

Course Code: VJ241S9

Subject	【JYPE】Geological Environment and Earthquake Disaster
Categories	Engineering
Day/Period	Thursday 8:50–10:20
Year	2020
Semester	Spring Semester
Credit(s)	2
Instructor (Position)	Masato MOTOSAKA (Emeritus Professor)
Eligibility	JYPE
Language	English

Class Subject	Geological Environment and Earthquake Disaster
Objectives and Summary of Class	This course comprises the lectures, students' presentations and discussions on engineering topics for earthquake disaster prevention considering geological environment.
Goal of Study	To understand the difference of ground motions due to soil conditions for earthquake countermeasures
Contents and Class Schedule	<p>It is clear through past disastrous earthquakes that the earthquake damage is quite different depending on the geological conditions. The earthquake observation explains this truth. Therefore, it is important to take into account the difference of ground motion due to soil conditions in a seismic design of urban structures and in urban disaster prevention planning. In this course, two reports are requested and students make presentation based on the materials of the task during classes.</p> <p>1 5/7 Introduction to Earthquake and Building Structures 2 5/14 Recent Earthquake Damage and Lessons (I) 3 5/21 Recent Earthquake Damage and Lessons (II) 4 5/28 Students' presentation on the 1st Report and Discussion 5 6/4 Measurement of Ground Motion and Structural Vibration 6 6/11 Overview of Geological Structure and Ground Motion Characteristics 7 6/25 Introduction to Wave Propagation Theory and Structural Vibration 8 7/2 Structural Health Monitoring 9 7/9 Earthquake Damage Prediction –Natural and Social Information– 10 7/16 Seismic Protection Technology –Earthquake Early Warning System– 11 7/23 Recent Topics on Earthquake Disaster Prevention Projects 12 7/30 Students' presentation on the 2nd Report and Discussion</p>
Evaluation Method	The evaluation will be based on the reports and presentations for the requested subjects.
Textbook and references	
URL	
Preparation and Review	
In addition	In each lecture, the relevant material will be handed out.
Last Update	2020/04/21 10:13