

Course title: Environmental fate of organic micropollutants		Kod ECTS		
Studies				
Specialty	Semester	Number of ECTS	Number of hours in the class	Form
Foreign students	winter	1	5	Lecture
Name of lecturer: dr hab. Ewa Siedlecka, prof. UG				
Objective of the course (expected learning outcomes and competences to be acquired)				
Students will classify emerging pollutants and their sources				
Students will describe the physicochemical parameters of emerging pollutants				
Students will describe correlation between physicochemical parameters of micropollutants and their fate in environment				
Students will classify and describe the micropollutants decay processes in environment				
Students will plan and describe micropollutants treatment technologies				
Students will describe efficiency of conventional technologies in micropollutants removal from wastewater..				
Prerequisites:				
Basic knowledge of inorganic chemistry, organic chemistry and analytical chemistry.				
Teaching methods:				
· Lecture with multimedia presentation				
Course content				
A summary of the recent occurrence of micropollutants in the aquatic environment including sewage, surface water, groundwater and drinking water, a major pathway for the introduction of micropollutants to surface water, the physicochemical properties of micropollutants responsible for their fate in environment, the processes participated in their removal from water environment, conventional WWTPs as primary barriers against the spread of micropollutants.				
Recommended reading:				
Cheremisinoff N.P., Handbook of water and wastewater treatment technologies, Elsevier 2001				
Riva G., Foppapedretti E., de Carolis C., Gikoumelos E., Malamatenios C., Signanini P., Giancarlo C., Di Fazio M., Gajdos J., Rucinsky R., Handbook on renewable energy sources, training nahdbook, ENER SUPPLY, 2012				
Assessment methods:				
- Writing exam				
Language of instruction: English				