Module designation	**Post-mining Land Reclamation**
Semester(s) in which the module is taught	*7th semester*
Person responsible for the module	*Dr. Ir. Bambang J. Priatmadi, MP* *Prof. Akhmad R. Saidy, SP., M.Ag.Sc., Ph.D* *Ir. Muhammad Syarbini, MP*
Language	*Bahasa Indonesia*
Relation to curriculum	*Compulsory courses*
Teaching methods	*Teaching, practice*
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	*3*
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	*Students are able to:* *a. Identify the legal basis of mining activities and mining activities that have the potential to cause a decrease in land quality.* *b. Outline the impact of various types of mining activities on geophysical, biological, socio-economic, cultural and public health aspects* *c. Evaluate changes in the physical, chemical and biological characteristics of the soil due to mining activities* *d. Implement techniques/methods in acid mine water management (AAT)* *e. Identify technology for post-mining land reclamation*

Content	*The Land Reclamation and Rehabilitation course is a compulsory course for students of the Soil Science Study Program Faculty of Agriculture ULM which is taken by students on the fourth year in semester odds (Semester 7). Knowledge of prinsif and technology in reclamation and rehabilitation of this land is very much encouraged by students of the S tuin Soil Science Program because it is very much related to the restoration of problematic land to support sustainable biomass production. In the course, it will be discussed about the legal basis of mining activities and regulations related to land reclamation, activities on various types of mining activities, the impact of mining on geophysical, chemical, biological, socioeconomic and public health aspects, the formation and management of acid mine water. Details of the various technologies used for land reclamation will also be discussed in this course*
Examination forms	*Quiz, mid-semester exams, final exam, and Practicum report*
Study and examination requirements	*Overall score is above 70 (B)* *Minimum attendance is 80% for lecture and 100% for practice/response*

Reading list	1. *Sudrajat, N. 2013. Theory and Practice of Indonesian Mining. Midpress Digital Publishers, Yogyakarta.* 2. *Hayati, T. 2015. The New Era of Mining Law: Under the Regime of Law No. 4 of 2009. Yayasan Obor Indonesia, Jakarta.* 3. *Susmiyati, H. R. 2020. Natural Resources Law: Examining coal mine utilities in forest areas. Inteligensia Media, Jakarta.* 4. *Fahruddin. 2018. Biological Management of Mining Waste. Celebes Media Perkasa, Makassar.* 5. *Bandung Institute of Technology. 2016. Acid Mine Water Management in Indonesia: Proceedings of the Acid Mine Water Seminar in Indonesia 2012 and 2014. PUBLISHER ITB Press, Bandung.* 6. *Neswati, R., Mustari, A.S., and Ambodo, A. R. 2020. Reclaimed Land of Former Nickel Mines: Characteristics, Potentials, Constraints and Management. CV. Social Politic Genius, Makassar.* 1. *Saidy, A. R., Purnomo, E., and Badruzsaufari. 2009. Bioremediation Technology for Reclamation of Ex-Mining Land in South Kalimantan (Research Report on Competitive Grants of the Director General of Higher Education, Ministry of National Education of the Republic of Indonesia, 2007-2009).* 2. *Saidy, A. R., Septiana, M. and Hayati, A. 2018. Stabilization of Soil Organic Matter to Increase Organic Matter Content in Ex-Mining Land (Competency Grant Research Report, Kemenristek Dikti RI, 2015-2017).* 3. *Mariana, Z. T., Badruzsaufari, Saidy, A. R. 2010. Reduction of Cr(VI) by bacteria isolated from ex-coal mined soils in the South Kalimantan Province: Evidence from field experiment. Agroscientiae 17 (2), 80-85.* 4. *Saidy, A. R., Badruzsaufari. 2009. Relationship between concentration of Cr(VI) and soil chemical properties: Information for remediation of ex-coal mined soils in the South Kalimantan Province. Journal of Tropical Soils 14 (2), 97-103. http://journal.unila.ac.id/index.php/tropicalsoil/article/ download/21/320* 7. *Saidy, A. R., Badruzsaufari. 2009. Lime and organic matter application: Bioremediation of Chromium in Ex-coal mined soils of the South Kalimantan Province. Agroscientiate 12 (4), 87-93.*