University of Gadjah Mada

Faculty of Forestry

Study Program of Doctor in Forestry Science

Module Handbook

Name (Code)	: Methodology and Ethic of Forestry Research *thrust* Forest Resource Conservation (KTDU22802)
ECTS | Type | Status	: 7.5 | Class lecture | Compulsory
Semester | OfL:OnL Ratio | LMS	: 1 | 60:40 | elok.ugm.ac.id
Pre-Requisite	: -
Description of content	: This course raises the basics of developing forestry science through research, including scientific theory and its benefits for research, components and characteristics of theory, research propositions, basics of analysis in research, principles of measurement and experimental analysis. The discussion also raises cases of field and laboratory research on ecology and wildlife, watershed and conservation area , and tourism.
Course Outcomes and PLO mandated	Finishing this course, student will be able to formulate research questions as the basis of dissertation research (CLO1/PLO1), to select methods for appropriate research approach (CLO2/PLO2), to draft a proposal for dissertation research in the field of forest conservation (CLO3/PLO4), and to identify the requirement for proposing manuscript (CLO4/PLO4)
Lecturer(s)	1. Dr. Ir. Ambar Kusumandari, M.E.S. 2. Prof.Dr. Ir. Djoko Marsono, M.P. 3. Dr. Hero Marhaento, S.Hut., M.Si
Workload	: Total workload per semester is for 14 weeks, with weekly activities: 2*(50' lectures, 60' structured activities, 60' independent study), and 2 mid-exam and final exam weeks.
Learning Method	: Class Lecture and Discussion
Student Learning Experience	: Actively discuss the class material and research cases, structured assignment, group work, quiz, material reflection, review of literature and problem in forestry sectors

Mapping CO-syllabus

CLO	Syllabus	Learning form	Meetings
1	1. Introduction 2. Research Stages 3. Writing Title, Background, Research Objectives and Literature Review 4. Sampling and Data Collection Techniques 5. Data Analysis Method	Class lecture, discussion, and assignment	5
2	6. Ecology and Animal Research Methodology 7. Ecology and Animal Research Example 8. Watershed Research Methodology 9. Watershed Research Example 10. Conservation Area and Natural Tourism Research Methodology 11. Examples of Research on Conservation Areas and Natural Tourism	Presentation, discussion, and assignment	5
3	12. Presentation of Draf proposal	Presentation and discussion	2
4	13. Manuscript Writing Procedure for Journals	Class lecture and discussion	2

Assessment method

Base of Evaluation	Component of Evaluation	CLO1	CLO2	CLO3	CLO4	Total (%)
Participative activity	Assignment	√		√	√	30
Cognitive & Psychomotoric	Mid exam	√	√			30
Case Study result	Final exam/ presentation		√	√	√	40

References

1. Ford, E.D. 2004. Scientific Method for Ecological Research. Cambridge. Cambridge University Press. 588p.
2. Hageltom, Y. 2017. Hydrological Data Analysis in Gash River: Towards more effective and productive Gash Agriculture Scheme Paperback
3. Naghettini, M. 2017. Fundamentals of Statistical Hydrology 1st Edition.
4. Ramesh S. V. Pand Teegavarapu , Ph.D., Jose D. Salas. Jery R. Stedinger. 2019. Statistical Analysis of Hydrologic Variables: Methods and Applications. American Society of Civil Engineers