


MODULE HANDBOOK

	UNIVERSITAS PADJADJARAN FACULTY OF MATHEMATICS AND NATURAL SCIENCES BACHELOR OF BIOLOGY PROGRAMME	COURSE CODE D10D-601012
Module designation	Biofertilization	
Semester(s) in which the module is taught	6	
Person(s) responsible for the module	1. Drs. Ruly Budiono, MS 2. Dr. Asep Zainal Mutaqin, MT	
Medium of instruction	Indonesian	
Relation to curriculum	Elective course	
Teaching methods	Lectures, discussions, cooperative learning, and inquiry learning	
Workload	Total workload : 5440 minutes = 90.67 hours Lectures, discussions, cooperative learning, and inquiry learning : 2 x 50 minutes x 16 weeks = 1600 minutes = 26.67 hours Exercises : 2 x 60 minutes x 16 weeks = 1920 minutes = 32 hours Self-study : 2 x 60 minutes x 16 weeks = 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. Demonstrate a responsible attitude, respect ideas/opinions, and work together 2. Able to think logically, critically, systematically and innovatively in the context of scientific development 3. Able to apply biofertilization knowledge in real life settings 4. Able to understand the biological increase in plant growth and soil fertility through the activities of soil organisms	
Contents	The Biofertilization course discusses the function of soil organisms, both symbiotic and non-symbiotic, to increase plant growth and the function of organisms in increasing soil fertility.	
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 Quizzes (25%), Assignments (25%), midterm exam (25%), and final exam (25%).	
Reading lists	1. Bergessen, FJ. And JR. Posgate, 1987. A century of Nitrogen Fixation research. Present Status and Future prospects. The Royal Soc., London. 2. Dilworth, MJ. Nd AR. Glenn. 1991. Biology and Biochemistry of Nitrogen Fixation. Elsevier Amsterdam. 3. Dixon, ROD and CT. Wheeler, 1986. NITROGEN: Fixation In Plants. Blackie USA, Chapman & Hall. New York. 4. Somasegaran P., and HJ. Hoben 1994. Hand Book for Rhizobia Methods In legume Rhizobium Technology. Springer-Verlag, New York. 5. Ayanaba, A. and PJ. Dart. 1975. Biological Nitrogen Fixation in Farming Systems of the Tropics. John Wiley & Sons. Brisbane, Toronto.	