



## Module Description/Course Syllabi

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

### 1. Course number and name

PIT611 03 Soil Fertility

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

3 credits (2 classes, 1 practicum)

### 3. Instructors and course coordinator

Ir. Octane Emalinda, MP  
 Ir. Irwan Darfis, MP  
 Dr.Ir. Gusnidar, MP,  
 Dr. Gusmini, SP. MP  
 Prof.Dr.Ir. Hermansah, MS. MSc,  
 Is. Lusi Maira, MAgrSc  
 Dr.rer.nat. Ir. Syafriment Yasin, . MS.MSc  
 Dr.Ir. Teguh Budi Prasetyo, MS,  
 Prof.Dr.Ir. Herviyanti, MS,  
 Nofrita Sandi, SP. MP  
 Dr.Ir. Agustian,  
 Dr. Mimien Harianti, SP. MP

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

1. Tisdale & Nelson. 1985. Soil Fertility & Fertilizers.
  2. Yusuf Nyakfa et al. 1986. Soil Fertility
  3. Adams & Pearson. 1967. Soil Acidity & Liming.
  4. The Annunciation. 1980. Nuclide Tracer.
- . Publications in research journals related to the subject / subsubject.

### 5. Specific course information

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

Students are able to explain and use the knowledge and analytical techniques obtained to assess the fertility of a soil and are able to overcome soil acidity problems by liming and are able to carry out laboratory and field tests in determining the amount of fertilizer needed to meet plant needs through efficient fertilization.

#### 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)

- ILO 1: Able to apply basic agricultural sciences widely in overcoming agricultural problems for sustainable agricultural development (P)  
 PI 2: Analyzing agricultural problems with a soil science approach and agricultural sciences in general

PI 3: Applying 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
PI 3: Measures soil fertility and its relationship to crop production and the environment.
ILO 4: Able to apply their professional responsibilities to make decisions in land and environmental management
PI 3 : Determining alternative solutions to land problems
<b>7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.</b>
1. Analyze agricultural problems with a soil science approach and agricultural sciences in general
2. Apply basic sciences and soil science in solving land and environmental problems for agricultural development
3. Measures soil fertility levels and their relationship to crop production and the environment.
4. Determine alternative solutions to land problems
<b>8. Learning and teaching methods</b>
Cooperative Learning, Case Method Learning, and Problem Based Learning
<b>9. Language of instruction</b>
English
<b>10. Assessment methods and criteria</b>
<b>Summative Assessment :</b>
1. Assignment
2. UTS
3. UAS
4. Internship
<b>Formative Assessment:</b>
1. Thumb up and thumb down
2. Minutes paper