



## Module Description/Course Syllabi

Study Program : Bachelor Program (S1)  
Faculty of Agriculture  
University of Andalas

### **1. Course number and name**

PPT611 01 AGRICULTURAL MICROBIOLOGY

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

3 credits (2 classes, 1 practicum)

### **3. Instructors and course coordinator**

Dr. Zurai Resti P. MP  
Ir. Reflin MP.  
Dr. Ir. Darnetty M.Sc  
Dr. Ir. Ujang Khairul MP.

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

### **5. Specific course information**

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

Discusses the position of microorganisms, the role of microorganisms in agriculture (soil, food and plant diseases), introduction to types of microorganisms (viruses, bacteria, fungi, algae, protozoa and nematodes), nutrition, development and growth, metabolism of microorganisms (energy utilization, enzymes, fermentation, biosynthesis, element cycles), basic genetics of microorganisms, management, control and utilization of microorganisms.

#### **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 : 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**

LCD & Projector

### **9. Language of instruction**

Indonesian

### **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