Module Description/Course Syllabi

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

1. *Course number and name*

PIT612 04 Soil and Plant Analysis

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

3 credits (2 classes, 1 practicum) / 4.3

3. Instructors and course coordinator

1. Dr. Mimien Harianti, SP. MP
2. Dr.Ir. Adrinal, MS,
3. Dr.Ir. Teguh Budi Prasetyo, MS
4. Dr. Gusmini, SP. MP,
5. Dr. Ir. Agustian
6. Ir. Oktanis Emalinda,
7. Ir. Irwan Darfis, MP
8. Zuldadan Naspendra, SP. Msi

4. Text book, title, outhor, and year

1..Jones,T.B.JR. 1984. Laboratory Guide of Exercises in Conducting Soil Test and Plant Analyses

2.Plant Analyses. 1984. Handbook for Georgia,

3.Tan, K.H. 1996. Soil Sampling, Preparation, and Analysis.

4.Westwerman, R.L., J.V. Baird, P.E. Fixen, D.A. Whitney. 1990. Soil Testing and Plant Analysis. Madison, Wisconsin, USA.

5.Juknis Analisis Kimia. Edisi 3. 2023

6.BSIP. 2024. Acuan Prosedur Analisis Tanah, Tanaman, Air dan Pupuk. Dinas Pertanian Indonesia Co.

7.Metode Analisis Biologi Tanah. 2007. Rasti Saraswati; Edi Husen; R.D.M Simanungkalit.

5. Specific course information

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

Soil and Plant Analysis is very useful to obtain correct soil and crop analysis data in the purposes of assessing soil fertility levels. Soil and plant analysis provides scientifically justifiable clues that include how to take representative soil and plant samples, preparation of correct soil and plant samples. In addition, choose the appropriate soil analysis procedure and name and recommend fertilizers that are added appropriately

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 3**: Applying basic sciences and soil science in solving land and environmental problems for agricultural development
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 **PI 2**: Able to analyze soil and plants precisely, meticulously using the latest methods
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.*
1.3 Apply basic sciences and soil science in solving land and environmental problems for agricultural development
3.1 Using laboratory equipment for soil analysis and milk crops with SOPs
3.2 Able to analyze soil and plants precisely, meticulously using the latest methods
4.1 Assessing soil properties and features
8. Learning and teaching methods
Cooperative Learning and Problem Based Learning
9. Language of instruction
English
10. Assessment methods and criteria
Summative Assessment : 1. Assignment 2. UTS 3. UAS 4. Internship **Formative Assessment**: 1. Minutes paper