



Šibenik University of Applied Sciences

Trg Andrije Hebranga 11, 22000 Šibenik



Erasmus + Course Catalogue

Academic year 2026/2027



Erasmus+

Šibenik, March 2026

Department of Traffic Studies

Professional undergraduate study of Traffic Direction Road Traffic

Dean: PhD Ljubo Runjić, college professor

Head of Traffic Studies Department: Darijo Šego, univ. spec. traff., senior lecturer

Šibenik, March 2026



Šibenik University of Applied Sciences



Trg Andrije Hebranga 11, 22000 Šibenik

Erasmus + programme is the EU's program which supports education, training, youth, and sport in Europe, and it includes all European and international programmes from 2014 to 2020 and 2021 to 2027. Erasmus + program offers mobility and cooperation opportunities in higher education, vocational education and training, adult and school education. Erasmus + mobility has positive effects on educational, social, personal, and professional development, because it enhances knowledge, skills, attitudes, improves employability, helps confidence-building and independence, stimulates curiosity and innovation, fosters the understanding of other people, and builds a sense of European belonging.

Šibenik University of Applied Sciences (ex. Polytechnic of Šibenik) is a higher education institution located in the city of Šibenik, and it was founded in 2006. It offers five Professional undergraduate studies of 180 ECTS credits (Tourism Management, Business Informatics, Public Administration, Nursing, and Traffic), and two Specialist graduate studies (Management and Public Administration) of 300 ECTS credits (180 + 120).

International mobility is an important segment of the development of the Šibenik University internationalization process. Different benefits of mobility such as the experience of staying in another country, networking, learning a foreign language, professional development, and acquiring other life knowledge and experiences can significantly influence the employment of students after completing their studies, but also on making important life decisions. International cooperation is also carried out among educational institutions in the form of cross-border cooperation on projects of importance to address the joint issue identified in several countries.

This Erasmus catalogue is dedicated to the courses performed at the Department of Traffic Studies, Professional undergraduate study of Traffic, Direction of Road Traffic. The programme of this study is oriented towards professional requests of engineers in traffic. The study offers technical, technological and organizational education necessary for conducting traffic processes, management of equipment and materials, practical application of modern technologies in the organization of transport with the aim of reaching optimal technical, technological and economical effects with protection of environment. The basic aim of education is to define and analyze theoretical,

technical, technological and practical solutions of contemporary transport technologies and systems, logistics of optimal solutions in traffic processes that consequently all make a base for successful realization of traffic processes.

Dear foreign students, the Department of Traffic Studies employees wish you pleasant lectures and a nice stay in the City of Šibenik while studying within the Erasmus + programme.



Course list

Course code	Course Lecturer	Course title	ECTS credits
270660	Beljo Ivana, Perišić Ana	Mathematics I	5
270667	Beljo Ivana, Perišić Ana	Mathematics II	5
214569	Beljo Ivana, Perišić Ana	Statistics in traffic	4
201138	Beljo Ivana, Perišić Ana	Operational research in traffic	4
187586	Gaćina Nikolina	Knowledge of goods	4
129833	Kardum Goleš Ivana	English language I	3
187599	Kardum Goleš Ivana	English language II	3
140775	Kardum Goleš Ivana	English language III	3
140784	Kardum Goleš Ivana	English language IV	3
201132	Olivari Luka	Graphic communication	5
284487	Olivari Luka	Theory of vehicle movement	4
201142	Poljičak Ana-Mari	Traffic in tourism	3
140777	Poljičak Ana-Mari	Freight-distributional centers and terminals	5
284501	Poljičak Ana-Mari	Transshipment resources	4
140771	Šego Darijo	Traffic corridors and merchandise flows	4
270665	Šego Darijo	Modern traffic systems	5
140773	Šego Darijo	Traffic logistics	4

Course Curricula

PK-SP-2. Description of a new course an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	MATHEMATICS I	1.8. ISVU course code	270660 / 270661
1.2. Course lecturer	Ivana Beljo, Ana Perišić	1.9. MOZVAG course code	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1st, 2nd, 3rd level), percentage of on line course performance (max. 20%)	1 st level – materials available on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	1
1.6. Study year	1 st	1.13. Modernization	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
1.7. Credit score (ECTS)	5	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The objective of the course is for students acquire knowledge and skills in analytical thinking, as well as logical reasoning and interpreting results for further education. The goal of the course is for students to be equipped, based on theoretical knowledge and case studies, to understand, comprehend, recognize, and apply various quantitative methods for solving specific problems and methods for optimizing such problems..
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.
	LO9: Solve problems in the field of road transport using analytical methods.

2.4. Expected learning outcomes on the course level	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)					Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1.	To perform basic operations on sets and functions.				3, 4
	2.	To conduct basic analysis of functions of one variable.				4, 5
	3.	To calculate the limes of the given function.				4
	4.	To derive the functions of one variable.				4, 5
	5.	To apply functional analysis methods in transport problems solving.				4, 5
2.5. Course content according to detailed curriculum schedule	Constructive allignement					
	no.	Thematic ensemble / Lecture Topic	LO of the course	Content / Teaching Method	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Attending lectures. Familiarize with course content, e-learning documents, literature and students' obligations.	-	2 h
	2.	Sets. Sets of numbers.	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to enumerate and distinguish basic concepts related to assemblies and perform basic operations on sets.	4 h
3.	Functions – basic terms, Elementary functions.	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define and distinguish elementary functions, solve the composition of functions and determine the inversion of functions.	4 h	

	4.	Composition of the functions. Inverse function.	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define and distinguish elementary functions, solve the composition of functions and determine the inversion of functions.	4 h
	5.	Evenness and oddness of a function. Periodicity of a function. Domain of a function. Graph of a function	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define and distinguish elementary functions, solve the composition of functions and determine the inversion of functions.	4 h
	6.	Growth/decline of a function. Concavity/convexity of a function	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define and distinguish elementary functions, solve the composition of functions and determine the inversion of functions.	4 h
	7.	Limit of the function. Continuity of functions.	2, 3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to calculate limits.	4 h
	8.	Revision for colloquium. Colloquium. Derivatives.	1, 2, 3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve derivatives.	4 h
	9.	Derivative of a function, interpretation. Differentiation of elementary functions.	4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve derivatives.	4 h
	10.	Derivative of composition	4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve derivatives.	4 h
	11.	Monotonicity and extrema of a function.	2, 4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to examine the basic properties of a function, to analyze the solutions obtained and to draw a graph of the function based on them, and to comment on the obtained solutions.	4 h

