

**Tárgytematika / Course Description****The Basics of Pedology****MENB\_VKTA022****Tárgyfelelős neve /****Teacher's name:** dr. Kalocsai Renátó**Félév / Semester:** 2019/20/2**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 / ASSESMENT'S METHOD**

### **ASSESMENT'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

