Browse Syllabus

🧐 Subject	[JYPE] Geological Environment and Earthquake Disaster
🧐 Categories	School of Engineering
🧐 Day/Period	Thursday 1st (8:50-10:20)
🧐 Year	2022
🧐 Semester	Spring Semester
🧐 Credit(s)	2
 Instructor (Position) 	MASATO MOTOSAKA (Emeritus Professor)
🧐 Eligibility	JYPE
🧐 Language	English
Notes	

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 e and Class Schedule	Google classroom : iz27x5c 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. 1 4/14 Introduction to Earthquake and Building Structures 2 4/21 Recent Earthquake Damage and Lessons (I) 3 4/28 Recent Earthquake Damage and Lessons (I) 4 5/12 Students' presentation on the 1st Report and Discussion 5 5/19 Measurements of Ground Motion and Structural Vibration 6 5/26 Overview of Geological Structure and Ground Motion Characteristics 7 6/2 Introductions to Wave Propagation Theory and Structural Vibration 8 6/9 Structural Health Monitoring 9 6/16 Earthquake Damage Prediction -Natural and Social Information- 10 6/23 Seismic Protection Technology-Earthquake Early Warning System- 11 7/30 Recent Topics on Earthquake Disaster Prevention Projects 12 7/7 Students' presentation on the 2nd Report and Discussion	
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	2022/04/07 11:36	

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 od 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.