

MA1101 - Mathematics

COURSE LESSON PLAN					
STUDY PROGRAM: METEOROLOGY					
FACULTY/SCHOOL: FACULTY OF EARTH SCIENCES AND TECHNOLOGY					
INSTITUT TEKNOLOGI BANDUNG					
Course MA1101	Code:	Credits: 4	Semester: I	Course Type: Compulsory course	
Course Name		Matematika			
		Mathematics			
Related Course		-	-	-	
Study Materials		Functions			Express
		Limits			Express
		Derivatives			Express
		Applications of Derivatives			Express
		Integrals			Express
		Applications of Integrals			Express
Learning Outcomes					
Code		LO			
PLO-1.1		Capable of utilizing basic mathematics and science as a foundation to understand the fundamentals of meteorology.			
Code	CO	Elements of Course Learning Outcomes (CO)			
PLO-1.1	CO1	recognize real-world phenomena as rates of change or accumulations of change, and formulate them using mathematical vocabulary.			
	CO2	examine and explain phenomena involving changes in quantities through various strategies by applying the basic concepts of single-variable calculus, particularly derivatives as the concept of rate of change and integrals as the concept of accumulation of change.			
	CO3	solve real-world problems using single-variable calculus and utilize technology as a supporting tool when necessary.			
	CO4	express ideas about changes in quantities and construct convincing arguments, both orally and in writing, in their own words, including providing interpretations in mathematical and non-mathematical contexts.			
	CO5	examine and present mathematical information in symbolic form, diagrams, tables, and graphs.			
	CO6	use mathematics to analyze and solve various problems, both in real-world contexts and across various disciplines, including science, engineering, life sciences, and business, while developing attitudes such as self-confidence, persistence, openness, and others.			
Learning Methods		Offline/Blended			
Learning Modalities		A combination of lectures and discussions, problem-based learning, independent assignments, regular joint quizzes, and cooperative learning.			
Assessment Method		Midterm Exam 35%, Final Exam 35%, Joint Quiz 15%, PKH 15%.			