

Module designation	Concepts of Pollution Control and Environmental Degradation
Code, if applicable	CIL 23825
Semester(s) in which the module is taught	2nd
Person responsible for the module	Prof. Dr. Ir. Purwanto, DEA
Language	<i>Indonesian and English</i>
Relation to curriculum	<i>Elective</i>
Teaching methods	<i>Lecture, Discussion (Q & A), Presentation.</i>
Workload (incl. contact hours, self-study hours)	<p><i>(Estimated) Total workload:</i></p> <ul style="list-style-type: none"> • <i>50 minutes of face-to-face lectures in class</i> • <i>1 hour of structured assignments (doing homework or assignments given by lecturers) or independent work (reading books, papers, etc.)</i>
Credit points	<i>2 credits</i>
Requirements according to the examination regulations	<i>Minimum attendance of lectures 75%</i>
Required and recommended prerequisites for joining the module	<i>Existing competencies in ecology</i>
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> - <i>Able to analyze environmental pollution and its sources.</i> - <i>Able to examine various implications of pollution on quality and environmental degradation.</i> - <i>Able to evaluate pollution control along with disaster mitigation and recovery.</i>
Content	<i>Definition of environmental pollution and pollutant sources, control of water environment pollution, control of air environmental pollution, control of soil environmental pollution, implications of pollution on environmental degradation and environmental degradation, possibilities of environmental disasters due to pollution, principles of pollution control from the perspective of physics-chemistry, biology, and health, principles of pollution control from community participation, principles of disaster mitigation and recovery, case studies of pollution in the air environment, case studies of pollution in the hospital environment, case studies of pollution in the hotel environment, study cases of pollution in industrial areas, case studies of pollution in urban areas.</i>
Exams and assessment formats	<i>One oral Midterm assessment (15 minutes each), one final oral exam (20 minutes), take-home written assignments.</i>

<p>Study and examination requirements</p>	<p><i>Requirements for successfully passing the module</i> <i>e.g. the final grade in the module is composed of 60% performance on exams, 20% take-home assignments, 20% in-class participation. Students must have a final grade of 60% or higher to pass.</i></p>
<p>Reading list</p>	<p>Rao, C.S., 2007. <i>Environmental pollution control engineering</i>. New Age International.</p> <p>Vesilind, P.A., Peirce, J.J. and Weiner, R.F., 2013. <i>Environmental pollution and control</i>. Elsevier.</p> <p>Cheremisinoff, N.P., 2002. <i>Handbook of air pollution prevention and control</i>. Elsevier.</p> <p>Wardhana, W.A., 2004. <i>Dampak Pencemaran Lingkungan (Edisi Revisi)</i>. Yogyakarta: Penerbit Andi.</p>