

Module Information

2022.01, Approved

Summary Information

Module Code	5209NATSCI
Formal Module Title	Marine and Freshwater Biology
Owning School	Biological and Environmental Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	19
Off Site	12
Practical	12
Workshop	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	To provide a broad-based foundation to major biological, physico-chemical and oceanographic features of the marine and freshwater environment on a world-wide basis. To introduce marine and freshwater habitat types and their communities and to examine selected habitats in terms of general ecological principles and animal behaviour. To examine the exploitation of marine and freshwater resources and potential sources of damage and threats to marine and freshwater ecosystems. To adopt practical field and laboratory sampling and analysis techniques relevant to the study of marine and freshwater biology.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Critically evaluate the similarities and differences between a wide range of marine and freshwater habitats in terms of their biological and physical components and develop awareness of the biological, behavioural and ecological roles of organisms in habitats ranging from micro to global in scale.
MLO2	2	Utilise computer software, field and laboratory equipment to sample, identify and analyse marine and freshwater biological samples.
MLO3	3	Critically review issues such as conservation, artificial substrata, species invasions, fisheries, aquaculture, abstraction, impoundments, pollution, global climate change.

Module Content

Outline Syllabus	Introduction to basic limnology and oceanography. Productivity in the marine and freshwater environment. Intertidal and subtidal biology. Behaviour of key species in the habitats. Communities of the standing waters and flowing waters. Characteristics of marine and freshwater habitat types found in different parts of the world. Applied marine and freshwater topics and current issues: Exploitation of marine and freshwater resources. Marine and freshwater pollution. Biofouling. Species invasions.
Module Overview	This module provides a broad introduction to fundamental aspects of marine and freshwater biology, including basic oceanography, limnology and productivity in the marine and freshwater environment. Different marine and freshwater habitat types found in various parts of the world are introduced, and their biological (e.g. ecology, animal behaviour) and physical characteristics are discussed. The exploitation and conservation of these ecosystems are also considered.
Additional Information	This module comprises a broad introduction to fundamental aspects of marine and freshwater biology, including basic oceanography, limnology and productivity in the marine and freshwater environment. Different marine and freshwater habitat types found in various parts of the world are introduced, and their biological (e.g. ecology, animal behaviour) and physical characteristics are discussed. The exploitation and conservation of these ecosystems are considered.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Test	Poster	50	0	MLO1, MLO3
Test	Online test	50	0	MLO2

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Simone Durr	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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