	12.	L'Hospital. Asymptotes of the function.	2, 4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to examine the basic properties of a function, to analyze the solutions obtained and to draw a graph of the function based on them, and to comment on the obtained solutions.	4 h
	13.	Basic analysis of functions of one variable. Convexity and concavity of a function.	2, 4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to examine the basic properties of a function, to analyze the solutions obtained and to draw a graph of the function based on them, and to comment on the obtained solutions.	4 h
	14.	Applications of Derivatives.	4, 5	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to examine the basic properties of a function, to analyze the solutions obtained and to draw a graph of the function based on them, and to comment on the obtained solutions.	4 h
	15.	Final conclusions. Exam preparation.	1, 2, 3, 4, 5	Attending lectures. Actively involving students through problem solving and discussion. Group problem solving and discussion. Exam preparation.	-	4 h

3. EVALUATION OF STUDENTS' WORK

3.1. Students' obligations	<p>Student obligations are prescribed by the Study Regulations. It is recommended that students actively participate in classes, which includes engaging in discussions, solving tasks, etc. Students who are unable to attend classes regularly should consult with the professor during consultation hours or via email (ivana.beljo@vus.hr , ana.sisak@vus.hr). It is the responsibility of each student to stay informed about the conduct of classes. All announcements regarding the conduct or possible postponement of classes will be posted on the website of the Polytechnic of Šibenik or the course webpage, where all information about the course, as well as teaching materials and a list of literature, can also be found. Students can pass the final exam in the course in two ways: a) During the course through continuous student assessment (active participation in classes and two colloquiums). Students who do not meet some of the learning outcomes are required to take the oral part of the exam. b) During the course (active participation in classes) and by taking the exam (written and oral parts).</p>
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3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,5	Written exam	3 (without colloquium)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous examination	0,5
	Colloquium	3,5 (without written and oral exam)	Seminar paper		Other	
	Class activity	0,5	Oral exam	0,5 (without colloquium)	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	Obligation			Hours (estimate)		
	1. Attending classes and exercises			60		
2. Preparation for the Colloquium / exam through self-study			90			
4. GRADING SYSTEM						
4.1. Grading seminar papers						
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average	
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.	
4.3. Final grade according to evaluation elements	Activities in class	Preparation for teaching units; Understanding previous content; Participation in solving tasks together: 0 – 20 points				
	Seminar papers	-				
	Colloquium/written exam	Preparation/learning; Scoring and grading according to correct answers in the test: 0 – 80 points (min 40 points)				
	Oral exam	Preparation/learning; additional verification of unachieved learning outcomes				

4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)	Numerical grade	ECTS grade
	90 – 100%	5 (excellent)	A
	80 – 89,9%	4 (very good)	B
	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (satisfactory)	D

5. ADDITIONAL INFORMATION ABOUT THE COURSE

5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
	Pašagić, H., Ivanković, B., Kapetanović, N.: Mathematical methods in Traffic, Zagreb, 2004.	3	
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Neralić, L.: Introduction in mathematics programming 1, Zagreb, 2012. Hillier F., Lieberman G.: Introduction to operations Research, McGraw Hill 8th ed. 2005, 8th Ed.		
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.		
5.4. Informing about the course and contacting the teacher	It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @ vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).		

PK-SP-2. Description of a new course an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	MATHEMATICS II	1.8. ISVU course code	270667 / 270668
1.2. Course lecturer	Ivana Beljo, Ana Perišić	1.9. MOZVAG course code	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1st, 2nd, 3rd level), percentage of on line course performance (max. 20%)	1 st level – materials available on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	1
1.6. Study year	1 st	1.13. Modernization	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
1.7. Credit score (ECTS)	5	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	Introducing students to the fundamental concepts of linear algebra and functions of single variable, which they can apply in different courses. Adopting analytical skills, logical and critical thinking skills.
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.
	LO9: Solve problems in the field of road transport using analytical methods.

2.4. Expected learning outcomes on the course level	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)					Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1. To solve integrals by applying the appropriate integration techniques.					4, 5
	2. To carry out fundamental operations on matrices and vectors.					4
	3. To propose a method and solve systems of linear equations.					5, 4
	4. To apply linear algebra and functional analysis methods in transport problems solving.					4, 5
2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	no.	Thematic ensemble / Lecture Topic	LO of the course	Content / Teaching Method	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Attending lectures. Familiarize with course content, e-learning documents, literature and students' obligations.	-	2 h
	2.	Integrals	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve an integral.	4 h
	3.	Indefinite Integrals. Definite Integrals.	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve an indefinite and definite integral.	4 h
4.	Substitution Rule and Integration By Parts	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve an indefinite integral using the method of substitution and partial integration.	4 h	

	5.	Applications of Integration.	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to analyze and sketch a graph of functions, and solve a definite integral.	4 h
	6.	Applications of Integration. Revision for colloquium. Colloquium.	1	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to analyze and sketch a graph of functions, and solve a definite integral.	4 h
	7.	Matrices.	3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define matrices, perform basic computational operations with matrices.	4 h
	8.	Determinants.	3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to calculate the determinants.	4 h
	9.	The inverse matrix.	3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to calculate the inverse of a matrix	4 h
	10.	Systems of linear equations.	4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to recommend a method for solving a system of linear equations and solve a system and apply it to problems.	4 h
	11.	Vectors.	3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define vectors, perform basic computational operations with vectors.	4 h
	12.	Scalar and vector product.	3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define vectors, perform basic computational operations with vectors.	4 h

	13.	Vector and mixed vector product.	3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define vectors, perform basic computational operations with vectors.	4 h
	14.	Applications of linear algebra.	4	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to recommend a method for solving a system of linear equations and solve a system and apply it to problems.	4 h
	15.	Final conclusions. Exam preparation.	1, 2, 3, 4	Attending lectures. Actively involving students through problem solving and discussion. Group problem solving and discussion. Exam preparation.	-	4 h

