

ME1201 - Introduction to Meteorology and Climatology

COURSE LESSON PLAN			
STUDY PROGRAM: METEOROLOGY			
FACULTY/SCHOOL: FACULTY OF EARTH SCIENCES AND TECHNOLOGY			
INSTITUT TEKNOLOGI BANDUNG			
Course Code: ME1201	Credits: 2	Semester: 2	Course Type: Compulsory course
Course Name	Pengantar Meteorologi dan Klimatologi		
	Introduction to Meteorology and Climatology		
Related Course	KI1101	Kimia	Pre-requisite
Study Materials	Atmospheric Structure		Expose
	Weather Phenomena		Expose
	Cloudiness and Convection		Expose
	Solar Radiation and Heat Balance of the Earth's Surface		Expose
	General Circulation and Climate		Expose
	Meteorological Disasters and Climate Change		Expose
Learning Outcomes			
Code		LO	
PLO-1.1		Able to use basic science and mathematics as a foundation for understanding the fundamentals of meteorology. (C3)	
PLO-2.1		Able to describe the atmosphere and weather and climate phenomena. (C2)	
Code	CO	Elements of Course Learning Outcomes (CO)	
PLO-1.1	1	Students are able to derive formulas related to lapse rate, gravity, Newton's laws, and ideal gas. (C3)	
PLO-2.1	2	Students are able to describe the composition, vertical structure, and heat balance of the Earth's atmosphere. (C1)	
	3	Students are able to explain global, mesoscale, and local circulations in the Earth's atmosphere. (C2)	
	4	Students are able to demonstrate knowledge of climate elements, such as temperature, pressure, humidity, wind, cloud formation, and precipitation. (C2)	
	5	Students are able to explain atmospheric phenomena, such as fronts, tropical cyclones, thunderstorms, and tornadoes. (C2)	
	6	Students are able to understand climate change and numerical prediction. (C1)	
Learning Methods		Lectures Group discussions Cooperative learning Problem-based learning	
Learning Modalities		Synchronous offline learning Blended/asynchronous online learning	
Assessment Method		Assessment components: Midterm Exam 35%, Final Exam 40%, Assignments 20%, and Quizzes 5%. 80–100% = A (maximum competency); 75–80% = AB (very good competency); 65–75% = B (good competency); 60–65% = BC (fairly good competency); 55–60% = C (minimum competency); 45–54% = D (below minimum competency); <45% = E (far below minimum competency).	