

THE MODULE HANDBOOK

Magister Biology Study Program FACULTY OF BIOLOGY

DIVERSITY AND TAXONOMY OF ALGAE

Course code	BIMB202235				
Course level	Magister				
Semester/ term	Even - Odd				
Course coordinator(s)	Abdul Razaq Chasani, S.Si., M.Si., Ph.D.				
Lecture(s)	 Abdul Razaq Chasani, S.Si., M.Si., Ph.D. Dr. Eko Agus Suyono, M.App.Sc. 				
Language	Bahasa Indonesia				
Classification within the Curriculum	Elective				
Teaching format/ class hours per week during the semester	This course is organised into 1 class and planned to have 14 teaching weeks and 2 weeks of examination.				
Workload	Estimated working hour: 2 credits of theory and 1 credit of laboratory/field work.				
Credits	2-1 credits				
Requirements					
Program	K1:The graduates are demonstrating knowledge and comprehend biological				
Learning Outcome	theories, includes all aspects of biological studies at various levels in the organization of life (Knowledge)				
	SK1 : The graduates are able to conduct research in the field of biology independently or in groups, and able to solve various biological-related problems (Specific Skills)				
Course Learning Outcome	CLO1: Students have the scientific capability covering basic concepts, principles and theories related to diversity and taxonomy of algae CLO2: Students are able to determine the validity of data and analyze the research results from practical works and scientific literatures independently				
	or in groups CLO3: Students are able to create scientific reports and communicate in scientific forum independently or in groups				
Course Description	This course summarize an understanding of the diversity and taxonomy of algae including the role of algae for environment and human. The understanding of algal diversity is studied through various characteristics such as morphological structures, cell structures, reproductions and life cycles, distributional patterns as well as environmental factors that affected to algal growth and development. The understanding of algal taxonomy can be learned by algal classification and phylogenetic relationships of algae prokaryotic (Cyanophyta/Cyanobacteria), algae eukaryotic protists				



THE MODULE HANDBOOK

Magister Biology Study Program FACULTY OF BIOLOGY

(Pyrrophyta, Chrysophyta, Euglenophyta), and algae eukaryotic plants

	(Chlorophyta, Phaeophyta, dan Rhodophyta).						
Assesments	Assessment Component	Percentage	CLO 1	CLO 2	CLO 3		
	Course						
	Assignments and quizzes	20	V	√	V		
	Mid-term exam	40	V				
	Final exam	40	V				
	Practical work						
	Pre-test	30	$\sqrt{}$				
	Field and laboratory activities	30	V	V	V		
	Report	40	V	V	V		
Study Media	Blended Learning, synchronous and asynchronous e-learning						
Literature	 Textbook Andersen, R.A. 2005. Algal Culturing Techniques. Elsevier Academic Press Lee, R.E. 1995. Phycology. Cambridge University Press. Sidney. Sze, P. 1993. A Biology of The Algae. Wm.C.Brown Publisher. Dubuque. Van den Hoek, C., D.G. Mann, and H.M. Jahns. 1998. Algae: An Introduction to Phycology. Cambridge University Press. Cambridge. Richmond, A. 2014. Handbook of Microalgal Culture: Biotechnology and Applied Phycology Becker, W.E. 1995. Microalgae: biotechnology and microbiology. Cambridge University Press. New York. USA Stein, J.R. 1973. Handbook of Phycological Methods. Cambridge University Press. Cambridge. United Kingdom Journals Systematic Botany Phycologia Plant Systematics and Evolution Journal of Applied Phycology Journal of Phycology Website: www.algaebase.org 						