

Module code

SEB-2401

Type of module

Undergraduate: Biological Sciences – Elective

Current Trends in Life Sciences



Modular credits

4

Total student
engagement

56 hours

Prerequisite

None

Anti-requisite

None

Aims

To provide students with information on the recent advances across various aspects of bioscience. To introduce current trends resulting from innovations in life sciences. To impart the necessary foundational knowledge to help students appreciate the complexity of biological issues.

Module learning outcomes (MLO)

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

MLO 1

Analyse the basic principles underlying scientific concepts and their application in the wider context, such as in biotechnology and medicine.

MLO 2

Analyse the application of innovations in biotechnology and their impacts.

MLO 3

Connect the concepts from information gained during this module for broader general applications, including biodiversity and conservation issues.

MLO 4

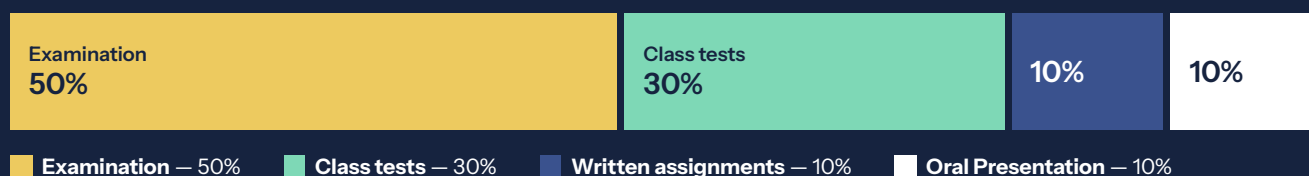
Apply critical judgments to explore viewpoints regarding matters related to biotechnology, biodiversity, and conservation issues.

Module contents

Industrial, food, algal and cyanobacterial, and medical biotechnology	Protein engineering	Issues surrounding organ transplantation, barriers to organ donation
In-vitro fertilisation	Assisted reproductive technology	Problems and issues surrounding assisted reproductive technology
Preimplantation genetic diagnosis (PGD), designer babies	Medicines from nature	Biodiversity and conservation
Threats to biodiversity	Benefits of biodiversity	Nanotechnology in everyday life, such as biology, food, environment, health and medicine
Nanotoxicology and the future of nanotechnology		

Assessment

50% **50%**
Examination Coursework



Formative assessment

Weekly discussion and feedback

Summative assessment

COMPONENT	WEIGHTING
Examination	50%
Coursework	50%
Individual	40%
Class tests	30%
Written assignments	10%
Group	10%
Oral Presentation	10%

Graduate attributes and skills

University learning objectives (ULO) addressed

B Balanced & holistic individuals	E Ethical leaders	S Sustainable thinkers	T Transdisciplinary practitioners	A Adaptable & resilient lifelong learners	R Responsible global citizens	I Innovative problem-solvers
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B, S, T, I

Sustainability concept addressed

3	SDG 3 Good Health and Well-Being
15	SDG 15 Life on Land

Digital skills/software used (not limited to)

- Microsoft Office software (e.g. Word, Excel, PowerPoint)
- Application software (e.g. Web browsers, statistical program, cloud-based storage and file sharing platform)
- eLearning platforms (e.g. CANVAS, MS Teams, Zoom)

Micro-credentialling option No	Stackable towards GenBESTARI Undergraduate Degree Programme or other relevant Lifelong Learning Programmes No
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Document details

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