

MODULE HANDBOOK

Course:	Basic Physics III
Module Level:	Undergraduate
Code:	FID 107
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/Term:	2 nd /First year
Module Coordinator:	Drs. R. Arif Wibowo, M.Si.
Lecturer (s):	Drs. R. Arif Wibowo, M.Si.; Prof. Dr. Suhariningsih; Dr. Moh. Yasin, M.Si.; Dr. Suryani D Astuti, M.Si.; A H Zaidan, S.Si., M.Si., Ph.D.; Drs. Adri Supardi, M.S.; Drs. Pujiyanto, M.S.; Drs. Siswanto, M.Si; Drs. Bambang, M.Si.; Suprijanto, M.Si.; Drs. Djoni Izak R., M.Si.; Supadi. S.Si., M.Si.; Imam S. S.Si., M.Si.; Jan Ady. S.Si., M.Si.; Samian. S.Si., M.Si.; and Dyah H., S.Si., M.Si.;
Language:	Bahasa Indonesia
Classification within the Curriculum:	Compulsory Course / Elective Course
Teaching format / class hours per week during the semester:	2 hours of lecturers (50 minutes per hour) and 1 hour (60 minutes) of tutorial
Workload:	2 hours of lecturers, 1 hour (60 minutes) of tutorial dan structured activities, 1 hour (60 minutes) of individual study, 13 weeks per semester, and total of 78 hours per semester ~ 2,6 ECTS*
Credit Points:	2
Requirement(s):	-
Learning Goals/ Competencies:	<p>General Competence (Knowledge): To understand the concept of Relative Motion, High Energy Dynamics, Gravitational Interaction, Superposition Simple Harmonic Motion, Wave, Transport Phenomena, Electrical Interactions, Continuous Charge Distribution, Interaction Electricity, Magnetic Field, Mass Spectrometer, Experimental Electro Magnetic Field Static</p> <p>Specific Competence:</p> <ol style="list-style-type: none"> 1. Able to explain the concept of High Energy Dynamics 2. Able to explain the concept of Gravitational Interaction 3. Able to formulate, solve and analyze problems of Superposition Simple Harmonic Motion 4. Understand and able to solve problems in electrical interactions 5. Understand and able to solve problems in sound waves. 6. Understand and able to solve problems in Continuous Charge Distribution and Experimental Electro Magnetic Field Static
Contents:	Review Calculus, Relative Motion, High Energy Dynamics, Gravitational Interaction, Superposition Simple Harmonic Motion, Wave, Transport Phenomena, Electrical Interactions, Continuous Charge Distribution, Interaction Electricity, Magnetic Field, Mass Spectrometer, Experimental Electro Magnetic Field Static
Soft Skill Attribute:	Effort and ethic

<p>Study/Exam Achievements:</p>	<p>Students are considered competent and eligible to pass the course upon obtaining at least 40% of maximum mark of the exams and homeworks. Type of test is multiple choice.</p> <p>Final score is calculated as follow: 15% Homework + 15% (Quiz I & 2) + 35% midterm exam + 35% final exam.</p> <p>Final grade is difined as follow:</p> <p>A : 75 - 100 AB : 70 - 74.99 B : 65 - 69.99 BC : 60 - 64.99 C : 55 - 59.99 D : 40 - 54.99 E : 0 - 39.99</p>
<p>Forms of Media:</p>	<p>Powerpoint slides, LCD projectors and whiteboards</p>
<p>Learning Methods:</p>	<p>Lecture and discussion</p>
<p>Literature(s):</p>	<ol style="list-style-type: none"> 1. Alonso and Finn, <i>Fundamental University Physics, Vol. 1</i>, Addison Wesley, 1992, 2. Alonso-Finn, <i>Fundamental University Physics, Vol II, Fields dan Waves</i>, Addison-Wesley Publishing Company, 1980 3. Tipler, P.A., Mosca G. <i>Physics for scientists and engineers (5ed., extended version)</i>
<p>Notes:</p>	<p>The course is calculus based.</p> <p>*Total ECTS = {(total hours workload × 50 min) / 25 hours Each ECTS is equals with 25 hours.</p>