Liverpool John Moores University

Title:	ECOLOGICAL PROCESSES AND BIOGEOGRAPHY
Status:	Definitive
Code:	**4105OUTDOR** (104226)
Version Start Date:	01-08-2016
Owning School/Faculty:	Sports Studies, Leisure and Nutrition
Teaching School/Faculty:	Sports Studies, Leisure and Nutrition

Team	Leader
Timothy Stott	Y

Academic Level:	FHEQ4	**Credit Value:**	12	**Total Delivered Hours:**	38
Total Learning Hours:	120	**Private Study:**	82		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	26
Off Site	10
Practical	1

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Exam 1 hour	34	1
Portfolio	AS2	Field trip and practical file, 2000 words	66	

Aims

1. to develop an understanding of the critical movement between the biotic and abiotic components of the ecosystem, including the impact of human activity
2. to show that energy flow through ecosystems controls the relative sizes of populations, intensity of competition etc.
3. to illustrate some key concepts in biogeography in coastal and upland ecosystems

4. to understand soil processes and how to interpret them.

Learning Outcomes

After completing the module the student should be able to:

1 understand that materials essential for the maintenance of life are recycled in natural ecosystems and the ways in which these recycling processes work;
2 understand the principles related to ecological energetics and their impact upon the form of natural communities;
3 understand the importance of biodiversity and the possible effects of human activities upon this, both locally and globally;
4 understand how the environmental change over time can be studied;
5 carry out field investigations and successfully process the data collected.
6 describe soil properties, identify major soil types and the processes that lead to their development based on field and laboratory investigations;
7 process soils in the laboratory to aid in their classification and interpretation

Learning Outcomes of Assessments

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

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

Outline Syllabus

Key concepts in ecology and biogeography. The study of ecosystems, the ecological niche; communities and succession; distribution of organisms in a habitat, including environmental factors; energy and nutrient cycles in ecosystems; populations; human influences and biodiversity, disturbed ecosystems; vegetation zonation in mountains; environmental change over time, palaynology, dating and the development of upland moorlands. The soil system and its components. Soils field description and mapping, soils laboratory analysis. Soil processes, classification, management , soil types (including upland soils).

Learning Activities

Lectures, laboratory practicals, fieldwork, on-line resources.

Notes

This module provides students with the key concepts in ecology and biogeography.