DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	**Information and Communication Systems in Transport**
Head of course	**Marina Rauker Koch, Lecturer**
Study programme	**Specialist professional graduate study Transport**
Status of a course	Obligatory

Year of study	1.	**Semester**	I	**ECTS credits**	6

Teaching plan (L + E + S+ Pr)	2+0+2+0

Goals of a course

Introduce students to information, communication and intelligent systems that solve traffic problems and their impact on improving various aspects of the transport system.

Conditions for enrolling course

No conditions

Learning outcomes on a level of a study programme which includes course

Outcome 7: Select information technology and software to address specific transport system problems.
Outcome 12: Manage organizational systems in road transport.
Outcome 13: Manage communication and collaboration processes in different social groups in the field of transport.

Expected learning outcomes on a level of a course

1. Determine the importance of information flows and information systems in transport.
2. Apply an information system to collect and analyse data.
3. Assess the benefits of using intelligent transportation systems at national, European and global levels
4. Recommend an available e-solution to solve specific problems in the transport system.
5. Evaluate the application of information and communication systems in a real transport system.

Content of a course

Information systems: Fundamental information systems theories, their purpose and aim. Flows of information in information transfer: Flows of information within logistic processes. Information system as a support in market research, in collecting and analyzing data regarding transport flow of people, goods and information. Development of information systems: information systems developmental stages. Designing, implementation and maintenance of information systems in transport. Data bases and data approach. Knowledge bases. Computer networks and products. Internet. E-business running. Information support: to processes and transport. Forwarding and agency business. Computer planning methods in transport. Role of information technology and communications in transport and logistic flows. Computer managed warehouse-transport centers. Basic processes in transport depending on the type of transport. Intelligent transport systems (ITS). European and global designs in ITS programming. ITS navigational devices (satellite positioning, robot devices). "Bravo" – business-information system in transport.

Teaching modes	☒ lectures ☐ auditory exercises ☒ seminars and workshops ☐ distance learning ☐ field classes	☒ individual assignments ☐ multimedia and network ☐ laboratory ☐ supervisor's work ☐ 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	Seminar/ report	Presentation	Threshold	Max
Outcome 1	20	10			15	30
Outcome 2			10	5	7,5	15
Outcome 3		10			5	10
Outcome 4			20	10	15	30
Outcome 5		10	5		7,5	15
Percentage of ECTS	1	2	2	1		
Total	20	30	35	15	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	30		30
Outcome 2		15	15
Outcome 3	10		10
Outcome 4	10	20	30
Outcome 5		15	15
Percentage of ECTS	3	3	
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. Bošnjak, I.: Inteligentni transportni sustavi - ITS 1, Zagreb : Fakultet prometnih znanosti Sveučilišta, 2006.

Additional literature

1. Pavlić, M.: Informacijski sustavi, Odjel za informatiku Sveučilišta u Rijeci, 2009;