

Module Handbook

Module Name:	Basic Physic II (Practical)
Module Level:	Bachelor
Abbreviation, if applicable:	FID105
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	2 nd / First Year
Module coordinator(s):	Supadi, S.Si, M.Si
Lecturer(s):	Lecturers Team
Language:	Bahasa Indonesia
Classification within the curriculum	Compulsory Course / Elective Studies
Teaching format / class hours per week during semester:	2 hours laboratory work(50 min / hours)
Workload:	2 hours doing worksheet and pretest preparation, 2 hours laboratory work, 2 hours group discussion, searching literature and writing report, 13 week per semester, and total 78 hours per semester ~ 2.6 ECTS *
Credit Points:	1
Requirements:	-
Learning goals/competencies:	<p>General Competence (Skill): To demonstrate an ability to conduct experiment in basic physics.</p> <p>Specific Competence:</p> <ol style="list-style-type: none"> 1. Ability to plan and prepare practical laboratory investigations on electrical resistance, electrical capacitance, inductance, magnetism and oscilloscope. 2. Ability to plan and prepare practical laboratory investigations on equality of mechanical heat, positive and negative lens, wavelength experiment, refractive index of prism and microscope. 3. Ability to plan and prepare practical laboratory investigations on radioactive. 4. Ability to plan and prepare practical laboratory investigations on simulation of electrical circuit in Electronics Workbench.
Content:	Electrical resistance, electrical capacitance, inductance, magnetism, oscilloscope, equality of mechanical heat, positive and negative lens, wavelength experiment, refractive index of prism, microscope, radioactive, and simulation of electrical circuit in Electronics Workbench.
Soft skill	Discipline and team work
Study/exam achievements:	<p>Students are considered to be competent and pass if at least get 55</p> <p>The final value is calculated as follows: 35%Final practical work examination; 10% SoftSkill; 30% Reports; 25%Pre-test</p> <p>Final index is defined as follows A : 100>NA≥75</p>

	AB: 74,9 > NA ≥ 70 B : 69,9 > NA ≥ 65 BC : 64,9 > NA ≥ 60 C : 59,9 > NA ≥ 55 D : 54,9 > NA ≥ 40 E : 39,9 ≥ NA
Learning Methods	<ul style="list-style-type: none"> - Practicum in Laboratory - Discussion - Structured role models
Forms of Media:	Laboratory's equipments, White board, Structured models
Literature:	<ol style="list-style-type: none"> 1. Petunjuk Praktikum Fisika Dasar II, Departemen Fisika, FST Universitas Airlangga, 2015. 2. Alonso and Finn, <i>Fundamental University Physics, Vol. 2</i>, Addison Wesley, 1992, 3. Tipler, P.A., Mosca G. <i>Physics for scientists and engineers</i> (5ed., extended version) 4. Halliday, D., Resnick, R., and Walker, J., <i>Principle of Physics</i>, 9th edition (extended), John Wiley & Sons, 2011 5. Jewet, J.W. and Serway, R. A., 2006, <i>Serway's Principles of Physics, A Calculus Based Text</i>, 4th Edition, Thomson & Brooks/Cole, Australia
Notes:	*Total ECTS = {(total hours workload x 50 min) / 60 min } / 25 hours Each ECTS is equals with 25 hours