

| Course Title  | Credits                    | Semester   | Course Classification | Course No. |
|---|----------------------------|--|-----------------------|------------|
| Global Environment and Its Dynamics   | 2                          | Fall   | Elective              | F-9        |
| Instructor(s)/Coordinator(s)  | Maximum Student Enrollment | Keywords   |                       |            |
| TSUKAWAKI Shinji<br>(Institute of Nature and Environmental Technology)  | 50                         | Global Environment, Global Tectonics, Human Evolution, Natural Resources |                       |            |
| Goal of Course& Educational Objectives  |                            |  |                       |            |
| <p>We, the species <i>Homo sapiens</i>, live on the Earth's solid surface. In order to understand the dynamics of the global environment and temporo-spatial changes to the global environment at various scales, this course provides a basic knowledge of global tectonics and related geological phenomena such as earthquakes, tsunamis and volcanic eruptions. Topics related to natural resources and climatic changes, which have become urgent issues for the Earth's environment, will be explained in the course. The evolutionary history of <i>H. sapiens</i> will be offered to help students grasp the nature and characteristics of a creature which has taken control of the present Earth's surface biosphere from geological and biological viewpoints.</p> |                            |  |                       |            |
| Course Outline  |                            |  |                       |            |
| <p>Week 1: Guidance and Introduction<br/> Week 2 - 4: Global Tectonics (Plate Tectonics and Plume Tectonics)<br/> Week 5 - 6: Natural Disaster (Volcanic Eruptions, Earthquakes and Tsunamis)<br/> Week 7: Glaciation and Global Sea-level Changes<br/> Week 8: Climatic Change in Earth's History<br/> Week 9: Natural Resources (Petroleum and Water)<br/> Week 10 - 12: Human Evolution (Evolutionary History of the Genus <i>Homo</i>)<br/> Week 13 - 14: Nature and Characteristics of the Species <i>Homo sapiens</i><br/> Week 15: Conclusion and Discussion</p>   |                            |  |                       |            |
| Grading   |                            |  |                       |            |
| Attendance and Participation: 100%  |                            |  |                       |            |
| Textbook(s)   |                            |  |                       |            |
| Handouts will be provided.  |                            |  |                       |            |
| Additional Information  |                            | Prerequisite(s)  |                       |            |
| This course is also offered as a regular course for undergraduate students.   |                            |  |                       |            |
| Office Hours  |                            |  |                       |            |
| <p>Email: tukawaki@t.kanazawa-u.ac.jp<br/> Tel.: 076-264-5814 or 076-264-5990<br/> Office Hours: any time, rooms 679 or 680 of the General Education Hall</p>   |                            |  |                       |            |