



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)

3. *Instructors and course coordinator*

Prof. Dr. Ir. Irfan Suliansyah, MS.

Prof. Dr. Ir. Auazar Syarif MS.

Prof. Dr. Ir. Warnita MP.

Dr. Yusniwati SP. MP.

Ir. Sutoyo MS.

Firsta Ninda Rosadi, SP. MSi

Aries Kusumawati SP. MSi

Fika Ekawati SP. MP.

Shalati Febjislami, SP, MSi.

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

1. Fisiologi Tanaman Budidaya, Franklin P. Gardner, R. Brent Pearce, Roger L. Mitchell, 1991

2. Fisiologi Tumbuhan , Frank B. Salisbury, Cleon W. Ross, 1995

3. Plant Physiology and Development, Sixth Edition, Lincoln Taiz, Eduardo Zeiger, Ian M. Møller, and Angus Murphy

4. Journal of Plant Physiology 5. American Journal of Plant Physiology

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)*

ILO 1: Able to apply basic agricultural sciences broadly in overcoming agricultural problems for sustainable agricultural development (P)

PI 2 : Analyze agricultural problems using a soil science approach and agricultural sciences in general

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 in general

8. *Learning and teaching methods*

Cooperative learning

9. *Language of instruction*

Indonesian

10. *Assessment methods and criteria*

Summative Assessment :

Assignment

UTS

UAS

Formative Assessment:

Minutes paper