MODULE HANDBOOK

	UNIVERSITAS PADJADJARAN **FACULTY OF MATHEMATICS AND NATURAL SCIENCES** **BACHELOR OF BIOLOGY PROGRAMME**	**COURSE CODE:** **D10D-1004**
Module designation	Biomathematics and Computation	
Semester in which the module is taught	1	
Persons responsible for the module	1. Asep Kuswandi Supriatna 2. Nursanti Anggriani.	
Medium of instruction	Indonesian	
Relation to curriculum	Compulsory course	
Teaching methods	Lectures and discussions, Cooperative Learning, Project Based Learning	
Workload	Total workload : 5440 minutes = 90.67 hours Lecture and discussion : 2 x 50 minutes x 16 weekss = 1600 minutes = 26.67 hours Exercises : 2 x 60 minutes x 16 weekss = 1920 minutes = 32 hours Self-study : 2 x 60 minutes x 16 weekss = 1920 minutes = 32 hours	
Credit points	2.00 (3.62 ECTS)	
Required and recommended prerequisites for joining the module	-	
Module objectives/intended learning outcomes	1. Students can explain the concept of real numbers 2. Students can explain the concept of limit correctly 3. Students can explain the concept of derivative and its application 4. Students can explain the concept of integral and its application 5. Students can choose the right integrating technique	
Contents	This course discusses the real number system, functions and their types, limit, and continuity of functions, derivatives of functions and their applications, integrals, and their applications, and integrating techniques.	
Examination forms	Quiz, Midterm exam, Assignment, and Final exam	
Study and examination requirements	The minimum attendance in lectures is 80%. Final grades are evaluated based on quiz (10%), midterm exam (15%), assignment (10%), final exam (15%), project and participation (50%)	
Reading lists	1. Purcell, E.J.& Varberg, D 1984 ”Kalkulus dan Geometri Analitis”, jilid 1, terjemahan edisi 5. Erlangga. 2. Stewart, J. 1998. ”Kalkulus”,jilid 1, tejemahan edisi 4. Erlangga. 3. Martono,K. 1999. Kalkulus. Erlangga 4. Anton, H., Bivens, I., & Davis, S. (2021). Calculus: Early Transcendentals (12th ed.). Wiley. 5. Hass, J., Heil, C. E., & Weir, M. D. (2020). Thomas' Calculus (14th ed.). Pearson.	