

**DETERMINATION OF CREDITS COURSES  
AGRICULTURAL BIOLOGY**

Course	CLO	CLO 1.1	Learning Methods	Study Materials	Study Hours		Sks/Credits
					T	P	
Agricultural Biology	Able to explain the function of plant cell organelles, plant organ structure and plant reproduction in relation to plant physiological and metabolic processes in supporting plant growth and production	Be able to identify and explain the function of plant cell organelles	Face to Face, Structure Assignment, Independent Study	1. Plant Cells 2. Microorganisms	7	0	0,15
	Able to explain and analyze the role of microorganisms, arthropods and soil biota in efforts to increase land resource capacity and protect plants against pests and diseases in order to increase plant production	Be able to explain the role of microorganisms in plant production, land resources, plant protection against pests and diseases	Face to Face, Structure Assignment, Independent Study	Agricultural Biotechnology	7	0	0,15
	Able to identify, describe and name plant types based on key plant characteristics for determining plants correctly	Able to identify plant types based on the structure and function of plant tissues and organs, analyze the relationship between the structure and function of plant tissue and its environment	Face to Face, Structure Assignment, Independent Study, Practicum	1. Plant structure and organs 2. Plant reproductive system	14	0	0,31
		Able to identify, describe and name plant types based on plant characteristics based on the key to determining plants correctly	Face to Face, Structure Assignment, Independent Study, Practicum	Nomenclature and Classification of plants	7	7	0,40
		Able to explain the process and mention plant organs and factors that influence the photosynthesis-respiration process explain and analyze the role of photosynthesis-respiration in plant production	Face to Face, Structure Assignment, Independent Study, Practicum	1. Photosynthesis 2. Respiration	14	7	0,56
		Able to analyze and communicate the relationship between the biosphere and ecosystem, biodiversity and population	Able to explain and mention types of arthropods and soil biota and analyze the role of arthropods and soil biota in plant production, land	Face to Face, Structure Assignment, Independent Study, Practicum	1. Arthropods 2. Soil Biota	14	7

dynamics as well as how to handle pollution problems that can be utilized in the agricultural sector based on student group work	resources and plant protection against pests and diseases in writing					
	Able to explain the meaning of biodiversity and the importance of biodiversity as well as the factors that influence population dynamics that support productivity in the agricultural sector	Face to Face, Structure Assignment, Independent Study, Practicum	1. Biosphere and Ecosystems 2. Biodiversity and Population Dynamics	14	7	0,56
Able to analyze the relationship between genetic and environmental factors in the formation of superior varieties as well as the role of biotechnology to increase crop production which is the result of collaborative work with colleagues/independently	Be able to describe and explain the types and sources of pollution. Ability to analyze and provide solutions to pollution problems and waste processing processes		Pollution and processing of agricultural waste	7	0	0,15
	Able to understand and explain genetic material and inheritance of traits and the role of biotechnology in agriculture to obtain superior varieties		Plant Genetic Material	7	0	0,15
			<b>Total Hours</b>	91	28	3,00
	sks/credit Theory		(Total Hours for Theory × 1 sks)/(2.83 × 16)	<b>SKS Theory</b>		2,01
	Practicum/field work		(Total Hours for Practicum × 1 sks)/(2.83 × 10)	<b>SKS Practicum</b>		0,99

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