

Minutes of the Meeting
Basic Statistics for Economics
Date: March 13, 2023

Course Title	Basic Statistics for Economics – GE-5
Course Code	ECON022
Course Abbreviation	
Credits	4
Duration (per week)	4 Hours (3 Lectures + 1 Tutorial)
Date of the Meeting	March 13, 2023
Venue	Delhi School of Economics
Chair	Dr. Devesh Birwal

Attended By:

Dr Kanika Pathania	Sri Venkateswara College
S Rubina Naqvi	Hindu College
Ankur Bhatnagar	Satyawati College
Gautam Kumar Jha	PGDAV College (Eve.)
Shikhar Kumar	Sri Aurobindo College
Sonia Goel	Ramjas college
Ravi	Miranda House
Vishakha Jain	Vivekananda college
Divya Singh	St. Stephen's College
Shruti Sabharwal	Jesus and Mary College

A meeting of teachers of this course was held to discuss the following:

- How to cover the concepts in the syllabus by giving students a knowledge of each without involving too much mathematical computations.
- Suggested readings and the detailed reading list for the UGCF course to be implemented in the academic session 2023-24.
- The pattern of the semester-end exam.

- What can be the different ways in which teachers can assess students for continuous assessment.

Since this paper is being taught in its present form for the first time, under UGCF, a sub-committee was constituted to review the suggested readings. The committee consisted of the following teachers:

Ankur Bhatnagar	Satyawati College
S.Rubina Naqvi	Hindu College
Deepika Goel	Aryabhata College
Sonia Goel	Ramjas College
Gautam Kumar Jha	PGDAV College (Eve.)
Kanika Pathania	Sri Venkateswara College
Shruti Sabharwal	Jesus and Mary College
Vishakha Jain	Vivekananda college

The details of the Course Content, Topic-wise Reading list, recommended textbooks are given below:

Topic	Readings	Section specific instructions
Unit – I: Introduction and Overview (09 Hours) <ul style="list-style-type: none"> • Populations and Samples; Sample Statistics • Descriptive Statistics 	<ul style="list-style-type: none"> • <i>McClave et. al: Ch 1 (except Sec 1.4)</i> • <i>McClave et. al: Ch 2.1-2.5,</i> • Anderson, Sweeny, et.al.): Ch 3.2(<i>only coefficient of variation to be done</i>) (pp121-122) 	<ul style="list-style-type: none"> • Emphasis should be placed on the concepts of mean, median, mode, standard deviation, variance and coefficient of variation • In graphical methods emphasis should be placed on histograms and pie charts.
Unit – II: Basic Concepts of Probability (12 Hours) <ul style="list-style-type: none"> • Spaces and Events; Probability Concepts, Conditional Probabilities 	<ul style="list-style-type: none"> • <i>McClave et.al: Ch 3</i> 	<ul style="list-style-type: none"> • Questions should be simple in conceptual and numerical calculations.
Unit – III: Probability Distributions and Sampling (12 Hours)		

<ul style="list-style-type: none"> • Random Variables – Discrete and Continuous, • Various Probability Distributions – Functions and Characteristics; • Commonly used Distributions – Uniform, Binomial, Exponential, Poisson, Hypergeometric and Normal Random Variables • Joint Distributions – Conditional Distributions and Expectations, Covariance and Correlation: 	<ul style="list-style-type: none"> • <i>McClave et.al: Ch 4 (except Sec 4.4)</i> • <i>McClave et.al: Ch 4.5, 4.6, 4.8 (only uniform distribution)</i> • <i>Anderson, Sweeny, et.al: Ch 5.4</i> 	<ul style="list-style-type: none"> • Emphasis should be placed on binomial, normal and uniform distributions.
<p>Unit – IV: Estimation and Hypothesis Testing (12 Hours)</p> <ul style="list-style-type: none"> • Properties of estimators • confidence intervals; • defining statistical hypothesis • distributions of test statistics • Testing hypothesis related to population parameters; Type I and Type II parameters; • Power of test 	<ul style="list-style-type: none"> • <i>McClave et. al: Ch 6.1-6.3</i> • <i>McClave et. al: Ch 7.1-7.5, 7.8</i> 	<ul style="list-style-type: none"> • Methods of Moments and Maximum Likelihood estimation are to be excluded as these topics involve rigorous mathematics and students are not formally trained in these concepts. • Only applications and interpretations of the important formulas and concepts to be done.

Notes

1. Teachers suggested that from the suggested readings in the syllabus, McClave, Benson and Sincich (2017) and Anderson, Sweeny, et.al. (2019) could be used as core textbooks. Sheldon Ross (2017) and Larsen and Marx (2011) could be uses as a suggested reading for the teachers.
2. Specific instructions are mentioned against each question which should be taken care of while setting the question paper.
3. Applet exercises are to be avoided in each text.
4. Numerical Questions involving integration should not be done.

Recommended Readings:

1. James McClave, P. George Benson, Terry Sincich (2017), *Statistics for Business and Economics*, Pearson Publication.
2. Anderson, D. R, Sweeny, D. J, et. al (2019), *Statistics for Business and Economics*, 13th edition, Cengage Learning.

Recommended Readings for teachers:

1. Sheldon Ross (2017), *Introductory Statistics*, 4th edition, Academic Press.
2. Larsen, R., Marx, M. (2011), *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall.

End semester examination and Internal Assessment:

- The end semester exam would be of 90 marks. The following distribution of topics, indicative weightage, and the amount of choice within each section, was agreed upon:
 - Section 1: Unit 1(weightage 30 marks) – Three questions of 10 marks each. Internal choice in these units should be given as three out of four questions
 - Section 2: Unit 2 (weightage 20 marks) – Two questions out of three of 10 marks each.
 - Section 3: Unit 3 (weightage 20 marks) – Two questions out of three of 10 marks each.
 - Section 4: Unit 4 (weightage 20 marks) – Two questions out of three of 10 marks each.
- There would be no compulsory question in any of the sections and each question should have limited number of sub-parts.
- The internal assessment would comprise of 12 marks Class test, 12 marks Class test/assignment. Attendance will carry 06 marks. Problem solving during tutorials/ interpretation of results pertaining to a set of data should be the preferred medium for continuous assessment of 35 marks out of 40 (Five marks for attendance in tutorials).