

Module designation	Differential Calculus	
Semester(s) in which the module is taught	1	
Person responsible for the module	Atmini Dhoruri, MS.	
Language	Bahasa Indonesia	
Relation to curriculum	Compulsory course	
Teaching methods	150 minutes lectures and 180 minutes structured activities per week.	
Workload (incl. contact hours, self-study hours)	Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.	
Credit points	3	
Required and recommended prerequisites for joining the module	-	
Module objectives/intended	After taking this course the students have ability to:	
learning outcomes	CO1. Showing respect for the other's opinion	
	CO2. Develop knowledge of Differential Calculus in a systematic, critical, creative, and innovative way	
	CO3. Communicate ideas in solving problems related to Integral in writing or verbally.	
	CO4. Understand the Differential concept for the basis of self-development in work and further study	
	CO5. Exploring, generalizing and provingtheorems related to Integral using logical reasoning	
Content	The course discusess about concepts of real number systems, coordinate systems, functions, limit functions and continuity, derivative functions, minima and maxima problems, limits at infinity, infinite limits, graphs of equation and the mean value theorems for derivatives	
Examination forms	CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude. The student is given a value of very good or not good attitude if they show it significantly compared to other students in general.	



Study and examination		
requirements		

The result of attitude assessment is not a component of the final grades, but as one of there quirements to pass the course. Students will pass from this course if at least have a good attitude.

The final mark will be weight as follow:

N o	со	Assessment Object	Assessment Technique	Weigh t
1	CO 2	Presentation	Observation	10%
	CO 3,CO 4, CO 5,	a. Individu al assessment b. Group assessment c. Quiz d. Mid exam e. Final exam	Written test	10% 10% 20% 25% 25%
	100%			

## Reading list

- 1. Purcell, Edwin J. danVarberg, D. 2001. Kalkulus, Edisi Tujuh, Jilid Satu. Alih Bahasa : I Nyoman Sulila. Batam: Interaksa..
- 2. Louis Leithold. 1992. Kalkulus dan Ilmu Ukur Analitik, Edisi kelima, jilid 1. Alih bahasa: E. Hutahaean. Jakarta: Penerbit Erlangga.
- 3. Frank Ayres, JR. 2000. Calculus . Theory and Problems of Diferential and Integral. Scaum's Outline Series. New York : McGraw-HillS Book Company.