

Liverpool John Moores University

Title: EARTH SURFACE PROCESSES
Status: Definitive
Code: **4106NATSCX** (101308)
Version Start Date: 01-08-2011

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

Team	Leader
Elizabeth Whitfield	Y

Academic Level: FHEQ4
Credit Value: 12.00
Total Delivered Hours: 11.00
Total Learning Hours: 120
Private Study: 109

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	1.000
Off Site	6.000
Practical	3.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Reflection	AS2	practical file	25.0	
Reflection	AS3	fieldwork report	25.0	

Aims

To provide students with an introduction to the major processes occurring at the Earth's surface in a wide variety of environments, and also to demonstrate how the sediments produced by these processes may be deposited and interpreted.

Learning Outcomes

After completing the module the student should be able to:

- 1 outline the main processes occurring in fluvial, coastal, continental shelf slope, glacial and arid systems.
- 2 recognise how these processes may vary depending upon the specific climatic regime.
- 3 explain how sediments may be transported, deposited and used to interpret the environment from which they were derived.
- 4 demonstrate the integrated nature of geological and geomorphological studies.
- 5 employ practical skills appropriate to the study of Earth Science.
- 6 apply their theoretical knowledge to interpret processes and deposits in the field.
- 7 recall examples of different palaeoenvironments recorded in the rock record.

Learning Outcomes of Assessments

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

CW	4	5	6	
CW	1	2	3	7

Outline Syllabus

Introduction to geomorphological environment.
Principles of stratigraphy.
Weathering and hydrology of drainage basins.
Fluvial processes and sediments.
Coastal processes and sediments.
Major features of glacial and arid environments.
Slope processes and slope evolution models.
Shallow marine and deltaic environments.

Learning Activities

Lectures are integrated with practical activities in the field and laboratory.

References

Course Material	Book
Author	Monroe, J.S. & Wicander, R.
Publishing Year	2001
Title	Physical Geology: Exploring the Earth
Subtitle	
Edition	4th
Publisher	Brooks/Cole
ISBN	0534377882

Course Material	Book
Author	Hamblin, W.K. & Christiansen, E.H.
Publishing Year	2001
Title	Earth's dynamic systems
Subtitle	
Edition	9th
Publisher	Prentice-Hall
ISBN	0130183717

Course Material	Book
Author	Holden, J.
Publishing Year	2005
Title	An introduction to physical geography & the environment
Subtitle	
Edition	
Publisher	Pearson
ISBN	0131217615

Notes

This module will provide students with a grounding in the major earth surface processes. The module will allow integration of geomorphological processes and geological environments of deposition. This module underpins much of the teaching of geosciences at Level 2.