Module designation	Cellular and Molecular Biology
Semester(s) in which the module is taught	Even/2nd
Person responsible for the module	Dr. Ixora Sartika Mercuriani and Dr. Evy Yulianti, M.Sc.
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 (3.2 ECTS)
Required and recommended prerequisites for joining the module	Insight and Review on Science
Module objectives/intended learning outcomes	PLO-1, PLO-2, PLO-3, PLO-6, PLO-8, PLO-9
Content	This course discusses the history of cell development and ways to study it, general characteristics of cells, variation of bacterium cells, archaea and eucariot, the characteristics of virus, prokaryotic cells, eukaryotic cells and Schleiden and Schwann theory of cell, cell chemical composition, structures and functions of cell membrane and many others.
Examination forms	Presence, task, quiz, mid-semester exam, final semester exam, case study.

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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="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>15</td><td></td></tr>
<tr><td>Final Semester Exam</td><td>15</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="2"></td><td>Case study</td><td>50</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. Lodish, H. 2021. Cell and Molecular Biology;Concepts and Experiments. 9th ed. England: W.H.Freeman & Company.
B. Albert, B., Johnson, A., Lewis, J. Raff, M., Roberts, K., Walter, P. 2022. Molecular Biology of the Cell. 7th ed. Garland Science. New York.
C. Pertiwi, K. R., Yulianti, E., & Rustiasari, U. J. 2022. Physical exercise as cytokine modulator in inflammatory immune response: a systematic review. Jurnal Keolahragaan, 10(2), 247–257. https://doi.org/10.21831/jk.v10i2.51677
D. Yulianti, E., Sunarti, & Wahyuningsih, M. S. H. 2021. The effect of Kappaphycus alvarezii fraction on plasma glucose, Advanced Glycation End-products formation, and renal RAGE gene expression. Heliyon, 7(1), e05978. https://doi.org/10.1016/j.heliyon.2021.e05978
E. Yulianti, E., Sunarti, & Wahyuningsih, M. S. H. 2022. The effect of Kappaphycus alvarezii active fraction on oxidative stress and inflammation in streptozotocin and nicotinamide-induced diabetic rats. BMC Complementary Medicine and Therapies, 22(1). https://doi.org/10.1186/s12906-021-03496-8

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