

Study program:	Civil Engineering		
Level of study:	Undergraduate academic studies		
Course title:	PAVEMENT STRUCTURES		
Teacher:	Igor Jokanović		
Course Status:	Core		
Credits (ECTS):	6		
Prerequisite:	Soil Mechanics, Road Design		
Course objective(s):	Acquiring basic knowledge in pavement structures.		
Course outcome(s):	The realization of the planned objectives.		
Course Content:			
1 st week	The definition and role of the pavement structure layers. Types of pavement structures.		
2 nd week	Mechanical behavior and damage to different types of pavement structures.		
3 rd week	Design based on the mechanics of pavement structures.		
4 th week	The relationship between design and pavement maintenance management. Selection of level of service.		
5 th week	Selection of wearing course. The functions and objectives important for the selection of wearing course, the choice of type of wearing course. The selection of materials quality.		
6 th week	Pavement subgrade (traditional and modern concept). Functions and criteria of soil classification of soil and stabilized soil. Characterization of the final layer of earth works.		
7 th week	Pavement materials. (traditional and modern concept). Basic materials (aggregates-stone grains, hydraulic and pozzolanic binders, hydrocarbon binders, other elements, laboratory tests of physical and mechanical properties and fundamental characteristics).		
8 th week	Pavement materials. Unbound mineral stone materials-gravel, crushed stone. Materials with hydraulically binders.		
9 th week	Pavement materials. Materials with hydrocarbon binders (common elements of different materials with hydrocarbon binders and bituminous crushed stone in the base course, different types of asphalt concrete and other hot mixtures).		
10 th week	Pavement materials. Classical cement concrete and compacted concrete.		
11 th week	Empirical design. Domestic regulations for design of pavement structures.		
12 th week	Design based on the mechanics of pavement. Mechanical models of pavement structures.		
13 th week	The cross section of pavement structure.		
14 th week	Design of existing pavements strengthening.		
15 th week	Design of existing pavements strengthening. Interpretation of results.		
Literature:			
1. Cvetanović, A., Radojković, Z., Vojnić, Ž., Projektovanje fleksibilnih kolovoznih konstrukcija, sveska 32, SDPJ, Beograd, 1984.			
2. Radojković, Z., Kolovozne konstrukcije (in preparation)			
3. Radojković, Z., Sistemi upravljanja kolovozima, Građevinska knjiga, Beograd, 1989.			
Number of hours:			
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Individual research work: 0
			Other classes: 0
Teaching methods:	lectures, exercises, colloquiums, 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
Term paper	20	-	-
Colloquia	50 (2 x 25)	-	-