

Study program / course: Mechanical engineering			
Type and level of study: Bachelor academic studies			
Course: SERVICEABILITY OF MOTOR VEHICLES AND ENGINES 1			
Lecturers: Krstic V.Bozidar			
Status of course: Obligatory for module M3, VI semester			
Number of ECTS: 6			
Precondition: none			
The objective of course Explaining the basic principles of Serviceability of Motor Vehicles and Engines. It means, make them closer themes such as: Classification, categorization and identification of vehicles; Requests which motor vehicles need to accomplish during driving; Serviceability and technical characteristics of motor vehicles and engines; Long life of motor vehicles and engines; Costs during life period of vehicles, Giving definition for condition of motor vehicles and engines; Reasons for making motor vehicles and engines broken; Analyze major parts of motor vehicles and engines from serviceability aspect; Effectiveness of motor vehicles and engines.			
The outcome of course Classification, categorization and identification of motor vehicles; Making right decision about choosing motor vehicles from aspect of serviceability and technical characteristics; Calculating costs during life period of motor vehicles; Giving definition for technical condition of motor vehicles and engines; Analyze reasons for making motor vehicles and engines broken; Definition for effectiveness of motor vehicles and engines.			
Syllabus			
Theoretical study			
1. Major concept and definitions, subject and goal			
2. Classification, categorization and identification of vehicles			
3. Requests which motor vehicles need to accomplish during driving			
4. Serviceability characteristics of motor vehicles and engines			
5. Long life of motor vehicles and engines, costs during life period of vehicles, condition of motor vehicles and engines			
6. Reasons for making motor vehicles and engines broken			
7. Analyze major parts of motor vehicles and engines from serviceability aspect.			
8. Effectiveness of motor vehicles and engines			
Steps for reaching effectiveness of motor vehicles and engines			
Working condition of motor vehicles and engines (Major concept. Primary condition of motor vehicles and engines, Breakdowns, Reasons for breakdowns and methods for analyzing the same). Effectiveness functions of motor vehicles and engines (Characteristics effectiveness function; Components of effectiveness function; Effectiveness structure of motor vehicles and engines; Component influence on outputs of motor vehicles and engines. Sand of motor vehicles and engines and effectiveness component.)			
Mathematical methods in research effectiveness of motor vehicles and engines (Major concept; Principles of sharing).			
Practical classes			
Student has commitment to be present on practical part of subject and to finish one homework.			
Recommended reading			
1. B.Krstic: Serviceability of motor vehicles and engines, Faculty of Mechanical Engineering, Kragujevac, 1997.			
2. I.Klinar: 2-stroke and 4-stroke engines – Serviceability of engines, Faculty of technical science, Novi Sad, 2001.			
3. D.Zelenovic, J. Todorovic: Reliability theory of technical systems, Faculty of technical science, Novi Sad, 2004.			
The number of hours of active teaching:			Other classes:
Theory: 3	Practical classes: 1.6	Other forms of teaching: 0.4	Research study: 0
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Methods of teaching			
Course consist two parts: theoretical and practical. Getting marks is very easy: all the student has to do is to past two tests during semester and one written work, so called in Serbia, "seminars work". Base on that, student can get min 30points and max 70points. The final, speak test, is obligate. There is another way of getting mark; et the end of the semester, student can show his knowledge on the written and speak test, in front of professor.			
Evaluation of knowledge			
Pre-final exam obligations	points	Final exam	points
Activities during the classes:	5	oral exam	30
Tests:	45		
Colloquiums(s) :			
Seminar(s) :	20		