Module Description

Module name	Course Module of Ecology, Environment dan Conservation
Module level, if applicable	Magister of Biology Education
Code, if applicable	34182033
Subtitle, if applicable	-
Course, if applicable	Ecology, environment dan conservation
Semester(s) in which the module istaught	I
Person responsible for the module	Lecturer of Courses
Lecturer	Dr. Ratna Komala, M.Si., Dr. Diana Vivanti, M.Si
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course for Magister of Biology Education and offered in the 1st semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) - Structured assignments (i.e., essays and case study The class size for lecture is 30 students. Contact hours for lecture is 23 hours, assignments are 28 hours
Workload	For this course, students required to meet a minimum of 233.2 hours in one semester, which consist of: 32.2 hours for lecture : tutorial and discuss the subject 22.00 hours for structured assignments : doing exercices and problem solving or project, 162.00 hours for independent study : reading references, group discuss, finish the exercises. Project ; 25 hours Paper : 14 hours 1 ECTS = 30 hours 233.2 hours = 7.8 ECTS -
Credit points	3 credit points (equivalent with 4.8 ECTS)

Requirements according to the examination regulations	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
Module objectives/intended learning outcomes	After completing the course and given with this case: **Learning Outcomes** **Social Competences:** 1. Have integrity and professional ethics, self-development, and make innovations to improve the quality of education and lifelong learning for the community (PLO1) 2. Able to work together in multicultural groups and collaborate with various parties/stakeholders in solving a problem in the field of education (PLO3). **Specific Competences:** 1. Able to improve mastery of biological material in the fields of plant and animal structure, environment, bioconservation, biomolecular, and biotechnology (PLO9). 2. Able to analyze and synthesize problem solutions in biology learning through interdisciplinary, transdisciplinary and multidisciplinary approaches (PLO10)

Content	**Students will learn about:** Principles of Ecology, environment education, biodiversity, land and forest Tropical biodiversity, Water resources, fuel resources and conservation
Forms of Assessment	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Project: 20%; Structured tasks: 20%; Mid Test: 30%; Final Test: 30%

Study and examination requirements and forms of examination	**Study and examination requirements:** - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. **Form of examination:** Written exam: Essay
Media employed	Direct Whiteboard, Power Point Presentation, online conference platform
Reading List	1. Kartasapoetra, .Ance Gunarsih. 2004. Klimatologi: Pengaruh Iklim Terhadap Tanah dan Tanaman. Jakarta: Bumi Aksara. 2. Hardjowigeno, . H. Sarwono. 2003. Ilmu Tanah. Jakarta: Akademika Pressindo 3. Nybakken, J.W. 1992. Biologi Laut Suatu Pendekatan Ekologis. Terjemahan. Penerbit PT. Gramedia 4. Nontji,A. 1987. Laut Nusantara. Djambatan. Jakarta 5. Odum, E.P. 1971. Fundamentals of Ecology 3rd ed. Philadelphia and London:W.B. Saunders Co. 6. Heddy , Suwarsono. 1994. Prinsip-prinsip Dasar Ekologi. Rajawali. Malang 7. Odum, E.P. 1971. Fundamentals of Ecology 3rd ed. Philadelphia and London:W.B. Saunders Co. 8. Asdak C. 1995. Hidrologi dan Pengelolaan Daerah Aliran Sungai. Gadjahmada Univ. Yogyakarta. 9. Prawiro, Ruslan. 1988 Ekologi Pencemaran Lingkungan Penerbit SW. Semarang 10. Ewusie JY. 1980. Pengantar Ekologi Tropika. Tanuwidjaya Usman, penerjemah. Bandung : ITB Press. Terjemahan dari : Elements of Tropical Ecology. 11. Soerianegara I dan A. Indrawan. 2005. Ekosistem Hutan Indonesia. Bogor : Laboratorium Ekologi Hutan, Fakultas Kehutanan IPB