

**Minutes of the Meeting**  
**Basic Statistics for Economics**  
**Date: January 27, 2024**

Course Title	Common Pool of GE- Basic Statistics for Economics
Course Code	ECON022
Semester	IV
Credits	4
Duration (per week)	4 Hours (3 Lectures + 1 Tutorial)
Date of the Meeting	January 27, 2024
Venue	Delhi School of Economics
Chair	Dr. Devesh Birwal

Attended By:

Akanksha	Daulat Ram College
Bibhor Kumar	Sri Aurobindo College (Eve)
Dr Saumya Shukla	Maharaja Agrasen College
Dr.Vishakha Jain	Vivekananda College
Nikita Gupta	Shivaji College
Priyambada Gupta	Shyam Lal College
Pummy	Indraprastha College for Women
Richika Rana	Janki Devi Memorial College
S Rubina Naqvi	Hindu
Sangeeta	Lady Shri Ram College for Women
Sanghita Mondal	PGDAV College (day)
Sonia Goel	Ramjas 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.

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

Topic	Readings	Section specific instructions
<b>Unit – I: Introduction and Overview (09 Hours)</b> <ul style="list-style-type: none"> <li>• Populations and Samples; Sample Statistics</li> <li>• Descriptive Statistics</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et. al: Ch 1 (except Sec 1.4)</i></li> <li>• <i>McClave et. al: Ch 2.1-2.5,</i></li> <li>• Anderson, Sweeny, et.al.): Ch 3.2(<i>only coefficient of variation to be done</i>) (pp121-122)</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis should be placed on the concepts of mean, median, mode, standard deviation, variance and coefficient of variation</li> <li>• In graphical methods emphasis should be placed on histograms and pie charts.</li> </ul>
<b>Unit – II: Basic Concepts of Probability (12 Hours)</b> <ul style="list-style-type: none"> <li>• Spaces and Events; Probability Concepts, Conditional Probabilities</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et.al: Ch 3</i></li> </ul>	<ul style="list-style-type: none"> <li>• Questions should be simple in conceptual and numerical calculations.</li> </ul>
<b>Unit – III: Probability Distributions and Sampling (12 Hours)</b> <ul style="list-style-type: none"> <li>• Random Variables – Discrete and Continuous,</li> <li>• Various Probability Distributions – Functions and Characteristics;</li> <li>• Commonly used Distributions – Uniform, Binomial, Exponential, Poisson, Hypergeometric and Normal Random Variables</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et.al: Ch 4 (except Sec 4.4)</i></li> <li>• <i>McClave et.al: Ch 4.5, 4.6, 4.8 (only uniform distribution)</i></li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis should be placed on binomial, normal and uniform distributions.</li> </ul>

<ul style="list-style-type: none"> <li>• Joint Distributions – Conditional Distributions and Expectations, Covariance and Correlation:</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Anderson, Sweeny, et.al: Ch 5.4</i></li> </ul>	
<p><b>Unit – IV: Estimation and Hypothesis Testing (12 Hours)</b></p> <ul style="list-style-type: none"> <li>• Properties of estimators</li> <li>• confidence intervals;</li> <li>• defining statistical hypothesis</li> <li>• distributions of test statistics</li> <li>• Testing hypothesis related to population parameters; Type I and Type II parameters;</li> <li>• Power of test</li> </ul>	<ul style="list-style-type: none"> <li>• <i>McClave et. al: Ch 6.1-6.3</i></li> <li>• <i>McClave et. al: Ch 7.1-7.5, 7.8</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Only applications and interpretations of the important formulas and concepts to be done.</li> </ul>

### 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 used 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*, 13<sup>th</sup> edition, Cengage Learning.

### Recommended Readings for teachers:

1. Sheldon Ross (2017), *Introductory Statistics*, 4<sup>th</sup> 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) – Two compulsory question of 15 marks each.
  - 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 2,3, and 4 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).