19 April 2002

Environmental Technology Policy Making/ Environmental and Energy Engineering

Lectured by Dr. Makoto Akai
Professor Hajime Yamaguchi
Associate Professor Hideyuki Suzuki
Associate Professor Toru Sato
Associate Professor Jun Takahashi

1 credit point each, total 2 points (corresponding to 4 credit points of University of Sydney)

Offered: Classes: 26 contact hours (all lectures), Given in English.

Assessment: presentation

Keywords: Global Environments, Environmental Technology, Policy Making

Objectives: These two different classes are ones of the required courses for the Joint Programme "Greenhouse Gas Mitigation" with the University of Sydney, Australia. The objectives and the contents of these two classes are strongly related, hence the lectures will be mixed and arranged to get information systematically. Students must take these two classes at the same time, and guidance will be given in the first class of April 5th together.

Environmental Technology Policy Making;

Energy and resource are limited, and some global environmental crises are predicted by IPPC. This omnibus lecture series will explain why and how to make the policy for global environmental and energy issues, and what kinds of technologies are expected to solve them.

Environmental and Energy Engineering;

Concerning the environmental and energy issues, advanced researches conducted in Department of Environmental and Ocean Engineering will be introduced.

Outcomes: Students will be able to get the following information systematically;

- Current topics concerning global environmental and energy issues,
- How to make the world and national policy,
- Environmental technologies and their role in the policy,
- Advanced environmental researches.

Schedule: Friday 13:00-14:40 at Lecture Room 74, Building 7 (East side)

Date	Title	Lecturer	Key Words
5 April	No Lecture		
12 April	No Lecture (Foundation Anniversary of the university)		
19 April	Guidance	Sato	
	What's Equity, and What's Sustainability?	Edahiro	Equity, Sustainability, Sustainable Development
26 April	Environmental Policy in Non-Industrial Sector	Takahashi	CO2 Emission, Save Energy, Civil Sector, Transport Sector
3 May	No Lecture (National Holiday)		
10 May	Utilization of Ocean Space	Suzuki	Advanced Technique of Floating Structure, Mega-Float
17 May	Biological Sequestration of CO2	Sato	CO2 Sequestration, Photobioreactor, Microorganism
24 May	No Lecture (Spring Festival of the university)		
31 May	Polar Environment and Global Warming	Yamaguchi	Satellite Remote Sensing, Sea Ice, Global Circulation
7 June	Overview on Environmental and Energy Policy	Akai	Climate Change, Global Worming, UNFCCC, IPCC
14 June	Environmental Policy in Japan	Akai	Local Environment, Global Environment, Policy Making
21 June	Challenge towards Climate Change	Akai	Kyoto Target, Deep Reduction of CO2, Mitigation Scenario
28 June	Industry's Participation in Climate Change Problem	Ozaki	CO2 Sequestration Technology
5 July	Combustion, Reaction and CO2 Sequestration	Hirai	Combustion, Reaction, Fuel Cell, CO2 Sequestration
12 July	R&D Policy in Japan	Akai	R&D Programs, Technology Assessment