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	Lab Work of Applied Microbiology
Semester(s) in which the module is taught	Even
Person responsible for the module	Dr. Dra. Bernadetta Octavia 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 45 hours per semester which is used for pretest, practicum preparation, practice, report making, report presentation and response for 16 weeks.
Credit points	1 SKS (1,6 ECTS)
Required and recommended prerequisites for joining the module	Microbiology. Lab work of microbiology
Module objectives/intended learning outcomes	PLO 5, PLO 9
Content	This Applied Microbiology practicum provides students with hands-on training in aseptic techniques for isolating microorganisms from environmental samples and mixed cultures, and in developing pure cultures for use in various fermented products. It also encompasses the characterization and identification of microorganisms from fermented products, as well as the physicochemical analysis of both commercially available and laboratory-produced fermented products.
Examination forms	Test, rubrics, and presentation

<table>
<tr>
<td>Study and examination requirements</td>
<td>Requirements for successfully passing the module
The final mark will be weight as follow:
<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>10</td><td></td></tr>
<tr><td>Task</td><td>10</td><td></td></tr>
<tr><td>Quiz</td><td>10</td><td></td></tr>
<tr><td>Mid-semester exams</td><td>0</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>
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<td>Reading list</td>
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A. Rini, I. A., Oktaviani, I., Asril, M., Agustin, R., dan Frima, F. K. (2020). Isolasi dan Karakterisasi Bakteri Penghasil IAA (Indole Acetic Acid) dari Rhizosfer Tanaman Akasia (Acacia mangium).Agro Bali: Agricultural Journal,3(2): 210-219
B. Ahmed, M., dan Kibret, M. (2014). Mechanisms and Application of Plant Growth Promoting Rizhobacteria: Current Perspective. Journal of King Saud University – Science 26 (1): 1 – 20.
C. Widawati, S., Suliasih, dan Saefudin. (2015). Isolasi dan Uji Efektivitas Plant Growth Promoting Rhizobacter di Lahan Marginal pada PertumbuhanTanaman Kedelai (Glycine max L. Merr.) var. Wilis. PROS SEM NAS MASY BIODIV INDON, 1(1): 59-65.

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