

## UNIVERSITAS NEGERI YOGYAKARTA FACULTY OF MATHEMATICS AND SCIENCE DEPARTMENT OF MATHEMATICS EDUCATION Colombo 1 Street Yogyakarta 55281 Phone: (0274)565411 Ext. 217, (0274)565411(Administration Office),fax (0274)548203 Website:fmipa.uny.ac.id, E-mail :humas\_fmipa@uny.ac.id

## **Bachelor of Science in Biology**

## MODULE HANDBOOK

Module name:	Agroforestry
Module level, if applicable:	Undergraduate
Code:	BIM6270
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	Even
Module coordinator:	Dr. Ir. Suhartini, MS
Lecturer(s):	Dr. Ir. Suhartini, MS.
Language:	Indonesian
Classification within the curriculum:	Elective Course
Teaching format / class hours	100 minutes lectures, 120 minutes structured activities, and 120
per week during the semester:	minutes individual studyper week
	Total workload is 91 hours per semester which consists of 100
Work load:	minutes lectures, 120 minutes structured activities, and 120
	minutes individual study per week for 16 weeks.
Credit points:	2 SKS (3 ECTS)
Prerequisites course(s):	Ecology and Plant Physiology
Perogram Learning Outcomes:	<ol> <li>Comprehensively mastering Biology (core biology) to solve problems in the field of Biology (problem-solving) and to underlie the concepts of related sciences</li> </ol>
	<ol> <li>Being adaptive, creative, innovative in applying the concepts of Biology and other related fields</li> </ol>
	<ol><li>Being able to work and create jobs/being an entrepreneur in the field of Biology</li></ol>
	11. Possessing scientific skills to support the ability to speak in local, national, and international forums
Course Outcomes	After taking this course, the students have ability to:
	CO1. Understand the background and development, as well as the scope of Agroforestry
	CO2. explain and give examples of strengths and weaknesses of the Agroforestry system from biological, economic, and social aspects.
	CO3. describe the classification of Agroforestry systems based on objectives, structure, functions, level of technology input, and management, ecological zones
	CO4. Determine criteria and select the type of Agroforestry

	component based on management objectives and site conditions						
	CO5. explain the relationship and role of biophysical and climatic factors in agroforestry, as well as the role of trees in increasing						
	productivity and soil conservation. CO6. Determine the methods and data needed in Agroforestry						
	financial and economic analysis CO7. Explain social factors and their role in the Agroforestry system CO8. Describe the Agroforestry system in the highlands						
	<ul> <li>CO9. Describe the Agroforestry system in the wet and dry tropical regions</li> <li>CO10. Describe the Agroforestry system for livestock and firewood production</li> <li>CO11. Describe the Agroforestry system in the mangrove and freshwater areas for fish production</li> <li>CO12. Describe the Agroforestry system for the production of</li> </ul>						
			rials (Treefarma)				
		-	for planning, imple		-		
	agroforestry utilization activities in the form of scientific articles						
		dependently a			houolooment		
			es the boundaries, l ole of agroforestry	-	•		
			asing land and fore				
Content:		•	-	•			
	strengths and weaknesses, classification of agroforestry systems, selection of agroforestry system component types, soil aspects,						
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## PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
CO1				V							
CO2				V							
CO3				V							
CO4				V		V					
CO5				V		V					
CO6				V		V					
CO7				V		V					
CO8				V		V					
CO9				V		V					
CO10				V					V		
CO11				V					V		
C012				V					V		
CO13											V