Liverpool John Moores University

Title:	EARTH SYSTEMS
Status:	Definitive
Code:	**4302NATSCI** (121163)
Version Start Date:	01-08-2021
Owning School/Faculty:	Biological and Environmental Sciences
Teaching School/Faculty:	Biological and Environmental Sciences

Team	Leader
Alexandre Gagnon	Y
Sasha Kosanic	
Jonathan Dick	
Laura Edwards	
Tim Lane	
David Jordan	
Emma Smith	
Kostas Kiriakoulakis	
Graham Sherwood	

Academic Level:	FHEQ4	**Credit Value:**	20	**Total Delivered Hours:**	60
Total Learning Hours:	200	**Private Study:**	140		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Off Site	12
Practical	22
Workshop	4

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	Test	Computer-based Test	60	
Report	Report	Field report	40	

Aims

To provide students with an introduction to our planet as a whole system and to develop skills appropriate to investigating the geography and formation of the Earth

Learning Outcomes

After completing the module the student should be able to:

1	Explain the processes occurring in the lithosphere, biosphere, hydrosphere, and atmosphere of Earth.
2	Explain and evaluate the relationships between the Earth's geographical systems.
3	Apply practical skills of geographical data collection, analysis, and interpretation.

Learning Outcomes of Assessments

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

Test	1	2
Field Report	2	3

Outline Syllabus

The syllabus of this module will provide an introduction to the below:
- Atmosphere and climate
- Hydrology and oceanography
- Biogeochemical cycles with emphasis on carbon cycle
- Ecology, biogeography and soils
- Glaciation and the cryosphere
- Formation of the Earth and plate tectonics
- Sedimentary processes

Learning Activities

Lectures are integrated with appropriate lab/computer practical and workshop sessions and fieldwork.

Notes

This module provides students with an introduction to the Earth from a geographical perspective and explores how the various global systems (lithosphere, atmosphere, hydrosphere, cryosphere, biosphere) are linked, and interact with one another.

Tasks completed during practical sessions will be used as formative assessments in order to provide continuous formative feedback to students throughout the course.