



JOHN WESLEY THEOLOGICAL COLLEGE
COURSE TEMATICS

Course: Complex investigation of environmental systems IV	Course type: practical course	Credits: 2	Course ID: KTAK135_2019
Course responsible: dr. Róbert Géczi	Programme type: full time	Hours/Semester : 28	Assessment: practical mark
Course objectives:			
<p>Become familiar with conceptual issues involved in the study of soils at landscape scales. Learn to interpret (make practical predictions about) and classify soils from soil descriptions. Understand processes involved in soil development. Understand how soils are affected by parent material, vegetation, landscape, climate, and time.</p>			
Competencies to be improved:			
<p>Knowledge: T6 Ability: K1, K4 Attitude: A1, A2, A3 Autonomy and responsibility: F1, F2</p>			
Compulsory literature:			
<p>Henry D. Foth: Fundamental of Soil Science. Eight Edition, John Wiley & Sons, Inc. 1990 Hans Jenny: Factors of Soil Formation. A System of Quantitative Pedology. Dover Publication, New York, 2011 Gábor Mezősi: Natural Hazards and the Mitigation of their Impact. Chapter 4.5 Soil Erosion Caused by Water and Wind. Spinger Publication, Cham, 2022</p>			
Recommended literature			
<p>Nina Toudal Jessen & Bo Fritzboøger: Translating the landscape. The reciprocity of representations and other realities. In: Landscape Ecology, 2023</p>			
Course content:			
<ol style="list-style-type: none"> 1. Representation of landscape profiles 2. Representations and maps as part of scientific knowledge use <ol style="list-style-type: none"> 3. What is Pedology? 4. Concepts Used In Pedology 5. Orientation bearings, field measurement 6. Soil sampling and field measurements (moisture and compaction) <ol style="list-style-type: none"> 7. Preparation of soil samples for laboratory testing 8. Laboratory analyzes moisture, color, pH, natron, carbonate 			
Course requirements:			
practical work, test (summary)			
Grading scale:			
>85 %: excellent, 75-85 %: good, 60-75 %: satisfactory, 50-60 %: pass			
Course Programme: WJLF ENVIRONMENTAL SCIENCE	Semester: 2022_2023_2	Lecturers: dr. Róbert Géczi	