

Module code

SPB-3401

Type of module

Undergraduate: Biological Sciences – Elective

Aquaculture



Modular credits

4

Total student
engagement

56 hours

Prerequisite

SPB-1201 Diversity of
Life OR SPB-1202
Organisms and
Environment OR SPB-
1203 Skills in Biological
Sciences

Anti-requisite

None

Aims

To equip students with theoretical and practical skills in aquaculture, fostering sustainable and responsible practices that address global food security and environmental challenges.

Module learning outcomes (MLO)

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

MLO 1

Analyse cultured aquatic species and their production systems.

MLO 2

Apply scientific methods and digital tools to collect, analyse, and interpret aquaculture data.

MLO 3

Perform integrated laboratory, field, and technical skills relevant to aquaculture system management.

MLO 4

Critically evaluate aquaculture challenges and propose evidence-based solutions.

MLO 5

Integrate sustainability principles and responsible practices in aquaculture design and management.

Module contents

Introduction to aquaculture	Biology of cultured species	Aquaculture systems and technology
Nutrition and feeding strategies	Disease management and biosecurity	Environmental and sustainability considerations
Economics and farm management	Emerging trends and innovations in aquaculture	

Assessment

60%

Examination

40%

Coursework



■ Examination — 60% ■ Practical reports — 20% ■ Class tests — 10% ■ Written assignments — 10%

Formative assessment

Weekly discussion
and feedback

Summative assessment

COMPONENT	WEIGHTING
Examination	60%
Coursework	40%
Individual	40%
Practical reports	20%
Class tests	10%
Written assignments	10%

Graduate attributes and skills

Programme learning objectives (PLO) addressed

- | | | | |
|---|--|---|---|
| 1 | PLO 1 (Fundamental Theoretical Knowledge in Biology) | 2 | PLO 2 (Application of Scientific Methods and Data Analysis) |
| 3 | PLO 3 (Integrated Laboratory, Field, and Technical Skills) | 4 | PLO 4 (Critical Thinking and Problem-Solving Skills) |
| 5 | PLO 5 (Sustainability and Responsible Practice) | | |

Sustainability concept addressed

- | | |
|----|---|
| 2 | SDG 2 Zero Hunger and Food Security |
| 12 | SDG 12 Responsible Consumption and Production |
| 14 | SDG 14 Life below Water |

Digital skills/software used (not limited to)

- Microsoft Office software (e.g. Word, Excel, PowerPoint)
- eLearning platforms (e.g. CANVAS, Zoom)

Micro-credentialling option

No

Stackable towards GenBESTARI Undergraduate Degree Programme or other relevant Lifelong Learning Programmes

No

Document details

Office ODVCE Document date 29 June 2026 Status New