MODULE HANDBOOK

	UNIVERSITAS PADJADJARAN **FACULTY OF MATHEMATICS AND NATURAL SCIENCES** **BACHELOR OF BIOLOGY PROGRAMME**	**COURSE CODE:** **D10D-2003**
Module designation	Plants Structure and Development 1 Practicum	
Semester in which the module is taught	2	
Persons responsible for the module	1. Dr. Budi Irawan, M.Si 2. Joko Kusmoro, MP 3. Betty Mayawatie, MSi 4. Dr. Suryana, S.Si., MP.	
Medium of instruction	Indonesian	
Relation to curriculum	Compulsory course	
Teaching methods	Practice, Student-Centered Learning, Project-based Learning, Collaborative Learning	
Workload	Total workload : 2720 minutes = 45.33 hours Practice : 1 x 170 minutes x 16 weeks = 2720 minutes = 45.33 hours Exercises : - Self-study : -	
Credit points	1.00 (1.81 ECTS)	
Required and recommended prerequisites for joining the module	Basic biology	
Module objectives/intended learning outcomes	1. Able to explain the procedures for conducting plant structure practical work and the functions of the tools and materials used 2. Able to identify and compare the morphology of the vegetative organs of roots, stems, and leaves in various types of plants 3. Able to analyze the morphological structure of flower generative organs and their parts and distinguish their variations in low and high plants 4. Able to apply systematic plant dissection and preparation techniques to support the study of plant structure 5. Able to compile accurate phytographs and botanical illustrations as a form of descriptive scientific communication on plant morphology	
Contents	1. Introduction (Practical Technical Explanation) 2. Vegetative Organs of Higher Plants 3. Generative Organs of Higher Plants 4. Vegetative Organs of Lower Plants 5. Generative Organs of Lower Plants 6. Plant Illustration Techniques 7. Plant Photographic Techniques/Botanical Illustration	
Examination forms	Quiz, Midterm exam, Assignment, and Final exam	
Study and examination requirements	The minimum attendance in lectures is 80%. Final grades are evaluated based on quiz (10%), midterm exam (15%), assignment (10%), final exam (15%), project and participation (50%)	
Reading lists	1. Tjitrosoepomo G. 1994. Morfologi Tumbuhan. Yogyakarta. Gadjah Mada University Press. 2. Clarke I and Lee H. 1994. Name that Flower, The Identification of Flowering Plants. Melbourne University Press 3. Harris JG and Harris MW, Plant Identification Terminology, an illustrated Glossary. Utah: Spring Lake Publishing 4. Hidayat EB. 1992. Morfologi dan Perkembangan Tumbuhan. FMIPA ITB 5. Bell AD. 1991. Plant Form, an Illustrated Guide to Flowering Plant Morphology. Oxford University Press. 6. Rosanti D. 2013. Morfologi Tumbuhan. Jakarta: Penerbit Erlangga 7. Stearn WT. 1998. Botanical Latin. Timber Press, Inc. Portland Oregon 8. Baumgardt JP. 1994. How to Identify Flowering Plant Family. Timber Press, Inc. Portland Oregon. 9. L M, Rifnas & Vidanapthirana, Nisansala. (2023). Plant Morphology. Univercity of Colombo. Sri Lanka.	