

ME2103 - Continuum Mechanics

COURSE LESSON PLAN			
STUDY PROGRAM: METEOROLOGY			
FACULTY/SCHOOL: FACULTY OF EARTH SCIENCES AND TECHNOLOGY			
INSTITUT TEKNOLOGI BANDUNG			
Course Code: ME2103	Credits: 3	Semester: 2	Course Type: Compulsory course
Course Name	Mekanika Medium Kontinu		
	Continuum Mechanics		
Related Course	MA1011	Matematika	Pre-requisite
	FII011	Fisika	Pre-requisite
Study Materials	Classical mechanics including Newtonian basics, 1D to 3D particle motion, coordinate systems, Lagrange equations, shear tensor inertia, small vibration theory and rigid body rotation.		Expose
	Gravitational potential and rock mechanics processes.		Expose
	Description/analysis of physical fluid flow including static fluid phenomena; formulation of Bernoulli's equation through mass and energy conservation laws and simple applications.		Explore
Learning Outcomes			
Code		LO	
PLO-1.1		Able to use basic science and mathematics as a foundation to understand the basics of meteorology.	
PLO-2.2		Able to demonstrate an understanding of basic meteorological knowledge to explain weather or climate phenomena.	
Code	CO	Elements of Course Learning Outcomes (CO)	
PLO-1.1	1	Students are able to apply basic fluid mechanics concepts, Eulerian and Lagrangian fluid velocity, and the forces acting on a fluid. (C2)	
PLO-2.2	2	Students are able to apply the Bernoulli equation and Navier–Stokes equations to understand fluid motion. (C3)	
Learning Methods		Lecture Group Discussion Cooperative Learning Problem-based Learning	
Learning Modalities		Synchronous learning Blended/Online Asynchronous	
Assessment Method		Assessment components: Midterm Examination (35%), Final Examination (40%), Assignments (20%), and Quizzes (5%). Grading Scale: 80–100% A (maximum competency) 75–80% AB (very good competency) 65–75% B (good competency) 60–65% BC (satisfactory competency) 55–60% C (minimum competency) 45–54% D (below minimum competency) <45% E (far below minimum competency)	