

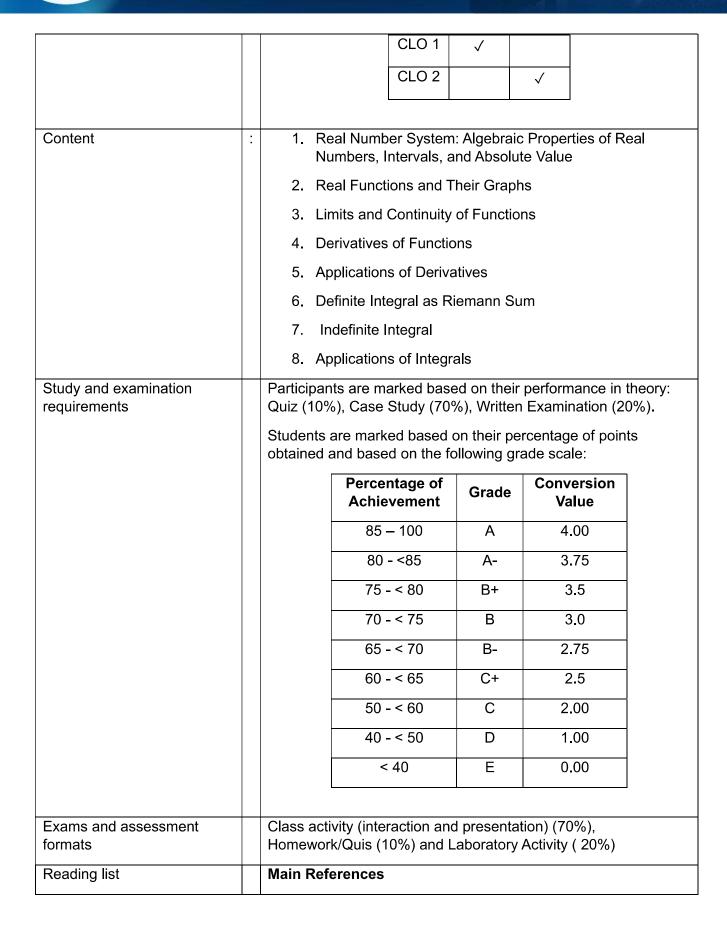
2. Basic Mathematics

Module Name	:	Basic Mathematics
Module Level	:	Bachelor
Code, if applicable	:	23H01110103
Subtitle, if applicable	:	-
Courses, if applicable	:	Geophysic
Semester(s) in which the module is taught	:	I (First Semester)
Module coordinator(s)	:	Jusmawati Massalesse, S.Si.,M.Si.
Lecturer(s)	:	Jusmawati Massalesse, S.Si.,M.Si., Naimah Aris, S.Si.,M.Math.
Language	:	Indonesian Language
Relation to curriculum	:	Compulsory course in the first year for Bachelor Degree in Geophysics
Type of teaching, contact hours	:	Teaching methods used in this course are:
		-Lecture (i.e., Lecture, Discussion, Colaborative learning, Case study, Project-based Learning);
		- Structured assignments (i.e., Module task).
Workload	:	40 hours per semester for Learning and Teaching, 48 hours per semester for Self Study, and 48 hours per semester for Structured Works.
Credit points	:	3 SKS (4.8 ECTS)
Requirements according to the examination regulations	:	Class activity (interaction and presentation) (40%), Homework/Quis (20%).
Recommended prerequisites	:	-
Module objectives/intended	:	After completion of this module, students will be able to:
learning outcomes		CLO 1. Students are able to determine solutions to problems related to the concept of one change calculus.
		CLO 2 Students are able to apply the concepts of function, derivative and integral, both to more complex calculus problems and problems related to their field.
		The following is the mapping of the ILO and the CLO of this course:
		ILO 4 ILO 8



Bachelor Program in Geophysics

Faculty of Mathematics and Natural Sciences





	1. Thomas, G. B., Weir, M. D., & Hass, J. R. (2013). Thomas' Calculus: Early Transcendentals (13th ed.). Pearson.
	2. McMullen, C. (2018). Essential Calculus Skills Practice Workbook with Full Solutions. Zishka Publishing.
	3. Stewart, J. (2015). Single Variable Calculus: Early Transcendentals. Thomson Brooks/Cole.
	4. Mathematics Teaching Team. (2023). Basic Mathematics.
	Additional References
	Khan Academy. Calculus 1. Retrieved from https://www.khanacademy.org/math/calculus-1
	Mathematics Lecture Series – Prof. Hendra Gunawan, Bandung Institute of Technology (ITB).
Last Revision Date	July 1 st , 2025