

**Course Outline**  
**JEE667 Environmental Pollution Control Technology**  
**Semester 2/2023**

**Online via MS Teams Classroom**

**Every Tuesday (Tuesday 16 January – 28 May 2023), 13.30-16.30 (Bangkok Time)**

<b>No.</b>	<b>Date</b>	<b>Topics</b>	<b>Details</b>	<b>Lecturers</b>
1	16 Jan 2024	Introduction and Discussion on the expected teaching and learning process	<ul style="list-style-type: none"> <li>• Get started together!</li> <li>• Survey of student background and expected learning outcomes.</li> <li>• Introduction to Environmental Pollution Control Technology</li> </ul>	Dr. Savitri Garivait
2	30 Jan 2024	Pollution of the Aquatic Environment: Priority Pollutants and Their Control (Part 1: Oceanic and Marine Environment)	Review of water pollution by chemicals resulting from human activities and their control technology (Part 1: Oceanic and marine environment)	Dr. Savitri Garivait
3	06 Feb 2024	Pollution of the Aquatic Environment: Priority Pollutants and Their Control (Part 2: In-Land Watershed)	Review of water pollution by chemicals resulted from human activities and their control technology (Part 2: In-land watershed)	Dr. Savitri Garivait
4	13 Feb 2024	Water Pollution from Wastewater (Industry and Households) and Their Control and Treatment Technologies	Review of wastewater (industry and households) and their control and treatment technologies	Dr. Savitri Garivait
5	20 Feb 2024	Sewage, Sewage Sludge, and Industrial Sludge Treatment	Review of management, treatment and utilization of sewage, sewage sludge, and industrial sludge	Dr. Savitri Garivait
6	27 Feb 2024	<b>Evaluation of Water Pollution and Their Control Technology</b>		Dr. Savitri Garivait

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7	05 Mar 2024	Soil Pollution and Land Contamination	Review of soil pollution resulting from human activities, especially those related to energy use and production	Dr. Savitri Garivait
8	12 Mar 2024	Soil Pollution and Land Contamination Remediation Technology	Review of soil pollution remediation technology: chemical and biological techniques	Dr. Savitri Garivait
9	19 Mar 2024	Solid Waste Management	Review of solid waste and MSW, their characteristics and possible management	Dr. Savitri Garivait
10	26 Mar 2024	Solid Waste Treatment and Waste to Energy	Review of solid waste treatment and waste to energy technologies, especially Anaerobic Digestion, Incineration, and Mechanical and Biological Treatment	Dr. Savitri Garivait
11	02 April 2024	<b>Evaluation of Soil Pollution Control and Remediation Technology and Solid Waste</b>		Dr. Savitri Garivait
12	09 Apr 2024	<ul style="list-style-type: none"> <li>• Emissions of Gases from Points/Stationary Sources and Their Control Technologies</li> <li>• Emissions of Particulate Matter from Points/Stationary Sources and Their Control Technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Review of emitted gases and technologies to control gaseous emissions from stationary sources, especially Scrubber, Adsorber, Thermal Techniques, FGD</li> <li>• Review of emitted particulate matter (PM) and technologies to control PM emissions at stationary sources, especially Cyclone, Fabric Filtration, and Electrostatic Precipitation</li> </ul>	Dr. Savitri Garivait
13	23 Apr 2024	Emissions from Mobile Sources	Review of mobile source characteristics, and their control technologies, especially Catalytic Converter, Particulate Filters, etc.	Dr. Savitri Garivait

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14	30 Apr 2024	<b>Evaluation of Air Pollution and their Control Technology</b>		Dr. Savitri Garivait
15	07 May 2024	Mitigation Technology of GHG (Part 1: CCS, CCUS and CSS)	General review of carbon capture and storage technology, carbon capture, usage, and storage, and carbon sequestration and storage technology, and their applications	Dr. Savitri Garivait
16	14 May 2024	Mitigation Technology of GHG (Part 2: CCS, CCUS and CSS for Power Plant)	Review of carbon capture and storage technology, carbon capture, usage, and storage, and carbon sequestration and storage technology for Power Plant	Dr. Savitri Garivait
17	21 May 2024	Mitigation Technology of GHG (Part 3: CCS, CCUS, and CSS for Cement Industry)	Review of carbon capture and storage technology, carbon capture, usage, and storage, and carbon sequestration and storage technology for Cement Industry	Dr. Savitri Garivait
18	28 May 2024	<b>Evaluation of Mitigation Technology of GHG and Individual Presentation of the “Learning Outcomes Summary”</b>		Dr. Savitri Garivait