

Learning Objectives:

After successful completion of this course, the student will be able to:

1. understand the processes that cause population change;
2. interpret essential demographic measures;
3. understand hypothesis testing; and
4. critically evaluate the data and methods used by social scientists.

Contents:**1. Correlation and Regression**

- 1.1. Introduction to scatter gram
- 1.2. Pearson r
- 1.3. Correlation matrix
- 1.4. Introduction to Regression Analysis

2. Introduction to Inferential Statistics

- 2.1. Probability sampling: basic concepts
- 2.2. EPSEM sampling techniques
- 2.3. The sampling distribution \

3. Estimation

- 3.1. Point Estimation
- 3.2. Interval Estimation
- 3.3. Confidence Intervals and Procedure for Testing of Hypotheses

4. Tests of Significance

- 4.1. Z test
- 4.2. t test
- 4.3. The Analysis of Variance (ANOVA)

5. Non-Parametric Tests

- 5.1. Chi Square

6. SPSS

- 6.1. Techniques to get data into the Data Editor of SPSS
- 6.2. Selection of Variables for Analysis
- 6.3. Manual Output of Statistical Procedures
- 6.4. Implementation of Statistical Procedures
- 6.5. Results and Reports generation under SPSS

Teaching-Learning Strategies:

Teaching will combine class lectures, class discussions, and group work.

Sessional Work:

The sessional work will combine written assignments, class quizzes, presentations, and class participation/attendance.

Assessments and Examination:

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	It is a written examination that takes place at the mid-point of the semester.
2.	Formative Assessment	25%	It is a continuous assessment. It includes variety of activities mentioned above.
3.	Final Assessment	40%	It is a written examination that takes place at the end of the semester.

Suggested Readings

1. Healey, Joseph F. (2012). Statistics: A tool for Social Research. 9th ed. Belmont: Wadsworth (E-Book)
2. Levin, Jack, and Fox, James A. 2006. Elementary statistics in social Research. 10th Ed. India Pearson Education.