

ME2201 - Statistical Meteorology

COURSE LESSON PLAN			
STUDY PROGRAM: METEOROLOGY			
FACULTY/SCHOOL: FACULTY OF EARTH SCIENCES AND TECHNOLOGY			
INSTITUT TEKNOLOGI BANDUNG			
Course Code: ME2201	Credits: 2	Semester: 4	Course Type: Compulsory course
Course Name	Meteorologi Statistik		
	Statistical Meteorology		
Related Course	WI2002	Data Literacy and Artificial Intelligence	Co-requisite
Study Materials	Atmospheric phenomena examined statistically.		Expose
	Empirical distributions and meteorological data analysis methods.		Expose
	Weather Pattern Analysis.		Explore
	Statistical weather forecasting.		Explore
	Time-series forecasting.		Explore
	Box–Jenkins Method.		Explore
Learning Outcomes			
Code		LO	
PLO-3.2		Able to process large-scale digital weather and climate data to understand weather and climate phenomena. (C3)	
PLO-3.3		Able to operate computing devices in accordance with the learned algorithms to solve standard scientific problems in meteorology. (C3)	
PLO-4.2		Able to interpret and analyze data processing and/or simulation results to obtain new information or knowledge related to meteorology. (C4)	
Code	CO	Elements of Course Learning Outcomes (CO)	
PLO-3.2	1	Students are able to apply EDA methods to accurately describe weather and climate phenomena from meteorological data. (C3)	
PLO-3.3	2	Students are able to construct and use probability distributions from meteorological data to explain the likelihood of weather and climate events. (C3)	
PLO-4.2	3	Students are able to build a simple statistical model to simulate and/or predict a weather or climate phenomenon. (C4)	
	4	Students are able to objectively analyze the performance of weather and climate prediction systems from global or regional model outputs. (C4)	
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)	