

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY UNIVERSITAS NEGERI SURABAYA FACULTY OF MATHEMATICS AND NATURAL SCIENCE UNDERGRADUATE PROGRAM OF MATHEMATICS EDUCATION Ketintang Campus, C8-C9 Buildings of FMIPA, Surabaya Email: s1-pmat@unesa.ac.id

## **Undergraduate Programme of Mathematics Education**

**Module Handbook** 

Module Name:	General Physics			
Module Level:	Sarjana (S-1) / Bachelor			
Abbreviation, if applicable:	8420203061			
Sub-heading, if applicable:	-			
Course included in the	-			
module, if applicable:				
Semester/term:	1/ First year			
Module Coordinator(s):	Dr. Utiya Azizah, M.Pd			
Lecturer(s):	Team			
Language:	Indonesia			
Classification within the curriculum:	Compulsory course/ elective studies			
Teaching format/class hours per week during the semester	Teaching format: lectures, tutorial assignment, and individual study. 3 x 170 minutes = 510 minutes = 8.5 hours lectures			
Workload:	14 weeks per semester consisting of:			
	> 2.5 hours lectures (3 x 50 minutes) per week,			
	➤ 3 hours tutorial assignments (3 x 60 minutes) per week,			
	➤ 3 hours individual study (3 x 60 minutes) per week,			
	Total workload : $14x3x170$ minutes = 7,140 minutes = 4.76			
	ECTS*			
Credit Point:	3			
Requirements:	-			

## **MODULE HANDBOOK**



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Learning Goals:	Social and Attitude		
	CLO-1 Solve physics basic concepts such as vectors, particle		
	kinematics, particle dynamics, fluids, thermophysics,		
	optics, static and dynamics electricity.		
	CLO-2 Implement mathematics to solve physics problems.		

Content:	The concepts and principles / laws of measurement, kinematics, dynamics, temperature, heat, and heat transfer.				
Study/exam achievements	<ul> <li>Students are considered competent and pass if the final score calculated from the score of midterm exam, assignments, participation, and final exam is at least 55 or C.</li> <li>Final score is calculated as follows:</li> <li>20% midterm exam + 30% assignments + 20% participation + 30% final exam</li> <li>Final index is defined as follow:</li> </ul>				
		Index	Converted Score	Score Range	
		А	4.00	85≤A≤100	
		A-	3.75	80≤A-<85	
		B+	3.50	75 <i>≤B</i> + <80	
		В	3.00	70≤ <i>B</i> <75	
		B-	2.75	65 <i>≤B</i> − <i>&lt;</i> 70	
		C+	2.50	60 <i>≤C</i> +<65	
		С	2.00	55≤C <60	
		D	1.00	40 <i>≤D</i> <55	
		Е	0.00	0≤ <i>E</i> <40	
Forms of Media	Slides	and LCD J	projectors, whiteboa	rd	



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Literature	<ol> <li>Giancoli, Douglas. 2016. <i>Physics: Principles with Applications I</i> <i>Global Edition</i>. California: AddisonWesley.</li> </ol>			
	2. Halliday & Resnick. 2013. Fundamental of Physics, 10th Edition.			
	John Wiley & Sons Inc. Young, Hugh D., Freedman, Roger A.,			
	Ford			
	3. Albert Lewis. 2016. Sears and Zemansky's University Physics:			
	With Modern Physics. Pearson.			
Note	*Total hours per 1 credit in 1 semester={(1 credit x 170 minutes x 14 weeks)/60 minutes}=39.67 hours.			
	Each ECTS equals with 25 hours therefore 1 credit in 1 semester equals 1.59 ECTS.			