

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Technical Facilities in Road Transport				
Head of course	Damir Pilepić, Lecturer				
Study programme	Specialist professional graduate study Road Transport				
Status of a course	Obligatory				
Year of study	2.	Semester	III	ECTS credits	6
Teaching plan (L + E + S+ Pr)	2+0+2+0				
Goals of a course					
To acquaint students with the characteristics of the engine, regulations and guidelines, the operation of individual assemblies of technical means and their maintenance.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 6: Create models of exploitation and maintenance of technical equipment in the transport system. Outcome 7: Select information technology and software to address specific transport system problems. Outcome 9: Use methods for optimizing technological processes in road transport.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Compare engines with respect to their characteristics. 2. Evaluate maintenance processes and select optimal maintenance. 3. Identify types of transmission, wheels, lubricants, steering, braking systems, safety systems of motor vehicles. 4. Analyse the elements of traffic accident investigations and their use in expert witnessing. 5. Research and present professional topics from the field covered by the course. 					
Content of a course					
Introduction. Classification of road transport means. Road transport means basic features. Driving dynamics analysis. Output unit and its driving utilization features analysis. Friction limits influence. Static and dynamic load distribution on wheel shafts. Wheels affecting driving stability and control. Curve affecting driving stability. Road means assemblies and elements. Power engine (combustion, engine mechanism, engine main parts, engine distribution, fuel system, air filtration and supercharging system, exhaust system, lubricating system, cooling system), clutch, gear box, power distributor, shafts and joints, reducing gear, pneumatics, braking system, steering system, and signalling system.					
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	Oral presentation	Home assignment (program)	Threshold	Max
Outcome 1	20				10	20
Outcome 2	20				10	20
Outcome 3		20			10	20
Outcome 4		20			10	20
Outcome 5			10	10	10	20
Percentage of ECTS	2,4	2,4	0,6	0,6		
Total	40	40	10	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. Mikulić, D., MOTORNA VOZILA - Teorija kretanja i konstrukcija, Veleučilište Velika Gorica, - dostupno u knjižnici Veleučilišta
2. Knjiga - grupa autora: Tehnika motornih vozila (Prijevod s njemačkog), Zagreb, 2004. – dostupno u knjižnici Veleučilišta

Additional literature

1. Lecture materials
2. Selected Laws and Regulations
3. Professional articles

