

Module Handbook

Module Name:	Problem-solving in Physics
Module Level:	Bachelor
Abbreviation, if applicable:	FI4003
Sub-heading, if applicable:	
Courses included in the module, if applicable:	
Semester/term:	fourth year
Module coordinator(s):	
Lecturer(s):	
Language:	Bahasa Indonesia
Classification within the curriculum:	General Studies / Major Subject / Elective Studies
Teaching format / class hours per week during the semester:	2 hours lecture
Workload:	2 hours lectures, 4 hours individual study, 16 weeks per semester, and total 96 hours a semester
Credit Points:	2
Requirements:	Mathematics IA, Mathematics IIA, Elementary Physics IA, Elementary Physics IIA
Learning goals:	<p>Knowledge:</p> <p>1.</p> <p>Skill:</p> <ol style="list-style-type: none"> 1. Apply knowledge of fundamental physics in problem solving of realistic physical system 2. Use knowledge and skill in problem solving 3. Develop the teamwork skill 4. Develop management skill
Content:	Every week, students will be provided 2-3 problems in class and 1 problem home works in the area of mechanics, electricity and magnetism, thermodynamics, vibration and wave, optics and atomic physics. The problem should be solved collaboratively in a group of three students to develop mangement skill and teamwork.
Study/exam achievements:	Students are considered to be competent and pass if at least get 50% of maximum mark of the exams, homework, quizzes
Forms of Media:	Slides and LCD projectors, blackboards
Literature:	<ol style="list-style-type: none"> 1. N. Newbury et al., Princeton Problems in Physics, , Princeton University Press, 1991 2. P.P. Dendy, Problem in Physics, , Cambridge University Press, 1991
Notes	