Module code	SB-4321		
Module Title	Mycology		
Degree/Diploma	Bachelor of Science (Biology)		
Type of Module	Major Option		
Modular Credits	4	**Total student workload**	8 hours/week
		Contact hours	6 hours/week
Prerequisite	SB-1201 Diversity of life; SB-2210 Cells, Biomolecules and Microbiology		
Anti-requisite	None		

Aims

The primary objective of this module is to provide students with a comprehensive overview of the fungal kingdom, their diversity, the basis for their taxonomy, role in agriculture, plant and animal interaction, food spoilage and food production. This module is designed for students seeking to start a mushroom production facility or careers as mycologists or research scientists that require the knowledge necessary to work with fungi.

Learning Outcomes:

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

Lower order :	10%	- Understand the characteristics, classification, nutrition, reproduction and evolution of fungi - Recognise and explain their physiology, ecology and spore dispersal mechanisms
Middle order :	10%	- Analyse the role of fungi in plant pathology and review their importance in agriculture, their control, food spoilage and prevention, human diseases caused by fungi - Conduct lab practicals related to mycology, know and apply various methods for fungal detection, observe and interpret results
Higher order:	80%	- Perform field and laboratory works to study and interpret the morphology and diversity of fungi - Demonstrate that fungi play an indispensable role in the environment, including elemental cycles, biodegradation and have the potential to contribute to the economy - work independently in writing practical and activity reports - Work co-operatively in groups during lab practicals and group work

Module Contents

-Introduction to Mycology
-Classification and biodiversity of fungi
-Fungal nutrition and growth
-Study of the phyla: Zygomycota, Basidiomycota, Ascomycota, Deuteromycota
-Chytridiomycota, Oomycota, Myxomycota; -Lichens and Mycorrhizae
-Spore dispersal and fungal physiology; -Ecological significance of fungi
-Plant pathology, mycotoxins, fungicides and fungi as agents of biocontrol
-Poisonous and hallucinogenic fungi, medical mycology
-Fungi in bioremediation, food processing, mushroom cultivation
-Fungal biotechnology & Fungal fermentation systems

Assessment	Formative assessment	Module assessment will be based on assignments, class tests, presentation, group activity and written reports.
	Summative assessment	Examination: 0%
		Coursework: 100% - 4 individual written reports (40%) - 2 class tests (40%) - 1 individual oral presentation (20%)