

Year	Second semester 2026
Course	Introduction of Earth and Planetary Material Sciences
Day/Period	Tue.2Period
Credit(s)	2Credits
Instructor	SATOSHI OKUMURA,TAKAHIRO KURIBAYASHI,DAISUKE NAKASHIMA
Eligible Participants	Undergraduate 3rd grade
Course code/number	SEP-EAS801E
Main Subjects	
Course of Media Class	
Practical business	
Language Used in Course	English
Course Title	Introduction to Earth and Planetary Material Sciences
Purpose/Abstract	This class is an introductory geology program to understand fundamental issues of Earth Sciences. The basics of Solar system, Volcanology, Mineralogy and Geochemistry will be taught, and each part will introduce recent topics.
Goal	The goal of this class is to obtain wide background knowledge concerning Earth Sciences.
Contents and progress schedule of the class	Details of the schedule will be announced during the guidance. - Guidance - An overview of the current Solar System - A general picture of the Solar System evolution - Dynamics of the solid Earth and the origin of volcanoes - Mechanism of volcanic eruptions based on the physical and chemical properties of magma - Fundamentals of Mineralogy: Definition, Crystal Structure and Symmetry etc. - Classification of Minerals and how to identify minerals - Examination
Grading	Reports/exams
Books required/referenced	Text information will be provided in the lecture.
Contents of preparation and review	The information will be provided in the lecture.
Study time for preparation and review	Standard Hours for Preparation/Review per class: *Lectures 4 hour *Seminar 2-4 hour *Experiment, Laboratory Work, and Skill Test 2 hours
How to contact and Google Classroom Code	Satoshi Okumura (satoshi.okumura.d2@tohoku.ac.jp) The class schedule will be announced later. jmflep7f
Remarks	
Last Update	

One-credit courses require 45 hours of study. In lecture and exercise-based classes, one credit consists of 15-30 hours of class time and 30-15 hours of preparation and review outside of class. In laboratory, practical skill classes, one credit consists of 30-45 hours of class time and 15-0 hours of preparation and review outside of class.