

Liverpool John Moores University

Title: APPLIED ENVIRONMENTAL MANAGEMENT
Status: Definitive
Code: **6101NATSCI** (112600)
Version Start Date: 01-08-2016

Owning School/Faculty: Natural Sciences & Psychology
Teaching School/Faculty: Natural Sciences & Psychology

| Team | Leader |
|----------------------|--------|
| Colm Bowe | Y |
| Kostas Kiriakoulakis | |
| Jane Fisher | |

Academic Level: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 50
Total Learning Hours: 240 **Private Study:** 190

Delivery Options

Course typically offered: Standard Year Long

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 30 |
| Off Site | 6 |
| Practical | 9 |
| Seminar | 3 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|----------|-------------------|---------------------------------|---------------|---------------|
| Exam | Exam | Includes interpretive question. | 40 | 2 |
| Report | Rpt | Practical / Field Report | 35 | |
| Report | Problem | Problem Solving Exercise | 25 | |

Aims

To study the application of scientific principles to the management of contemporary environmental issues. To examine a number of real-world environmental problems in

terms of their causes, processes and impacts on the environment and society. To understand the methodologies used to investigate, monitor, evaluate and remediate damaged terrestrial, atmospheric and aquatic systems.

Learning Outcomes

After completing the module the student should be able to:

- 1 Assess the impact of human activities on the environment and understand the causes, processes and impacts of environmental issues on the environment and society
- 2 Apply integrative skills to the investigation, analysis, remediation and management of damaged environmental systems.
- 3 Apply field and laboratory skills to assess site degradation.
- 4 Critically evaluate the implementation of management strategies for different environmental contexts.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

| | | | |
|--------------------------|---|---|---|
| Exam | 1 | 2 | 4 |
| Practical / field report | 2 | 3 | |
| Problem solving | 2 | 4 | |

Outline Syllabus

Introduction to managing the environment; Theme A 'Terrestrial environments': soil erosion, salinisation, desertification, soil pollution, biodiversity, contamination of agricultural land; Theme B 'Atmospheric environments': air pollution, ozone, climate change; Theme C 'Aquatic environments': flooding, sea level rise, water quality, water quantity.

Learning Activities

Lectures, laboratory practicals, fieldwork and seminars.

Notes

This module investigates how different scientific and management approaches are required to achieve sustainable management of a number of current environmental problems. Case studies and field/laboratory work will enable students to have a sense of the challenges presented in real world contexts.