

科目ナンバリング		U-LAS15 20002 LE58									
授業科目名 <英訳>		Field Earth Science-E2 Field Earth Science-E2				担当者所属 職名・氏名		理学研究科 教授 ZWINGMANN, Horst Friedrich August			
群	自然科学科目群			分野(分類)	地球科学(発展)			使用言語	英語		
旧群	B群	単位数	2単位	週コマ数	1コマ	授業形態	講義(対面授業科目)				
開講年度・ 開講期	2024・後期		曜時限	水2		配当学年	2回生以上	対象学生	理系向		
【授業の概要・目的】											
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.											
【到達目標】											
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.											
【授業計画と内容】											
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.											
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)											
- Antarctica											
- North polar-region											
- Himalaya											
- Volcanic chains in the circum Pacific region											
Course will be offered in the second semester with 14 classes, one examination and one feedback class.											
【履修要件】											
特になし											
【成績評価の方法・観点】											
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%).											
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## Field Earth Science-E2(2)

### **[教科書]**

授業中に指示する

Instruction is given during class.

### **[参考書等]**

( 参考書 )

授業中に紹介する

Instruction is given during class.

### **[授業外学修（予習・復習）等]**

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.

### **[その他（オフィスアワー等）]**

to be confirmed