

MODULE HANDBOOK

PHYSICS 1

Module name	Physics 1	
Module level	Undergraduate	
Code	SF184101	
Course (if applicable)	Physics 1	
Semester	First Semester (Gasal)	
Person responsible for the module	Ir. Tutug Dhanardono.	
Lecturer		
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, mandatory , 1 st semester.	
Type of teaching, contact hours	Lectures, <60 students	
Workload	1. Lectures : 3 x 50 = 150 minutes per week. 2. Exercises and Assignments : 3 x 50 = 150 minutes per week. 3. Private learning : 3 x 50 = 150 minutes per week.	
Credit points	3 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.	
Mandatory prerequisites	-	
Learning outcomes and their corresponding PLOs	Course Learning Outcome (CLO) after completing this module, CLO 1: Students are able to apply logical thinking, critical, systematic, and inovative in problem solving and implementing physics 1. CLO 2: Students are able to demonstrate independent, quality, and measurable performance. CLO 3: Students show an attitude of responsibility for work in their field of expertise independently.	PLO-03 PLO-03 PLO-01
Content	This course studies basic laws of physics, particle kinematics, particle dynamics, work and energy, rotational motion, vibration and fluid mechanics, through simple mathematical description also introducing	

	the examples of usage concepts, and doing material analysis in the form of practice.
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> ● In-class exercises ● Assignment 1, 2, 3 ● Mid-term examination ● Final examination
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.
Reading list	<p>Main :</p> <ol style="list-style-type: none"> 1. Sears & Zemanky, "University Physics", Pearson Education, 14thed, USA, 2016 2. Douglas C. Giancoli, 'Physics for Scientists and Engineers, Pearson Education, 4th ed, London, 2014 3. Tim Dosen, " Fisika I", Fisika FMIPA-ITS 4. "Petunjuk Praktikum Fisika Dasar", Fisika, MIPA-ITS <p>Supporting :</p> <ol style="list-style-type: none"> 1. Halliday, Resnic, Jearl Walker; 'Fundamental of Physics'. John Wiley and Sons, 10th ed, New York, 2014 2. Tipler, PA, 'Physics for Scientists and Engineers ',6th ed, W.H. Freeman and Co, New York, 2008