

Module designation	Laboratory Work in Plant Morphology
Semester(s) in which the module is taught	Odd/1 <sup>st</sup>
Person responsible for the module	Dra. Budiwati, M.Si, Dra. Ratnawati, M.Sc., Drs. Sudarsono, M.S.
Language	Bahasa Indonesia
Relation to curriculum	Compulsory
Teaching methods	Lab works, project, seminar, exam
Workload (incl. contact hours, self-study hours)	Total workload is 91 hours per semester which consists of 100 minutes lecturers, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.
Credit points	1 SKS (1.6 ECTS)
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	PLO 2 PLO 3 PLO 4 PLO 6 PLO 7 PLO 9
Content	The practicum of plant morphology is the activity of observing the outer structure of plants which includes roots, stems and leaves and its modification, namely rhizomes, stolons, bulbs, flowers, fruits and seeds; analysis of modified forms of the main structure of plants; analysis of the development of flowers into both true and pseudo fruit; identifying the tree construction and architecture forms, and observing some examples of the morphological response of the stem, roots and leaves to the environment.
Examination forms	Presence, task, quiz, mid semester exam, final semester exam, case study, team based project.

<b>Study and examination requirements</b>	<p>The final mark will be weight as follow:</p> <table border="1" data-bbox="624 242 1396 1174"> <thead> <tr> <th>NO</th><th>Assessment Techniques</th><th>Percentage Weight Assessment (%)</th><th>Information</th></tr> </thead> <tbody> <tr> <td rowspan="6">1</td><td>Cognitive</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr> <tr> <td>Presence</td><td>5</td><td></td></tr> <tr> <td>Task</td><td>10</td><td></td></tr> <tr> <td>Quiz</td><td>5</td><td></td></tr> <tr> <td>Mid Semester Exam</td><td>15</td><td></td></tr> <tr> <td>Final Semester Exam</td><td>15</td><td></td></tr> <tr> <td rowspan="3">2</td><td>Participatory</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr> <tr> <td>Case Study</td><td>25</td><td></td></tr> <tr> <td>Team Based Project</td><td>25</td><td></td></tr> <tr> <td></td><td><b>Total</b></td><td><b>100</b></td><td></td></tr> </tbody> </table>				NO	Assessment Techniques	Percentage Weight Assessment (%)	Information	1	Cognitive	50	Maximum assessment weight accumulation 50%	Presence	5		Task	10		Quiz	5		Mid Semester Exam	15		Final Semester Exam	15		2	Participatory	50	Maximum assessment weight accumulation 50%	Case Study	25		Team Based Project	25			<b>Total</b>	<b>100</b>	
NO	Assessment Techniques	Percentage Weight Assessment (%)	Information																																						
1	Cognitive	50	Maximum assessment weight accumulation 50%																																						
	Presence	5																																							
	Task	10																																							
	Quiz	5																																							
	Mid Semester Exam	15																																							
	Final Semester Exam	15																																							
2	Participatory	50	Maximum assessment weight accumulation 50%																																						
	Case Study	25																																							
	Team Based Project	25																																							
	<b>Total</b>	<b>100</b>																																							
<b>Reading list</b>	<p>A. Gembong, T. 2009. Morfologi Tumbuhan, cetakan ke 13, Gadjah Mada University Press. Yogyakarta.</p> <p>B. Stern KR, Bidlack JE, Jansky SH. 2008. Introductory Plant Biology. Eleven Edition. New York: Mc Graw Hill Companies Inc.</p> <p>C. Goethe, J.W. 2009. The Metamorphosis of Plant, masachusetts Institute of Technology, The MIT Press 55 hayward Street, Cambridge, MA</p> <p>D. Donald R. Kaplan. 2022. Kaplan's Principles of Plant Morphology. CRC Press.</p> <p>E. Clive Koelling. 2016. Plant Anatomy, Morphology and Physiology. Syrawood Publishing House</p>																																								