

Module designation	Plant Anatomy
Semester(s) in which the module is taught	Odd/1st
Person responsible for the module	Ratnawati, M.Sc. and Annisa Latifa, M.Sc.
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 consisting of 100 minutes lecture, 120 minutes for structured activities, and 120 minutes for individual study per week for 16 weeks.
Credit points	2 SKS (3.2 ECTS)
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> - Attitude: Being adaptive, creative, innovative in applying the concepts of Biology and other related fields. - Knowledge: Comprehensively mastering Biology (core biology) to solve problems in the field of Biology (problem-solving) and to underlie the concepts of related sciences - General Skills: Possessing scientific skills to support the ability to speak in local, national, and international forums. - Specific Skills: Being able to work and create jobs/being an entrepreneur in the field of Biology.
Content	This subject discusses the structure and development of cells and the organelles, meristem, epidermis, parenchyme, strengthening, and vascular tissues of Spermatophytes. The understanding about these structures will be the basic knowledge to discuss more and compare among the structure of organs and compare between the organ structures in Dicots/Gymnosperms and the ones in Monocots. The anomalous structure of organs will be elaborated and compared with the normal ones. The structural response to environmental conditions, and the roles of plant anatomy in daily life will be presented and discussed through group projects or journal studies.
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 (%)
	1	Cognitive	50
			Information
			Maximum assessment weight accumulation 50%
		Presence	5
		Task	10
		Quiz	5
		Mid-semester exams	15
		Final Semester Exam	15
	2	Participatory	50
			Information
			Maximum assessment weight accumulation 50%
		Case study	25
		Team Based Project	25
		Total	100
Reading list	A. Evert R.F. 2006. Esau's Plant Anatomy 3 rd Edition. Wiley-Interscience. A John Wiley & Sons, Inc., Publication.		
	B. Crang R., Lyons-Sobaski S., and Wise R. 2018. Plant Anatomy: A Concept-Based Approach To The Structure Of Seed Plants. Springer Nature. Switzerland.		
	C. Cutler, D., Botha, T. and Stevenson, D. Wm. 2009. Plant Anatomy. 1st edn. Wiley-Blackwell.		
	D. Nugroho, L.H., Purnomo dan I. Sumardi. 2005. Struktur dan Perkembangan Tumbuhan. Jakarta: Penebar Swadaya.		
	E. Crang, R., Lyons-Sobaki, L. 2018. Plant Anatomy: A Concept-Based Approach to the Structure of Seed Plant. Springer.		