

Study program: Road Traffic			
Subject name: Maintenance of Motor Vehicles			
Teacher: dr Tomislav R. Marinković			
Subject status: Compulsory			
Number of ECTS: 6			
Conditions: None			
Subject objective Introducing students to: The process of maintaining motor vehicles and engines; Causes of failure of motor vehicles and engines; Maintenance system of motor vehicles and engines (Characteristics, Maintenance Methodologies, Maintenance Concepts, Maintenance Organization, Maintenance Technologies); Designing the maintenance system of motor vehicles and engines; Integral system support and application of information systems in the field of maintenance of motor vehicles and engines; Management of spare parts in the maintenance of motor vehicles and engines; The manner of conducting the analysis and evaluation of the maintenance system of motor vehicles and engines; Designing vehicles and engines from the aspect of maintenance.			
Subject outcome Determining the causes of motor vehicle and engine failures. Defining the maintenance system of motor vehicles and engines (Methodologies, Concepts, Organizations, Technologies). Design of motor vehicle and engine maintenance systems. Defining integral system support, using information systems in the field of maintenance of motor vehicles and engines. Management of spare parts in the maintenance of motor vehicles and engines. Conducting analysis and evaluation of motor vehicle and engine maintenance systems. Vehicle and engine design from the aspect of maintenance.			
Subject content <i>Theory classes</i> Basic terms and definitions, subject and goal. Maintenance engineering and operational safety of motor vehicles and engines. Maintenance process. Condition of motor vehicles and engines, time picture of the condition, models of motor vehicle and engine maintenance processes. Changes in the condition of motor vehicles and engines and their causes. Changes in the situation due to one's own weaknesses. Changes in condition due to misuse. Condition changes caused by wear, corrosion and fatigue. Conditions changes caused by fuel, lubricant and other technical fluids. Maintenance-induced condition changes. Defining changes in the condition of motor vehicles and engines. Motor vehicle and engine maintenance system. Characteristics of motor vehicle and engine maintenance systems. Motor vehicle and engine maintenance methodologies. Concepts of maintenance of motor vehicles and engines Organization of maintenance of motor vehicles and engines. Motor vehicle and engine maintenance technologies. Design of motor vehicle and engine maintenance systems. Logistics, integrated system support and application of information systems in the field of motor vehicle and engine maintenance. Specialized plants for maintenance of motor vehicles and engines). <i>Practice classes</i> Introduction to practical examples of motor vehicle maintenance in service workshops.			
Literature: 1. Б. Крстић, „Експлоатација моторних возила и мотора“, Машински факултет, Крагујевац, 1987. 2. Б. Крстић, „Техничка експлоатација моторних возила и мотора“, Машински факултет, Крагујевац, 2009. 3. Ч. Дубока, „Технологије одржавања возила“, Машински факултет, Београд, 1992. 4. Ј. Тодоровић, „Инжењерство одржавања техничких система“, Машински факултет, Београд, 1993.			
Number of active classes		Theory classes: 45	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	30
practice classes	5	oral exam	-
colloquium/s	50		
seminar/s	10		