

Module designation	Biotechnology
Semester(s) in which the module is taught	Odd/3rd
Person responsible for the module	Dr. Ixora Sartika Mercuriani, M.Si., Risma Wiharyanti, M.Si.
Language	Bahasa Indonesia
Relation to curriculum	Compulsory
Teaching methods	Lecture, project, seminar, exam
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 ECTS)
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	PLO-1, PLO-2, PLO-3, PLO-4, PLO-5, PLO-6, PLO-7, PLO-8, PLO-9, PLO-10, PLO-11
Content	The course discusses the fundamental issues on biotechnology, recombinant DNA technologies and techniques for molecule analyses, biotechnology application, as well as biosafety and bioethics.
Examination forms	Presence, task, quiz, mid semester exam, final semester exam, case study.

Study and examination requirements	<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>40</td><td>Maximum assessment weight accumulation 40%</td></tr><tr><td rowspan="5"></td><td>Presence</td><td>5</td><td></td></tr><tr><td>Task</td><td>10</td><td></td></tr><tr><td>Quiz</td><td>5</td><td></td></tr><tr><td>Mid-semester exams</td><td>10</td><td></td></tr><tr><td>Final Semester Exam</td><td>10</td><td></td></tr><tr><td>2</td><td>Participatory</td><td>60</td><td>Maximum assessment weight accumulation 60%</td></tr><tr><td rowspan="2"></td><td>Case study</td><td>60</td><td></td></tr><tr><td>Total</td><td>100</td><td></td></tr></table>	NO	Assessment Techniques	Percentage Weight Assessment (%)	Information	1	Cognitive	40	Maximum assessment weight accumulation 40%		Presence	5		Task	10		Quiz	5		Mid-semester exams	10		Final Semester Exam	10		2	Participatory	60	Maximum assessment weight accumulation 60%		Case study	60		Total	100	
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Reading list	<p>A. Thieman and Palladino, 2019. Introduction to Biotechnology. Boston: Pearson Education Inc.</p> <p>B. Glick, B.R and Patten, C.L. 2022. Molecular Biotechnology Principles and Applications of Recombinant DNA 6th ed. ASM Press</p> <p>C. Schmid, R.D. 2003. Pocket Guide to Biotechnology and Genetic Engineering. Weinheim: Wiley-VCH Verlag GmbH & Co.</p> <p>D. Ratledge C., & Kristiansen, B. 2006. Basic Biotechnology 3rd ed. Cambridge University Press.</p>																																			