3. EVALUATION OF STUDENTS' WORK

3.1. Students' obligations	Student obligations are prescribed by the Study Regulations. It is recommended that students actively participate in classes, which includes engaging in discussions, solving tasks, etc. Students who are unable to attend classes regularly should consult with the professor during consultation hours or via email (ivana.beljo@vus.hr , ana.sisak@vus.hr). It is the responsibility of each student to stay informed about the conduct of classes. All announcements regarding the conduct or possible postponement of classes will be posted on the website of the Polytechnic of Šibenik or the course webpage, where all information about the course, as well as teaching materials and a list of literature, can also be found. Students can pass the final exam in the course in two ways: a) During the course through continuous student assessment (active participation in classes and two colloquiums). Students who do not meet some of the learning outcomes are required to take the oral part of the exam. b) During the course (active participation in classes) and by taking the exam (written and oral parts).					
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,5	Written exam	3 (without colloquium)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous examination	0,5
	Colloquium	3,5 (without written and oral exam)	Seminar paper		Other	

	Class activity	0,5	Oral exam	0,5 (without colloquium)	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	<i>Obligation</i>			<i>Hours (estimate)</i>		
	1. Attending classes and exercises			60		
2. Preparation for the Colloquium / exam through self-study			90			
4. GRADING SYSTEM						
4.1. Grading seminar papers						
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average	
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.	
4.3. Final grade according to evaluation elements	Activities in class	Preparation for teaching units; Understanding previous content; Participation in solving tasks together: 0 – 20 points				
	Seminar papers	-				
	Colloquium/written exam	Preparation/learning; Scoring and grading according to correct answers in the test: 0 – 80 points (min 40 points)				
	Oral exam	Preparation/learning; additional verification of unachieved learning outcomes				
4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	
	65 – 79,9%		3 (good)		C	
	50 – 64,9%		2 (satisfactory)		D	

5. ADDITIONAL INFORMATION ABOUT THE COURSE

5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
5.2. Additional literature (at the moment of changes and/or amended of study programme)	<p>Marušić S.: Mathematics and textbook with resolved examples, Zagreb, 2007. Beljo I., Olivari L.: Mathematics, Šibenik University of Applied Sciences, 2024.</p> <p>Teaching materials from lectures and exercises Bradić, T., Rojki, R., Pečarić, J., Strunje, M.: Mathematics for Faculty of Technology, Multigraph - Zagreb 1994.</p>	5	On-line
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	<p>The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students' progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>		
5.4. Informing about the course and contacting the teacher	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	STATISTICS IN TRAFFIC	1.8. Course code in ISVU	214569 / 214570
1.2. Course lecturer	Ivana Beljo, Ana Perišić	1.9. Course code in MOZVAG	
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	4
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The goal is to provide students with theoretical knowledge and practical skills needed for performing statistical analysis and interpretation of the results.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.		
2.3. Learning outcomes on the study programme level	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.		
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.		
	LO7: Apply computer tools for analyzing and comparing data.		
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.		
	LO9: Solve problems in the field of road transport using analytical methods.		

2.4. Expected learning outcomes on the course level	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)					Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1. Choose appropriate descriptive statistics methods, apply them and draw conclusions about observed phenomena					5, 3
	2. Present statistical data in tables and graphs and comment on the displays					3, 4
	3. To calculate and interpret values for the measures of central tendency and dispersion parameters.					3, 4
	4. To conduct correlation and regression analysis and derive conclusions on variable relationship					3, 4, 5
	5. To solve basic problems in the field of combinatorics and probability theory					4
	6. To select and apply probability models for different stochastic phenomena.					5, 3
2.5. Course content according to detailed curriculum schedule	Constructive allignment					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Attending lectures. Familiarize with course content, e-learning documents, literature and students' obligations and.	-	2 h
2.	Descriptive statistics.	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	Students will define fundamental concepts of descriptive statistics and interpret indicator values from the field of descriptive statistics; will calculate and interpret values for the measures of central tendency and dispersion parameters through colloquia or written/oral exams. Students will apply methods of descriptive statistics in transport problems solving.	4 h	

	3.	Measures of central tendency	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	Students will define fundamental concepts of descriptive statistics and interpret indicator values from the field of descriptive statistics; will calculate and interpret values for the measures of central tendency through colloquia or written/oral exams. Students will apply descriptive statistic methods for solving transport problems.	4 h
	4.	Positional measures of central tendency	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	Students will define fundamental concepts of descriptive statistics and interpret indicator values from the field of descriptive statistics; will calculate and interpret values for the measures of central tendency through colloquia or written/oral exams. Students will apply descriptive statistic methods for solving transport problems.	4 h
	5.	Measures of dispersion	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	Students will define fundamental concepts of descriptive statistics and interpret indicator values from the field of descriptive statistics; will calculate and interpret values for the measures of central tendency and dispersion parameters through colloquia or written/oral exams. Students will apply descriptive statistic methods for solving transport problems.	4 h
	6.	Correlation and regression.	5	Attending lectures. Actively involving students through problem solving and discussion.	Students will conduct correlation and regression analysis and derive conclusions on variable relationship through colloquia or written/oral exams. Students will apply statistical methods for solving transport problems	4 h

	7.	Partial exam preparation. Introduction to combinatorics	1, 2, 5, 3	Group problem solving and discussion. Exam preparation. Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of combinatorics through colloquia or written/oral exams. Students will apply probability theory in transport problems solving.	4 h
	8.	Introduction to combinatorics	3	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of combinatorics through colloquia or written/oral exams. Students will apply probability theory in transport problems solving.	4 h
	9.	Permutations, Variations, Combinations	3	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of combinatorics through colloquia or written/oral exams.	4 h
	10.	Introduction to probability theory.	3	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of probability theory through colloquia or written/oral exams. Students will apply probability theory in transport problems solving.	4 h
	11.	Introduction to probability theory. A priori probability, a posteriori probability, geometric probability	3	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of probability theory through colloquia or written/oral exams. Students will apply probability theory in transport problems solving.	4 h
	12.	Random variable, distributions, expectation, variance.	3, 4	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of probability theory through colloquia or written/oral exams. Students will select and apply probability models for different	4 h

					stochastic phenomena. Students will apply probability theory in transport problems solving.	
	13.	Discrete random variable, binomial distribution, Poisson distribution.	3, 4	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of probability theory through colloquia or written/oral exams. Students will select and apply probability models for different stochastic phenomena.	4 h
	14.	Continuous random variables. Normal distribution.	3, 4	Attending lectures. Actively involving students through problem solving and discussion.	Students will define basic concepts and solve basic problems from the field of probability theory through colloquia or written/oral exams. Students will select and apply probability models for different stochastic phenomena. Students will apply probability theory in transport problems solving.	4 h
	15.	Final conclusions. Exam preparation	-	Group problem solving and discussion. Exam preparation.	-	4 h

