Module code	SB-2242			
Module Title	Microbiology			
Degree/Diploma	Bachelor of Science (Biology)			
Type of Module	Major Core			
Modular Credits	4	Total student Workload	8 hours/week	
		Contact hours	6 hours/week	
Prerequisite	None			
Anti-requisite	SB-2210 Cells, Biomolecules and Microbiology			

Aims

This module will focus on structure, classification, diversity, metabolism, molecular biology and evolution of microorganisms. Infection, immunity and the control of microorganisms are emphasized with respect to human and crop diseases. The role of microorganisms in human health, environmental management and economy with special reference to roles in modern biotechnology will be discussed.

Learning Outcomes

On successful completion of this module, a student will be expected to be able to

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Lower order :	30%	 Describe structure, classification, molecular biology and evolution of microorganisms Explain the diversity and types of metabolism in microbes
Middle order :	60%	 Discuss the principles of microbiology that influence biology, medicine, public health and nature Conduct lab practicals related to microbiology, collect data, interpret and discuss results
Higher order:	10%	 Follow lab procedures and protocols and develop competence in basic microbiology lab skills Work independently in writing practical reports Work effectively in groups during lab practicals

Module Contents

- Basic principles of microorganisms and cells
- Classification and metabolism of prokaryotes
- Microbial genetics
- Microbes and human
- Principles of diseases and pathogens
- Industrial and environmental microbiology

Assessment	Formative assessment	Tutorial assignments and feedback
	Summative assessment	Examination: 60%
		Coursework: 40%
		- 4 practical reports (20%)
		- 2 written assignments (10%)
		- 2 class tests (10%)