

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Advanced Transportation Systems				
Head of course	Erika Gržin, Lecturer				
Study programme	Professional undergraduate study Road Transport Professional undergraduate study Railroad Transport				
Status of a course	Obligatory				
Year of study	1.	Semester	II	ECTS credits	6
Teaching plan (L + E + S+ Pr)	2+0+2+0				
Goals of a course					
To acquaint the students with the basic concepts related to the transport system and the characteristics of particular branches of transport, with special reference to road and rail traffic. To show the advantages and disadvantages as well as the principle of operation of some modern transportation technologies.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 2: Apply legislation in the field of road/ railroad transport. Outcome 6: Distinguish between entities and their powers in the field of road /railroad transport. Outcome 8: Recommend effective solutions for road /railroad transport system planning based on sustainable development principles. Outcome 14: Independently present professional content on oral, written and graphical basis using the usual tools in Croatian and/or foreign language.					
Expected learning outcomes on a level of a course					
1. Describe the basic features and elements of transport systems. 2. Determine the specifics of individual branches of land transport. 3. Define the basic characteristics of air transport, water transport and seaports. 4. Define the role of intelligent transport systems in the development of transport. 5. Describe the characteristics and elements of particular types of modern transportation technologies.					
Content of a course					
Transport in the theory of a system. Transport systems elements – vertically and horizontally. Historical development of transport. Marine transport. Road transport. Rail transport. Air transport. Postal services. Telecommunications. River transport. Canal transport. Pipeline transport. Cable-way transport. Urban traffic. Sea ports. Important items of transport system. Integral transport, palletization, containerization. Combined transport. Multimodal transport. RO-RO transport, LASH transport technology, Huckepack transport technology, bimodal transport technologies.					
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	Seminar work	Home assignments	Threshold	Max
Outcome 1	10 %				5 %	10 %
Outcome 2	10 %		6 %	10 %	13 %	26 %
Outcome 3	10 %			6 %	8 %	16 %
Outcome 4		10 %			5 %	10 %
Outcome 5		20 %		18 %	19 %	38 %
Percentage of ECTS	1,5	1,5	0,5	2,5		
Total	30 %	30 %	6 %	34 %	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 %	0	10 %
Outcome 2	20 %	6 %	26 %
Outcome 3	12 %	4 %	16 %
Outcome 4	10 %	0	10 %
Outcome 5	30 %	8 %	19 %
Percentage of ECTS	5	1	
Total	82 %	18 %	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. Brnjac, N.: Intermodalni transportni sustavi, Sveučilište u Zagrebu, Fakultet prometnih znanosti, Zagreb, 2012.
2. Komadina, P.: Brodovi multimodalnog transportnog sustava, Pomorski fakultet Sveučilišta u Rijeci, Rijeka, 1998.
3. Grakalić, I., Franušić, M., Štern, A.: Telekomunikacijski aspekti upravljanja flotom. Zbornik Veleučilišta u Rijeci, Vol. 1 (2013), No. 1, pp. 279-289. 279
4. Ristov, P., Mrvica, A.: Primjena RFID tehnologije u pomorstvu, 3. Međunarodna konferencija o pomorskoj znanosti, Split : Hrvatski hidrografske institut, 2011., 247-261.
5. Materials posted on Moodle

Additional literature
1. Zelenika, R.: Prometni sustavi, Ekonomski fakultet Sveučilišta u Rijeci, Rijeka, 2001.

1. Zelenika, R.: Prometni sustavi, Ekonomski fakultet Sveučilišta u Rijeci, Rijeka, 2001.

