

Subject	Water and Waste Engineering			Credits	2
Subject Type	Type 1 Subject	Schedule	Fri. 3rd (13:00-14:30)		
Course	Master's Course	Instructor	Assoc. Prof. HIRAYAMA, Nagahisa		
Keywords	Water system, Waste treatment system, Water supply engineering, wastewater engineering, Waste Management Engineering				
Outline	We will give lectures on the water and wastewater system, waste management system, the management system and cutting-edge technologies for water, waste, and human health and the environment. In addition, we consider the water and waste system from the viewpoint of natural disaster, climate change, and depopulation society. And, we will discuss the emergency environmental management.				
Objectives	<ul style="list-style-type: none">• To management system and technology for water and waste management system• To discuss and explain on water, wastewater and waste management.• To discuss the future water and waste system with the influence on natural disaster, climate change, and depopulation society.• To understand emergency environmental management.				
Basic subject	Sanitary Engineering, Water and Waste Policy, Urban Environmental Systems Engineering				
Related subject	N.D.				
Contents	1. 4/19	Introduction & Drinking water quality risk management			
	2. 4/26	Water supply system in Japan			
	3. 5/10	Water safety plan			
	4. 5/17	Water quality risk management in emergency			
	5. 5/31	Recovery of clean water			
	6. 6/5	Wastewater treatment system in Japan			
	7. 6/14	Watershed water quality risk management			
	8. 6/21	Waste management system in Japan			
	9. 6/28	Solid waste management technology			
	10. 7/5	Disaster debris management system			
	11. 7/6	Disaster resilience and water system			
	12. 7/12	Presentation 1			
	13. 7/19	Presentation 2			
	14. 7/26	Report 1			
	15. 8/2	Report 2			
Course Textbook	Handouts Recommended reference books will be introduced in class. Presentation & Materials: English Oral explanations: English Questions in English: Available				
Grading Criteria	Participation 45%, Presentation 25%, and Report 30%				
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