## Programme Outcomes, Programme Specific Outcomes For PhD Programmes

Programme Name: Ph.D course work in Microbiology



Name of the Department
University of North Bengal
West Bengal, INDIA

## **Programme Outcomes**

- Significance and understanding of research problem, literature citation, bibliography etc.
- Enumerating the significance of experimental values in terms of statistical analysis
- Understanding and application of different software's in molecular biology and microbiological sampling
- Knowledge of updated techniques in the field of microbiology, biophysics, molecular biology etc.

## **Programme Specific Outcomes**

- Defining research and project proposal
- Importance of statistical analysis of biological sampling
- Hands on experience of bioinformatics tools
- Making students familiar with the advance tools and techniques required for now a day's research in microbiology

## **Course Outcomes**

Course	Course	Course Outcomes
Code	Name	
MBCW	Research	Essential steps in defining research problems and experimental design
01	Methodology	<ul> <li>Format of manuscript, research article, references etc.</li> </ul>
	and Design	<ul> <li>Handling and safe disposal of hazardous wastes</li> </ul>
MBCW	Quantitative	Understanding the different statistical measurements
02	methods	Biosafety guideline and regulation
		Software handling
MBCW	Computer	<ul> <li>Database searching like BLAST, FASTA, CLUSTAL W etc.</li> </ul>
03	Application	<ul> <li>Structure function analysis, primer designing.</li> </ul>
		Molecular docking and drug design
MBCW	Advance	<ul> <li>Study of up to date techniques used for research in microbiology</li> </ul>
04	Microbiology	<ul> <li>Study of phylogenetic profiling, VNTR, SNTR, Proteomics, microarray etc.</li> </ul>
	-,	<ul> <li>Study of spectroscopy, chromatography, PCR, automation in diagnostics, nano- techniques, sequencing etc.</li> </ul>