Module designation	Laboratory Work in Cell and Molecular Biology
Semester(s) in which the module is taught	Even/2nd
Person responsible for the module	Dr. Evy Yulianti, M.Sc. and Lili Sugiyarto, 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 46 hours per semester which consists of 170 minutes lab work per week for 16 weeks.
Credit points	1 SKS (1. 6 ECTS)
Required and recommended prerequisites for joining the module	Laboratory Work in Biochemistry
Module objectives/intended learning outcomes	PLO-2, PLO-4, PLO-8, PLO-9
Content	This course is to demonstrate and do experiments about preparation of chemicals for DNA isolation, microbial and plant DNA isolation, DNA quantification, and animal cell culture.
Examination forms	Presence, task, quiz, final semester exam, case study, team based project.

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<td>Study and examination requirements</td>
<td>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="4"></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>10</td><td></td></tr>
<tr><td>Final Semester Exam</td><td>25</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>20</td><td></td></tr>
<tr><td>Team Based Project</td><td>30</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. Surzycki, S. 2000. Basic Techniques in Molecular Biology. Springer-Verlag. Berlin Heidelberg. Germany. Pp 4-13, 17-27.
B. Lodish, H. 2007. Cell and Molecular Biology; Concepts and Experiments. 6th ed. England: W.H.Freeman & Company.
C. Hartl, D.L., 2018, Essential Genetics andGenomics, Jones and Bartlett Publishing.
D. Klug, W.S., Cummings, M. R. , Spencer, C. A.,and M.A Palladino, 2016, Concepts of Genetics,Pearson Education international, London.
E. Rogers, S.O., 2017, Integrated MolecularEvolution 2nd Ed., CRC Press.
F. Alberts B., Heald R., Johnson A., Morgan D., Raff M., Roberts K., & Walter P. 2022. Molecular Biology of the Cell 7th edition. W. W. Norton & Company, Inc., 500 Fifth Avenue, New York.

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