

Study programme: Bachelor with honours in Geography, Bachelor with honours in Ecology			
Course title: Environmental Protection Technologies			
Teacher(s): dr Ivana Ivančev Tumbas			
Status: elective			
ECTS: 7			
Requirements: none			
Learning objectives Training students for management and control of active protection of the environment.			
Learning outcomes Master the necessary knowledge on unit processes of technology (technological operations) for protecting the environment from anthropogenic pollution, which will be applied in the framework of the protection of air, water and soil protection.			
Syllabus <i>Theoretical part:</i> Basic principles of environmental technology. Waste water and basic treatment processes. Biological and tertiary treatment of waste water. Treatment and disposal of sludges. Purification of communal and industrial wastewater. The atmosphere and the formation of air pollution sources. Chemical processes in the atmosphere. Managing emissions of gaseous pollutants, particulate matter. Solid waste. Integrated waste management. <i>Practical part:</i> Practical instruction follows the theoretical one.			
Literature 1. B. Dalmacija, Z. Tamaš, S. Rončević: Predavanja iz predmeta - Tehnologija zaštite životne sredine, PMF, Novi Sad, 2006. 2. S. Gaćeša, M. Klačnja: Tehnologija vode i otpadnih voda, Jugoslovensko udruženje pivara, Beograd, 1994. 3. B. Dalmacija B., I. Ivančev-Tumbas: Analiza vode - kontrola kvaliteta, tumačenje rezultata, Prirodno-matematički fakultet, Departman za hemiju, 2004. 4. D. Veselinović, I. Gržetić, Š. Đarmati, D. Marković: Stanje i procesi u životnoj sredini, Fakultet za fizičku hemiju, Beograd, 1995., str. 177-378. 5. D. Ljubisavljević, A. Đukić, B. Babić: Prečišćavanje otpadnih voda, Građevinski fakultet, Beograd, 2004. 6. J. Đuković, V. Bojanić: Aerozagađenje, D.P. Institut zaštite i ekologije, Banja Luka, 2000. 7. J. Đuković: Hemija atmosfere, Rudarski institut, Beograd, 2001. 8. V. Rekalić: Analiza zagađivača vazduha i vode, Tehnološko-metalurški fakultet, Beograd, 1989.			
Weekly teaching load 6 (90)	Lectures 3	Exercises 3	
Methods of Teaching Lectures, laboratory exercises, consultations.			
Grading method (maximu 100 points)			
Pre-examination assignments	points	Final examination	points
Activities during lectures	5	Written examination	30
Activities during exercises	30	Oral examination	20
Colloquia	15	