

Course title: Environmental technology						
	Specialty	Semester	Number of ECTS	Number of hours in the class	Form	
	Foreign students	winter	1	15	Lecture	
Name of lecturer: Prof. Adriana Zaleska						
Objective of the course (expected learning outcomes and competences to be acquired)						
<p>Students will classify common type of pollutants and pollutant source</p> <p>Students will classify of remediation methods</p> <p>Students will plan and describe water and wastewater treatment technologies</p> <p>Students will plan and describe air treatment technologies</p> <p>Students will plan and describe remediation technologies of polluted soil</p> <p>Students will plan and describe solid waste processing</p> <p>Student will classify renewable energy sources</p> <p>Student will describe the various renewable energy sources and the possible conversion paths to a useful form of energy</p>						
Prerequisites:						
Basic knowledge of inorganic chemistry, organic chemistry and analytical chemistry.						
Teaching methods:						
<ul style="list-style-type: none"> Lecture with multimedia presentation 						
Course contents						
Basic concepts of Environmental Technology. Pollution control technologies. Water and Wastewater Treatment Plants: planning, design and operation. Preliminary unit operations and processes in water and wastewater and industrial wastewaters treatment. Drinking and industrial water purification. Wastewater treatment systems. Solid waste processing. Solid waste recycling. Air pollution control methods. Soil remediation technologies. Renewable energy.						
Recommended reading:						
<p>Cheremisinoff N.P., Handbook of water and wastewater treatment technologies, Elsevier 2001</p> <p>Tchobanoglous G., Kreith F., Handbook of solid waste management, 2002 The McGraw-Hill Companies, Inc</p> <p>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</p>						
Assessment methods:						
<ul style="list-style-type: none"> Writing exam 						
Language of instruction: English						