

**DETERMINATION OF CREDITS COURSES  
AGROFORESTRY**

Couse	CLO	CLO 1.1	Learning Methods	Study Materials	Study Hours		Sks/Credit
					T	P	
Agroforestry	Able to explain the concept and principle of agroforestry which refers to sustainable agriculture principles, and is based on the local wisdom	The students are able to : Describes : Definition of agroforestry The philosophy of agroforestry, history of agroforestry and their development Processes under agroforestry system The advantage, constraints, potency, and challenges of the agroforestry system	Face to Face, Structure Assignment, Independent Study	An Introduction to Agroforestry	6	0	<b>2</b>
		The students were able to determine the classification of agroforestry based on their components in the ecosystem as well as the pattern of the combination of the component in the agroforestry system	Face to Face, Structure Assignment, Independent Study, Field Activity	An Introduction to Agroforestry	10	0	
	Capable in managing and developing marginal land through implementing appropriate agroforestry concepts to get the healthy and productive land	The students were able to analyze and explain about agroforestry system (complex agroforestry and simple agroforestry and their management practices	Face to Face, Structure Assignment, Independent Study, Field Activity	An Introduction to Agroforestry	10	0	
		The students were able to explain and analyze the tree-soil-crop interaction; especially from the light uses, water, and nutrient (roots)	Face to Face, Structure Assignment, Independent Study, Field Activity	Tree-Crop Interactions : A Physiological Approach	10	0	

	The students were able to explain the advantage of implementing the local wisdom on agroforestry in maintain and developing sustainable agriculture, especially on lowland agriculture	Face to Face, Structure Assignment, Independent Study	1.Agroforestry for Soil Conservation 2. Agroforestry for Soil Fertility	5	0
Capable to plan, and design the agroforestry concept on each type of land use to maintain and increase the productive land	The students were able to analyze all of the processes under the agroforestry system, and how is this process affect the soil organic matter and nutrient availability due to tree planting in the agroforestry system	Face to Face, Structure Assignment, Independent Study	Agroforestry for Soil Fertility Toward Integrated Natural Resource Management in Forest margins of the Humid Tropics: local action and global concerns	4	0
	The students were able to explain how agroforestry affects the water balance	Face to Face, Structure Assignment, Independent Study	Tree-Crop Interaction: A Physiological Approach Agroforestry for Soil Conservation	4	0
	The students were able to characterize and analyze the agroforestry function, either their role in enhancing land productivity or their function in land protection	Face to Face, Structure Assignment, Independent Study	Tree-Crop Interaction: A Physiological Approach Agroforestry for Soil Conservation	4	0
	The students were able to explain the nutrient cycle model under the tree component (close nutrient cycle) and under the crop component (open nutrient cycle)	Face to Face, Structure Assignment, Independent Study, Field Activity	Tree-Crop Interaction: A Physiological Approach Agroforestry for Soil Conservation	7	0
capable to describe the role and function of agroforestry in the nutrient and water cycle; carbon cycle, as well as their role in controlling pest and disease	The students were able to understand related with the role of tree domestication in developing agroforestry, especially in tree productivity	Face to Face, Structure Assignment, Independent Study, Field Activity	Agroforestry for Soil Fertility	10	0

		The students were able to understand the role and function of agroforestry globally as well as landscape scale	Face to Face, Structure Assignment, Independent Study, Field Activity	1. Tree-Crop Interactions: A Physiological Approach 2. Agroforestry for Soil Conservation 3. Agroforestry for Soil Fertility	5	0	
capable in understanding the interaction of agroforestry components the processes affected, and use this knowledge to plan, design, and manage the unsustainable land unproductive land		The students were able to apply the principle of management and development of agroforestry	Face to Face, Structure Assignment, Independent Study, Field Activity	1. Tree-Crop Interactions: A Physiological Approach 2. Agroforestry for Soil Conservation 3. Agroforestry for Soil Fertility	5	0	
		The students are aware and understand the concept of institutional and policy in developing agroforestry as well as the impact on the agroforestry development	Face to Face, Structure Assignment, Independent Study, Field Activity	1. Tree-Crop Interactions: A Physiological Approach 2. Agroforestry for Soil Conservation 3. Agroforestry for Soil Fertility	6	0	
		The students can apply the agroforestry model in planning and designing the agroforestry system	Face to Face, Structure Assignment, Independent Study, Field Activity	WaNuLCAS, Model Simulasi untuk Sistem Agroforestri	5	0	
					<b>Total Hours</b>	<b>91</b>	<b>0</b>
		sks/credit Theory	$(\text{Total Hours for Theory} \times 1 \text{ sks}) / (2.83 \times 16)$	<b>SKS Theory</b>		~	2
		sks/credit Practicum/field work	$(\text{Total Hours for Practicum} \times 1 \text{ sks}) / (2.83 \times 0)$	<b>SKS Practicum</b>		~	0

Notes: T = Theory P = Practicum/Field Work

1 SKS/Credit = 170 minutes = 2,83 hours

1 Semester = 16 Face Times

The study time required for students to achieve CLO at each learning stage is determined by the lecturer/lecturer team based on their experience in teaching the course.

Total Course SKS/Credits = Theory + Practicum/field work