Module code	SB-2404		
Module Title	Current Trends in Life Sciences		
Degree/Diploma	Undergraduate GenNEXT Bachelor degree		
Type of Module	Breadth		
Modular Credits	4	Total student Workload	8 hours/week
		Contact hours	4 hours/week
Prerequisite	None		
Anti-requisite	None		

## **Aims**

The objective of this module is to provide students with information on the recent advances in most aspects of bioscience. This module also aims to impart current trends following innovations in life sciences. Impart the necessary background facts in order to appreciate the complexity of biological issues.

## Learning OutcomesOn successful completion of this module, a student will be expected to be able to:Lower order:10%-Describe the basic principles underlying scientific principles and its application in the wider context such as in biotechnology and medicineMiddle order:10%- Analyse and understand the application of the innovations in Biotechnology and its impactHigher order:80%- Connect the concepts from information gained during this module for a wider general application<br/>- Apply wide judgements to explore the viewpoints regarding matters relating to Biotechnology and conservation issues

## **Module Contents**

- -Recent updates in biotechnology such as genetic engineering and its applications
- GMOs
- Industrial, food, algal and cyanobacterial, and medical biotechnology
- Protein engineering
- Bioinformatics
- Issues surrounding organ transplantation, barriers to organ donation
- In-vitro fertilization
- Assisted reproductive technology
- Problems and issues surrounding assisted reproductive technology
- Vitrified embryos
- Preimplantation genetic diagnosis (PGD), designer babies
- Biodiversity and conservation
- Medicines from nature
- Biodiversity loss and medicine

Assessment	Formative assessment	Tutorial assignments and feedback
	Summative assessment	Examination: 0%
		Coursework: 100%
		- 4 class tests (60%)
		- 1 written assignment (10%)
		- 1 case study (10%)
		- 1 group presentation (20%)