Module Description/Course Syllabi

Study Program : S1 Undergraduate Program
Faculty of Agriculture
University of Andalas

1. *Course number and name*

IT611 05 Soil Morphology and Classification

2. *Credits and contact hours/Number of ECTS credits allocated*

credits (2 classes, 1 practicum)

3. *Instructors and course coordinator*

Prof.Dr.Ir.Azwar Rasyidin M.Sc.
Prof.Dr.Ir. Dian Fiantis M.Sc.
Dr. Juniarti, SP. MP
Ir. Junaidi, MP

4. *Text book, title, outhor, and year*

1. Buol, Soil Genesis and Classification
2. ISSS Working Group RB. 1998. World Reference Base for Soil Resources: Introduction (J. A. Deckers, F. O. Nachtergaele and O. C. Spaargaren, Eds.). First Edition. ISSS, ISRIC and FAO of United Nation. Acco. Leuven.
3. IUSS Working Group WRB. 2007. World Reference Base for Soil Resources 2006, first update 2007. World Soil Resources Reports No. 103. FAO, Rome.
4. Olson G. W. 1983. Soil and the Environment. Chapman and Hall. New York. London. 178 p.
5. Mohr, Van Barren 1972. Tropical Soil
6. Soil Survey Staff. 1975. Soil Taxonomy, A Basic System of Soil Classification for Making and Interpreting Soil Surveys. USDA handbook No. 436. 754 p.
7. Soil Survey Staff. 1990. Keys to Soil Taxonomy. 4th ed. AID, USDA, SMSS Technical Monograph, No. 19. Blacksburg, Virginia. 280 p.
8. Soil Survey Staff. 1992. Keys to Soil Taxonomy. 5th ed. AID, USDA, SMSS Technical Monograph, No. 19. Blacksburg, Virginia. 541 p.
9. Soil Survey Staff. 1996. Keys to Soil Taxonomy. 7th ed. AID, USDA, SMSS Technical Monograph, No. 19. Blacksburg, Virginia. 643 p.
10. Soil Survey Staff. 1998. Keys to Soil Taxonomy. 8th ed. USDA, NRCS. Washington. 326 p.
11. Soil Survey Staff. 1999. Soil Taxonomy, A Basic System of Soil Classification for Making and Interpreting Soil Surveys. USDA handbook No. 436. 861 p.
12. Soil Survey Staff. 2010. Keys to Soil Taxonomy. 11th ed. USDA, NRCS. Washington. 338 p
13. Wisaksono Wirdjodihardjo, M, 1952, Soil Body Science
14. USDA-SCS. 1974. Definitian and Abreviation for soil description. WTSC. Portland. Oregon

5. ***Specific course information***

A. Brief description of the content of the course (catalog description)
Students will be able to explain soil morphology found in the field, soil properties and characteristics from the analysis of physical, chemical and mineralogy properties of soil in the laboratory so that on the basis of soil morphology and the influence of external factors such as climate, landform, vegetation, soil can be grouped based on the existing soil classification system ranging from the highest to the lowest hierarchy.
B. Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)
irst Cycle Bachelor
C. Semester when the course unit is delivered
ven Semester
D. Mode of delivery (face-to-face, distance learning)
ace to face
6. *Intended Learning Outcomes (CPL)*
ILO 2: Able to identify, analyze, and solve land problems in improving productivity and quality of agricultural products for sustainable agricultural development PI 2 : Classifying soil types
ILO 3: Able to use various methods for soil and crop analysis appropriately in land resource management PI 1 : Using laboratory equipment for soil analysis and follow-up plants with SOP
ILO 4: Able to apply their professional responsibilities to make decisions in land and environmental management PI 1 : Evaluate the properties and characteristics of the soil
7. *Course Learning Outcomes (CPMK)* *ex. The student will be able to explain the significance of current research about a particular topic.*
1. Classifying soil types
2. Using laboratory equipment for soil analysis and milk crops with SOPs
3. Assessing soil properties and features
8. Learning and teaching methods
Cooperative Learning, Cas Method Learning, and Problem Based Learning
9. Language of instruction
English
10. Assessment methods and criteria
ummative Assessment : 1. Assignment 2. UTS 3. UAS 4. Internship **ormative Assessment**: 1. Thumb up and thumb down 2. Minutes paper