



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>Keanekaragaman Mahluk Hidup</i> Biodiversity
Module Level:	Bachelor degree/Undergraduate Programme
Course Code:	8420103065
Abbreviation, if applicable:	KMH
Courses included in the module, if applicable:	Not applicable
Semester/term	II/first year (freshmen)
Module coordinator(s):	Ahmad Qosyim, S.Si., M.Pd
Lecturer(s):	Dr. Hasan Subekti, M.Pd. Ahmad Qosyim, S.Si., M.Pd. Eny Susiawati, Ph.D. Dhita Ayu Permata Sari, S.Pd., M.Pd
Language:	<i>Bahasa Indonesia</i> (Indonesian Language)
Classification within the curriculum:	Compulsory / Elective
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:	General Biology (8420103023)
Learning goals/competencies:	Course Learning Outcomes (CLOs): After taking this course, students will be able to: <ol style="list-style-type: none">1. Utilizing science and technology to communicate ideas and findings in the basic concepts of the Diversity of Living Things2. Mastering basic scientific concepts about the specific characteristics of organisms (macro and micro) related to the classification principle according to Whittaker (1969)3. Make strategic decisions based on data and information that has been done, both in practice and theory4. Responsible for the task of compiling a performance report on the results of the experiment, related tasks Sub-CLO: <ol style="list-style-type: none">1. The concept of Biodiversity and Viruses2. Monera: Prokaryotic Algae, Blue Algae (<i>Cyanocloronta</i>) and Bacteria3. Protists: Green Algae (Chlorophyta), Eukaryotic Algae (Brown, Golden and Red algae)4. <i>Mycota</i>/Fungi (Mushrooms)5. Plantae: Moss (Liverworts, Leaves and Horns)

	<p>6. Plantae: nails (<i>Pterydophyta</i>)</p> <p>7. Plantae: <i>Gymosperm, Angiosperms</i> (Dicotyl, Monocot)</p> <p>8. Animalia: Invertebrates (Mollusca, Worms, Arthropods, Echinoderms,</p> <p>9. Animalia: Vertebrates (Fish, Amphibians, Reptiles, Aves, Mammals)</p>												
Content:	This course discusses the life of microorganisms, for example prions, viruses, Monera (, blue algae and bacteria) and macros, for example fungi, plants and animals, and their diversity, including classification principles, and representative examples in Indonesia, presented in theoretical form. and practice.												
Attribute Soft skill:	Discipline, collaboration, responsibility, 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"> <thead> <tr> <th>Assessment Components</th> <th>Percentage Contribution</th> </tr> </thead> <tbody> <tr> <td>Participation</td> <td>20%</td> </tr> <tr> <td>Assignment</td> <td>30%</td> </tr> <tr> <td>Mid-semester test</td> <td>20%</td> </tr> <tr> <td>Final semester test</td> <td>30%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </tbody> </table>	Assessment Components	Percentage Contribution	Participation	20%	Assignment	30%	Mid-semester test	20%	Final semester test	30%	Total	100%
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Learning Methods	Constructivism, student-centered approach, project-based learning, lecturing, discussion, and presentation (structured activities), and flip learning												
Form of Media:	LCD, PowerPoint slides, worksheets,												
Literature (primary references):	<ol style="list-style-type: none"> 1. Brock, M. 1991. <i>Biology of Microorganism</i>. New Jersey: Prentice-Hall 2. Campbell, N. A. et al. 2008. <i>Biology; Eighth Edition</i>. San Fransisco: Pearson, Benjamin Cummings. 3. Deacon, Jim W. 2006. <i>Fungal Biology</i>. Printed and bound in the United Kingdom. by Blackwell Science Ltd a Black Well Publishing Company. 4. Henry, Robert J. <i>Plant Diversity and Evolution</i>. Printed and bound in the UK by Cromwell Press, Trowbridge. CABI Publishing CAB International Wallingford Oxford shire OX10 8DE UK 5. Hickman Jr., Cleveland. P., Roberts, Larry S., Larson, Alan. 2001. <i>Integrated Principles of Zoology, Eleventh Edition</i>. 1221 Avenue of The American, New York. By the McGraw-Hill Companies, Inc. 												
Notes:	<p>*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)</p> <p>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,</p>												

	Technology, and Higher Education No. 50 Year 2018.
	**1 sks = 1,59 ECTS