



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

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

4. Text book, title, outhor, and year

1. Tisdale & Nelson. 2013 . Soil Fertility & Fertilizers.
2. Amitava Chatterjee, David E. Clay. 2020 Soil Fertility in agroecosystem.
3. The Annunciation. 1980. Nuclide Tracer.
4. Publications in research journals related to the subject / subsubject.
5. Havlin et al 2007. Soil Fertility and Fertilizer.
6. Marsner. 2012. Mineral nutrition in Higher Plant. 3th Editions.
7. Plant Nutrient Management in Hawaii's Soils, Approaches for Tropical and Subtropical Agriculture J. A. Silva and R. Uchida, eds. College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, ©2000
8. Related new publication

5. Specific course information

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.

<i>B. Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)</i>
First Cycle Bachelor
<i>C. Semester when the course unit is delivered</i>
Even Semester
<i>D. Mode of delivery (face-to-face, distance learning)</i>
Face to face
<i>6. Intended Learning Outcomes (CPL)</i>
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
<i>7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.</i>
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
<i>8. Learning and teaching methods</i>
Cooperative Learning, Case Method Learning, and Problem Based Learning
<i>9. Language of instruction</i>
English
<i>10. Assessment methods and criteria</i>
Summative Assessment :
1. Assignment

2. UTS
3. UAS
4. Internship

Formative Assessment:

1. Minutes paper