



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

Ketintang Campus, Jalan Ketintang, C3 Building, Surabaya 60231
 Website: <https://pendidikan-fisika.fmipa.unesa.ac.id/>, email: s1-pfis@unesa.ac.id

Undergraduate Programme of Physics Education

Module Handbook

Module Name :	<i>E-Learning Fisika</i> Physics E-Learning
Module level :	Bachelor degree/Undergraduate Programme
Course Code :	8420302253
Abbreviation, if applicable:	-
Courses included in the module, if applicable:	Not Applicable
Semester/Term	
Module coordinator(s)	Dr. Eko Hariyono, M.Pd,
Lecturer(s):	Prof. Dr. Budi Jatmiko, M.Pd. Dr. Dwikoranto, M.Si. Dr. Eko Hariyono, M.Pd, Dr. Binar Kurnia Prahani, M.Pd. Nurita Apridiana Lestari, S.Pd., M.Pd.
Language:	<i>Bahasa Indonesia</i>
Classification within the curriculum:	Compulsory / Elective
Teaching format/class hours per week during the semester:	2 contact hours of lectures (Indonesia credit semester or sks*)
Workload :	2 x 50 minutes lectures, 2 x 60 minutes structured activity, 2 x 60 minutes individual activity, 14 weeks per semester, 90 total hours per semester ~ 3.18 ECTS**
Credit Point:	2 sks (3.18 ECTS)
Requirements:	Digital Literacy
Learning goals/competencies:	<ol style="list-style-type: none"> 1. Students can analyze, evaluate and create interactive simulation based physics learning and are able to communicate scientifically and work effectively both individually and in groups. 2. Students can analyze, evaluate and create mobile based physics learning and are able to communicate scientifically and work effectively both individually and in groups. 3. Students can analyze, evaluate and create web based physics learning and are able to communicate scientifically and work effectively both individually and in groups. 4. Students can analyze, evaluate and make distance learning of physics and are able to communicate scientifically and work effectively both individually and in groups.
Content	E-Learning Physics studies and equips prospective undergraduate students in physics education about analyzing, evaluating and creating interactive simulation-based physics learning, mobile based physics learning, web based physics



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	learning, and distance learning of physics to be able to compete and excel in the era 4.0 and welcoming society 5.0 and able to communicate scientifically and work effectively both individually and in groups.										
Attribute Soft skill:	Scientific report, public speaking, and team work										
Study/exam achievements:	<p>Students are considered to complete the course and pass if they obtain at least 40% of maximum final grade. The final grade (NA) is calculated based on the following ratio:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Assessment Components</th> <th style="text-align: left;">Percentage of contribution</th> </tr> </thead> <tbody> <tr> <td>Participation</td> <td style="text-align: center;">20%</td> </tr> <tr> <td>Assignment</td> <td style="text-align: center;">30%</td> </tr> <tr> <td>Mid-semester test</td> <td style="text-align: center;">20%</td> </tr> <tr> <td>Final semester test</td> <td style="text-align: center;">30%</td> </tr> </tbody> </table>	Assessment Components	Percentage of contribution	Participation	20%	Assignment	30%	Mid-semester test	20%	Final semester test	30%
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Learning Methods :	Student-centered approach, lecture and discussion, and presentations (structured activities)										
Form of Media:	<i>Power Point</i> slides, e-book file, and multimedia.										
Literature (primary references):	<ol style="list-style-type: none"> 1. Griffin, P. & Care, E. (2015). Assessment and teaching of 21st century skills: Methods and approach. New York: Springer. 2. Nichols, J. R. (2015). 4 Essential Rules of 21st Century Learning. Teach Thought. 3. Benade, L. (2017). Being a teacher in the 21st century: A critical new zealand research study. New York: Springer. 4. Watson, J. (2008). Blended learning: The convergence of online and face-to-face education. Florida: NACOL. 										
Notes:	<p>*1 sks in learning process = three periods 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 according to Rector Decree Of Universitas Negeri Surabaya No. 598/Un38/Hk/Ak/2019</p>										