

MODULE HANDBOOK

Module Name	:	Experimental Physics I
Module Level	:	Bachelor
Abbreviation, if applicable	:	FI 2205
Sub-heading, if applicable	:	
Semester/ term	:	4
Module Coordinator(s)	:	
Lecturer(s)	:	
Language	:	Bahasa Indonesia
Classification within the curriculum	:	Compulsory Course
Teaching format/ class hours per week during the semester	:	lectures, labwork, independent study
Workload	:	4 hours lectures for the first two weeks, and another 2 hours before the RBL Project 2 hours of preparation (individual work), 3 hours of laboratory works, 4 hours of report preparation and presentation, each for 7 weeks 6 hours of RBL Project, for 3 weeks + 1 hour for presentation Total of 88 hours a semester
Credits Points	:	2
Requirements	:	FI1101 Basic Physics IA & FI1201 Basic Physics IIA
Leraning goals	:	Knowledge: (1) Able to plan and prepare experiments on several topics. Skill: (1) Able to do several physical experiments and retrieve data correctly in the allotted time, with reference to safety standards. (2) Able to analyze and interpret experimental data, and be able to assess whether the data obtained is correct or not. (3) Able to display experimental data well, analyze data, and explain the results clearly, both in written reports and presentations. Competencies: (1) Able to carry out simple research activities in groups, including planning and preparing the research in detail.

Content	:	Mechanics (Tensile Strength, Damped Pendulum Oscillation), Waves (Diffraction of X-Rays by periodic structures, Waveguide), Optics (Optical Fibers, Laser spectra & Cavity Modes), Fluids (Flowrate and Permeability)
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