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) / 4,6

3. Instructors and course coordinator

- 1. Prof.Dr.Ir. Herviyanti, MS
- 2. Dr. Ir. Gusnidar, MP.
- 3. Dr. Juniarti, SP. MP
- 4. Ir. Lusi Maira, MAgrSc

4. Text book, title, outhor, and year

- 1. Agus, F. (ed). 2019. <u>1a.METODE PENILAIAN ADAPTASI DAN INVENTARISASI GRK Sektor Pert.pdf</u>. Jakarta.
- 2. APIKI Bulletins according to their respective topics. 2020-2024 https://doi.or.id/aktivitas/2024/07/materi-diseminasi-riset-apik-indonesia-network-11-juni-2024-perubahan-iklim-dan-landuse-dalam-dinamika-hidrometeorologi-di-sumatra/
- 3. Climate Journal, seminar materials, (domestic and foreign) and relevant materials. 2019-2024 <u>Climate Outlook 2024 Pemutakhiran</u>: <u>Desember 2023</u>
- 4. Berbel, J., Bournaris, T., Manos, B., Matsasinis, N., Viaggi, D. 2018. 2018 Book MulticriteriaAnalysisInAgricul.pdfSpringer.
- Susilawati, L. S., Dariah, A., Agus, F (ed). 2020. Calculation Method for Mitigation and Absorption of Greenhouse Gases in the Agricultural Sector Agricultural Researchand Development Agency. Jakarta. 1b. Metode Perhitungan Mitigasi dan Serapan Gas Rumah Kaca Sektor Pertanian-2020.pdf
- 6. Tourquebeau.E. 2026. Climate Change and Agriculture Worldwide.

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 forsustainable 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 5**: Able to keep up with the latest knowledge and apply it to support appropriate learningstrategies
- **PI 1**: Review the literature and novelty of technological knowledge about soil and environmentalscience
- 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.

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. Minutes paper

Summative Assessment:

- 5. Assignment

- 6. UTS7. UAS8. Internship

Formative Assessment:

1. Minutes paper