

Module designation	Basic Physics I
Module level, if applicable	Undergraduate
Code, if applicable	PIPAUM6201
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	Odd/Spring Term
Person responsible for the module	Erni Yulianti, S.Pd., M.Pd
Lecturer	Erni Yulianti, S.Pd., M.Pd Yessi Affriyenni, S.Pd., M.Sc
Language	Bahasa Indonesia
Relation to curriculum	Undergraduate degree program, compulsory, 1st semester.
Type of teaching, contact hours	Undergraduate degree program: cooperative learning, presentation, laboratory work, 3 x 50 = 150 minutes and 1 x 170 minutes
Workload	1. Lectures: 3 x 50 = 150 minutes (2.5 hours) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Laboratory work: 1 x 170 minutes (2.83 hours) per week. 4. Private study: 3 x 60 = 180 minutes (3 hours) per week.
Credit points	4 credit points (~6.35 ECTS-eq)
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing this module, students are expected to: LO 2: master basic physics knowledge and earth science using the Nature of Science (NOS) along with logical, critical, systematical, and innovative thinking in team collaboration using local potential and information technology development.
Content	This course covers the following two main topics: 1. Measurement; quantities and units (principal quantity, derivative quantity, dimensions), figures important, measuring tools, vectors. 2. Mechanics; kinematics (straight motion, parabolic motion, circular motion), dynamics (translation and

	rotation)
Study and examination requirements and forms of examination	Assignment, Quiz, Midterm examination, Final examination, Performance
Media employed	LCD, power point, white board, video and moodle (Sipejar)
Reading list	<ol style="list-style-type: none"> <li>1. Holliday, D., Resnick, R. &amp; Walker, J. 2010. <i>Fundamentals of Physics Extended</i> (9<sup>th</sup> edition). New York: Wiley.</li> <li>2. Knight, D Randall. 2016. <i>Physics for Scientists and Engineers: A Strategy Approach</i>. California: Pearson.</li> <li>3. Serway, R. A. &amp; Jewett, J. W. 2014. <i>Physics for Scientists and Engineers</i> (9<sup>th</sup> edition). New York: Thomson Brooks.</li> <li>4. Young, H. D., Freedman, R. A., Sears, &amp; Zemansky's. 2012. <i>University Physics with Modern Physics</i> (13<sup>th</sup> edition). San Fransisco: Pearson Education.</li> </ol>
Date of last amendment made	May, 2020