

Study program: Road Traffic			
Subject name: Ecology and environmental protection			
Teacher: dr Gordana Lj. Bogdanović			
Subject status: Optional			
Number of ECTS: 6			
Conditions: None			
Subject objective Acquiring basic knowledge about ecological systems, changes in nature, pollution and environmental protection.			
Subject outcome Creating market conditions for environmental products and services; for new jobs - space for innovation and investment; preservation and improvement of the environment with the application and implementation of world standards of quality and environmental protection.			
Subject content			
<i>Theory classes</i>			
Introduction. Biosphere and its organization. Basics of toxicology. Man - a factor and target of environmental pollution. Atmospheric pollution. Noise. Soil pollution. Solid waste pollution. Food pollution. Hydrosphere pollution. Radiation. Teratogenesis. Mutagenesis. Carcinogenesis. Mental pollution. Monitoring and environmental protection. Measures and activities in environmental protection.			
<i>Practice classes</i>			
Air sampling for analysis. Analytical method for the determination of sulfur dioxide in air. Determination of soot. Determination of sediment dust content in air. Determination of carbon monoxide content in air. Determination of heavy metals in foodstuffs using AAS. Determination of chloroplast pigment content in acetone solution. Determination of reducing sugar content. Determination of the amount of total proteins in plant material. Determination of the amount of the amino acid proline. Determination of vitamin C in foods. Determination of peroxidase and catalase activities. Determination of soil chloride.			
Literature:			
1. Г. Богдановић–Душановић, Д. Николић, Н. Манојловић, А. Миленковић, „Екологија – узроци и последице загађивања животне средине“, Висока школа примењених струковних студија, Врање, 2010.			
2. Г. Богдановић, „Практикум из екологије и заштите животне средине“, Висока школа примењених струковних студија, Врање, 2015.			
3. М. Begon, J. L. Harper, C. R. Townsend, „Ecologia“, Yanichelli, Bologna, 1989.			
Number of active classes	Theory classes: 30	Practice classes: 30	
Teaching methods Oral presentation method, interview method, seminar paper method and demonstration method.			
Knowledge assessment (maximum number of points 100)			
Pre-exam obligations	points	Final exam	points
activity during the lectures	5	written exam	–
practice classes	5	oral exam	30
colloquium/s	50		
seminar/s	10		