



Module Description/Course Syllabi

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

1. Course number and name

PTN612 01 Applied Agroclimatology

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

3 credits (2 classes, 1 practicum)

3. Instructors and course coordinator

Dr. Ir. Gusnidar, MP.
Dr. Juniarti, SP. MP
Is. Lusi Maira, MAgrSc
Prof.Dr.Ir. Herviyanti, MS

4. Text book, title, outhor, and year

1. Agus, F. (ed). 2019. Methods for assessing adaptation and inventory of greenhouse gases in the agricultural sector. Agricultural Research and Development Agency. Jakarta.
2. Susilawati, L. S., Dariah, A., Agus, F (ed). 2020. Calculation Method for Mitigation and Absorption of Greenhouse Gases in the Agricultural Sector Agricultural Research and Development Agency. Jakarta.
3. Joyce Martha W and Wenny Adidarma (1984) Getting to know the basics of Hydrology, Nova Bandung Publishers.
4. Oteng Haridjaja, Kukuk Muktilaksono, Sudarmo, Train Proficient Rahman (1990). Agricultural Hydrology. J. Land F. Agriculture IPB. Bogor.
5. Richard Lee (1988) Forest Hydrology. Translation of "Forest Hydrology" Sentot Subagio and Prawirohatmodjo. Gama University Press.
6. Soewarso (1991) Hydrology (measurement and processing of river flow data). Nova Bandung Publishers.
7. Soeyono Soesrodarsono and Kensaku Takeda (19.77) Hydrology for irrigation. Assosiation for technical Promotion. Toyota. Japan
8. APIKI Bulletins according to their respective topics
9. Climate Journal, seminar materials, (domestic and foreign) and relevant materials.

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 climate of an area and are able to overcome climate suitability problems and are able to calculate plant water needs and design a planting pattern

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
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 PI 4: Using regulatory concepts and principles in land utilization and arrangement
ILO 5: Able to keep up with the latest knowledge and apply it to support appropriate learning strategies PI 1 : Review the literature and novelty of technological knowledge about soil and environmental science PI 2: Using software technology, lab and field equipment for accurate data analysis.
ILO 7 : Able to communicate with audiences of different backgrounds/levels PI 1: Presenting assignments in groups in front of lecturers and students
7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.
1. Analyze agricultural problems with a soil science approach and agricultural sciences in general
2. Measures soil fertility levels and their relationship to crop production and the environment.
3. Determine alternative solutions to land problems
4. Using regulatory concepts and principles in land utilization and structuring
5. Review the literature and the novelty of technological knowledge about soil and environmental science
6. Use software technology, lab and field equipment for accurate data analysis.
7. Presenting assignments in groups in front of lecturers and students
8. Learning and teaching methods
Cooperative Learning, Case Method 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. Thumb up and thumb down
2. Minutes paper