UNIVERSITY OF LONDON | INTERNATIONAL PROGRAMMES

Course information 2011–12
GY1147 Physical geography: fundamentals of the physical environment

This course provides a wide-ranging introduction to the principles of Physical Geography and it is the foundation for more specialised and detailed study.

Prerequisite
None apply.

Aims and objectives
This course aims to provide a wide-ranging introduction to the principles of Physical Geography. These are concerned with the form and functioning of the natural environment and how they change over various timescales. This course is the foundation for further and more detailed study in the fields of geomorphology, climatology, biogeography, hydrology and past environmental change. It also provides valuable context for studying Human Geography in areas such as environmental management and sustainability.

Essential reading
For full details please refer to the reading list

Christopherson, R.W. *Geosystems.* (Upper Saddle River, N.J.: Pearson Education)
Maslin, M. *Global Warming: A Very Short Introduction.* (Oxford: Oxford University Press)
Ruddiman, W. *Earth's Climate: Past and Future.* (New York: Freeman)
Smithson, P., K. Addison and K. Atkinson *Fundamentals of the Physical Environment*. (London: Routledge)
Waugh, D. *Geography: An Integrated Approach.* (Walton-on-Thames: Nelson Thornes)

Learning outcomes
At the end of this course and having completed the essential reading and activities students should have:

- ☑ insight into the basic components of the natural environment and understanding of how these are shaped by natural and some human processes
- ☑ knowledge of how these processes interact with one another and some perspective of both the time and spatial scales at which they operate.

These skills will be developed by using ideas and information acquired from reading to approach problems and answer questions about the natural environment.

Assessment
This course is assessed by a three hour unseen written examination.

Syllabus

This is a description of the material to be examined, as published in the *Regulations*. On registration, students will receive a detailed subject guide which provides a framework for covering the topics in the syllabus and directions to the essential reading.

- Composition of the Earth: plate tectonics, earthquakes, volcanoes, rock types, geohazards.
- Tectonics and climate: setting the scene for our unique modern climate system.
- Atmosphere: composition and circulation.
- Hydrosphere and landscape evolution: precipitation, rivers, lakes, erosion, weathering patterns, hillslope dynamics.
- Oceans: surface and deep circulation, upwelling, productivity and climate.
- Biosphere: evolution, ecosystem concepts, ecological processes, soil dynamics, vegetation-geology-climate interactions.
- Global environmental change: glacial-interglacial cycles, sea-level changes, Heinrich events, El Nino southern oscillation, North Atlantic oscillation, global warming.

Students should consult the *Programme Regulations for degrees and diplomas in Economics, Management, Finance and the Social Sciences* that are reviewed annually. The Prerequisites, Exclusions, and Syllabus are subject to confirmation in the *Regulations.* Notice is also given in the *Regulations* of any courses which are being phased out and students are advised to check course availability.