

Course number		U-LAS15 20002 LE58					
Course title (and course title in English)		Field Earth Science-E2 Field Earth Science-E2		Instructor's name, job title, and department of affiliation		Graduate School of Science Professor,ZWINGMANN , Horst Friedrich August	
Group	Natural Sciences		Field(Classification)		Earth Science(Development)		
Language of instruction	English		Old group	Group B		Number of credits	2
Number of weekly time blocks	1	Class style	Lecture (Face-to-face course)		Year/semesters	2025 • Second semester	
Days and periods	Wed.2		Target year	2nd year students or above		Eligible students	For science students
[Overview and purpose of the course]							
Understanding the past earth activities and its geological records provides essential information to predict development and environmental change of the earth. Past earth activities can be investigated through geological field studies. This lecture is designed to understand the role of field work studies based on traditional to modern earth scientific methods.							
[Course objectives]							
The objective of this course is to develop an understanding of fundamental geological concepts and processes of plate tectonics and its influences on the dynamic Earth. The lectures comprise a general introduction to plate tectonics theory and selected detailed field case studies from Japan and the world.							
[Course schedule and contents)]							
<p>This lecture is designed to teach the essence of geological field surveys and studies. The main concept of the developing earth is based on the theory of plate tectonics. This lecture demonstrates how geological information obtained by field studies enables earth scientists to establish the plate tectonics theory.</p> <ol style="list-style-type: none"> 1. General introduction of the significance of the field survey correlated with the plate tectonics theory. (2 times) 2. Understanding time scale which produce various geological phenomenon. (2 times) 3. Introduction of development the geology around Kyoto, accretional complex. (2 times) 4. Plate tectonics and climate change case studies (8 times) <ul style="list-style-type: none"> - Antarctica - North polar-region - Himalaya - Volcanic chains in the circum Pacific region <p>Course will be offered in the second semester with 14 classes, one examination and one feedback class.</p>							
[Course requirements]							
None							

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[Evaluation methods and policy]

Students are able to (1) demonstrate knowledge of geological techniques relevant to the plate tectonics theory; and (2) identify and interpret common minerals, rocks, fossils and tectonic structures and interpret their formation; and (3) read and interpret basic geological maps. The evaluation method comprises (1) an in class assignment (50%) and (2) written examination during the official examination term (50%).

[Textbooks]

Instructed during class

Instruction is given during class.

[References, etc.]

(References, etc.)

Introduced during class

Instruction is given during class.

[Study outside of class (preparation and review)]

This course has been designed to allow students to integrate the concepts covered in lectures with own readings. A joint group project is developed by students based on data from a range of sources. Students will be supported throughout the project by discussions with your lecturer and associated students.

[Other information (office hours, etc.)]

Office hours and method of communication given during class.