

	<b>Universitas Negeri Surabaya</b> <b>Faculty of Mathematics and Natural Sciences</b> <b>Natural Sciences</b> <b>Education Undergraduate Study Program</b>						<b>Document Code</b>
<b>SEMESTER LEARNING PLAN</b>							
<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>			<b>SEMESTER</b>	<b>Compilation Date</b>
<b>Cell Level Life</b>	8420103067	Compulsory Study Program Subjects	<b>T=3</b>	<b>P=0</b>	<b>ECTS=4.77</b>	5	April 28, 2023
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>			<b>Study Program Coordinator</b>	
	Prof. Dr. Erman, M.Pd. Ahmad Qosyim, S.Si.,M.Pd		Ahmad Qosyim, S.Si.,M.Pd			Prof. Dr. Erman, M.Pd.	
<b>Learning model</b>	<b>Case Studies</b>						
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program that is charged to the course</b>						
	<b>Program Objectives (PO)</b>						
	<b>PLO-PO Matrix</b>						
		<div style="border: 1px solid black; padding: 5px; display: inline-block;">P.O</div>					
<b>Short Course Description</b>	The study of life at the cellular level includes the structure and function of cells and cell organelles, the structure and function of the plasma membrane, the structure and biological function of proteins and nucleic acids, the mechanisms of protein synthesis, cell growth and proliferation, as well as differentiation and determination which is carried out through theoretical studies and discussions.						
	<b>References</b>	<b>Main :</b>	<ol style="list-style-type: none"> <li>1. Gatot, Suparno, Djoko Budiono, dan Sri Kencananingsih. 2014. Handout Kehidupan Tingkat Sel . Unesa.</li> <li>2. Karp, Gerald. 2010. Cell Biology 6th Edition International Student Version . Wiley &amp; Sons.</li> <li>3. Wong, EV. 2009. Cells: Molecules And Mechanisms . Louisville: Axolotl Academic Publishing Company.</li> <li>4. Sheeler, P. and D.E. Bianchi. 1987. Cell and Molecular Biology . Canada : John Wiley &amp; Sons.</li> <li>5. Thorpe, N.O. 1984. Cell Biology . New York : John Wiley &amp; Sons.</li> <li>5. ....Chapter 1 Biochemistry: From Atoms to Molecules to Cells</li> </ol>				
<b>Supporters:</b>		<ol style="list-style-type: none"> <li>1. Sheeler, P. and D.E. Bianchi. 1987. Cell and Molecular Biology . Canada : John Wiley &amp; Sons.</li> <li>5. Thorpe, N.O. 1984. Cell Biology . New York : John Wiley &amp; Sons.</li> </ol>					
<b>Supporting lecturer</b>		Prof. Dr. Erman, M.Pd. Guntur Trimulyono, S.Si., M.Sc. Ahmad Qosyim, S.Si., M.Pd. Fasih Bintang Ilhami, S.Kep., M.T., Ph.D. Dr. Sapti Puspitarini, S.Si., M.Si.					

Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [ Estimated time]		Learning materials [ References ]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline ( offline )	Online ( online )		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							0%
2							0%
3							0%
4							0%
5							0%
6							0%
7							0%
8							0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							0%
16							0%

**Evaluation Percentage Recap: Case Study**

No	Evaluation	Percentage
		0%

**Notes**

- Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
- Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- Forms of assessment:** test and non-test.

8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.