



## COURSE DATASHEET

<b>Semester:</b>	2013/14/1
<b>Course:</b>	Waste Water Treatment Laboratory Practice
<b>Code:</b>	VEMKKVT133S
<b>Responsible department:</b>	Department of Environmental Engineering
<b>Department code:</b>	MKKV
<b>Responsible instructor:</b>	dr. Árpád Kárpáti

---

### Course objectives:

Giving possibilities to control in practice the efficiencies of the different treatment methods and new directions of research. Examination of new treatment methods and processes.

### Course content:

1. Control of the influence of the chemical precipitation of suspended parts from municipal sewage in preliminary step for the denitrification capacity of the Activated Sludge treatment. (Pilot plant control.) 2. Oil separation from the water and reuse of the oil phase. 3. Use of chemical oxidation for transformation of hardly biodegradable organic contaminants (clay processing effluent). 4. Respirometric measurements for estimation of biodegradability of the contaminants. 5. Studies with activated sludge –adsorption capacity for removal of recalcitrant contaminants. 6. Measuring the biodegradation and ammonium oxidation in two sludge AS system. 7. Study of post denitrification with different organic substrates; and simultaneous denitrification with biofilm. 8. Measuring denitrification in continuous flow and SBR system.

### Requirements, evaluation and grading:

Knowledge of the theoretic basis of the measurements moreover the details of the laboratory work.

### Required and recommended readings:

Kiadott laboratóriumi mérésleírások.