MODUL HANDBOOK
THESIS

MASTER PROGRAM OF ENVIRONMENTAL SCIENCE
SCHOOL OF POSTGRADUATE STUDIES
DIPONEGORO UNIVERSITY

Modul Description :

Module designation	Thesis
Semester(s) in which the module is taught	4th Semester
Person responsible for the module	Principal Supervisor Co-Supervisor
Language	Indonesian and English
Relation to curriculum	Compulsory
Teaching methods	Mix Method or Blended Learning by incorporating Lecture based-learning, Student Centred-learning and Technological Learning • 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)	• Drafting and discussion the thesis title and research objectives, 30 hours • Drafting and discussion proposal draft: preliminary chapter, 30 hours • Drafting and discussion proposal draft: literature review, 30 hours • Drafting and discussion proposal draft: overview of the study location, 30 hours • Drafting and discussion proposal draft: survey and preliminary research, research method flowchart, 30 hours • Drafting and discussion proposal draft: Research methods chapter, 30 hours • Finalization of proposal research report, 30 hours • Proposal seminar exam, 5 hours • Revise and Finalization the research proposal, 50 hours • Preparing for collecting data, survey, and observation, 30 hours • Collect data, surveys, and observations related to research, 80 hours • Analysing and processing data, surveys and field observations, 50 hours

	• Drafting and discussion of data analysis results, 50 hours • Drafting and discussion research result report draft: research result chapter, 50 hours • Drafting and discussion research result report draft: conclusions and recommendations chapter, 30 hours • Finalization research report, 50 hours • Research result seminar exam, 5 hours • Revise the research data and analysis, 30 hours • Drafting and discussion final research report, 50 hours • Finalization of final research report, 50 hours • Final research seminar exam, 10 hours • Total workload for semester = 750 hours
Credit points	6 credits / 30 ECTS
Required and recommended prerequisites for joining the module	Pass 1st and 2nd semester
Module objectives/intended learning outcomes	• Able to formulate environmental management theory • Able to formulate and carry out scientific research to solve environmental problems • Able to formulate environmental management policies • Able to formulate rules, methods through of environmental management to improve the quality of life, and save them in the form of theses, national and international journals or proceedings of reputable seminars
Content	This course is the final course that students must take to obtain a Master's in Environmental Sciences degree.
Examination forms	• Presentation report/document • Interview • Thesis report/document (problem statement, goal, method, schedule, survey, colleting data, analysis and reporting, finding and recomendation)
Study and examination requirements	• Have been approved by the supervisor for examination • Received LOA for scientific publication from journal editor or conference
Reading list	1. Bojie Fu, Yanxu Liu, Yan Li, Cong Wang, Changjia Li, Wei Jiang, Ting Hua, Wenwu Zhao, 2021, Research priorities in Resources and Environmental Sciences, Geography and Sustainability, Volume 2, Issue 2, Pages 87-94, https://doi.org/10.1016/j.geosus.2021.04.001.

	2. Kutz, M. (Ed.). (2018). Handbook of Environmental Engineering. John Wiley & Sons. 3. Kornuta Halyna, Germaine Ron. 2019. Quick Guide to Writing a Thesis or Dissertation. Routledge Educational and Further Research. 4. Nikolai Attard, 2018, WASP (Write Scientific Papers): Writing an academic research proposal, Early Human Development, Volume 123, Pages 39-41, https://doi.org/10.1016/j.earlhumdev.2018.04.01 1. 5. Howlett, M., & Mukherjee, I. (Eds.). (2017). Handbook of policy formulation. Edward Elgar Publishing. 6. Evans David, Gruba Paul, Zobel Justin. 2014. How to Write a Better Thesis (Third Edition). Jumper. 7. Romero, C. (2014). Handbook of critical issues in goal programming. Elsevier. 8. Khoiyangbam, RS, and N Gupta. 2012. Introduction to Environmental Science. New Delhi: TERI 9. Lovett, J. C., & Ockwell, D. G. (2010). A handbook of environmental management. Edward Elgar Publishing Limited.