Water Quality and Contaminant Transport

Course description

Subject leader: Prof. Dr. Zoltán Gribovszki
***Lecturer**:* Prof. Dr. Zoltán Gribovszki
Institute: University of Sopron, Faculty of Forestry, Institute of Geomatics and Civil Engineering
Course code: EBNKOMH1028
Credit points: 3
Evaluation: oral exam / written exam / mid-term grade
Instruction hours/week (lecture + practice): 2 + 1
***Language**:* English

Course content
Lectures:
Water resources and water quality environments,
Basic physical, chemical and biological characteristics of water,
Contaminants in water,
Transport of contaminants in surface water,
Transport of contaminants in subsurface water
Practice:
Water quality and contaminants spreading calculations.
Simple water quality models for surface water and groundwater.

Required and recommended reading
Chapra S. C. Surface water quality modelling, McGRaw-Hill, New York, 1997.
Jolánkai G. Description of the CAL programme on Water Quality Modelling, Basic river and lake water quality models (with an outlook to "ecohydrological" applications), Budapest, 2000.
Franklin W. Schwartz – Hubao Zhang, Fundamentals of Groundwater, John Wiley & Sons, Ltd., New York, 2003.
Nancy D. Gordon – Thomas A. McMahon – Brian L. Finlayson – Christopher J. Gippel – Rory. J. Nathan, Stream Hydrology (an Introduction for Ecologist), John Wiley & Sons, Ltd., Chirchester, 2004.
Pregun Cs. Water Resources Management and Water Quality Protection, 2011.
https://www.tankonyvtar.hu/en/tartalom/tamop425/0032_vizkeszletgazdalkodas_es_vizminoseg/adatok.html