Ecology and Environmental Pollution

MASTER PROGRAM OF ENVIRONMENTAL SCIENCE
SCHOOL OF POSTGRADUATE STUDIES
DIPONEGORO UNIVERSITY

A Module Handbook or collection of module descriptions that is also available for students to consult should contain the following information about the individual modules:

Module design	Ecology and Environmental Pollution
Module level, if applicable	
Code, if applicable	CIL-2.2.603
Subtitles, if applicable	
Courses, if applicable	
Semester(s) in which the module is taught	1st Semester
Person responsible for the module	1. Prof. Dra. Norma Afiati, M.Sc., Ph.D.
Lecturer	1. Prof. Dra. Norma Afiati, M.Sc., Ph.D. 2. M. Arief Budihadrjo ST, M.Eng.Sc., Env.Eng. Ph.D **3.** Dr. Jafron Wasiq Hidayat, M.Sc
Language	*Indonesian and English*
Relations to curriculum	
Type of teaching, contact hours	*Lecture: 60 minutes* *Q&A: 10 minutes* *Discussion: 10 minutes* *Presentation: 10 minutes*
Workload	*(Estimated) workload, divided into contact hours (lecture, exercise, laboratory session, etc.) and private study, including examination preparation, specified in hours,[1] and in total.*
Credit points	*3 credits*
Requirements according to the examination regulations	*Minimum attendance of lectures 75%*
Recommended prerequisites	*eg existing competences in...*

[1] When calculating contact time, each contact hour is counted as a full hour because of the organization of the schedule, moving from room to room, and individual questions to lecturers after the class, all mean that about 60 minutes should be counted.

Module objectives/intended learning outcomes	• Able to describe the history of ecological development • Able to describe the interrelationships of living things and their environment • Able to describe important basic concepts in an ecosystem.
Content	Ecology and Environmental Pollution Courses are compulsory subjects in the Environmental Science master's program. The material presented includes an explanation of the history and ecological approach, the concept of environmental factors and their effects on living things, habitats and niches, responses and adaptations, populations, communities, ecosystems and environmental pollution.
Study and examination requirements and forms of examination	• *Open book and close book* • *Multiple choice, case study, interview, practice*
Media employed	*Powerpoint, youtube, website*
Reading list	• Campbell, Neil A. 2012. Biology. Edition 8. Erlangga, Jakarta. • Dasman F. 1980. Principles of Ecology for Development. grammar. Jakarta. • Lakshmi, Prihantoro. 1989. Man and Environment (Man and Environmental). FPMIPA IKIP Bandung. Bandung. • Soerjani, Moh., et al.; 1987. Environment: Natural Resources and Population in Development. University of Indonesia. Jakarta. • Ryadi, ALS 1983. Ecology, Environmental Science, Fundamentals and Understanding. National Effort. Surabaya. • Soeriatmadja. 1987. Environmental Science. ITB. Bandung. • Satrawijaya, A. Tresna. 1991. Environmental Pollution. Rineka Cipta. Jakarta