MODULE HANDBOOK

	UNIVERSITAS PADJADJARAN FACULTY OF MATHEMATICS AND NATURAL SCIENCES BACHELOR OF BIOLOGY PROGRAMME	COURSE CODE D10D0042

Module designation	Bioremediation of Agro-Industry and Polluted Waters
Semester(s) in which the module is taught	6
Person(s) responsible for the module	1. Dr. Nia Rossiana 2. Dr.rer.nat. Tri Dewi K. Pribadi 3. Dr. Suryana
Medium of instruction	Indonesian
Relation to curriculum	Elective course
Teaching methods	Lectures, discussions, cooperative learning, and problem based learning
Workload	Total workload : 8160 minutes = 136 hours Lectures, discussions, cooperative learning, and problem based learning : 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	1. Animal Physiology 2. Plant Physiology 3. Microbiology 4. General Ecology
Module objectives/intended learning outcomes	1. Students are able to explain the basic concepts of recovery for damaged ecosystems caused by anthropogenic and xenobiotic activities using biological agents (animals, plants, microbes). 2. Students are able to choose recovery methods for damaged ecosystems caused by anthropogenic and xenobiotic activities using biological agents (animals, plants, microbes).
Contents	This course covers the concepts and methods of restoring ecosystems polluted by hazardous toxic materials (B3), xenobiotics, toxic contaminants in the form of organic and or inorganic materials, using biological agents.
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 (20%), Assignments (20%), UTS (30%), and UAS (30%).
Reading lists	1. Crawford, R.L. and Crawford, D. L. 2005. Bioremediation: Principles and Applications. Cambridge: Cambridge University Press.