SYLLABUS

of the

Value-added Course

BIOSTATISTICS

(MCBHVAC 001)

(w.e.f. 2022-2023)

Offered by:

THE DEPARTMENT OF MICROBIOLOGY

Panskura Banamali College

(AUTONOMOUS)

Panskura R.S., Purba Medinipur

West Bengal – 721152

COURSE INFORMATION IN BRIEF

Course Name:	*Biostatistics*
Course Contents:	The Course consists of 1 unit.
Course Type:	Value-added Course (Optional, additional, and not a part of the CBCS curriculum)
Medium:	English
Mode:	Online (Google meet or Zoom meet)
Intake:	Minimum 20; Maximum 50
Eligibility:	**Microbiology** students from across College
Duration:	30 hours (to complete within a time span of 2 months)
Course Fees:	Rs. 300.00 (Rupees three hundred only)
Coordinator:	Ranita Maji
Contact:	Department of Microbiology, Panskura Banamali College (Autonomous)

Objectives:

1. To work for efficiency improvement in biomedical research through better bio statistical inputs.
2. Knowledge of statistics is essential for students into research management or undergraduate projects in a specialized area.
3. Be able to understand the common statistical technique and terminology used in studies.

Outcomes:

1. Describe the roles biostatistics serves in the discipline of public health.
2. Apply statistical knowledge to design and conduct research studies.
3. Analyze the different type of data using appropriate statistical data.

Syllabus

Theory No. of hours-30

Measures of central tendency, Measures of dispersion; skewness, kurtosis; Correlation and Regression.

Mean, Median and Mode

Statistical methods: Scope of statistics: utility and misuse. Principles of statistical analysis of biological data.

Sampling parameters, Difference between sample and Population, Sampling Errors, Censoring, difference between parametric and non-parametric statistics;

Sampling Distributions, Standard Error, Testing of Hypothesis, Level of Significance and Degree of Freedom;

Large Sample Test based on Normal Distribution, Small sample test based on t-test, Z- test and F test; Distribution-free test - Chi-square test;