

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Means of Road Transport and their Exploitation				
Head of course	Damir Pilepić, Lecturer				
Study programme	Professional undergraduate study Road Transport				
Status of a course	Obligatory				
Year of study	3.	Semester	V	ECTS credits	5
Teaching plan (L + E + S+ Pr)	2+2+0+0				
Goals of a course					
Introduce students to regulations and guidelines, the operation of individual vehicle assemblies and the application of maintenance regulations.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
<p>Outcome 2: Apply legislation in the field of road transport.</p> <p>Outcome 3: Use standards that cover the subject area when designing transport projects and implementing technological and service processes in the field of road transport.</p> <p>Outcome 10: Assess models of exploitation and maintenance of technical equipment in the transport system.</p> <p>Outcome 14: Independently present professional content on oral, written and graphical basis using the usual tools in Croatian and/or foreign language.</p> <p>Outcome 15: Participate in teamwork in solving complex road transport tasks.</p>					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Describe individual categories of road vehicles according to the Croatian regulations and ECE guidelines 2. Define the driving dynamics of road vehicles by applying the laws of engineering mechanics 3. Describe the operation of individual road vehicles assemblies 4. Define optimal models of exploitation and maintenance of road vehicles in accordance with the legislation 5. Research and present professional topics from the field covered by the course 					
Content of a course					
<p>Introduction. Classification of road transport vehicles. Basic characteristic of road vehicles. Driving mechanics. Friction limit. Load distribution on axes and wheels at rest and during movement along the straight road and in curves. Vehicle stability in curves. The influence of drive wheels on stability and driving safety. The influence of road profile on stability and driving safety. Determining of vehicle's center of gravity. Vehicle's assemblies (engine, clutch, gear-box, reduction gear, compensation mechanism and power distributor, shafts, links, pneumatics, braking system, steering system, signalization system). Change of the vehicle technical condition during exploitation. Causes of technical condition change. Wearing. Influence of exploitation on vehicle lifetime. Maintenance conceptions. Maintenance processes and optimization. Logistic support. Diagnostics. Favours for road vehicle maintenance.</p>					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
Comments					
Students' obligations					
Grading, evaluation and monitoring of students' work continuously during lectures and exams					

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

Continuous check-up:

Outcomes	Pre-exam I	Pre-exam 2	Home assignment (program)	Oral presentation	Threshold	Max
Outcome 1	15				7,5	15
Outcome 2	15				7,5	15
Outcome 3		30			15	30
Outcome 4			20		10	20
Outcome 5			10	10	10	20
Percentage of ECTS	1,5	1,5	1,5	0,5		
Total	30	30	30	10	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Written exam	Oral exam	Max
Outcome 1	10	10	20
Outcome 2	10	10	20
Outcome 3	10	10	20
Outcome 4	10	10	20
Outcome 5	10	10	20
Percentage of ECTS	2,5	2,5	
Total	50	50	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature

1. Knjiga - grupa autora: Tehnika motornih vozila (Prijevod s njemačkog), Zagreb, 2004. – dostupno u knjižnici Veleučilišta

Additional literature

2. Mikulić, D., MOTORNA VOZILA - Teorija kretanja i konstrukcija, Veleučilište Velika Gorica, - jedan primjerak dostupan, ostali u dolasku – knjižnica Veleri

