MODULE HANDBOOK
PHYSICS 2

Module name	**Physics 2**	
Module level	Undergradute	
Code	SF184202	
Course (if applicable)	Physics 2	
Semester	Second Semester (Genap)	
Person responsible for the module	Mariyanto, S.Si., M.T.	
Lecturer	ITS Physics Lecturer Team	
Language	Bahasa Indonesia	
Relation to curriculum	Undergradute degree program, **mandatory**, 2nd semester.	
Type of teaching, contact hours	Lectures, <60 students	
Workload	1. Lectures : 3 x 50 = 150 minutes per week. 2. Exercises and Assignments : 2 x 60 = 120 minutes (2 hours) per week. 3. Private learning : 2 x 60 = 120 minutes (2 hours) 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	CLO 1 Students understand particles that compose a matter and it's electrical properties, substantial of conductor and dielectric CLO 2 Students understand the strength of an electric field based on Coulomb force and Gauss's law CLO 3 Students are able to understand various forms of electric potential in charged conductors CLO 4 Students understand the capacitance principle of various form of capacitor in capacitor circuits, series, parallel and mixed CLO 5 Able to use magnetic field force formulas for electric currents and moving charges CLO 6 Able to mention the role of magnetization in magnetic material and hysteresis loop. CLO 7 Understand the principle of electromotive force emergences, and current in resistor, capacitor and inductor	Not mentioned

	CLO 8 Able to determine magnitude of the impedance, electric current and phase angle in parallel and series circuit R-L, R-C, RL-C	
Content	In this course students will learn to understand the basic laws of physics, Electric Field; Electric Potential; Electric current ; Magnetic field; Electriomotive Force (EMF) of Induction and Alternating Current, through simple math descriptions and introducing the examples of concepts usage	
Study and examination requirements and forms of examination	• In-class exercises • Assignment 1, 2, 3 • Mid-term examination • Final examination	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.	
Reading list	Main : 1. Halliday & Resnic; 'Fundamental of Physics'. John Wiley and Sons, New York, 1987 2. Tim Dosen, "Diktat Fisika II", ”Soal-soal Fisika II", Fisika FMIPA-ITS 3. Giancoli, DC., (terj, Yuhilza H), 'Fisika, jilid 2', Ertangga, Jakarta, 2001. Supporting : 1. Alonso & Finn,"Fundamental University Physics", Addison Wesley Pub Comp Inc,1`.ed, Calf, 1990 2. Tipler, PA,(ted. L Prasetio dan R.W.Adi), "Fisika : untuk Sains dan Teknik, Jilid 2", Erlangga, Jakarta, 1998	