

Module designation	Laboratory Work in Microtechniques		
Semester(s) in which the module is taught	Odd/5th		
Person responsible for the module	Ciptono, M.Si., Budiwati, M.Si.		
Language	Bahasa Indonesia		
Relation to curriculum	Compulsory		
Teaching methods	Lab works, project, seminar, exam		
Workload (incl. contact hours, self-study hours)	Total workload is 46 hours per semester which consists of 100 minutes laboratory work, and 120 minutes individual study / practice per week for 16 weeks.		
Credit points	2 SKS (3.2 ECTS)		
Required and recommended prerequisites for joining the module	General Biology		
Module objectives/intended learning outcomes	PLO-2 PLO-5 PLO-8 PLO-9		
Content	This course will conduct the students with the skills to use laboratory equipment and recognize the properties of chemicals used in biology laboratories, understand the use of microscopes correctly, and are skilled at making semipermanent and permanent microtechniques preparations.		
Examination forms	Presence, task, quiz, mid-semester exam, final semester exam, case study, team based project.		



Study and examination requirements	The final mark will be weight as follow:				
	NO	Assessment Techniques	Percentage Weight Assessment (%)	Information	
	1	Cognitive	50	Maximum assessment weight accumulation 50%	
		Presence	5		
		Task	5		
		Quiz	5		
		Mid-semester exams	15		
		Final Semester Exam	20		
	2	Participatory	50	Maximum assessment weight accumulation 50%	
		Case study	25		
		Team Based Project	25		
		Total	100		
Reading list	 A. Yeung E.C.T., Stasolla C., Sumner M.J., Huang B.Q. 2015. Plant Microtechniques and Protocols. Springer International Publishing Switzerland. B. Kiernan J.A. 2015. Histological and Histochemical Methods (Theory and Practice) 5th ed. Scion Publishing Ltd. 				