



Module Description/Course Syllabi

Study Program : Bachelor Program (S1)

Faculty of Agriculture

University of Andalas

1. *Course number and name*

PIT621 05 Soil Chemistry

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

3 credits (2 classes, 1 practicum)

3. *Instructors and course coordinator*

1. Prof.Dr.Ir., Herviyanti,, MS
2. Prof.Dr.Ir., Hermansah,, MS. MSc,
3. Prof. Dr.rer.nat.Ir., Syafrimen Yasin,, MS. MSc
4. Dr.Ir., Teguh Budi Prasetyo. MS,
5. Dr., Gusmini SP. MP
6. Dr., Mimien Harianti, SP. MP
7. Nofrita Sandi, , SP. MP

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

1. Bohn, N.B.L. and G.A.O Connor. 2001. Soil chemistry. John Wiley and Sons, New York
2. Tan K.H. 2011. Principle of Soil Chemistry, ed. III, Marcel Dekker, N.Y
3. Tan,K.H. 2001. Environmental Soil Science, ed. II, Marcel Dekker, N.Y, Basel
4. Anwar and Sudadi. 2012. Soil Chemistry Introduction, IPB Press.

5. *Specific course information*

A. *Brief description of the content of the course (catalog description)*

B. *Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)*

First Cycle Bachelor

C. *Semester when the course unit is delivered*

Even Semester

D. *Mode of delivery (face-to-face, distance learning)*

Face to face

6. <i>Intended Learning Outcomes (CPL)</i>
ILO-1: Able to apply basic agricultural sciences widely in overcoming agricultural problems for sustainable agricultural development (P)
P1.1. Explain agricultural sciences related to soil science
P1.2 Analyze agricultural problems with a soil science approach and agricultural sciences in general
P1.3. Apply basic sciences and soil science in solving land and environmental problems for agricultural development
ILO-2: Able to identify, analyze, and solve land problems in improving productivity and quality of agricultural products for sustainable agricultural development
P2.1. Characterizing soil fertility (physics, chemistry, soil biology)
ILO-3: Able to use various methods for soil and crop analysis appropriately in land resource management
P3.1 Using laboratory equipment for soil analysis and follow-up crops with SOPs
P3.2 Able to analyze soil and plants precisely, meticulously using the latest methods
7. <i>Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.</i>
1. Explain agricultural sciences related to soil science
2. Analyze agricultural problems with a soil science approach and agricultural sciences in general
3. Apply basic sciences and soil science in solving land and environmental problems for agricultural development
4. Characterize soil fertility (physics, chemistry, soil biology)
5. Using laboratory equipment for soil analysis and follow-up plants with SOPs
6. Able to analyze soil and plants precisely, meticulously using the latest methods
8. <i>Learning and teaching methods</i>
Cooperative Learning and Case Method Learning
9. <i>Language of instruction</i>
Indonesian

10. *Assessment methods and criteria*

Summative Assessment :

1. Assignment
2. UTS
3. UAS
4. Internship

Formative Assessment:

1. Minutes paper