

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Multimodal Transport				
Head of course	PhD Saša Hirnig, College Professor				
Study programme	Specialist professional graduate study Transport				
Status of a course	Obligatory				
Year of study	1.	Semester	II	ECTS credits	6
Teaching plan (L + E + S+ Pr)	2+2+0+0				
Goals of a course					
Understanding the relevant features of integral and multimodal transport.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 2: Apply international, European and national legislation in the implementation of technological and service processes in the field of road/ railroad transport. Outcome 3: Apply economic solutions to transport systems while respecting the fundamental financial, marketing, ethical, management and other economic principles. Outcome 4: Offer solutions for transport system planning based on sustainable development principles. Outcome 5: Manage and lead road/ railroad transport development activities. Outcome 9: Use methods for optimizing technological processes in road/ railroad transport.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Substantiate the need for interconnection of individual transport branches in the provision of transport services 2. Identify the preconditions for the successful functioning of multimodal transport 3. Evaluate the features, advantages and disadvantages of some modern transportation technologies 4. Critically evaluate the development of multimodal transport in the Republic of Croatia 					
Content of a course					
Theoretical features and achieved level of multimodal transport development. Multimodal transport international legislation. Advanced transport technologies as a base of multimodal transport development. Palletisation, containerization, Ro-Ro transport technology, huckepack transport technology, other multimodal transport technologies. Transport documents in multimodal transport. Goods transport model designing and analysis in multimodal transport. Interrelatedness of participants in multimodal transport.					
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 adoption of course's learning outcomes. 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 *	Threshold	Max
Outcome 1	18			9	18
Outcome 2	25			13	25
Outcome 3	15	20		18	35
Outcome 4		22		11	22
Percentage of ECTS	2,5	2,5	1		
Total				50 %	100 %

* The topic can be related to any outcome. Seminar paper carries a maximum of 1/3 of the predicted percentages of the respective outcome.

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	8	18
Outcome 2	20	5	25
Outcome 3	20	15	35
Outcome 4	12	10	22
Percentage of ECTS	3,5	2,5	
Total	62	48	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. Miloš, I.: Tehnologija i organizacija intermodalnog prometa, 2011.

Additional literature

1. Brnjac, N.: Intermodalni transportni sustavi, 2012.
2. Zelenika, R.: Pravo multimodalnog prometa, 2006.
3. Komadina, P.: Brodovi multimodalnog transportnog sustava, 1998.
4. Nikolić, G., Multimodalni transport, 2004.

