

Study program: Environmental governance and corporate responsibility			
Type and level of study: Bachelor academic studies			
Course Title: Hazardous Substances			
Teachers: Nataša Stojić			
Status: Obligatory, semester III			
ECTS: 6			
Prerequisite: None			
The goal of course In this course, students gain knowledge of the classification and properties of substances that are in the category of pollutants with the properties of dangerous and harmful substances, pollution sources, as well as the removal of contaminants from the environment and remediation of polluted habitat. Students will be familiar with the fate and effects of harmful and hazardous substances on the environment.			
The outcome of the subject Mastering the matter relating to dangerous and harmful substances, students will be able to determine the class of risk, their activity and toxicity to wildlife and to suggest ways of analysis and remediation of contamination.			
Syllabus <i>Theoretical study –</i> The definition and classification of hazardous substances; physico-chemical properties and mode of action of harmful chemicals (toxicity, flammability, reactivity, radioactivity); direct and indirect effects of pollutants; work with hazardous materials, safety precautions, first aid instruction, hazard and risk classification of harmful substances; determine the extent and categories of potential hazards; determine the activity and toxicity of the living world; transport, labeling and storage of hazardous substances; main groups of harmful and hazardous substances. <i>Practical classes –</i> Identification, reading and understanding the MSDS sheet, determination of the total hydrocarbons in soil and water, the determination of volatile organic compounds, determination of metals, presentation of seminar papers and case studies.			
Literature 1. Kastori, R., Kadar, I., Sekulić, P., Bogdanović, D., Milošević, N. & Pucarević, M. (2006). Uzorkovanje zemljišta i biljaka, nezagađenih i zagađenih staništa. Naučni institut za ratarstvo i povrtarstvo. Novi Sad. 2. Wells, G.L. (1997). Major Hazards and their Management. ChemE. 3. RISK ASSESSMENT OF CHEMICALS An Introduction, 2nd edition. Edited by C.J. van Leeuwen and T.G. Vermeire Published by Springer, P.O. Box 17, 3300 AA Dordrecht, The Netherlands, 2007, Springer. 4. Hazardous Chemicals Handbook, Second edition, Phillip Carson, Clive Mumford, Oxford Amsterdam Boston London New York Paris San Diego, San Francisco Singapore Sydney Tokyo Butterworth-Heinemann, Elsevier Science Linacre House, Jordan Hill, Oxford OX2 8DP 225 Wildwood Avenue, Woburn, MA 01801-2041 2002			
Number of lectures: 4			Other Classes
Lectures: 2	Practices: 2	Other forms of teaching: Student research work:	
Teaching methods: ☐ Lectures, using computer technology, discussions with students, individual and team work.			
Score (maximum 100 points)			
Pre-commitments	Poens	The final exam	Poens
Activity during lectures	10	Written exam	
Practical classes	10	Oral examination	40
Colloquia	30		
Seminars	10		
<i>Total</i>	60		40