MODULE HANDBOOK

	UNIVERSITAS PADJADJARAN **FACULTY OF MATHEMATICS AND NATURAL SCIENCES** **BACHELOR OF BIOLOGY PROGRAMME**	**COURSE CODE:** **D10D-2010**
Module designation	Biostatistics	
Semester in which the module is taught	2	
Persons responsible for the module	1. Neneng Sunengsih, Dra., M.Stat. 2. Restu Arisanti, S.Si., M.Si.	
Medium of instruction	Indonesian	
Relation to curriculum	Compulsory course	
Teaching methods	Lectures and discussions	
Workload	Total workload : 8160 minutes = 136 hours Lecture and discussion : 3 x 50 minutes x 16 weeks = 2400 minutes = 40 hours Exercises : 3 x 60 minutes x 16 weeks = 2880 minutes = 48 hours Self-study : 3 x 60 minutes x 16 weeks = 2880 minutes = 48 hours	
Credit points	3.00 (5.43 ECTS)	
Required and recommended prerequisites for joining the module	-	
Module objectives/intended learning outcomes	1. Students are able to explain and master the Basic Concepts of Statistics 2. Students are able to calculate and interpret measures of concentration and measures of statistical distribution 3. Students are able to explain the Basic Concepts of Probability, Calculate and interpret expected or expected values 4. Students are able to explain, calculate and analyze parameter estimation 5. Students are able to explain, calculate and analyze hypothesis testing 6. Students are able to understand and explain the basic concepts of experimental design Students are able to understand, explain, design and analyze perfectly randomized designs 7. Students are able to calculate and analyze further tests 8. Students are able to understand, explain, design and analyze randomized block designs 9. Students are able to understand, explain, design and analyze missing data in randomized block design 10. Students are able to understand, explain, design and analyze non-randomized block design 11. Students are able to understand, explain, design and analyze Latin square designs	
Contents	The Biological Statistics course studies the basic concepts of Statistics, Descriptive Statistics, Inference Statistics, the concept of chance, Parameter Estimation, Hypothesis Testing, Sampling Distribution, Basic Concepts of Experimental Design, Perfect randomized design, further tests, Randomized block design, missing data in randomized block design, incomplete randomized block design and Latin square design.	
Examination forms	Pretest, Quiz, Midterm exam, and Final exam	
Study and examination requirements	The minimum attendance in lectures is 80%. Final grades are evaluated based on pretest (10%), quiz (30%), midterm exam (30%), and final exam (30%)	
Reading lists	1. Mendenhall *et.al*. Introduction to Probability Statistics 2. Sudjana. Metoda Statistika 3. Walpole, ER. Pengantar Statistika	