

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	Natural Food Technology
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	PLO-2
Module objectives/intended learning outcomes	

Content	<p>This course equips students with the knowledge and practical skills to explain the scope and principles of natural feed technology and to apply cultivation techniques for a wide range of live feed organisms. The topics include the culture of <i>Chlorella vulgaris</i>, <i>Chironomus</i> sp., crickets (<i>Gryllus</i> sp.), <i>Spirogyra</i> sp., <i>Daphnia</i> sp., <i>Moina</i> sp., <i>Tubifex</i> sp., <i>Brachionus plicatilis</i>, mosquitoes (<i>Culex</i> sp.), grasshoppers (<i>Caelifera</i>), red earthworms (<i>Lumbricus rubellus</i>), weaver ants (<i>Oecophylla smaragdina</i>), diatoms (<i>Chaetoceros</i> sp.), rotifers (<i>Rotifera</i>), and black soldier flies (<i>Hermetia illucens</i>). Through lectures and practical sessions, students develop a comprehensive understanding of the biology, cultivation methods, and management practices required for sustainable production of these natural feed resources.</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>Total</td><td>100</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		Total	100	
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Reading list	<ul style="list-style-type: none">A. Wirosaputro, S. 1998. <i>Clorella Makanan Kesehatan Global Alami</i>. Yogyakarta: Universitas Gajah Mada.B. Djarijah, S.A. 1995. <i>Pakan Alami</i>. Yogyakarta: Kanisius.C. Dahril, T.1996. <i>Rotifer Biologi dan Pemanfaatannya</i>. Pekanbaru: UNRI-Press.D. Busniar, Munzir. 2006. <i>Entomologi</i>. Padang: Andalas University Press.E. Yurisman dan Sukendi. 2004. <i>Biologi dan Kultur Pakan Alami</i>. Pekanbaru: UNRI Press.
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