



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 Program

Module Handbook

Module Name:	<i>Pembelajaran Inovatif 1</i> (Innovative Learning 1)
Module Level:	Bachelor Degree/Undergraduate Program
Course Code:	8420103107
Abbreviation, if applicable:	PI 1
Sub-heading, if applicable:	
Courses included in the module, if applicable:	Not applicable
Semester/term	IV/second year (sophomore)
Module coordinator(s):	Tutut Nurita, S.Pd., M.Pd.
Lecturer(s):	Prof. Dr. Erman., M.Pd. Laily Rosdiana, S.Pd., M.Pd. An Nuril MF, S.Pd., M.Pd. Enny Susiyawati, Ph.D
Language:	<i>Bahasa Indonesia</i> (Indonesian Language)
Classification within the curriculum:	Compulsory Course / Elective Studies
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 ~ 3.97 ECTS**
Credit point:	3 <i>sks</i> (3.97 ECTS)
Requirements:	<ul style="list-style-type: none"> – Educational Psychology (8420102183) – Introductory of Natural Science (8420102028) – Learning Theory (8420103155) – History and Philosophy of Science Education (8420102159) – Management and Safety Work in Laboratory (8420103161)
Learning goals/competencies:	<p>Course Learning Outcomes (CLO): After taking this course, university students have ability to;</p> <ol style="list-style-type: none"> 1. Apply knowledge about the characteristics of innovative learning models 1 2. Apply pedagogical knowledge in designing, implementing, and evaluating integrated science learning 3. Designing, implementing and evaluating learning by utilizing ICT to support the implementation of innovative learning 1 <p>Sub-CLOs:</p> <ol style="list-style-type: none"> 1. Apply knowledge about the characteristics of learning models including concept acquisition, meaningful verbal learning, direct instruction, discussion, SET;

	<ol style="list-style-type: none"> 2. Planning, implementing and evaluating learning by utilizing ICT to support the implementation of innovative learning including Concept Acquisition Learning Models, Meaningful Verbal Learning, Direct Instruction, discussions, SET (Science Environment and Technology) and strategies to achieve student competence; 3. Implementing learning management using relevant learning models (Concept Acquisition Learning Model, Meaningful Verbal Learning, Direct Instruction, discussion, SET) according to the learning styles of students; 4. Make decisions in designing and using laboratory equipment, learning resources, and science and technology-based learning media and contexts to support the implementation of innovative learning including Concept Acquisition Learning Models, Meaningful Verbal Learning, Direct Instruction Learning, discussions, SET according to competence, characteristics of the subject matter, and characteristics of students 												
Content:	Acquisition of concepts, meaningful verbal learning, direct instruction, discussion, SET, learning management												
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" 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> <tr> <td>Mid-semester test</td> <td>20%</td> </tr> <tr> <td>Final semester test</td> <td>30%</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">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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Assignment	30%												
Mid-semester test	20%												
Final semester test	30%												
Total	100%												
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, simulation, and e-learning Vinesa												
Literature (main references):	<ol style="list-style-type: none"> 1. Arends, Richard I. 2012. Learning To Teach sixth Edition. New York: McGraw-Hill Book Company 2. Arends, Richard I. 2004. Guide to Field Experiences and Portofolio Development: to accompany ;learning to teach. New York: McGraw-Hill Book Company. 3. Ibrahim, Muslimin, Rachmadiarti, Fida, Ismono. 2005. Pembelajaran Kooperatif. Surabaya: Pusat Sains dan Matematika Sekolah. 4. Ibrahim, Muslimin. 2012. Konsep, Miskonsepsi, dan Cara Pembelajarannya. Surabaya: University Press 												

	<p>5. Nur, Mohamad. 2000. Strategi-strategi Belajar. Surabaya: Pusat Sains dan Matematika Sekolah</p> <p>6. Nur, Mohamad, Kardi Soeparman. Pembelajaran langsung. Surabaya: Pusat Sains dan Matematika Sekolah</p>
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) 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>