University Gadjah Mada
Faculty of Forestry
Study Program of Doctor in Forestry Science
Module Handbook

Name (Code)	: Methodology and Ethic of Forestry Research thrust Forest Product (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	: The Forestry Research Methods course in the Forest Products Technology Interest presents a critical and comprehensive review of the philosophy of THH in Tropical Forestry Science to produce novelty in the utilization and processing of forest products (ontology) for human welfare. Students can develop a detailed research design to answer the ontology gap of research including literature, scientific approach research, equipment, and data collection for Tropical Forestry-based THH research. Students can develop scientific communication in the form of proposals, publications, and seminars. research publications in journals and seminars to update the science of THH in Tropical Forestry.
Course Outcomes and PLO mandated	Finishing this course, student will be able to formulate research problems in the field of forest product technology based on gap analysis of current research towards the novelty of the tropical forestry-based product industry (ontology) (CO1/PLO1), to design literature-based research design on forest product interest, innovation and the applicability of the forest products industry, research equipment, data collection and analysis design, drawing conclusions that answer research problems and analysis, drawing conclusions that answer research problems and the product technology industry (CO2/PLO2), to communicate scientifically in the form of proposals, publication of research results in journals, seminars in the context of development and science and technology and industrial innovation in forest product based on tropical forestry (CO3/PLO4).
Lecturer(s)	1. Prof. Dr. Tibertius Agus Prayitno 2. Prof. Dr. Ganis Lukmandaru 3. Dr. Widiyanto 4. Dr. Deny Irawati 5. Dr. Rini Pujiarti
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

CO	Syllabus	Learning form	Meetings
1	1. The scope of Forest Products Science and Technology 2. Consumption, Production, Sustainability 3. Novelty of forest product science and technology and industry innovation parameters 4. The scope of Forest Products science and technology. 5. Ontology of forest product problems, novelty and related research gaps: the field of Wood Processing and its industry 6. Ontology of forest product technology problems, novelty and related research gaps: the field of NTFPs and its industry	Class lecture, presentation, and discussion	6
2	7. Research Design and Methodology: Research Approach 8. Literature Study and Application of Theory and Research Ethics 9. Research Objectives, Hypotheses and Experimental Design 10. Quantitative and Qualitative Methods 11. Mixed Methods and Inference	Class lecture, presentation, and discussion	5
3	12. Scientific writing: research proposal (dissertation) 13. Research report writing (dissertation) 14. Seminar and journal publication	Class lecture, presentation, and discussion	3

Assessment method

Base of Evaluation	Component of Evaluation	CO1	CO2	CO3	Total (%)
Participative activity	Assignment	√	√	√	40
Cognitive & Psychomotoric	Mid exam	√	√		30
Case Study result	Final exam/ presentation		√	√	30

References

1. AFPA, 2006. Forest Product Industry dan Technology Roadmap
2. Brack, 2018. Sustainable consumption and production of forest products
3. Creswell, 2014: Research Design
4. Ruger, S. 2022. How to write a good PhD thesis and survive the viva