GEOG2165 Global Landforms

TIMETABLE ARRANGEMENT: Annual; 1st Semester

CREDITS: 6

COURSE TEACHER: Dr. Jimmy Li

ASSESSMENT:

<table>
<thead>
<tr>
<th>Examination</th>
<th>Coursework 60%</th>
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<tbody>
<tr>
<td>A closed-book final exam</td>
<td>Problem sets</td>
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<tr>
<td></td>
<td>Term paper</td>
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OBJECTIVES:

To provide an introduction to major concepts of earth surface landforms and their associated internal and external formation processes.

COURSE SYNOPSIS:

This course is a core element in physical environmental study. The course provides a systematic description and analysis of earth surface landscapes and the processes that create them. Given that the Earth’s land surface is located at the interface of the Earth’s lithosphere, atmosphere, hydrosphere and biosphere, this study is closely related to a wide range of disciplines of natural environments. Topics discuss the landforms and their processes in different environments, including slope, fluvial, coastal, glacial and arid locations. The landforms created by tectonic movement and the techniques in geomorphology are also studied.

LECTURE TOPICS:

- Global technics and Earth surface relief
- Volcanicity and landforms
- Weathering
- The processes and forms in slope, fluvial, coastal, karst, aeolian and glacial, and periglacial environments
- Application of geomorphology
- Techniques and field investigation

RECOMMENDED READING LIST:

- Scherler D, Marren GM, Strecker MR, 2011. Spatially variable response of Himalayan glaciers to climate change affected by debris cover. Nature Geoscience, DOI: 10.1038/NGEO1068

<table>
<thead>
<tr>
<th>Course Learning Outcomes (CLOs)</th>
<th>Alignment with Programme Learning Outcomes (PLOs)</th>
<th>Course Assessment Methods</th>
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<tbody>
<tr>
<td>After completing this course, students would be able to:</td>
<td>1</td>
<td>2</td>
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<tr>
<td>1 Explain the processes by which gravity, water, wind, ice and other geographic agents modify and shape landscapes</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>2 Describe different types of landforms and recognize examples of these landforms in photos, on maps, and on the landscape</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>3 Calculate stresses and forces working on the landscape, explain the meaning of your calculated values, and relate these values to landscape characteristics</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>4 Understand the primary scientific methods, including quantitative methods, in geomorphology and be able to communicate your findings effectively</td>
<td>✔</td>
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*b* Problem sets, term paper & exam

* Problem sets, term paper & exam

* Problem sets & exam

* Term paper & exam
*Geography Major Programme Learning Outcomes (PLOs)*

In order to meet the demands and challenges in this dynamic and ever-changing world, the Department has designed a series of well-structured and contemporary courses to cater to the different interests of students. Its courses are designed to align with the University’s educational aims which hope to nurture future generations not only with a critical and intellectual mindset, but also with a passion to contribute to society in general.

After completing the programme, Geography Major students should be able to:

- **PLO1** critically analyse the geographical aspects of the relationship between people and the natural environment;
- **PLO2** demonstrate and develop an understanding of how these relationships have changed with space and over time;
- **PLO3** identify, collect and utilize primary and secondary data to investigate and analyse the issues and problems facing people, places and society;
- **PLO4** integrate, evaluate and communicate information from a variety of geographical and other sources;
- **PLO5** participate in promoting social, economic and environmental sustainability at the local, regional and global scales; and
- **PLO6** effectively apply a range of transferable skills in academic, professional and social settings.