

## Module Descriptions

A **module** is a self-contained **learning unit** within a higher education program that includes thematically related courses and is assigned a **fixed number of credits**. It follows specific **learning objectives**, includes an **assessment component**, and contributes to achieving the qualifications of a degree program. In some countries, “modules” are also named “courses”.

Please provide a module description for each module. In addition to the compulsory and elective modules, this also includes credited internships and the final thesis.

Please summarize all module descriptions in one document (Module Handbook) and create a table of contents so that the modules can be found easily.

Module designation	Planktonology
Semester(s) in which the module is taught	Even
Person responsible for the module	Drs. Sudarsono, M.Si
Language	Indonesian language
Relation to curriculum	Elective subject
Teaching methods	lecture, project, case study, seminar, examination
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	-
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> <li>- PLO-6</li> <li>- PLO-7</li> </ul>

Content	<p>This course covers a comprehensive study of planktonology, including the scope and fundamental concepts of the discipline as well as environmental factors influencing plankton distribution and dynamics. The topics explored include freshwater plankton communities found in ponds, reservoirs, lakes, rivers, small artificial ponds (<i>embung</i>), caves, and swamps. In addition, the course examines brackish water and estuarine plankton in mangrove and lagoon ecosystems, marine plankton, and plankton inhabiting saline lakes and low-pH environments. Special attention is also given to the ecological relationships between plankton and aquatic ecosystems, as well as the role of plankton as bioindicators of water quality and environmental conditions.</p>																																						
Examination forms	Test, rubrics, and presentation																																						
Study and examination requirements	<p>Requirements for successfully passing the module</p> <p>The final mark will be weight as follow:</p> <table><tr><th>NO</th><th>Assessment Techniques</th><th>Percentage Weight Assessment (%)</th><th>Information</th></tr><tr><td>1</td><td>Cognitive</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr><tr><td rowspan="5"></td><td>Presence</td><td>5</td><td></td></tr><tr><td>Task</td><td>5</td><td></td></tr><tr><td>Quiz</td><td>10</td><td></td></tr><tr><td>Mid-semester exams</td><td>15</td><td></td></tr><tr><td>Final Semester Exam</td><td>20</td><td></td></tr><tr><td>2</td><td>Participatory</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr><tr><td rowspan="3"></td><td>Case study</td><td>25</td><td></td></tr><tr><td>Team Base Project</td><td>25</td><td></td></tr><tr><td><b>Total</b></td><td><b>100</b></td><td></td></tr></table>	NO	Assessment Techniques	Percentage Weight Assessment (%)	Information	1	Cognitive	50	Maximum assessment weight accumulation 50%		Presence	5		Task	5		Quiz	10		Mid-semester exams	15		Final Semester Exam	20		2	Participatory	50	Maximum assessment weight accumulation 50%		Case study	25		Team Base Project	25		<b>Total</b>	<b>100</b>	
NO	Assessment Techniques	Percentage Weight Assessment (%)	Information																																				
1	Cognitive	50	Maximum assessment weight accumulation 50%																																				
	Presence	5																																					
	Task	5																																					
	Quiz	10																																					
	Mid-semester exams	15																																					
	Final Semester Exam	20																																					
2	Participatory	50	Maximum assessment weight accumulation 50%																																				
	Case study	25																																					
	Team Base Project	25																																					
	<b>Total</b>	<b>100</b>																																					

Reading list	<ul style="list-style-type: none"><li>A. Barus. T. A. (2004). Pengantar Limnology Study Tentang Ekosistem Air Daratan. Medan : USU Press.</li><li>B. Krismono dan Yayuk Sugianti. (2007). Distribusi Plankton di Waduk Kedungombo. Jurnal Perikanan, Hal 108.</li><li>C. Santhanam, P., Begum, A., Pachiappan, P. 2018. Basic and Applied Zooplankton Biology. Springer Verlag, Singapore.</li><li>D. Rao, K.S. 2002. Recent Advances in Fresh Water Biology. Anmol Publications Pvt Ltd. India.</li></ul>
--------------	--