



Module Description/Course Syllabi

Study Program : Bachelor Program (S1)

Faculty of Agriculture

University of Andalas

1. **Course number and name**

PTN621 01 Fundamentals of Soil Science

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

3 credits (2 classes, 1 practicum)

3. **Instructors and course coordinator**

Prof.Dr.Ir., Yulnafatmawita,, MSc,
 Prof.Dr.Ir., Herviyanti, MS,
 Prof. Dr.rer.nat.Ir., Syafrimen Yasin, MS. MSc,
 Prof.Dr.Ir., Yulnafatmawita, MSc,
 Prof.Dr.Ir. Azwar Rashidin, MSc
 Prof.Dr.Ir., Dian Fiantis, MSc,
 Dr.Ir., Agustian
 Dr.Ir., Adrinal, MS,
 Dr., Juniarti, SP. MP
 Dr., Gusmini, SP. MP
 Dr.Ir., Teguh Budi Prasetyo, MS,
 Dr.Ir., Gusnidar,MP
 Dr Mimien Harianti, SP.MP
 Ir., Junaidi, MP,
 Ir., Irwan Darfis, MP
 Oktanis Emalinda, MP
 Nofrita Sandi, SP.,MP
 Zuldadan Naspendra, , SP. MSi

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

1. Nurhajari Hakim et al. 1989. Dasar-Dasar Ilmu Tanah
2. Sarwono Hardjowigeno. (1989).Ilmu Tanah. Dasar-Dasar Ilmu Tanah. Survel dan Evaluasi Lahan.
3. Goeswono Soepardi (2013) Sifat dan Ciri Tanah
4. Hendry D. Foth

5.	Utomo et al (2016) Ilmu Tanah , Dasar-dasar dan Pengelolaannya
6.	Weil, R. and C. Brady. 2017. The Nature and Properties of soils. 15th edition.
5. Specific course information	
A. Brief description of the content of the course (catalog description)	
<p>In this course, students learn about the Basics of Soil Science. Students learn the formation processes and factors forming the soil, soil morphology and classification, land survey and evaluation. The principles and basic knowledge that become the basis when conducting thesis research or final project research. Students learn the basics of soil science, formulate soil fertility problems, physical, chemical and biological properties of soil, students learn soil survey activities and land evaluation, can make maps.</p>	
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. Intended Learning Outcomes (CPL)	
<p>ILO-1: Able to apply basic agricultural sciences widely in overcoming agricultural problems for sustainable agricultural development (P)</p> <p>PI 1.1 : Explain the science of agriculture related to soil science.</p>	
<p>ILO 2: Able to identify, analyze, and solve land problems in improving productivity and quality of agricultural products for sustainable agricultural development</p> <p>PI 2.1: Characterizing soil fertility (physics, chemistry, soil biology)</p>	
<p>ILO 3: Able to use various methods for soil and crop analysis appropriately in land resource management</p> <p>PI 3.1 : Using laboratory equipment for soil analysis and milk crops with SOP</p> <p>PI 3.2 : Able to analyze soil and plants precisely, meticulously using the latest methods</p>	

7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.

1. Explain agricultural sciences related to soil science

2. Characterizing soil fertility (physics, chemistry, soil biology)

3. Using laboratory equipment for soil analysis and milk crops with SOPs

4. Able to analyze soil and plants precisely, meticulously using the latest methods

8. Learning and teaching methods

Cooperative Learning and Self Direct Learning

9. Language of instruction

Indonesian

10. Assessment methods and criteria

Summative Assessment :

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

Formative Assessment:

1. Minutes paper