

Soil Ecology

Module name		Soil Ecology					
Module level		3 rd year of Bachelor program					
Abbreviation, if applicable		-					
Sub-heading, if applicable		-					
Courses included in the module, if applicable		BI3109 Soil Ecology					
Semester/term		5 th Semester					
Module coordinator(s)		Prof. Dr. Tati S. Syamsudin					
Lecturer(s)		Prof. Dr. Tati S. Syamsudin					
Language		Indonesian					
Classification within the Curriculum		Elective courses for Bachelor Program in Biology					
Teaching format/ class hours per week during the semester		Lecture (face to face teaching): 2 x 1 hour x 12 weeks Assignment: Student class presentation/group: 2 hours x 2 weeks Quizzes: 15 minutes x 8 weeks					
Workload	Total Workload	96 hours; 2 CU					
		Face to face teaching	Structured Activities	Independent study	Exam	Total	
	Lecture	28	32	32	4	96	
Credit points		<i>Soil Ecology (2 Credits)</i>					
Requirements		-					
Content		<ul style="list-style-type: none"> - <i>The soil environment and related ecological concepts</i> - <i>diversity of soil biota (macro and mesofauna; soil microorganisms: fungi, bacteria, Archea)</i> - <i>organism interaction (commensalism, mutualism)</i> - <i>soil processes (decomposition, biogeochemical cycles & nutrient cycling)</i> - <i>relationship between plant and soil communities</i> - <i>trophic interaction</i> - <i>Soil biological characteristics related to soil physical-chemical conditions.</i> 					
Learning goals/competencies		Students are able to: <ul style="list-style-type: none"> - Group soil organism according to its function - Describe the formation of organic soil materials - Describe nutrition cycle - Explain interaction between soil, its management, nutrient dynamic and soil microbe community 					
Study/exam achievements		Midterm exam	Final exam	Quizzes	Assignments and Laboratory reports	Field Works	Total
		100%					
Forms of media		<i>Classical teaching tools:</i>		<i>White board, power point presentation</i>			
		<i>Digital teaching tools:</i>		<i>Video/CD, Website</i>			
Literature							