



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

Ketintang Campus, Jl. Ketintang C12 Building, Surabaya 60231

Phone (031)18296427

Website <http://pendidikan-sains.fmipa.unesa.ac.id>

Undergraduate Programme in Science Education

Module Handbook

Module Name:	<i>Pengelolaan Laboratorium dan Keselamatan Kerja</i> (Laboratory and Work Management and Safety)
Module Level:	Bachelor degree/Undergraduate Programme
Course Code:	8420103158
Abbreviation, if applicable:	Penglab
Courses included in the module, if applicable:	Not applicable
Semester/term	III/third year (junior)
Module coordinator(s):	Siti Nurul Hidayati, S.Pd., M.Pd.
Lecturer(s):	Siti Nurul Hidayati, S.Pd., M.Pd. Laily Rosdiana, S.Pd., M.Pd. Dr. Hasan Subekti, 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 sks*)
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 sks (4.77 ECTS)
Requirements:	General Physics (8420103045) General Chemistry (8420103074) General Biology (8420103023)
Learning goals/competencies:	Course Learning Outcomes (CLOs): After taking this course, students will be able to: 1. Analyzing about how to use laboratory tools and managerial functions in the laboratory; 2. Plan procedurally the construction of practical rooms in school laboratories and their distribution; 3. Analyzing manage procedurally the implementation of pactum in school laboratories in accordance with cognitive, affective and psycomotor aspects as well as work safety; and 4. Procedurally evaluate the implementation of practicum in a laboratory based on SOP that have been made
Content:	Laboratory management and administration, work planning and costs, laboatory safety and safety, making solutions, evaluating laboratory work, and developing SOP
Attribute Soft skill:	Discipline, collaboration, responsibility, and argumentation in the natural classroom setting
Study/exam achievements:	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:

	<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	Student-centered approach, deductive learning, lecturing, discussion, and presentation (structured activities), and flip learning												
Form of Media:	LCD, PowerPoint, hand out, simulation, and whiteboard and e-learning unesa (https://vinesa.unesa.ac.id/course/view.php?id=423)												
Literature (primary references):	<ol style="list-style-type: none"> 1. Bettelheim & Landesberg. 2000. Laboratory Experiment for General, Organics, and Biochemistry Laboratory Handbook for Teacher 2. Sri Hidayati S, 2001. Penyediaan Alat dan Bahan Praktikum. Makalah Pelatihan teknisi Laboratorium Kimia/Biologi Madrasah Allah se-jawa Timur di Madiun 3. Supriono, Sri Hidayat dan Isnawati, 2011. Pelatihan atau Pembinaan Laboran Sekolah Jatim. Handout, tidak diterbitkan 												
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, Technology, and Higher Education No. 50 Year 2018.</p> <p>**1 sks = 1,59 ECTS</p>												