



COURSE SPECIFICATION 2nd SEMESTER

Course Name : Soil Science
Code : KU 122
Credit : (2-1)

Course Description:

This course study the process of soil formation, factors determining soil formation such as: main material, climate, vegetation, organisms, relief/slope and time, development and characteristics of soil to understand the interaction between the soil and root surface to enhance crop productivity.

References:

Buku Dasar-dasar Ilmu Tanah karya Dr. Ir. Kemas Ali Hanafi, M.S.

<https://earth.gsfc.nasa.gov/bio/>

Buku Ilmu Tanah karya Hardjowigeno

Topics:

1. Biosphere system
2. Volcanic activity
3. Soil parent material
4. Weathering process
5. Horizontal differentiation
6. Soil properties and their performance
7. Interaction between soil properties and the concept of soil fertility.
8. The concept of soil as a natural bioreactor
9. Technical calculation of fertilizer requirements
10. Crop cultivation techniques