

Module designation	Ecology
Semester(s) in which the module is taught	<i>4th semester</i>
Person responsible for the module	Prof. Dr. Ir. H. Abdul Hadi, M.Agr. Prof. Ir. Fadly Hairannoor Yusran, M.Sc., Ph.D Prof. Akhmad Rizali Saidy, S.P., M.Ag.Sc., Ph.D
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	<i>Compulsory courses</i>
Teaching methods	<i>Teaching, practice</i>
Workload (incl. contact hours, self-study hours)	- Total workload: 121,69 hours Contact hours: - Lecture: 79.24 hours - Practice:42,45hours Private study including examination preparation: 48 hours
Credit points	2
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<i>Students are able to:</i> a. <i>Realizing man's position in nature.</i> b. <i>Defining Ecology and mentioning its scope and history.</i> c. <i>Explaining the basic ideas of Ecology</i> d. <i>Explaining about ecosystem processes.</i> e. <i>Define the ecosystem and name its components.</i> f. <i>Mentions examples of major ecosystems in the world.</i> g. <i>Apply biomass analysis to wetlands.</i>

Content	<p><i>Man is the most noble creation because it is equipped with reason. In addition to humans, there are also the sun, the earth, animals, plants, and others that as a whole are called the environment. As a creation equipped with reason, man can have power over the environment. This power can make the environment more sustainable, get better, or get more damaged. Ecology is a science that studies the system of relationships between living things and the environment. The word "ecology" comes from the ancient Greek oikos, meaning "house or dwelling place," and "logos," meaning science. Between the 16th and 17th centuries, ecology developed rapidly to the point of having systematics, methodology, and analysis like other branches of science. Ecology was pledged as a branch of science in the year.</i></p> <p><i>Environmental problems that have recently arisen include pollution of natural areas, forest destruction, population development, food problems, energy use, rising earth temperatures due to the greenhouse effect or global warming, ozone holes, and others. In order to solve the above problems, the relationship between humans and the environment needs to be understood. An understanding of ecology, more fundamentally, can lead humans to preserve the environment or even improve it.</i></p> <p><i>The ecology course is intended to provide students with an understanding of the environment and its relationship with humans. This understanding will then raise awareness to maintain the sustainability of the environment, and/or improve the damaged environment for the better.</i></p> <p><i>Ecology lectures begin with the identification of courses in the form of course names, numbers of credits, time, and place, which are then accompanied by discussions about becoming a course self. The first lecture material will be "Definition, History, and Scope" of Ecology. Next, we will talk about the basic processes of the environment. The environment consists of biotic and abiotic components that will be discussed in the next lecture. After UTS, lectures mainly discuss the main ecosystems in the world and the elemental cycles in ecosystems. It will also include presentations of papers from students on current issues related to the environment. At any time, field lectures are also carried out in order to better understand ecosystems, especially wetlands, which are the main scientific focus of the university.</i></p>
Examination forms	<p><i>Quiz, mid-semester exams, final exam, and Practicum report</i></p>
Study and examination requirements	<p><i>Overall score is above 70 (B)</i></p> <p><i>Minimum attendance is 80% for lecture and 100% for practice/response</i></p>
Reading list	<ol style="list-style-type: none"> <i>1. Hadi A. 2022. Microbial Processes in Tropical Peat Soils. Labung Mangkurat University Press, Banjarmasin.</i> <i>2. Hadi A, Noor HS and Imaningsih, W. 2016. Tropical WetLand Biology. Hull Mangkurat University Press. 176 p. (https://bukuvirtual.ulm.ac.id/toko)</i> <i>3. Kilham K. 1996. Soil Ecology. Cambridge University Press. Aberden, USA.</i> <i>4. Sumarwoto, O. 1983. Ecology, Environment and Development. Djambatan, Jakarta.</i> <i>5. Woodward, J.G.J. (ipusnas). Ecology. Pt. Great Expert. Bandung.</i> <i>6. Books, journals, and videos related to Ecology</i>