

Module designation	Plant Tissue Culture
Semester(s) in which the module is taught	Even/4th
Person responsible for the module	Dr. Ixora Sartika Mercuriani, Paramita Cahyaningrum Kuswandi, Ph.D.
Language	Bahasa Indonesia
Relation to curriculum	Compulsory
Teaching methods	Lecture, project, seminar, exam
Workload (incl. contact hours, self-study hours)	Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.
Credit points	2 SKS (3.2 ECTS)
Required and recommended prerequisites for joining the module	Plant Physiology
Module objectives/intended learning outcomes	PLO-1, PLO-2, PLO-4, PLO-5, PLO-6, PLO-7, PLO-8, PLO-9, PLO-10, PLO-11
Content	This course discusses the basic concept of tissue culture, including the history of development, lab facilities for tissue culture, the principles of sterilization, the types and purposes of tissue culture, preparation and composition of medium nutrition, explant and tool sterilization, internal influence of explant-source plant to growth and tissue development, influence of physical factors to tissue growth and development, embryo and protoplasm culture.
Examination forms	Presence, mid-semester exam, final semester exam, case study.

Study and examination requirements	The final mark will be weight as follow:			
	NO	Assessment Techniques	Percentage Weight Assessment (%)	Information
	1	Kognitif	50	Maximum assessment weight accumulation 50%
		Presence	5	
		Mid-semester exams	20	
		Final Semester Exam	25	
	2	Participatory	50	Maximum assessment weight accumulation 50%
		Case study	50	
		Total	100	
	Reading list	A. RA Rennytasari, PC Kuswandi - Kingdom (The Journal of Biological Studies), 2022 Related articles.		
B. S Milah, L Sugiyarto, S Aloysius, IS Mercuriani - AGROISTA: Jurnal Agroteknologi, 2023.				
C. K Khoirunnisa, IS Mercuriani - Kingdom (The Journal of Biological Studies), 2022.				
D. R. Dwiyani, Y Fitriani, IS Mercuriani - Journal of Sustainable Agriculture, 2022.				
E. Edwin F. George, Michael A. Hall, Geert-Jan De Klerk. 2008. Plant Propagation by Tissue Culture: Volume 1. The background. Springer.				
F. B. N. Sathyanarayana, Dalia B. Verghese. 2007. Plant Tissue Culture: Practices and New Experimental Protocols. International Publishing House.				