3. EVALUATION OF STUDENTS' WORK

3.1. Students' obligations	Student obligations are prescribed by the Study Regulations. It is recommended that students actively participate in classes, which includes engaging in discussions, solving tasks, etc. Students who are unable to attend classes regularly should consult with the professor during consultation hours or via email (ivana.beljo@vus.hr , ana.sisak@vus.hr). It is the responsibility of each student to stay informed about the conduct of classes. All announcements regarding the conduct or possible postponement of classes will be posted on the website of the Polytechnic of Šibenik or the course webpage, where all information about the course, as well as teaching materials and a list of literature, can also be found. Students can pass the final exam in the course in two ways: a) During the course through continuous student assessment (active participation in classes and two colloquiums). Students who do not meet some of the learning outcomes are required to take the oral part of the exam. b) During the course (active participation in classes) and by taking the exam (written and oral parts).					
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total	Attendance	0.5	Written exam	2 (without colloquia)	Project	
	Experimental work		Research		Practical work	

number of ECTS points corresponds to the credit score of the course)	Essay		Report		Continuous examination	0.5
	Colloquium	2,5 (without written exam)	Seminar paper		Other	
	Class activity	0.5	Oral exam	0.5(without colloquia)	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	Commitment			Hours (estimate)		
	1. Attending classes and exercises 60 hours			60		
2. Preparation for the Colloquium / exam through individual work			60			
4. GRADING SYSTEM						
4.1. Grading seminar papers						
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average	
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.	
4.3. Final grade according to evaluation elements	Activities in class	Preparation for teaching units; Understanding previous content; Participation in solving tasks together 0 – 20 points				
	Seminar papers	-				
	Colloquium/written exam	Preparation/learning; Scoring and grading according to correct answers in the test. 0 – 80 points (min 40 points)				
	Oral exam	Preparation/learning; additional verification of unachieved learning outcomes				
4.4. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	

	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (satisfactory)	D

5. ADDITIONAL INFORMATION ABOUT THE COURSE

5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Kovač Striko E., Fratović T., Ivanković B., Probability and statistics, Books of University of Zagreb, Zagreb 2008. Šošić I., Serdar V.: Introduction to statistics, School book, Zagreb, 2002. Šošić I.: Applied statistics, School book, Zagreb, 2004. Azcel A. Sounderpandian J.: Complete Business Statistics, McGraw Hill, 2009. Zenzerović Z.: Statistical manual, Faculty of Maritime Studies, University of Rijeka, Rijeka, 2004. Čižmešija M., Kurnoga Živadinović N.: A collection of solved tasks based on statistics, Mirorad d.o.o., Zagreb, 2006. Patrick R. McMullen: Business statistics for professional studies [translated by Devčić, K., Perišić, A.], Polytechnic of Šibenik, 2017. Teaching materials on e-learning	1 12 1 - 5 2 -	No
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students' progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.		
5.4. Informing about the course and contacting the teacher	It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).		

PK-SP-2. Description of a new course an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	OPERATIONAL RESEARCH IN TRAFFIC	1.8. ISVU course code	201138 / 202091
1.2. Course lecturer	Ivana Beljo, Ana Perišić	1.9. MOZVAG course code	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 15 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1st, 2nd, 3rd level), percentage of on line course performance (max. 20%)	1 st level – materials available on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	1
1.6. Study year	2 nd	1.13. Modernization	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
1.7. Credit score (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The objective of the course is for students acquire knowledge and skills in analytical thinking, as well as logical reasoning and interpreting results for further education. The goal of the course is for students to be equipped, based on theoretical knowledge and case studies, to understand, comprehend, recognize, and apply various quantitative methods for solving specific problems and methods for optimizing such problems..
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.
	LO7: Apply computer tools for analysing and comparing data.
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.
	LO9: Solve problems in the field of road transport using analytical methods.

2.4. Expected learning outcomes on the course level	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)					Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1. Formulate a mathematical model for linear optimization problems.					6
	2. Solve optimization problem with graphical method.					4
	3. Apply computer tools in solving linear programming problems and recommend and valorize the solution through postoptimality analysis.					3, 5
	4. Choose the appropriate algorithm and solve the problem on network.					3, 4
	5. Design a model for project management and recommend optimal savings by cutting the duration of activities.					6, 5
2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	no.	Thematic ensemble / Lecture Topic	LO of the course	Content / Teaching Method	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Attending lectures. Familiarize with course content, e-learning documents, literature and students' obligations.	-	2 h
	2.	Formulate a mathematical model	1	Attending lectures. Actively involving students through problem solving and discussion.	Students will formulate a mathematical model.	3 h
	3.	Linear programming	1	Attending lectures. Actively involving students through problem solving and discussion.	Students will formulate a mathematical model.	3 h
4.	Linear Programming Problems. Graphical solution	1, 2	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to model a linear programming problem and sketch a	3 h	

					graph and solve an optimization problem.	
	5.	Solving linear programming problems: The Simplex method. The Excel Solver	1, 3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to model the linear programming problem and solve the problem with the simplex method and using the Solver and recommend the optimal solution.	3 h
	6.	Postoptimality analysis	1, 2, 3	Attending lectures. Actively involving students through problem solving and discussion.	Students will formulate a mathematical model and apply computer tools in solving linear programming problems and recommend and valorize the solution through postoptimality analysis.	3 h
	7.	The Transportation problem.	1, 3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to define and describe the transport problem, distinguish between open and closed transport problem., and set the model.	3 h
	8.	Northwest corner rule, Minimum prices method, Vogel's approximation method, Russel's approximation method	1, 3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve the transportation problem using the northwest corner rule, minimum prices method, and Vogel's and Russel's approximation methods.	3 h
	9.	The Assignment Problem	1, 3	Attending lectures. Actively involving students through problem solving and discussion.	In colloquium or written and oral exams students know how to solve the transport problem and the assignment problem.	3 h
	10.	An Overview of Various Applications of Linear Programming Methods in Practical Examples. Exam preparation	1, 2, 3	Attending lectures. Actively involving students through problem solving and discussion.	Students will formulate a mathematical model, apply computer tools in solving linear programming problems and recommend and valorize the solution through postoptimality analysis.	3 h

