

Module Information

2022.01, Approved

Summary Information

Module Code	6308NATSCI
Formal Module Title	River Monitoring and Management
Owning School	Biological and Environmental Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	18
Off Site	10
Practical	2
Seminar	3
Workshop	7

Module Offering(s)

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

Aims and Outcomes

Aims	To introduce and analyse the main water-related legislative and management frameworks that environmental regulators and consultants work within. To study the application of scientific principles to the management of contemporary river management issues. To evaluate the methodologies used to investigate, monitor, manage and improve river environments. To develop the practical skills and knowledge required by professional environmental regulators and consultants working in river management.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Critically discuss the main legislative and management frameworks governing the management of river pollution.
MLO2	2	Critically evaluate the main issues and challenges involved in river pollution management.
MLO3	3	Develop and apply practical skills to the investigation and analysis of different river pollution issues.
MLO4	4	Report to a professional standard on a specific topic which addresses a major issue in river pollution management.

Module Content

Outline Syllabus	UK and European Union Water Legislation; Ecosystem Approach; River Catchment Management; Sources, Pathways and Receptors of River Pollution; Principles of River Water Sampling and Analysis; Agricultural and River Pollution; Mining and River Pollution; River Pollution Remediation Practices
Module Overview	The aim of this module is to introduce and analyse the main water-related legislative and management frameworks that environmental regulators and consultants work within. You will study the application of scientific principles to the management of contemporary river management issues and evaluate the methodologies used to investigate, monitor, manage and improve river environments.
Additional Information	The module is intended to provide students with practical skills and knowledge required by employers such as environmental regulators and consultants working in the area of river management. Teaching on this module is set in the context of the European Union Water Framework Directive (WFD), River Catchment Management and the Ecosystem Approach to environmental management. The WFD of which the UK is a signatory requires all member states including rivers. To achieve this, EU Member States are required to develop River Basin Management Plans that outline strategies to monitor, manage and improve the quality status of rivers at the river catchment level. The river catchment is used as the management framework as all human and natural processes operating in a river catchment (air, land and water) have the capacity to influence the chemical and ecological status of water bodies within that catchment. Important river pollution issues that will be covered in this module include diffuse agricultural pollution and mine pollution.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Presentation	Consultancy Presentation	40	0	MLO1, MLO2, MLO3
Report	Consultancy Report	60	0	MLO2, MLO3, MLO4

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
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