

MODUL HANDBOOK DISASTER MITIGATION AND ADAPTATION



MASTER PROGRAM OF ENVIRONMENTAL SCIENCE
SCHOOL OF POSTGRADUATE STUDIES
DIPONEGORO UNIVERSITY

Modul Description:

Module designation	Disaster Mitigation and Adaptation
Semester(s) in which the module is taught	2 nd Semester
Person responsible for the module	Prof. Drs. Sudharto Prawata Hadi, MES, Ph.D Prof. Dr. Dr. Anies, M.Kes., PKK Dr. dr. Purwanto Adhipireno, SpPK(K) Dr. Anang, Wahyu Sejati, S.T., M.T.
Language	Indonesian and English
Relation to curriculum	Compulsory for Disaster Management Concentration/Specialization
Teaching methods	Mix Method or Blended Learning by incorporating Lecture Based-learning, Student Centred-Learning and Technological Learning <ul style="list-style-type: none">• Lecture Based-Learning: teacher lead a lesson by using presentation, showing visual• Student Centred-Learning: teacher promote individual learning so that student can exploring individual idea• Technological Learning, teacher leads to use high technology in information such as by exploring, utilizing internet/searching engine and social media.
Workload (incl. contact hours, self-study hours)	<ul style="list-style-type: none">• Lecture, 3 hours per week• Discussion and presentation (Q&A), 1,5 hours per week• Individual assignment, 5 hours per week• Total workload for semester = 150 hours
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">• Able to formulate environmental management theory to foster disaster management strategies• Able to formulate and carry out scientific research to solve environmental problems caused by disaster• Able to find rules, method to solve problems environmental damage caused by disaster• Able to manage and control environmental degradation

	<p>caused by disaster</p> <ul style="list-style-type: none"> • Able to conduct quick studies to solve /environmental damage and pollution as a result of disaster
Content	<p>Disaster mitigation and adaptation course examines various aspects of disaster, such as types of potential hazards, disaster cycles, disaster early warning, and policies related to disaster management. This course study about framework of disaster mitigation and adaptation, structural mitigation, non structural mitigation and adaptation system both for human being and its enviroment</p>
Examination forms	<ul style="list-style-type: none"> • Closed book or Open book • Essay • Individual and group assignments.
Study and examination requirements	<p>Lecture attendance of at least 75%.</p>
Reading list	<ol style="list-style-type: none"> 1. Erniati B., et al (ed), (2021), Knowledge of Disasters and the Environment, Publisher of Our Writing Foundation, Meda 2. Lindell, M. K. (Ed.). (2019). The routledge handbook of urban disaster resilience: integrating mitigation, preparedness, and recovery planning. Routledge. 3. Musthofa, (2019), Unraveling the Chaos of Environmental Disasters (Reflections on Environmental Journalism and Deep Ecology in Indonesia), UMM Press Publisher and UMM PSLK, Malang 4. Puji L., (2018), Disaster Communication Important Aspects of Disaster Risk Reduction, Publisher PT Kanisius, Yogyakarta 5. Ministry of Environment and Forestry. (2016). Set of Regulations on the Environment. 6. Khambali, (2016), Disaster Management, ANDI Publisher, Yogyakarta 7. Handmer, J., & Dovers, S. (2013). Handbook of disaster policies and institutions: improving emergency management and climate change adaptation. Routledge. 8. Esteban, M., Takagi, H., & Shibayama, T. (Eds.). (2015). Handbook of coastal disaster mitigation for engineers and planners. Butterworth-Heinemann.

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| | <ol style="list-style-type: none">9. Wisner, B., Gaillard, J. C., & Kelman, I. (Eds.). (2012). Handbook of hazards and disaster risk reduction and management. Routledge.10. Andersson, W. A., Kennedy, P. A., & Ressler, E. (2007). Handbook of disaster research (Vol. 643). H. Rodríguez, E. L. Quarantelli, & R. R. Dynes (Eds.). New York: Springer. |
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