



COURSE DATASHEET

Semester:	2015/16/2
Course:	Introduction to Geophysics
Code:	VEMKKVB221G
Responsible department:	Department of Environmental Engineering
Department code:	MKKV
Responsible instructor:	Zsófia Kovács

Course objectives:

Delivery of basic knowledge on the environmental application of geophysical methods; first of all through case histories

Course content:

1. History and general introduction of geophysics 2. Summary of basic geophysical methods 3. Comparison of gravity and magnetic methods 4. Direct current geoelectric methods: VES (Vertical Electrical Sounding) 5. Direct current geoelectric methods: Horizontal Profiling 6. Direct current geoelectric methods: Induced Polarization investigations 7. Alternating current geoelectric methods: profiling and frequency sounding 8. 1st essay 9. Seismic method: reflection and refraction measurements 10. Aerogeophysics; well logging methods 11. Engineering Geophysical Sounding 12. Concerning all the methods: physical bases, equipment, measurements, processing, interpretation, environmental relations 13. Demonstration of real field survey results 14. Application possibilities of geophysics in solving environmental problems 15. 2nd essay

Requirements, evaluation and grading:

According to the requirements of fulfillment.

Required and recommended readings:

Segédanyag a „GEOFIZIKA” című tárgyhoz (az oktató összeállítása)