



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>Fisika Umum</i> General Physic
Module Level:	Bachelor degree/Undergraduate Programme
Course Code:	8420103045
Abbreviation, if applicable:	FU
Courses included in the module, if applicable:	Not applicable
Semester/term	I / fourth year (senior)
Module coordinator(s):	Dr. Mohammad Budiyanto, M.Pd.
Lecturer(s):	Dr. Mohammad Budiyanto, M.Pd. Tutut Nurita, S.Pd.,M.Pd. Muhamad Arif Mahdiannur, 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:	-
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 make representations of physical symptoms (mechanics and heat energy) in the form of graphs, data tables, mathematics, and information retrieval 2. Analyze facts, concepts, principles, laws, theories and procedures in the field of mechanics and thermal energy for solving relevant problems. 3. Able to make strategic decisions based on data and information in mechanics and heat energy. 4. Responsible for self-learning, assignments, and agreements with colleagues.
Content:	This course discusses the concepts and principles / laws of measurement, kinematics, dynamics, temperature, heat, and heat transfer.
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:

	Assessment Components	Percentage Contribution
	Participation	20%
	Assignment	30%
	Mid-semester test	20%
	Final semester test	30%
	Total	100%
Learning Methods	Student-centered approach, deductive learning, lecturing, discussion, and presentation (structured activities), and flip learning	
Form of Media:	LCD, PowerPoint, hand out, simulation, e-learning Vinesa, and whiteboard	
Literature (primary references):	<ol style="list-style-type: none"> 1. Giancoli, Douglas. 2016. <i>Physics: Principles with Applications II Global Edition</i>. California: Addison-Wesley. 2. Halliday & Resnick. 2013. <i>Fundamental of Physics</i>, 10th Edition. John Wiley & Sons Inc. <u>Young</u>, Hugh D., <u>Freedman</u>, Roger A., <u>Ford</u>, 3. Albert Lewis. 2016. <i>Sears and Zemansky's University Physics: With Modern Physics</i>. Pearson. 	
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>	