

Module Handbook

Module Name:	Mechanics (Experimental)
Module Level:	Bachelor
Abbreviation, if applicable:	FIT 213
Sub-heading, if applicable:	
Courses included in the module, if applicable	
Semester/term:	4 / Second Year
Module coordinator(s):	
Lecturer(s):	
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course / Elective Studies
Teaching format / class hours per week during the semester:	1 hours lectures
Workload:	2 hours Laboratories work, 16 weeks per semester, and total 96 hours a semester
Credit Points:	1
Requirements:	FID116 Physics II
Learning goals/competencies:	<p>Knowledge:</p> <ul style="list-style-type: none"> - To demonstrate an ability to conduct experiments in analytical mechanics <p>Skills:</p> <ul style="list-style-type: none"> - Ability to plan and prepare Oscillation experiment in detail - Ability to plan and prepare Coordinate System experiment in detail - Ability to plan and prepare Moment of Inertia experiment in detail - Ability to plan and prepare Projectile Motion experiment in detail - Ability to conduct experiment , record data using a variety of suitable instrument - Ability to analyze and interpret resulting data using knowledge of mathematics and physics - Ability to report the result in the form of both paper and oral presentation <p>Competence:</p> <ul style="list-style-type: none"> - To understand and able to apply to solve problems in Projectile Motion - To have an ability to apply the concept of Oscillation - To understand and able to apply the concept of Coordinate System - To have an ability to apply solve and analyse Moment of Inertia Motion
Content :	Coupled Pendula, Laws of Gyroscope, Forces Oscillation-Pohl's Pendulum, Moment of Inertia and Torsional Vibrations, Projectile Motion
Soft Skill Attribute:	Persistence and work ethic
Study/exam achievements:	<p>Students are considered competent and eligible to pass the course upon obtaining at least 55</p> <p>Pretest 10% + activity daily practical 15 % + Presentation 15% + Final Exam 30% + Analysis & report 30%</p> <p>Form of final exam is essay and practical test</p>

	<p>Final grade is defined as follow:</p> <p>A : 75 - 100</p> <p>AB : 70 - 74.99</p> <p>B : 65 - 69.99</p> <p>BC : 60 - 64.99</p> <p>C : 55 - 59.99</p> <p>D : 40 - 54.99</p> <p>E : 0 - 39.99</p>
Forms of Media:	Slides and LCD projectors, blackboards, lab.
Literature:	<ol style="list-style-type: none"> 1. Fowles, G. R., Cassiday, G.L., Analytical Mechanics, Harcourt College Publishing, 1999 2. Arya, A. P., An Introduction to Classical Mechanics, PrenticeHall, 1990. 3. Symon, K. R., Mechanics, Addison Wesley, 1980. 4. Physics Laboratory Experiments, Phywe Systeme GmbH & Co. KG, Germany
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