

# MODUL HANDBOOK DISASTER MANAGEMENT STRATEGIES



MASTER PROGRAM OF ENVIRONMENTAL SCIENCE  
SCHOOL OF POSTGRADUATE STUDIES  
DIPONEGORO UNIVERSITY

**Module Description :**

Module designation	Disasters Management Strategies
Semester(s) in which the module is taught	2 <sup>nd</sup> Semester
Person responsible for the module	Prof. Drs. Sudharto Prawata Hadi, MES, Ph.D Prof. Dr. Dr. Anies, M.Kes., PKK Prof. Dr. rer. nat. Imam Buchori, S.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"><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, 2 hours per week</li><li>• Discussion and presentation (Q&amp;A), 1 hours per week</li><li>• Individual assignment, 3 hours per week</li><li>• Total workload for semester = 100 hours</li></ul>
Credit points	2 credits / 4 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 to foster disaster management strategies</li><li>• Able to formulate and carry out scientific research to solve environmental problems caused by disaster</li><li>• Able to find rules, method to solve problems environmental damage caused by disaster</li></ul>

	<ul style="list-style-type: none"> <li>• Able to manage and control environmental degradation caused by disaster</li> <li>• Able to conduct quick studies to solve problems of pollution/environmental damage as a result of disaster events with management and/or technical approaches</li> </ul>
Content	Disaster management strategies courses provide knowledge for students to be able to understand management, strategies for disaster management, forms and type of strategies for disaster management. This course provide insight for student to understand program, planning, monitoring of planning, evaluation of program during disaster, before and after disaster. This course provide strategies during emergency respond, during rehabilitation-reconstruction and strategies to transfer from disaster event to normal condition.
Examination forms	<ul style="list-style-type: none"> <li>• Closed book or Open book</li> <li>• Essay</li> <li>• Individual and group assignments.</li> </ul>
Study and examination requirements	Lecture attendance of at least 75%.
Reading list	<ol style="list-style-type: none"> <li>1. Erniati, B., et al (ed), (2021), Knowledge of Disasters and the Environment, Publisher of Our Writing Foundation, Medan</li> <li>2. Musthofa (2019). Unraveling the Chaos of Environmental Disasters (Reflections on Environmental Journalism and Deep Ecology in Indonesia), UMM Press Publisher and UMM PSLK, Malang</li> <li>3. Puji L. (2018),. Disaster Communication Important Aspects of Disaster Risk Reduction, Publisher PT Kanisius, Yogyakarta</li> <li>4. Kelman, I., Mercer, J., &amp; Gaillard, J. C. (Eds.). (2017). The Routledge handbook of disaster risk reduction including climate change adaptation. Routledge.</li> <li>5. Madu, C. N. (2017). Handbook of disaster risk reduction &amp; management: Climate change and natural disasters. World Scientific Publishing Company.</li> <li>6. Khambali (2016). Disaster Management, ANDI Publisher, Yogyakarta</li> <li>7. Djauhari N. (2014). Introduction to Geological Disaster</li> </ol>

Mitigation, Deepublish Publisher, Yogyakarta

8. Alazawi, Z., Alani, O., Abdljabar, M. B., Altowaijri, S., & Mehmood, R. (2014, August). A smart disaster management system for future cities. In Proceedings of the 2014 ACM international workshop on wireless and mobile technologies for smart cities (pp. 1-10).
9. Rao, K. H., & Rao, P. S. S. (2008). Disaster management. New Delhi: Serials Publications.
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.
11. Banipal, K. (2006). Strategic approach to disaster management: lessons learned from Hurricane Katrina. *Disaster Prevention and Management: An International Journal*, 15(3), 484-494.
12. Comfort, L. K. (2005). Risk, security, and disaster management. *Annu. Rev. Polit. Sci.*, 8, 335-356.