



**MINISTRY OF EDUCATION AND CULTURE**  
**UNIVERSITAS NEGERI SURABAYA**  
**FACULTY OF MATHEMATICS AND NATURAL SCIENCES**  
**DEPARTMENT OF NATURAL SCIENCES**

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**Undergraduate Programme in Science Education**

**Module Handbook**

Module Name:	<i>Biologi Umum</i> (Basic Biology)						
Module Level:	Bachelor degree/Undergraduate Programme						
Course Code:	8420103158						
Abbreviation, if applicable:	-						
Courses included in the module, if applicable:	Not applicable						
Semester/term	1/first year						
Module coordinator(s):	Dyah Astriani, S.Pd., M.Pd						
Lecturer(s):	Dr. Yuliani, M.Si. Ahmad Qosyim, S.Si., M.Pd. Enny Susiyawati, S.Si., M.Pd., M.Sc., Ph.D Dhita Ayu Permata Sari, S.Pd., M.Pd						
Language:	<i>Bahasa Indonesia</i> (Indonesian Language)						
Classification within the curriculum:	Compulsory / <del>E</del> lective						
Teaching format/class hours per week during the semester:	3 contact hours of lectures (Indonesia credit semester or <i>sks</i> *)						
Workload:	3 x 50 minutes lectures, 3 x 60 minutes structured activity, 3 x 60 minutes individual activity, 14 weeks per semester, 119 total hours per semester ~ 4.77 ECTS**						
Credit point:	3 <i>sks</i> (4.77 ECTS)						
Requirements:	-						
Learning goals/competencies:	<p><b>Course Learning Outcomes (CLOs):</b>            After taking this course, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Mastering the basic concepts of biology and conducting experiments: scientific method, cell structure and function, metabolism, photosynthesis and respiration), genetics, diversity of living things and nomenclature;</li> <li>2. Mastering the basic concepts of biology and conducting experiments: the origin of life, evolution, structure of plant and animal organ tissue functions, ecology, organism behavior and biotechnology;</li> <li>3. Applying the principles of the scientific method to discussing various natural phenomena that are catastrophic to the life of organisms;</li> <li>4. Designing observations about living organisms and making reports</li> </ol>						
Content:	Scientific methods, Structure and function of cell, Characteristics and Classification of Living Things, metabolism, genetic, biodiversity, origin of living, structure and function of plant tissue, nomenclature, ecology, biotechnology, inheritance						
Attribute Soft skill:	Be autonomous, honest, discipline, communication, collaboration, responsibility, analyze data and information, problem solving, and argumentation in the natural classroom setting						
Study/exam achievements:	<p>Students are considered to be competent and pass if at least get 40% of the maximum final grade. The final grade (NA) is calculated based on the following weight:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: yellow;">Assessment Components</th> <th style="background-color: yellow;">Percentage Contribution</th> </tr> </thead> <tbody> <tr> <td>Participation</td> <td>20%</td> </tr> <tr> <td>Assignment</td> <td>30%</td> </tr> </tbody> </table>	Assessment Components	Percentage Contribution	Participation	20%	Assignment	30%
Assessment Components	Percentage Contribution						
Participation	20%						
Assignment	30%						

	Mid-semester test	20%
	Final semester test	30%
	<b>Total</b>	<b>100%</b>
Learning Methods	Student-centered approach, respository, lecturing, discussion, presentation (structured activities), laboratory activities	
Form of Media:	LCD, PowerPoint, hand out, worksheet, simulation, internet, and whiteboard	
Literature (primary references):	<ol style="list-style-type: none"> <li>1. Campbell, Neil A, Jane B.Reece dan Lawrence G.Mitchell. 2003. <i>Biologi</i>. California: Benjamin Cummings</li> <li>2. Kimball, J.W. 1989. <i>Biologi Jilid I, II, III</i>. Edisi Kelima</li> <li>3. Rachmadiarti, F.,Yuliani, Widowati B., Rinie P, Mahanani T.A,Dyah H.,Herlina F. 2007. <i>Biologi Umum</i>. Surabaya: UNESA Press.</li> <li>4. 4. Luria. 1981. <i>A View of Life</i>. California: Benyamin Cumming.</li> <li>5. Johnson, Raven. <i>Biology</i>.Third Edition.</li> <li>6. Reece, Taylor, Simon, dan Dickey. 2012. <i>Campbell Biology, Concepts and Connections</i>. Eleventh Edition. San Francisco: Pearson Education, Inc.</li> <li>7. Reece, Urry, Cain, Waserman, Minorsky, dan Jackson. 2011. <i>Campbell Biology</i>. Ninth Edition. San Francisco: Pearson Education, Inc.</li> <li>8. Solomon, B., dan Martino. 2008. <i>Biology</i>.Eight Edition. Belmont, CA: Thomson, Brooks/Cole.</li> <li>9. Rujukan lain dalam bentuk berbagai artikel dalam jurnal atau <i>proceeding</i> internasional dan nasional yang terkini dan termutakhir (5-10 tahun terakhir).</li> </ol>	
Notes:	<p><b>*1 sks in learning process = three contact hours that consist of: (a) scheduled instruction in a classroom or laboratory (50 minutes); (b) structured activity (60 minutes); and (c) individual activity (60 minutes)</b> according to the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 44 Year 2015 jo. the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 50 Year 2018.</p> <p><b>**1 sks = 1,59 ECTS</b></p>	