Course nu	U-LAS61 10009 LE61											
Course title (and course title in English)		•		name 2 and d	Instructor's name, job title, and department of affiliation			Graduate School of Energy Science Associate Professor, AU Ka Man				
Group In	terdiscij	erdisciplinary Sciences				Field(Classification)			Environmental Sciences			
Language of instruction	Englis	English			Old	Old group			Number of credits 2		2	
Number of weekly time blocks	1		I CIASS SIVIC		ecture Face-to-	cture ace-to-face course)			Year/semesters		2025 • First semester	
Days and periods Wed				Targ			ainly 1st & 2nd year students		Eligible students		For science students	

[Overview and purpose of the course]

Chemistry and chemical processes are very important in both the natural environment and in human society. It is important to understand how chemistry helps to develop the products and services that we utilise, as well as how chemical products from society impact the environment, and how we can mitigate such impacts.

This class will introduce some of the important chemical processes and products that shape modern society, as well as examining the influence that they have on the environment. It will cover basic, important chemical processes that occur in nature as well.

The course is aimed at those who are not specialists in chemistry, but are interested in chemistry and its application, history and influence.

[Course objectives]

Students will understand the importance of chemistry and its role in the modern world. Students will understand the importance of chemistry in relation to societal goals and environmental issues.

[Course schedule and contents)]

The following topics will be covered.

Chemistry introduction

- 1. The history of chemistry and its influence on society
- 2. The chemical industry and global flows

Introduction to the basics of important chemical processes:

- 3. Water chemistry
- 4. Energy chemistry
- 5. Petrochemistry
- 6. Pharmaceuticals and health chemistry
- 7. Mineral chemistry

Environmental issues and chemistry

- 8. Climate change
- 9. Chemical pollution
- 10. Addressing environmental problems

Continue to Chemistry, Society and Environment-E2(2)

Chemistry, Society and Environment-E2(2)
Each of the above topics covers 1-2 weeks, with one class per week.
The course overall consists of 14 classes and one feedback session.
[Course requirements]
None
[Evaluation methods and policy]
Class participation and small exercises (35%)
Final presentation (15%)
Final report (50%)
[Textbooks] Not used
[References, etc.]
(References, etc.)
Introduced during class
[Study outside of class (preparation and review)]
Small exercises out of class may be expected.
[Other information (office hours, etc.)]