

MODUL ECOLOGY AND ENVIRONMENTAL POLLUTION



MASTER PROGRAM OF ENVIRONMENTAL SCIENCE
SCHOOL OF POSTGRADUATE STUDIES
DIPONEGORO UNIVERSITY

A Module Descriptions:

Module design	Ecology and Environmental Pollution
Module level, if applicable	
Code, if applicable	P-CIL-8-104
Subtitles, if applicable	
Courses, if applicable	
Semester(s) in which the module is taught	1 st Semester
Person responsible for the module	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	<i>Indonesian and English</i>
Relations to curriculum	
Type of teaching, contact hours	<i>Lecture: 180 minutes Q&A: 30 minutes Discussion: 30 minutes Presentation: 30 minutes Individual Assignment: 60 minutes</i>
Workload	<i>(Estimated) workload, divided into contact hours (lecture, exercise, laboratory session, etc.) and private study, including examination preparation, specified in hours,¹ and in total.</i>
Credit points	<i>3 credit points / 6 ECTS</i>
Requirements according to the examination regulations	<i>Minimum attendance of lectures 75%</i>
Recommended prerequisites	<i>eg existing competences in...</i>

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	• <i>Open book and close book</i> • <i>Multiple choice, case study, interview, practice</i>
Media employed	<i>Powerpoint, youtube, website</i>
Reading list	• Campbell, Neil A. 2012. Biology. Edition 8. Erlangga, Jakarta. • Satrawijaya, A. Tresna. 1991. Environmental Pollution. Rineka Cipta. Jakarta • Bharti, K. P. and Chauhan, A. 2012. Environmental Pollution and Biodiversity. • Singh, J.S., Singh, S.P., and Gupta, S.R. 2014. Ecology and Environmental Science and Conservation. India: S. Chand Publishing. • Raven, P. H., et all. 2022. Environment, 9th Edition 9th Edition. Wiley.