



MINISTRY OF EDUCATION, CULTURE, RESEARCH,
AND TECHNOLOGY

UNIVERSITAS NEGERI SURABAYA

FACULTY OF MATHEMATICS AND NATURAL SCIENCES
Ketintang Campus, D-1 Building, Surabaya 60231 +6231-8296427
Website: www.fmipa.unesa.ac.id, email: info_fmipa@unesa.ac.id

Master Program of Science Education

Module Handbook

<i>Module Name :</i>	<i>Fisika Sekolah/ Physics for High School*)</i>
<i>Module level :</i>	<i>Master Program of Science Education</i>
<i>Course Code :</i>	<i>8410102145</i>
<i>Abbreviation, if applicable:</i>	<i>-</i>
<i>Courses included in the module, if applicable:</i>	<i>Not Applicable</i>
<i>Semester/Term</i>	<i>1st /First Year</i>
<i>Module coordinator(s)</i>	<i>Dr. Eko Hariyono, M.Pd</i>
<i>Lecturer(s):</i>	<i>Dr. Eko Hariyono, M.Pd</i>
<i>Language:</i>	<i>Indonesian Language</i>
<i>Classification within the curriculum:</i>	<i>Compulsory/ Elective</i>
<i>Teaching format/class hours per week during the semester:</i>	<i>2 contact hours of lectures (Indonesia credit semester or CU*)</i>
<i>Workload :</i>	<i>2 x 50 minutes lectures, 2 x 90 minutes structured activity, 2 x 100 minutes individual activity, 14 weeks per semester, 112 total hours per semester ~ 4.48 ECTS**</i>
<i>Credit Point:</i>	<i>2 CU (4.48 ECTS)</i>
<i>Requirements:</i>	
<i>Learning goals/competencies:</i>	<p>Knowledge (KNO-3) CLO-1 <i>Mastering fundamental knowledge of physics in its application in various technological products that have the meaning of human life through research.</i></p> <p>Competency(COM-3) CLO-2 <i>Designing and creating Solving fundamental problems of physics in terms of its application in various technological products that are related to human life through an inter or transdisciplinary approach</i></p> <p>CLO-3 <i>Designing and creating fundamental research in physics and its application in various technological products for human life and its development in science and the benefit of mankind, as well as gaining national and international recognition.</i></p>



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<i>Content</i>	<i>This course examines various fundamental laws of general physics that are widely studied in schools and their application in various technological products beneficial to human life.</i>																				
<i>Attribute Soft skill:</i>	<i>Scientific report, public speaking, and team work</i>																				
<i>Study/exam achievements:</i>	<p><i>Students are considered to be competent and pass if at least get 70. Final score is calculated as follows: 20% Participation + 30% Assignment + 20% Middle Exam (UTS) + 30% Final Exam (UAS)</i></p> <p>Table index of graduation:</p> <table border="1"> <thead> <tr> <th><i>Interval Score</i></th> <th><i>Index</i></th> </tr> </thead> <tbody> <tr> <td><i>0 - 39,999</i></td> <td><i>E</i></td> </tr> <tr> <td><i>40 - 54,999</i></td> <td><i>D</i></td> </tr> <tr> <td><i>55 - 59,999</i></td> <td><i>C</i></td> </tr> <tr> <td><i>60 - 64,999</i></td> <td><i>C+</i></td> </tr> <tr> <td><i>65 - 69,999</i></td> <td><i>B-</i></td> </tr> <tr> <td><i>70 - 74,999</i></td> <td><i>B</i></td> </tr> <tr> <td><i>75 - 79,999</i></td> <td><i>B+</i></td> </tr> <tr> <td><i>80 - 84,999</i></td> <td><i>A-</i></td> </tr> <tr> <td><i>85 - 100</i></td> <td><i>A</i></td> </tr> </tbody> </table>	<i>Interval Score</i>	<i>Index</i>	<i>0 - 39,999</i>	<i>E</i>	<i>40 - 54,999</i>	<i>D</i>	<i>55 - 59,999</i>	<i>C</i>	<i>60 - 64,999</i>	<i>C+</i>	<i>65 - 69,999</i>	<i>B-</i>	<i>70 - 74,999</i>	<i>B</i>	<i>75 - 79,999</i>	<i>B+</i>	<i>80 - 84,999</i>	<i>A-</i>	<i>85 - 100</i>	<i>A</i>
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<i>Learning Methods :</i>	<i>Case Method and Discussion</i>																				
<i>Form of Media:</i>	<i>Power Point slides, e-book file, and multimedia.</i>																				
<i>Literature (primary references):</i>	<ol style="list-style-type: none"> Lockett, K. (1990). <i>Physics in the real world</i>. New York: University Press. Davidovits, P. (2008). <i>Physics in biology and medicine</i> 3ed Beneson, W.dkk. (2002). <i>Handbook of physics</i>. New York: Springer 																				
<i>Notes:</i>	<p><i>*1 CU in learning process = three periods consist of: (a) scheduled instruction in a classroom (50 minutes); (b) structured activity (90 minutes); and (c) individual activity (100 minutes) according to according to Rector Decree of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2020</i></p> <p><i>**1 CU = 2.24 ECTS according to Rector Decree of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2020</i></p> <p><i>*Total ECTS = (total hours workload/ 60 min) / 25 hours</i></p> <p>Each ECTS is equals with 25 hours</p>																				
<i>Last Amendment</i>	<i>5 January 2023</i>																				