

Study program:	Civil Engineering		
Level of study:	Master academic studies		
Course title:	TRAFFIC INFRASTRUCTURE AND ENVIRONMENT		
Teacher:	Igor Jokanović		
Course Status:	Core		
Credits (ECTS):	6		
Prerequisite:	N/A		
Course objective(s):	Acquiring basic knowledge about the interaction of traffic infrastructure and the environment. Getting acquainted with the activities and possible measures of protection and improvement of the environment throughout the life cycle of traffic infrastructure. Training for application of acquired knowledge in practice in the planning, design, construction, operation and maintenance of traffic infrastructure.		
Course outcome(s):	The realization of the planned objectives.		
Course Content:			
1 st week	Introduction to the subject. The concept of sustainable development. Transport policy and environmental protection.		
2 nd week	Basic aspects of the interaction of traffic infrastructure and the environment. Roads and traffic on them as a threat factor for environment.		
3 rd week	Types of traffic infrastructure impact on the environment in the life cycle of traffic infrastructure. Engineering-organizational and regulatory measures of protection (air, water, soil, land use).		
4 th week	Engineering-organizational and regulatory measures of protection (flora and fauna, microclimate, visual pollution, energy and resources, safety).		
5 th week	Engineering-organizational and regulatory protection measures (socio-economic impacts, natural heritage, cultural heritage, risks).		
6 th week	Indicators of the environmental condition in the area of traffic infrastructure.		
7 th week	Regulatory and methodological basis for conducting analysis of the impact of traffic infrastructure on the environment.		
8 th week	Relation between environmental impact assessment and phases of development of planning and design documentation for traffic infrastructure.		
9 th week	Preliminary and detailed design of technical measures. Environmental management plan. The design of ecological arrangement of construction site.		
10 th week	Assessment of the quality of environmental impacts analysis. Public participation. The management of traffic infrastructure.		
11 th week	Environmental management subsystem. Basic principles. Standards.		
12 th week	Economic aspects of environmental management subsystem in the field of traffic infrastructure.		
13 th week	Research and consultations for seminar paper.		
14 th week	Presentation and defense of the seminar paper.		
15 th week	Presentation and defense of the seminar paper.		
Literature:	<ol style="list-style-type: none"> 1. Beara, G., Planiranje, saobraćaj, ekologija, Arkade print, Beograd, 1993. 2. Veljković, M., Put i životna sredina, Priručnik za izradu analiza uticaja /izvod/, Urbanistički zavod Republike Srpske, Banja Luka, 2000. 3. Guidelines for Environmentally Sustainable Transport, Futures, Strategies and Best Practices, OECD, Paris, 2000. 4. Environmental Principles and Concepts, OECD, Paris, 1995. 5. Tsunokawa, K., Hoban, K., Roads and the Environment, A Handbook, Technical Paper, No. 376, The World Bank, Washington, D.C., 1997. 		
Number of hours:	Other classes: 0		
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Individual research work: 0
Teaching methods: lectures, exercises, seminar paper, consultations			
Evaluation of knowledge (maximum 100 points)			
Pre-exam activities	points	Final exam	points
Activity during the lectures	5	Written exam	-
Activity during the exercises		Oral exam	25

Seminar paper	20	-	-
Colloquia	50 (2 x 25)	-	-