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| Year | Second semester 2025 |
| Course | Introduction of Earth and Planetary Material Sciences |
| Day/Period | Tue.2Period |
| Credit(s) | 2Credits |
| Instructor | SATOSHI OKUMURA,TAKAHIRO KURIBAYASHI,HIROAKI OHFUJI,DAISUKE NAKASHIMA |
| Eligible Participants | 3rd grade and above |
| 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 | <p>Details of schedules will be announced at the guidance of this class.</p> <ul style="list-style-type: none"> - Guidance - Evolution history of the Solar System 1 (Lecturer Daisuke Nakashima) An overview of the current Solar System. - Evolution history of the Solar System 2 (Lecturer Daisuke Nakashima) A general picture of the Solar System evolution. - Introduction to volcanology1 (Associate Professor Satoshi Okumura) This lecture introduces the dynamics of solid earth and the origin of volcanoes. - Introduction to volcanology2 (Associate Professor Satoshi Okumura) we discuss the mechanism of volcanic eruptions based on the physical and chemical properties of magma. - Introduction to Mineralogy and Crystallography 1 (Associate Professor Takahiro KURIBAYASHI) This lecture introduces the fundamentals of Mineralogy will be lectured: Definition, Crystal Structure and Symmetry etc. - Introduction to Mineralogy and Crystallography 2 (Associate Professor Takahiro KURIBAYASHI) This lecture introduces the classification of Minerals and how to identify minerals will be lectured. - Mineral evolution 1 (Professor Hiroaki OHFUJI) This lecture introduces the diversity of mineral species throughout the 4.6 billion year history of the Earth (Era of planetary accretion and crust-mantle reworking). - Mineral evolution 2 (Professor Hiroaki OHFUJI) This lecture introduces the diversity of mineral species throughout the 4.6 billion year history of the Earth (Era of biologically mediated mineralogy). |
| Grading | Reports/exams |
| Books required/referenced | Each speaker will indicate during class. |
| Contents of preparation and review | Each speaker will indicate during class. |
| Study time for preparation and review | <p>Standard Hours for Preparation/Review per class:</p> <ul style="list-style-type: none"> *Lectures 4 hour *Seminar 2-4 hour *Experiment, Laboratory Work, and Skill Test 2 hours |
| How to contact and Google Classroom Code | The class schedule will be announced later. 7w3u2dd |
| 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.