

BSP457 BIOSTATISTICS AND BIOINFORMATICS LAB

Course Outcomes:

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

- CO 1. Perform suitable statistical tests for evaluation of data
- CO 2. Make suitable graphical representations of data
- CO 3. Perform statistical tests - t test, F-test, ANOVA
- CO 4. Develop the skill to use search engines, internet tools and databases.
- CO 5. Gain the practical knowledge of restriction mapping and microarray techniques.

Biostatistics

- 1. Measurement of Central tendencies, mean, median, mode
- 2. Measures of dispersion range SD, CV & SE
- 3. Scatter plot, Simple Correlation & Regression, Multiple Correlations
- 4. Construction of frequency table
- 5. Theoretical distribution, Binomial, Poisson & normal
- 6. Statistical inference, normal, t test, chi-square & F test
- 7. Analysis of Variance

Bioinformatics

- 1. Introduction to bioinformatics
- 2. Basic feature of computers; flow charts and problems.
- 3. Search engines and internet tools.
- 4. Biological databases
- 5. Use of databases (e.g. BLAST, FASTA)
- 6. Restriction mapping
- 7. Micro array techniques
- 8. Search engines
- 9. Web lab viewer and Ras mols

