

# **UNIVERSITY OF PANNONIA**

## **COURSE DATASHEET**

Semester:	2014/15/1
Course:	Soil- and Groundwater Protection
Code:	VEMKKVT122T
Responsible department:	Department of Environmental Engineering
Department code:	MKKV
Responsible instructor:	Dr. Erzsébet Horváth

#### Course objectives:

Protection of environmental elements, remediation technologies on the base of examples;

### Course content:

1. Influence of wet quality for the ground water; 2. evapotranspiracy; 3. Mechanisms causing groundwater acidicy and puffer-effects; 4. The influence of pH for pollution migration; 5. Redox processes in soil water; 6. Adsorption in the soil; 7. Ion-exchange processes in the soil; 8. Calculations, chemical processesI. 9. Calculations, chemical processesII. 10. Cessation of interactions between hydrophyl contaminants and soil/soil water 11. Cessation of interactions between hydrophobe contaminants and soil/soil water 12. Determination of inorganic pollutions 13. Determination of volatile pollutions 14. test 15. Determination of organic pollutions

### Requirements, evaluation and grading:

According to the requirements of fulfillment.

### Required and recommended readings:

Szabó I.: Hulladdékelhelyezés III. Ipar a Környezetért Alapítvány, 1995. ? C.A.J. Appelo, D. Postma: Geochemistry, groundwater and pollution, 1992. Rotterdam