data; Describing Data Using Numerical Measures (means, quantiles; variance and other measures of spread).

Elementary Probability Theory: Concept of Probability, addition and multiplication theorems of probability, Bayes' Theorem.

Theoretical Frequency Distributions: Concept of Random variable, Binomial distribution, Normal distribution, Poisson distribution, The relationship between the distributions

Correlation and Simple Regression Analysis: Correlation and Causation, Method of Studying correlation, Fitting a regression line by the method of least squares, Measuring the fit of the line.

Sampling and Sampling Distribution: Sampling Methods, Sampling distribution of sample means, Sampling distribution of Difference between two sample means, Sampling distribution of sample proportion, Sampling distribution of differences

Estimation and Testing of Hypothesis: Point Estimation, Interval estimation, Meaning of Hypothesis testing, type I and type II errors Hypothesis testing for large samples and small samples, Parametric and Non-parametric test.

Assessment Details with weights:

Reading List:

S.P. Gupta (2010). Statistical Methods, Sultan Chand & Sons, New Delhi

S. C. Gupta (2010). Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi

D.N.Elhance, (1996), Fundamentals of Statistics, KitabMahal, Allahabad

A.L. Nagar and R.K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.

G.S Monga (2000), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.

M.R. Spiegel (1992), Theory and Problems of Statistics, McGraw Hill Book, London.

ADDITIONAL REFERENCE: