

Tárgytematika / Course Description

The Basics of Pedology

MENB_VKTA022

Tárgyfelelős neve /

Teacher's name: dr. Kalocsai Renátó

Félév / Semester: 2021/22/2

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 2/1/0

Tárgy féléves óraszám /

Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

AIM OF THE COURSE

The goal of the course, on the one hand, is to learn about the soil as the most important renewable resource of agricultural production and, on the other hand, the most important pedological correlations. During the lectures (and seminars) students become familiar with the most important physical and chemical properties of the soil, the process of soil formation and their relations. The course offers soil taxonomy knowledge that provides a good basis for the agrochemical chapter which is based on pedological knowledge.

TANTÁRGY TARTALMA / DESCRIPTION

Lectures

Lecture 1: Introduction of Pedology

Lecture 2: The main components of soil

Lecture 3: Soil physics

Lecture 4: Water management of soils

- Lecture 5: Soil biology
- Lecture 6: Soil chemistry
- Lecture 7: Air and nutrient management of soils
- Lecture 8: Nutrients providing ability of soils
- Lecture 9: Methodology of soil examination
- Lecture 10: Soil taxonomy I.
- Lecture 11: Soil taxonomy II.
- Lecture 12: Soil degradation
- Lecture 13: Soil protection
- Lecture 14: Soil remediation

Seminars

1. The rules of accident and health protection in laboratory. The rules of soil sampling and the on-site examinations
2. Soil sampling, soil profiling and examination
3. Examination of the mechanical composition of the soil
4. Soil plasticity examination
5. Water management examination
6. pH measurement
7. Ca and Mg content of the soil and the examination of alkalinity

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

ASSESSMENT'S METHOD

The precondition of the signature is the participation in the lectures and practice seminars. Only those students can take the oral exam who participated in at least 80 (eighty) percent of the lectures and practice seminars. The student registers provide the teacher with the relevant information regarding students' participation. Allowed percentage of missed lectures and seminars altogether 20%.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

OBLIGATORY MATERIAL

Soil Science Step-by-Step Field Analysis

Sally Logsdon - Dave Moore - Teferi Tsegaye