

# **UNIVERSITY OF PANNONIA**

### **COURSE DATASHEET**

**Semester:** 2014/15/2

Course: Water Treatment Laboratory Practice

Code: VEMKKVT232V

Responsible department: Department of Environmental Engineering

Department code: MKKV

Responsible instructor: dr. Árpád Kárpáti

### Course objectives:

Getting acquainted with the most important unit processes of the water treatment

#### **Course content:**

1. Sampling of groundwater and surface waters. 2. Water quality control of surface waters. 3. Removal of Fe and Mn from groundwater. 4. Ammonium removal from groundwater wits dry sand filtration. 5. Disinfection of ammonium containing groundwater with chlorine. 6. Measuring the oil content in pre-treated oil processing effluent. 7. Measuring chlorine removal from potable water with home treatment facilities. 8. Efficiency of ozonization and AC filtration in removal of organic contamination from inking water (TOC control). 9. Nitrate removal from raw water with packed bed filters and lime/elemental S substrate. 10. Water softening with lime/sodium-carbonate tratment. 11. Softening of potable water with ion-exchange. 12. Removal of heavy metals from contaminated drinking water.

#### Requirements, evaluation and grading:

According to the requirements of fulfillment.

## Required and recommended readings:

Kiadott mérési leíratok