

Subject (English)	Evolution of the Western Pacific Island Arcs and Their Environments		Semester	Spring	Day/Slot	Tues./2nd 10:30-12:00	
科目名 (日本語)	島弧系の進化と環境						
Course Code	VJ222S6	Course Numbering	SGS-EAS802E		Period	Apr. 10 – Jul. 16, 2019	
Instructor (Post)	Jun Muto, <i>et al.</i> (Assoc. Prof.)				Campus	Aobayama Campus	
					Building	Earth Science Building	
Faculty	Faculty of Science		Credits	2	Class Room	Room 513	
Class subject	-						
Object and summary of class							
In this lecture course, students will learn some basic concepts and knowledge of 1) plate tectonics and 2) the tectonic history of the world including Japan Islands, 3) active faults and earthquakes, 4) ocean environments and their history. Also, this class deals with 5) the effect of the Western Pacific island arcs and Japan Sea to the Asian monsoon circulation.							
Keywords	Plate tectonics, Japan island, fault and earthquake, environment, climate						
Goal of study							
This course aims at presenting some basic concepts and information of plate tectonics and the tectonic history of the Asiatic continent and the Japanese islands, active faults and earthquakes, ocean environments and their history, and climate.							
Contents and progress schedule of class							
The lectures include the problems how natural hazard and earth's environmental changes affect the living world and human life.							
Lectures will be given in the following topics (schedule may change):							
<ul style="list-style-type: none"> -Outline of lectures and, Rheology of rocks and subduction zone earthquake cycles -Geology and morphology of Kawauchi and Hirose river area (outside small trip) -Earthquake triggering -Earthquakes and active faults -Faulting and electro-magnetic phenomena -Active faults in Japan -Coral reefs in Japan. -Geology and biogeography of the Ryukyu Islands -Greenhouse paleoenvironments -Looking back of life -Climate change during the past 200 Myr. -The Great East Japan Earthquake -Monsoon circulation around Japan 							
Schedule (Instructor)							
1	2	3	4	5	6	7	8
4/9 (J. Muto)	4/16 (J. Muto)	4/23 (S. Osozawa)	5/7 (S. Toda)	5/14 (Y. Isoda)	5/21 (S. Hirano)	5/28 (O. Sasaki)	6/4 (R. Asami)
9	10	11	12	13	14	/	/
6/11 (Y. Iryu)	6/18 (R. Takashima)	6/25 (H. Nagahama)	7/2 (H. Nishi)	7/9 (TBC)	7/16 (TBC)		
Preparation	None						
Record and evaluation method	Attendance (50%) and submitted reports (50%)						
Textbook and references	TBC						
Self study	TBL						
In addition	-						