	11.	Network Optimization Models. The shortest-path problem. The minimum spanning tree problem.	4	Attending lectures. Actively involving students through problem solving and discussion.	Students will choose the appropriate algorithm and solve the problem on network.	3 h
	12.	The maximum flow problem. The minimum cost flow problem.	4	Attending lectures. Actively involving students through problem solving and discussion.	Students will choose the appropriate algorithm and solve the problem on network.	3 h
	13.	Project Management with PERT/CPM	5	Attending lectures. Actively involving students through problem solving and discussion.	Students will design a model for project management and recommend optimal savings by cutting the duration of activities.	3 h
	14.	Dynamic Programming	5	Attending lectures. Actively involving students through problem solving and discussion.	Students will propose optimal business decisions using dynamic programming methods.	3 h
	15.	Final conclusions. Exam preparation.	1, 2, 3, 4, 5	Attending lectures. Actively involving students through problem solving and discussion. Group problem solving and discussion. Exam preparation.	-	3 h

3. EVALUATION OF STUDENTS' WORK

3.1. Students' obligations

Student obligations are prescribed by the Study Regulations. It is recommended that students actively participate in classes, which includes engaging in discussions, solving tasks, etc. Students who are unable to attend classes regularly should consult with the professor during consultation hours or via email (ivana.beljo@vus.hr, ana.sisak@vus.hr). It is the responsibility of each student to stay informed about the conduct of classes. All announcements regarding the conduct or possible postponement of classes will be posted on the website of the Šibenik University of Applied Sciences or the course webpage, where all information about the course, as well as teaching materials and a list of literature, can also be found. Students can pass the final exam in the course in two ways: a) during the course through continuous student assessment (active participation in classes and two colloquiums). Students who do not meet some of the learning outcomes are required to take the oral part of the exam. b) during the course (active participation in classes) and by taking the exam (written and oral exam).

3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points

Attendance	0,5	Written exam	2 (without colloquium)	Project	
Experimental work		Research		Practical work	

corresponds to the credit score of the course)	Essay		Report		Continuous examination	0,5
	Colloquium	2,5 (without written and oral exam)	Seminar paper		Other	
	Class activity	0,5	Oral exam	0,5 (without colloquium)	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	Obligation			Hours (estimate)		
	1. Attending classes and exercises			45		
2. Preparation for the Colloquium / exam through self-study			65			
4. GRADING SYSTEM						
4.1. Grading seminar papers						
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average	
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.	
4.3. Final grade according to evaluation elements	Activities in class	Preparation for teaching units; Understanding previous content; Participation in solving tasks together: 0 – 20 points				
	Seminar papers	-				
	Colloquium/written exam	Preparation/learning; Scoring and grading according to correct answers in the test: 0 – 80 points (min 40 points)				
	Oral exam	Preparation/learning; additional verification of unachieved learning outcomes				
4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	

	80 – 89,9%	4 (very good)	B
	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (satisfactory)	D

5. ADDITIONAL INFORMATION ABOUT THE COURSE

5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Pašagić, H., Ivanković, B., Kapetanović, N.: Mathematical methods in traffic, Zagreb, 2004. Neralić, L.: Introduction to Mathematical Programming 1, Zagreb, 2012. Hillier F., Lieberman G.: Introduction to operations Research, McGraw Hill 8th ed. 2005, 8th Ed.	3	
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.		
5.4. Informing about the course and contacting the teacher	It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @ vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).		

PK-SP-2. Description of a new course an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	KNOWLEDGE OF GOODS	1.8. ISVU course code	187586 / 202074
1.2. Course lecturer	Nikolina Gaćina	1.9. MOZVAG course code	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 0 + 15 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st – materials available On-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	2.
1.6. Study year	1 st	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The goal is to provide students with theoretical knowledge and case studies: Defining the basic concepts of the science of knowledge of goods, Understanding the specificity of particular types of goods, their identification, conditions of packaging, transport and storage, and environmental friendliness; Understanding the need and importance of standardization and product quality, Understanding the importance and types of strategic goods, Apply the learned content of this course in business practice.
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.
	LO3: Independently and responsibly analyze the relevant literature necessary for decision-making.
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.

	LO13: Monitor trends in the development of technology, techniques, and road transport safety.	
2.4. Expected learning outcomes on the course level	<p>Learning outcomes towards Bloom's taxonomy: (up to two verbs per LO)</p>	<p>LO Level: 1- Recapture, 2- Understanding, 3- Application, 4- Analysis, 5- Evaluation, 6- Synthesis</p>
	1. Demonstrate knowledge and understanding of the content of the course by defining and describing the basic concepts of the science of knowledge of goods.	3
	2. Categorize and compare the basic concepts of the science of knowledge of goods.	4, 5
	3. Compare and distinguish product types, their identification, labeling, and transportation and storage conditions.	4, 5
	4. Categorize and compare types of packaging material.	4, 5
	5. Analyze and evaluate the specific characteristics and reasons for the application of particular packaging materials for different products.	5, 6
	6. Distinguish and compare different processes of food preservation in relation to the longevity and preservation of the nutritional value of the product.	5, 6
	7. Analyze and anticipate the importance of food and non-food commodities of today and today.	4, 5
	8. Present the acquired knowledge, ideas, problems and solutions independently and in a team.	6

2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	No.	Thematic ensemble / Lecture Topic	LO of the course	Content / Teaching Method	Evaluation	Time needed
	1.	Introduction to the course and detailed curriculum. Introduction to writing a seminar paper.	-	Listen to the lecture.	-	2 h
		The basics of the science of knowing goods. Defining basic concepts.	1, 2	They listen to a lecture and read literature.	At the colloquium or the written and oral exam: define, describe, categorize and compare the basic concepts of the science of knowledge of goods.	4 h

	2.	Product identification. GS1.	1, 2, 3, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature.	At the colloquium or the written and oral exam they know: explain the reasons for the product identification, define GS1, enumerate the types of identification numbers and analyze their specific application.	10 h
	3.	Norms and norms. The basics of quality management.	1, 2, 3, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature.	At the colloquium or the written and oral exam they know: define norms and standardization, describe and analyze the meaning of standardization, classify norms, define basic concepts of quality.	6 h
	4.	ISO. ISO standards.	1, 2, 3, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature.	At the colloquium or the written and oral exam they know: define and explain the meaning and importance of ISO, enumerate and describe ISO standards and their form.	6 h
	5.	Packaging. Types of packaging material.	1, 2, 3, 4, 5, 6, 8	They listen to a lecture, watch multimedia, present a seminar paper, followed by a discussion, and read literature. They watch multimedia.	At the colloquium or the written and oral exam they know: define the packaging and explain the importance of packaging the product, list and describe the advantages and disadvantages of individual packaging materials, choose the appropriate packaging material for the specific product and explain their choice. List and analyze the primary functions of packaging material.	10 h
	6.	Packaging features. Product Graphic Labeling.	1, 2, 3, 4, 5, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: define and classify the functions of packaging, evaluate the choice of packaging material with regard to its function, define, describe and analyze the graphic marking of products.	8 h
	7.	Specific features of product storage and transportation.	1, 2, 3, 4, 5, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define and describe the types of warehouses, storage and transport conditions,	6 h

					and evaluate the appropriate type of storage and transport depending on the type of product.	
	8.	Perishable products. Declaring food.	1, 2, 3, 4, 5, 6, 7, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define and describe the types of perishable products, their specificities and conditions of storage and transport, to analyze the basic declaration of food.	6 h
	9.	Physical methods of food preservation.	1, 2, 3, 4, 5, 6, 7, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define and describe the types of physical methods of preservation, to analyze the applicability depending on the type of food products in terms of better preservation of nutritional value and longer shelf life, to analyze the advantages and disadvantages of individual physical methods. And evaluate combining different canning methods.	10 h
	10.	Food preservation with natural and chemical preservatives. Combining canning types.	1, 2, 3, 4, 5, 6, 7, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: define and describe natural and chemical preservatives, analyze applicability depending on the type of food products in terms of better preservation of nutritional value and longer shelf life, analyze the advantages and disadvantages of individual methods and evaluate the combination of different preservation methods.	6 h
	11.	Polymeric materials.	1, 2, 3, 4, 5, 6, 7	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define, describe and classify polymeric materials, describe their advantages and disadvantages and storage conditions.	10 h
	12.	Hazardous Substances.	1, 2, 3, 4, 5, 6, 7, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define and classify the types of	6 h

					dangerous substances, to analyze the possible danger of the same.	
	13.	Transport and disposal of hazardous substances.	1, 2, 3, 4, 5, 6, 7, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define and classify the labeling of hazardous substances during transport, to evaluate the disposal and labeling of hazardous waste.	6 h
	14.	Strategic Goods. 2. Colloquium.	1, 2, 3, 5, 6, 7, 8	They listen to a lecture, present a seminar paper, followed by a discussion, and read literature	At the colloquium or the written and oral exam they know: to define and categorize strategic goods, to explain their importance.	4 h
	15.	Concluding Considerations / Repetition and Exam Preparation.	-	They listen to a lecture and prepare individually for the exam.	-	20 h

3. EVALUATION OF STUDENT WORK

3.1. Students` obligations	In accordance with the Book of Rules and the Rulebook on Student Assessment and Evaluation: for all regular students attend at least 70% attendance. Part-time students have the obligation to attend at least 50% of lectures. All students must create, present and positively colloquy seminar paper. Students who have during the course achieved: from 0 – 24,9% ECTS is rated unsuccessful and cannot get ECTS credits and must re-enrol the subject in the next academic year; from 25 – 49,9% ECTS is rated inadequate and has to come out and pass the test (exam). A written exam can be held in a regular or extraordinary exam period; more than 50% ECTS credits - students have the right to access the final exam of the subject. Students can pass the final exam in two ways: a) during the course through continuous student attendance (active participation in the lessons, solving case studies, making and presenting the seminar paper and project, passing two colloquia); b) during the course (active participation in the lessons, solving case studies, creating and presenting the seminar paper and project) and passing the exam (written and oral exam).					
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,25	Written exam	2 (without colloquiums)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous examination	
	Colloquium	3 (without the written and oral exams)	Seminar paper	0,75	Other (inscribe)	
	Class activities		Oral exam	1 (without colloquiums)	Other (inscribe)	

3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:			
	Commitment		Hours (estimate)	
	1. Attending classes		45	
	2. Creating and Presenting seminar paper		10	
3. Preparation for the Colloquium / exam through self-study		65		
4. GRADING SYSTEM				
4.1. Seminar paper grading	Valuation Element	Poor	Satisfying	Above average
	Organization	The paper is not organized in a logical order and its structure is lacking.	The paper is well structured with a clear distinction between the introduction, the main part of the text and the conclusion.	The paper is well-structured with a clear distinction between the introduction, the main part of the text and the conclusions that are perfectly logically linked to one another.
	Terminology, writing style	Words and phrases are low harmonized with official terminology. Writing style is not appropriate, sentences are too long, modest vocabulary, and frequent and repeated grammatical mistakes.	Words and phrases are aligned with official terminology. The writing style is appropriate, the sentence structure is clear, the vocabulary is appropriate and has little grammatical errors.	Words and phrases are aligned with official terminology and show an understanding of their meaning. The writing style is excellent, the sentences are clear and concise, the vocabulary is rich and there are no grammatical errors.
	Quoting and referencing	Sources are not specified at all. The references do not match the topic and show a superficial approach to the research topic.	Sources are listed, but incomplete and with errors. The references are appropriate for the subject and show a satisfactory research attitude.	Sources are accurate, complete and consistent. The references are appropriate, their list is "rich" and comprehensive and shows a robust research approach.
4.2. Colloquium / exam grading	Poor	Satisfying	Above average	
	Give answer by memory, no deeper understanding. Does not know and does not apply the basic terms and concepts. Cannot apply or explain the contents of the course.	Reproduces basic terms, without difficulty transfers new knowledge, understands subject matter, explains the terms and the notions that substantiate by examples.	Knowledge is at the level of analysis, synthesis and evaluation. It observes legitimacy, accurately and thoroughly explains the content of the subject, and logically links and explains the terms and concepts that it encapsulates. Find solutions that are not originally given. There is a correlation with correlative subjects.	

4.3. Creating a final grade according to evaluation elements	Active participation in the lessons	70 of attendance	71-80% of attendance	81-90% of attendance	91-100%
		2 points	3 points	4 points	5 points
	Research paper	2	3	4	5
		8 points	10 points	12 points	15 points
	Colloquium / written exam	2	3	4	5
		50-64,9%	65-79,9%	80-89,9%	90-100%
		25 points	35 points	40 points	50 points
	Oral exam	2	3	5	5
15 points		20 points	25 points	30 points	
4.4. Creating a final grade according to absolute allocation	Percentage of adopted knowledge, skills and competences (teaching + final exam)		Numerous grade	ECTS grade	
	90 – 100%		5 (excellent)	A	
	80 – 89,9%		4 (very good)	B	
	65 – 79,9%		3 (good)	C	
	50 – 64,9%		2 (sufficient)	D	
5. ADDITIONAL INFORMATION ABOUT THE COURSE					
5.1. Compulsory literature (available in the library and through other media)	Title			Number of copies in the library	Availability via other media
	Gacina, N. (2012). Knowledge of goods. Internal script of the Polytechnic of Šibenik, Šibenik. Lazibat, T. (2004). Knowledge of goods and quality management. Synergy Publishing, Zagreb. (Chapters selected)			4	e-learning
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Andrijanić, I., Balen, M., Lazibat, T. (2001). Knowledge of merchandise in commerce. Mikrorad, Zagreb. (Chapters selected)			4	
	Štrumberger, N. (2000). Handling of materials in traffic. Faculty of transport and traffic sciences, University of Zagreb, Zagreb. (Chapters selected)			4	

<p>5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences</p>	<p>The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>
<p>5.4. information on the course and contact with the teacher</p>	<p>It is obligatory for every student to regularly inform about the course, teaching and teaching activities. All information about teaching or any delay in teaching will be published on the e-learning pages of the course and on the web pages of the Šibenik University. Students can contact the teachers during the consultation term (at least one hour per week), while brief questions and explanations can be addressed during classes. It is possible to ask questions by e-mail (from the official e-mail address from the domain @ vus.hr) that will be answered in a short time (no later than five working days from the receipt of e-mail).</p>

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	ENGLISH LANGUAGE I	1.8. Course code in ISVU	129833 / 202067
1.2. Course lecturer	Ivana Kardum Goleš	1.9. Course code in MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 15 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	1
1.6. Year of study	1 st	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	3	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The objective of the course is to master the basic vocabulary related to road and postal traffic as well as the predicted grammatical structures that include verb tenses, articles, personal pronouns and possessive pronouns, both in written and oral expression. The goal is also to expand the vocabulary related to the traffic, while grammar and newly acquired vocabulary are established and practiced in the exercises. Another goal of the course is to familiarize students with the basic parts of business writing. Foreign language teaching seeks to introduce students to new communication systems and facilitate their easier and more direct involvement in world events and to familiarize them with the elements of culture and civilization of English-speaking peoples. Learning a foreign language is in line with the desire to preserve the richness of diversity in a multilingual Europe, as well as to foster a culture of dialogue and civilization.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.		
	LO3: Independently and responsibly analyse the relevant literature necessary for decision-making.		

	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)					Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1. to apply and link basic terms from the professional terminology of English road traffic and use them in written and oral communication.					3
	2. to apply grammatical structures in texts and assignments and real-life context					3
	3. to develop a shorter essay within the topics of the course.					3
	4. to communicate in a foreign language within the subjects of the course, to express one`s own opinions.					6
	5. to compare and evaluate different traffic solutions.					5
	6. to use part of the general language competency at levels B1					6
2.5. Course content according to detailed curriculum schedule	Constructive allignement					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Listen to lectures. Work independently on computer, get to know course content and elearning documents.	-	2 h
2.	Trouble With The Car, Nouns and plurals	1, 2	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, understand, apply and link terms from the professional terminology of English road traffic and use them in written and oral communication verb tenses are interpreted in a real linguistic context, use part of other language competences at B1 level.	4 h	

	3.	Helen Catches The Train – Izražavanje Sadašnjosti (Present Simple And Continuous)	1, 2, 3	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	4.	In The Train – Trouble With The Car (Present Simple And Continuous).	1, 2, 3	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	5.	At The Airport And Air Pollution Problem (Present Tenses)	1, 2, 3, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of	4 h

					other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	6.	Keeping Drunken Drivers Off The Road – Past And Perfect Tenses	1, 2, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	7.	Types Of Drivers – Verb Tenses	1, 2, 3, 5, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	8.	Moving About Towns – Verb Tenses I colloquium	1, 2, 3, 5, 6	Listen to lectures and take part in discussion. Write the colloquium.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to	10 h

					the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	9.	Fitness To Drive – Relative Pronouns And Possessives	1, 2, 3, 5, 6	Listen to lectures and read literature. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	10.	Travelling By Tube – Personal And Reflexive Pronouns	1, 2, 3, 5, 6	Listen to lectures and read literature. Solve exercises. Discuss.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	11.	The Engine Of A Car – Future Tenses – Will And Going To And Present Continuous	1, 2, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real	10 h

					linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	12.	About Cars In General – Future Perfect	1, 2, 3, 4, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h
	13.	A City At Sea - Living Under Cover – Future Tenses	1, 2, 3	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h

	14.	„Jam Yesterday - Jam Tomorrow“; Passenger Transportation – Tenses Revision, Only Stricker Traffic Rules Can Prevent Accidents – Articles	1, 2, 3, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	15.	Revision – II colloquium	1, 2, 3, 4, 5, 6	Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h

3. EVALUATION OF STUDENTS' WORK

3.1. Students` obligations	In accordance with the Regulations on Studying and the Regulations on Student Assessment and Evaluation: for all full-time students' attendance of at least 70% is required. Part-time students are required to attend classes at least 50%. The students` acquired knowledge is tested during the course classes. Special consideration is given to the student's evaluation during the course of the teaching process, with particular attention being paid to the student's active participation in teaching as well as his/her presentation of the written work that the student produces for homework. Of particular importance for the final evaluation are the two written tests that students take during the semester. If the student successfully passes both exams, he / she is exempted from the written part of the final exam and is obliged to take the oral exam only. The final exam consists of a written and an oral part. Ways to check learning outcomes are: essays, objective type assignments, discussion, roleplay, presentation creation, etc. The obligation of each student is to regularly inform
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	oneself about the course. All notices about maintenance or eventual postponement of teaching will be published on the web site of the Šibenik University and the e-learning page of the course, where all the information on the course as well as the teaching materials and the list of literature are also available.				
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,5	Written exam	1 (without colloquia)	Project
	Experimental work		Research		Practical work
	Essay		Report		Continuous examination
	Colloquium	1 (without written exam)	Seminar paper		Other
	Class activity	0,5	Oral exam	1	Other
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:				
	<i>Commitment</i>		<i>Hours (estimate)</i>		
	1. Attending classes and exercises		45		
2. Preparation for the Colloquium / exam through self-study		45			
4. GRADING SYSTEM					
4.1. Grading seminar papers					
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.
4.3. Final grade according to evaluation elements	Active course attendance	70-75% of attendance	76-86% of attendance	87-100% of attendance	Maximum points
		3 points	7 points	20 points	20 points
	Seminar paper				

