

# MODUL HANDBOOK NATURAL RESOURCES AND ENVIRONMENT CONSERVATION



MASTER PROGRAM OF ENVIRONMENTAL SCIENCE  
SCHOOL OF POSTGRADUATE STUDIES DIPONEGORO  
UNIVERSITY

**Modul Description:**

Module designation	Natural Resources and Environment Conservation
Semester(s) in which the module is taught	2 <sup>nd</sup> Semester
Person responsible for the module	Dr. Fuad Muhammad, S.Si., M.Si. Dr. Ir. Muh Yusuf, M.Si. Dr. Ir. Joesron Alie Syahbana, M.Sc. Dr. Jafron Wasiq Hidayat, M.Sc.
Language	Indonesian and English
Relation to curriculum	<ul style="list-style-type: none"><li>• Compulsory for Environmental Engineering Concentration/Specialization</li><li>• Compulsory for Environmental Management Concentration/Specialization</li></ul>
Teaching methods	Mix Method or Blended Learning by incorporating Lecture Based-learning, Student Centred-Learning and Technological Learning <ul style="list-style-type: none"><li>• Lecture Based-Learning: teacher lead a lesson by using presentation, showing visual</li><li>• Student Centred-Learning: teacher promote individual learning so that student can exploring individual idea</li><li>• Technological Learning, teacher leads to use high technology in information such as by exploring, utilizing internet/searching engine and social media.</li></ul>
Workload (incl. contact hours, self-study hours)	<ul style="list-style-type: none"><li>• Lecture, 3 hours per week</li><li>• Discussion and presentation (Q&amp;A), 1,5 hours per week</li><li>• Individual assignment, 5 hours per week</li><li>• Total workload for semester = 150 hours</li></ul>
Credit points	3 credits/ 6 ECTS
Required and recommended prerequisites for joining the module	No required prerequisite
Module objectives/intended learning outcomes	<ul style="list-style-type: none"><li>• Able to formulate environmental management theory for Natural Resources and Environment Conservation</li><li>• Able to formulate and carry out scientific research to solve environmental problems</li><li>• Able to formulate environmental management policies</li></ul>

	<p>especially related to Natural Resources and Environment Conservation</p> <ul style="list-style-type: none"> <li>• Able to conduct rapid assessments to resolve environmental pollution/damage problems using a management approach and or engineering approach</li> <li>• Able to formulate rules, methods through of environmental management or environmental engineering to improve the quality of life.</li> </ul>
Content	<p>This course aims to creating knowledge for students to understand about natural resources, utilizing and exploring of natural resources and running environmental conservation to maintain the quality of environment. This course exploring the conservation concept, approach and issues. More over this course exploring process on changing environment both from the natural situation and or human being activity. This course study about developing approach of conservation.</p>
Examination forms	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Case study</li> <li>• Individual and group assignments.</li> </ul>
Study and examination requirements	<p>Lecture attendance of at least 75%.</p>
Reading list	<ol style="list-style-type: none"> <li>1. Jhariya, M., et al. (2021). Conservation of Natural Resources and Progress for Sustainability. United States of America: Elsevier Publishing.</li> <li>2. Sangeetha, J., et al. (2021). Characterization and Utilization of Biodiversity and Conservation of Plants, Microbes and Natural Resources for Sustainable Development and Ecosystem Management. Apple Academic Press.</li> <li>3. Dyke, FV, and Lamb, RL (2020). Conservation Biology: Foundations, Concepts, Applications 3rd ed. Spinger Publishing.</li> <li>4. Kareiva, P., and Marvier, M. (2017). Conservation Science: Balancing Human and Natural Needs Both. WH Freeman publications</li> <li>5. Alikodra, H.S., (2012). Resource and Environmental Conservation Ecosophy Approach to Save the Earth 1st ed. Gajah Mada UniversityPress. Yogyakarta.</li> <li>6. Hamilton, S.L. (2011). Ethics, Religion and Biodiversity.</li> </ol>

	<p>Relation between Conservation and Cultural Value. Cambridge: The White Horse Press.</p> <ol style="list-style-type: none"><li>7. Primack, B.R. (2007). Essentials of Conservation Biology. USA: Sinauer</li><li>8. Keraf, S.A. (2006). Environmental Ethics. Jakarta: Kompas Book Publishers</li><li>9. Brown, L. (2006). Conservation and Practical Morality. Challenges to Education and Reform. Macmillan Press.</li></ol>
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