Module Description/Course Syllabi

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

1. *Course number and name*

PIT611 04 Soil and Water Conservation

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

3 credits (2 classes, 1 practicum)

3. *Instructors and course coordinator*

Ir. Irwan Darfis,, MP,
Prof.Dr.Ir. Aprisal, MP,
Zuldadan Naspendra, SP. MSi
Ir. Junaidi, MP,
Nofrita Sandi, SP. MP
Dr.Ir. Adrinal, MS

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

1. Arsyad, S. 2000. Soil and water conservation. IPB Press. Bogor
2. Barrow. C. J. 1991. Land degradation. Departement and breakdown of terrestrial environments. Cambridge University Press. Cambridge
3. Rusman B. 2004. Soil and Water Conservation. Unand Press.
4. Morgan, R. P. C. 1979. Soil Erosion. Longman Group Ltd., New York.
5. Singht, Vijay.P. 1992. Elementary Hidrology. Department of Civil Engineering. Lousiana State University. New Jesey.

5. ***Specific course information***

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

Able to know for the basic understanding of soil and water conservation, Able to know the methods, soil and water conservation, Able to explain the main functions of the soil, Able to explain land degradation, Able to know global climate change and its effects on soil and water, Able to know the process of soil erosion, Able to know soil and water conservation problems, Able to know and predict erosion, Able to know and calculate surface flow, Able to calculate erosion using erosion estimation models, Able to know conservation methods, Able to know about conservation planning and able to compile conservation planning, Able to know the influence of development on soil and water conservation

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 4: Determining the rate of soil degradation and its causative factors
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 PI 5 : Preparing regional development planning
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. Determining the degree of soil degradation and its causative factors
3. Determine alternative solutions to land problems
4. Using regulatory concepts and principles in land utilization and structuring
5. Preparing regional development planning
8. Learning and teaching methods
Cooperative 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