


**MODULE HANDBOOK**

	<b>UNIVERSITAS PADJADJARAN</b> <b>FACULTY OF MATHEMATICS AND NATURAL SCIENCES</b> <b>BACHELOR OF BIOLOGY PROGRAMME</b>	<b>COURSE CODE :</b> <b>D10D-4009</b>
<b>Module designation</b>	Aquatic Ecology Practicum	
<b>Semester in which the module is taught</b>	4	
<b>Persons responsible for the module</b>	1. Dr. Keukeu Kaniawati Rosada 2. Hikmat Kasmara, Drs, MS 3. Prof. Sunardi 4. Dr. rer. nat. Tri Dewi Kusumaningrum Pribadi	
<b>Medium of instruction</b>	Indonesian	
<b>Relation to curriculum</b>	Compulsory course	
<b>Teaching methods</b>	Practice, Student-Centered Learning, Project-based Learning, Collaborative Learning	
<b>Workload</b>	Total workload : 2720 minute = 45.33 hour  Practice Exercises : 1 x 170 minute x 16 week = 2720 minute = 45.33 hour Self-study : - : -	
<b>Credit points</b>	1,00 (1.81 ECTS)	
<b>Required and recommended prerequisites for joining the module</b>	General Ecology	
<b>Module objectives/intended learning outcomes</b>	1. Able to distinguish between lentic and lotic waters 2. Able to measure physical and chemical parameters of water that are important for aquatic biota 3. Able to measure the primary productivity of an aquatic ecosystem 4. Students are able to critically evaluate data from aquatic ecology practicums and make decisions based on scientific analysis	
<b>Contents</b>	1. Aquatic ecosystems in general 2. Determination of observation stations 3. Measurement of physical and chemical parameters of water 4. Analysis of aquatic biota samples and primary productivity of aquatic environments 5. Evaluation of water quality based on biological indicators and assessment of current aquatic environmental issues	
<b>Examination forms</b>	Quiz, Midterm exam, Assignment, and Final exam	
<b>Study and examination requirements</b>	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%)	
<b>Reading lists</b>	1. Wetzel, R.G. 2023. Limnology: Lake and River Ecosystems. Fourth Edition. Academic Press 2. Dash, M. C., & Dash, S. P. (2009): Fundamentals of Ecology (3rd ed.), Tata McGraw-Hill Education Private Limited, New Delhi. 3. M. Begon, R.W. Howarth & C.R. Townsend (2014): Essentials of Ecology (4th ed). 4. Sigeo, DC. 2005. Freshwater Microbiology: Biodiversity and Dynamic Interactions of Microorganisms in the Aquatic Environment. Manchester: John Wiley & Son, Ltd. 5. Pandey, Pramod & Mallik, Sumanta & Yumnam, Rameshori. (2024). Handbook of Aquatic Microbiology. CRC Press. London 6. Dodds, W. K., & Whiles, M. R. (2017). <i>Freshwater ecology</i> (3rd ed.). Academic Press.	