

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Information Systems in Road/ Railroad Transport				
Head of course	Marina Rauker Koch, Lecturer				
Study programme	Professional undergraduate study Road/ Railroad Transport				
Status of a course	Obligatory				
Year of study	3.	Semester	V	ECTS credits	3
Teaching plan (L + E + S+ Pr)	1+0+2+0				
Goals of a course					
Introduce students to the concept, content, role, use and selection of information systems in transport systems, as well as the basics of database design and operation.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 11: Select appropriate information technology and software to address specific road transport problems.					
Outcome 14: Independently present professional content on oral, written and graphical basis using the usual tools in Croatian and/or foreign language.					
Outcome 15: Participate in teamwork in solving complex road/ railroad transport tasks.					
Expected learning outcomes on a level of a course					
1. Define an information system and its features					
2. Interpret methods and stages of information systems development.					
3. Assess the benefits of using information systems in the transport system.					
4. Select and apply the available e-solution to specific problems in the transport system.					
5. Apply the selected tool to create a simple database					
Content of a course					
Notion and features of information systems in rail transport. Systematization of components of information systems in rail transport: assembly equipment and operating systems, communications equipment, CASE tools, object technology, Internet and web technology, Excel in quantitative analyses, relational data bases. Designing and development of information systems in rail transport. Stages and principles in the development of information systems. Business reengineering and management of supply chains as basic methods of development of advanced information systems in rail transport.					
Types of advanced information systems in rail transport. Information – booking systems in rail transport. Systems for observing and managing the flow of goods and vehicles in rail transport.					
Computer simulations and rail transport management.					
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	Written exam	Practical assignments	Presentation	Percentage of ECTS	Threshold	Max
Outcome 1	20			0,5	10	20
Outcome 2	10			0,5	5	10
Outcome 3		15	5	0,5	10	10
Outcome 4		15	5	0,5	10	10
Outcome 5		30		1	15	15
Total	30	60	10	3	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	Percentage of ECTS	Max
Outcome 1	10	10	0,5	20
Outcome 2	10		0,5	10
Outcome 3	10	10	0,5	10
Outcome 4	10	10	0,5	10
Outcome 5	15	15	1	15
Total	55	45	3	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. Pavlić, M.: Informacijski sustavi, Odjel za informatiku Sveučilišta u Rijeci, 2009;

Additional literature

1. Bošnjak, I.: Inteligentni transportni sustavi - ITS 1, Zagreb : Fakultet prometnih znanosti Sveučilišta, 2006.

