

SYLLABUS CURRICULUM

COURSE	Course Name : Fundamental Physics I
	Course Code : SF184101
	Credit : 4 sks
	Semester : I

COURSE DESCRIPTION	
LEARNING OUTCOMES	
LO5	Understand the basic science and mathematics.
COURSE LEARNING OUTCOMES	
MAIN SUBJECT	
<p>The focus of this course are as follows:</p> <ul style="list-style-type: none"> - Magnitude and vector; - particle kinematic: velocity, acceleration, linear motion, parabolic motion, circular motion; - Dynamic particle: newton's laws, friction force; - work and energy: work concept, kinetic energy, potential energy, constancy mechanical energy , - Momentum and collision; - rotational motion: velocity dan angular velocity, moment dan moment inertia, rolling motion; - vibration : simple harmonic motion, harmonic vibration combination; - fluids mechanics: hidrostatic, hidrodynamic. 	
PREREQUISITES	
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REFERENCE	
<ol style="list-style-type: none"> 1. Halliday & Resnic; 'Fundamental of Physics'. John Wiley and Sons, New York, 1987 2. Tim Dosen, "Diktat Fisika I", "Soal-soal Fisika I", Fisika FMIPA-ITS 3. Petunjuk Praktikum Fisika Dasar", Fisika, MIPA-ITS 4. Alonso & Finn, "Fundamental University Physics", Addison Wesley Pub Comp Inc, 13`ed, Calf, 1990 5. Tipler, PA, (ted. L Prasetio dan R.W.Adi), "Fisika : untuk Sains dan Teknik, Jilid 1", Erlangga, Jakarta, 1998 	

6. Giancoli, DC., (terj, Yuhilza H), 'Fisika, jilid 1', Erlangga, Jakarta, 2001