

**LORETO COLLEGE**  
**TIME PLAN JULY 2022-DECEMBER 2022**

**3<sup>rd</sup> Semester Topic-wise Time Plan**  
**Paper: STSA-GE-3-3-T**  
**Introduction to Statistical Inference**

**Name of the teacher:** Mayukh Bhattacharya

**Initials:** MB

**Teaching Objective:**

- To help students learn concepts relating to statistical inference
- To introduce concepts of statistical estimation and testing
- To introduce fundamentals of ANOVA and DOE

<b>Topics</b>	<b>Hours allotted</b>	<b>Topics (as per curriculum)</b>	<b>Teaching method</b>	<b>Learning outcome (output)</b>	<b>Assessment</b>
Unit 1	15 hours	a)Sampling distribution b)Introduction to inference – point estimation and interval estimation c) Testing of hypothesis d) Some useful distribution	a)Interactive Lecture b)Problem solving c)Real life application	a)knowledge of sampling distribution and fluctuation b) Understanding building blocks of statistical inference	Practical Problem solving skills and Assignments
Unit 2	25 hours	a)Estimation of mean and CI for normal distribution b)Test of significance c)Sign test	a)Interactive Lecture b)Problem solving c)Real life application	a)Knowledge of Estimation b) Understanding concepts of parametric and non-parametric testing	Practical Problem solving skills and Assignments
Unit 3	20 hours	a)ANOVA b) Introduction to DOE c)CRD and RBD	a)Interactive Lecture b)Problem solving c)Real life application	a)Understanding ANOVA b)application of ANOVA in DOE	Practical Problem solving skills and Assignments

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**3<sup>rd</sup> Semester Topic-wise Time Plan**  
**Paper: STS-A-GE-3-3-P**  
**Introduction to Statistical Inference Lab**

**Name of the teacher:** Mayukh Bhattacharya

**Initials:** MB

**Teaching Objective:**

- To help students solving problems using concepts on statistical inference
- To introduce various problems from agricultural experiments and other scenarios and various ways to solve such problems

<b>Topics</b>	<b>Hours allotted</b>	<b>Topics (as per curriculum)</b>	<b>Teaching method</b>	<b>Learning outcome (output)</b>	<b>Assessment</b>
Unit 1	NA	a) Problems on estimating mean b) Problems on CI of parameters of normal distribution c) Problems of testing of hypothesis d) Problems on ANOVA e) Problems on CRD and RBD	a) Demonstration b) Problem solving	a) Practical problem solving skills b) usage of theoretical concepts in real life data	Assignments