

The University of Hong Kong

Faculty of Sciences

Department of Earth Sciences

Earth Sci 2022

Explore Planet Earth, Its Hazards, Resources and Environmental Change

(July 11 – 15, 2022)

Course Objective

The objective of this course is to provide a general understanding of our planet Earth and environmental issues. Through comprehensive lectures, hands-on exercises, outdoor field trips and visits to different university and government facilities, students will acquire knowledge about Earth System Sciences from various scientific perspectives. Students will come across basic concepts on Earth and environmental related disciplines and gain experience on scientific interpretation, which enable them to widen their horizon on their future learning development.

A certification of completion will be issued to students upon completion of the course.

Course Outline

It will cover basic theory and practical experience in the following topics:

- 1) Identification of common rocks and minerals
- 2) Plate tectonics and Earth dynamics
- 3) Climate change and geological hazards (such as earthquakes, tsunami, and volcanoes)
- 4) Natural resources and energy consumed

Learning Outcomes

After completion of this course, students should have:

- enhanced their skills of scientific interpretation and critical thinking;
- obtained field work experience and training on field interpretation;
- ability to identify common minerals and rocks and their economic values;
- fundamental concepts of global tectonic evolution and the mechanism of earthquake and volcanic activities by case studies;
- developed better knowledge on global climate change and the human impacts on this issue.

Study Loads

5 days course from 09:30 to 17:00

- 2 full-day and 2 half-day lecture
- 1 full-day field trip
- 2 half-day site visiting

Course Assessment

The course will be divided into two assessments

1. In-class exercise and laboratory works
2. Active Participation

Students will be issued a Certificate of Completion upon finishing the course.