# Liverpool John Moores University

Title:	ENVIRONMENTAL ISSUES		
Status:	Definitive		
Code:	6202OUTDOR (104242)		
Version Start Date:	01-08-2016		
Owning School/Faculty: Teaching School/Faculty:	Sports Studies, Leisure and Nutrition Sports Studies, Leisure and Nutrition		

Team	Leader
Duncan Martin	Y

Academic Level:	FHEQ6	Credit Value:	12	Total Delivered Hours:	26
Total Learning Hours:	120	Private Study:	94		

#### **Delivery Options**

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Off Site	5
Practical	7

# Grading Basis: 40 %

# Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination: Essay questions	66	2
Portfolio	AS2	Coursework: A 1000 word study based upon personal research of an area of student's interest	34	

# Aims

To provide a balanced view of the causes and effects of environmental change through the development of skills in identification, measurement and analysis of factors associated with such change today, and the study of environmental change which has occurred in the past.

# **Learning Outcomes**

After completing the module the student should be able to:

- 1 evaluate the extent to which human activity may be causative agent in selected examples of perceived local and global environmental problems;
- 2 demonstrate knowledge of the origins and effects of selected industrial and domestic wastes on the environment and evaluate data derived from a wide variety of sources in order to form opinions about selected industrial processes on the environment;
- 3 demonstrate knowledge of chemical and biological treatment systems for water, sewage and industrial wastes and evaluate their effectiveness;
- 4 demonstrate knowledge of the properties of (e.g.) CFCs and CO2 relate to global environmental problems, evaluate the impact of such substances currently and the various projections of damage in the future;
- 5 evaluate the validity (in commercial and environmental terms) of recycling and demonstrate knowledge of selected recycling processes;
- 6 discuss the impact of political and socio-economic factors together with the role of education in shaping public attitudes towards the environment;
- 7 evaluate the theories of climatic change and summarise the climate trends and variations since the last glacial phase.

# Learning Outcomes of Assessments

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

EXAM	1	2	3	4	5	6	7
Coursework	1	2	3	4	5	6	7

# **Outline Syllabus**

Review the environmental impact of a variety of industries in terms of ecological effects, e.g. biodiversity. Acidification of terrestrial and fresh water environments as a specific effect. Use of Irish and North Seas as case studies of the impact of a variety of anthropogenic and natural factors. Economic growth, prosperity and population in relation to political attitudes towards the environment. Impact of organisations such as Greenpeace and education on public understanding of attitudes to the environment.

Identification and estimation of selected chemicals in water, properties of industrial waste, pesticides, radio activity etc in the environment. Properties and effects of environmentally sensitive gases e.g. methane, CFC, CO2, SO2 etc. Recycling processes and the design of materials in terms of recyclability. Climate variability, evidence for climate change, e.g. pollen analysis, dendroclimatology, causes and mechanisms of climate change. Patterns of change, e.g. Late glacial climate, Holocene changes, Medieval warm period and Little Ice Age climates.

# Learning Activities

Lectures. Practical laboratory work involving investigations of processes that are thought to effect the environment. Fieldwork involving tours around the industrial sites that effect the environment and collection of environmental data from these sites.

# Notes

This module considers present day environmental change by providing information about the extent of the impact of industrial activities through a study of their products and wastes. This and the conflict between economic growth and environmental responsibility in society is placed in the context of historic environmental change.