

Module designation	<i>Introduction to soil science</i>
Semester(s) in which the module is taught	<i>3th</i>
Person responsible for the module	<i>Prof. Dr. Ir. Dermiyati., M.Agr.Sc.</i>
Language	<i>Indonesian language</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lectures (100 minutes) Practicum sessions (170 minutes)</i>
Workload (incl. contact hours, self-study hours)	<i>Contact hours : 14 weeks x 100 minutes Structured learning: 14 weeks x 120 minutes Independent study: 14 weeks x 120 minutes Practicum sessions: 14 weeks x 170 minutes</i>
Credit points	<i>3 (2-1) CP or 4.76 (ECTS) ((14 weeks x 100 minutes) + (14 weeks x 120 minutes) + (14 weeks x 120 minutes) + (14 weeks x 170 minutes)) : 60 minutes/hour = 119 hours : 25 study hours/ECTS = 4.76 (ECTS)</i>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> - <i>Students are able to apply the basic concepts and principles of cultivation technology and the development of sustainable agriculture technology</i> - <i>Students are able to identify, formulate, solve problems, and apply plant science, plant protection, soil science, socio-economic agriculture, and plant production engineering principles that are oriented towards good agricultural practices (GAP);</i>
Content	<i>Introduction to Soil Science course is a 3 (2-1) credit course. This course contains studies of: Soil and human civilization, soil as a resource, soil formation, physical, chemical and biological properties of soil, sources of soil nutrients (N, P, K, Ca, Mg, S, and micro elements) and their management, interpretation of land use, soil environment, basics of soil classification and surveying.</i>
Examination forms	<i>oral presentation, essay</i>

Study and examination requirements	<p><i>Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).</i></p> <p><i>Performance in theory (100%):</i> <i>Mid Exam (25%)</i> <i>Final Exam (25%)</i> <i>Assignments (30%)</i> <i>Class participation (10%)</i> <i>Individual quiz (10%)</i></p> <p><i>Performance in practicum (100%):</i> <i>Practicum exam (40%)</i> <i>Pre-test or post-test (10%)</i> <i>Lab activity (10%)</i> <i>Experiment reports (40%)</i></p>
Reading list	<ol style="list-style-type: none"> <i>1. Fundamental of Soil Science. 2022. D. Tripathi, S. Mani, Mohinder Singh. www.agrimoon.com. Accessed Dec 16th, 2022.</i> <i>2. The Nature and Properties of Soil. 2017. N.C. Brady and R.R. Weil. Pearson Prentice Hall, Pearson Education Inc. New Jersey 15th Edition.</i> <i>3. Ilmu Tanah: Dasar-dasar dan pengelolaan. M. Utomo, T. Sabrina, Sudarsono, J. Lumbanraja, B. Rusman dan Wawan. 2016. Edisi Pertama, Penerbit: Prenadamedia, Jakarta. 433 hlm.</i> <i>4. Essential Soil Science: A Clear and Concise Introduction to Soil Science. 2002. Blackwell Science, Blackwell Pub. Co, Hongkong, Great Britain.pp 198, M.R. Ashman and G. Puri.</i> <i>5. Fundamental of Soil Science. 1991. H.D. Foth, 8th Ed. Wiley.</i>