Environmental Pollution

Module Information

2022.01, Approved

Summary Information

Module Code	5304NATSCI
Formal Module Title	Environmental Pollution
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	20
Off Site	4
Practical	14
Workshop	4

Module Offering(s)

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

Aims and Outcomes

Aims	To introduce students to the processes that drive the transport, transformation and fate of environmental pollutants in terrestrial and marine environments.To develop skills in acquiring, processing and interpreting environmental pollution data.To develop skills in the production of professional standard environmental reports.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Analyse and evaluate current views concerning the transport, transformation and fate of contemporary environmental pollutants.
MLO2	2	Compile a professional standard scientific report on an applied environmental pollution problem.
MLO3	3	Plan and perform laboratory analysis of environmental samples and demonstrate analytical capability with a variety of environmental data.

Module Content

Outline Syllabus	Metal pollution, soil science, carbon cycles, microplastics pollution, ocean acidification, terrestrial and marine systems.
Module Overview	This module will introduce the processes that drive the functioning of two major (terrestrial and marine) environments of the Earth with a view to their deeper understanding, evaluation and management. You will develop an appreciation and assessment of capabilities of the environmental impact of humans (e.g. pollution, deforestation, ocean acidification) on natural environments and ecosystems. You will develop skills in acquiring, processing and interpreting environmental data.
Additional Information	The module will examine pollution of terrestrial and marine environments by considering key environmental pollutants and elements (toxic metals, microplastics, carbon) and their impacts on the environment (ocean acidification). Theme 1 will focus on terrestrial environments, describing the characteristics, highlighting the significance and investigating the functioning of soils and terrestrial systems. These despite being home to the vast majority of human populations, providing large amount of our resources (e.g. food, water, minerals, fuel etc.), and, consequently, being heavily influenced by our actions (e.g. pollution, deforestation), are still not fully understood. Theme 2 will concentrate on the marine environment. The ocean is the vastest environment on earth and although there is growing awareness of its major influence on our lives through climate regulation and the increasing reliance on its resources, it is still woefully little understood. This part of the module will introduce marine ecosystems and their biogeochemical significance, and will investigate the impacts of human actions, such as pollution and ocean acidification.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Report	40	0	MLO1, MLO2, MLO3
Test	Test	60	0	MLO1, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Patrick Byrne	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings