



Module Description/Course Syllabi

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

1. *Course number and name*

AGT621 01 Fundamental of Plant Physiology

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

3 credits (2 classes, 1 practicum) / 4,76

3. *Instructors and course coordinator*

1. Prof. Dr. Ir. Irfan Suliansyah, MS.
2. Prof. Dr. Ir. Auazar Syarif MS.
3. Prof. Dr. Ir. Warnita MP.
4. Dr. Yusniwati SP. MP.
5. Ir. Sutoyo MS.
6. Firsta Ninda Rosadi, SP. Msi
7. Aries Kusumawati SP. MSi
8. Fika Ekawati SP. MP.
9. Shalati Febjislami, SP, MSi.

4. *Text book, title, author, and year*

1. Franklin P. Gardner, R. Brent Pearce, Roger L. Mitchell. 1991. [Fisiologi Tanaman Budidaya](#).
2. Frank B. Salisbury, Cleon W. Ross, 1995. Fisiologi Tumbuhan.
3. Mismawarni Srima Ningsih Edi Susilo Rahmadina Friskia Hanatul Qolby Dian Diani Tanjung Ulfah Anis Eka Susila N Nurul Huda Panggabean Sapto Priyadi Jumaria Nasution Novi Yulanda Sari Raisa Baharuddin Muhammad Parikesit Wisnubroto. 2024. [Dasar-Dasar Fisiologi Tumbuhan](#). Padang. CV HEI PUBLISHING INDONESIA.
4. Lincoln Taiz, Eduardo Zeiger, Ian M. Møller, and Angus Murphy. 2015. [Journal of Plant Physiology and Development](#), Sixth Edition.

5. *Specific course information*

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

Concepts of life and plant physiology, plant cells, solutions, diffusion, osmosis, imbibition, transpiration, absorption and translocation. Sugar translocation, function of essential mineral elements and symptoms of mineral deficiency, enzymes, pigments and structure of the photosynthetic apparatus, light and dark reactions of photosynthesis, factors that influence the rate of photosynthesis and respiration.

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)
<p>ILO 1: Able to apply basic agricultural sciences broadly in overcoming agricultural problemsfor sustainable agricultural development (P)</p> <p>PI 2 : Analyze agricultural problems using a soil science approach and agricultural sciences ingeneral</p>
7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.
2. Analyze agricultural problems using a soil science approach and agricultural sciences ingeneral
8. Learning and teaching methods
Cooperative learning
9. Language of instruction
Indonesian
10. Assessment methods and criteria
<p>Summative Assessment :</p> <ol style="list-style-type: none"> 1. Assignment 2. UTS 3. UAS <p>Formative</p> <p>Assessment:</p> <p>Minutes paper</p>