

Study program / course: Mechanical Engineering				
Type and level of study: Master academic studies				
Course: Traffic and environment				
Lecturers: Radivoje B. Pešić, Dragoljub R. Radonjić				
Status of course: Elective for modules M₃ and M₈, III term				
Number of ECTS: 6				
Precondition: none				
The objective of course The objective of the course is to qualify the students for individual scientific-research in the area of complex aspects of motor vehicles' from road traffic influence on the environment throughout the whole life cycle of the vehicle. Through expressively interdisciplinary and multidisciplinary research, the students will be able to analyze and evaluate, from the ecological aspect, the projects connected to the vehicles and traffic.				
The outcome of course After the successful finish of the course, the student will be able to: (1) recognize the influence of vehicle production on the environment, (2) know the influence of vehicle use on the environment, (3) know the importance of on-board vehicle diagnostics of vehicle emissions, (4) know the basics of vehicle recycling, (5) know the basic standards and laws from the area of motor vehicle's ecology.				
Syllabus Natural sources and their reserves. Influence of preparations of materials for vehicle production on the environment. Influence of vehicle production on the environment. Influence of vehicle use on the environment. Vehicle emission. On-board vehicle diagnostics in function of emission reduction. Traffic and vehicle noise. Recycling of motor vehicles. Legal regulations. Practical Studies: Independent analysis of vehicle's influence on the environment. Experimental measurements of emission and imissions and doing of seminar paper.				
Recommended reading R. Pešić, S. Petković, S. Veinović: "Motor vehicles – equipment", (in Serbian), Faculties of Mechanical Engineering from Banja Luka and Kragujevac, 2008 R. Pešić, D. Radonjić: Traffic and environment, (in Serbian), Script in preparation				
The number of hours of active teaching:				Other classes:
Theory: 3	Practical classes: 1.4	Other forms of teaching: 0.6	Research study: 0	1
Methods of teaching Teaching will be conducted through lectures, practical studies, visits to companies and doing two seminar papers.				
Evaluation of knowledge				
Pre-final exam obligations	points	Final exam	points	
Activities during the classes:	10	Oral Examination	40	
Practical classes:	20			
Colloquiums(s) :				
Seminar(s) :	15+15			