	Colloquia/ Written exam	2	3	4	5
		50-64,9%	65-79,9%	80-89,9%	90-100%
		25 points	30 points	35 points	40 points
	Oral exam	2	3	4	5
		25 points	30 points	35 points	40 points
4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)		5 (excellent)	ECTS grade	
	90 – 100%		4 (very good)	A	
	80 – 89,9%		3 (good)	B	
	65 – 79,9%		2 (sufficient)	C	
	50 – 64,9%		5 (excellent)	D	
5. ADDITIONAL INFORMATION ABOUT THE COURSE					
5.1. Compulsory literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media
	Katja Bošković Gazdović: "English textbook of Transport I", Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2002. (selected chapters)			10	X
5.2. . Additional literature (at the moment of changes and/or amended of study programme)	Tamara Polić: „The English Language I and II, English Textbook of Road and Rail Transport and Postal Services with Grammar and Exercises for 1st Year Students“, Department for traffic, Polytechnic of Rijeka, 2007.			10	X (e-learning, handouts)
	Adrian Pilbeam, Nina O’Driscoll: „Logistics Management“, Market Leader, Pearson Longman, 2010 A.J. Thomson, A. V. Martinet: "A practical English Grammar", Oxford University A.J. Thomson, A.V. Martinet: "A Practical English Grammar Exercises", Oxford University A.J. Thomson, A.V. Martinat: "A Practical English Grammar exercises II", Oxford University				
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations				

	<p>as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>
<p>5.4. Informing about the course and contacting the teacher</p>	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	ENGLISH LANGUAGE II	1.8. Course code in ISVU	187599 / 202076
1.2. Course lecturer	Ivana Kardum Goleš	1.9. Course code in MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 15 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	1
1.6. Year of study	1 st	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	3	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The aim of the course is to expand the vocabulary related to road and postal traffic as well as predicted grammatical structures that include tenses, the adjective comparison, adverbs, modal verbs, transformation of direct into reported speech in the present. The aim is also to expand the vocabulary related to traffic, while exercises determine and practice grammar and new vocabulary. Another goal of the course is to write different kinds of business letters. By attending a foreign language classes, students are introduced with new communication systems, enabling their easier and more direct involvement in world events and getting acquainted with the elements of English culture and civilization of the English speaking world. Learning a foreign language is in line with the aspiration to preserve the richness of the diversity of multi-faceted Europe as well as with fostering the development of the culture of dialogue and civilization.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF, Completed course English language I		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.		
	LO3: Independently and responsibly analyse the relevant literature necessary for decision-making.		

	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)					Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1. to apply basic and advanced terms from the professional terminology of English road traffic in English.					3
	2. to apply grammatical structures in texts and assignments and real-life context					3
	3. to develop an essay within the topics of the course.					5, 6
	4. to communicate in a foreign language within the subjects of the course, to express one own opinions.					6
	5. to compare and evaluate different traffic solutions.					5
	6. to use part of the general language competency at levels B1.					6
2.5. Course content according to detailed curriculum schedule	Constructive allignment					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Listen to lectures. Work independently on computer, get to know course content and elearning documents.	-	2 h
2.	CARS` ANATOMY - Adjectives and their formation	1, 2	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, understand, apply and link terms from the professional terminology of English road traffic and use them in written and oral communication verb tenses are interpreted in a real linguistic context, use part of other language competences at B1 level.	4 h	

	3.	MANAGEMENT IN TRAFFIC - Adverbs and their formation	1, 2, 3, 4	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	4.	In the train – expressing present	1, 2, 3	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	5.	MODERN TRANSPORTATION (HYDROFOILS) – Modal verbs	1, 2, 3, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of	4 h

					other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	6.	RAIL TRAFFIC IN EUROPE – Expressing habit	1, 2, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	7.	Traffic in the USA – Tenses	1, 2, 3, 5, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	8.	Traffic for tomorrow – Tenses, I colloquium	1, 2, 3, 5, 6	Listen to lectures and take part in discussion. Write the colloquium.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to	10 h

					the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	9.	Hovercraft – Indirect speech	1, 2, 3, 5, 6	Listen to lectures and read literature. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	10.	Magnetic levitation trains – Personal and reflexive pronouns	1, 2, 3, 5, 6	Listen to lectures and read literature. Solve exercises. Discuss.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	11.	Steam engine cars – Future tenses	1, 2, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real	10 h

					linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	12.	Post office and their role in the progress of mankind – Future tenses	1, 2, 3, 4, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h
	13.	Climate changes and telecommunication	1, 2, 3, 4, 5, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h

	14.	Sattellites	1, 2, 3, 4, 5, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	15.	Revision – II colloquium	1, 2, 3, 4, 5, 6	Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h

3. EVALUATION OF STUDENTS` WORK

3.1. Students` obligations	In accordance with the Regulations on Studying and the Regulations on Student Assessment and Evaluation: for all full-time students attendance of at least 70% is required. Part-time students are required to attend classes at least 50%.The students` acquired knowledge is tested during the course classes. Special consideration is given to the student's evaluation during the course of the teaching process, with particular attention being paid to the student's active participation in teaching as well as his/her presentation of the written work that the student produces for homework. Of particular importance for the final evaluation are the two written tests that students take during the semester. If the student successfully passes both exams, he / she is exempted from the written part of the final exam and is obliged to take the oral exam only. The final exam consists of a written and an oral part. Ways to check learning outcomes are: essays, objective type assignments, discussion, roleplay, presentation creation, etc. The obligation of each student is to regularly inform
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	oneself about the course. All notices about maintenance or eventual postponement of teaching will be published on the web site of the Šibenik University and the e-learning page of the course, where all the information on the course as well as the teaching materials and the list of literature are also available.				
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,5	Written exam	1 (without colloquia)	Project
	Experimental work		Research		Practical work
	Essay		Report		Continuous examination
	Colloquium	1 (without written exam)	Seminar paper		Other
	Class activity	0,5	Oral exam	1	Other
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:				
	<i>Commitment</i>			<i>Hours (estimate)</i>	
	1. Attending classes and exercises			45	
2. Preparation for the Colloquium / exam through self-study			45		
4. GRADING SYSTEM					
4.1. Grading seminar papers	-				
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.
4.3. Final grade according to evaluation elements	Active course attendance	70-75% of attendance	76-86% of attendance	87-100% of attendance	Maximum points
		3 points	7 points	20 points	20 points
	Seminar paper				

	Colloquia/ Written exam	2	3	4	5
		50-64,9%	65-79,9%	80-89,9%	90-100%
		25 points	30 points	35 points	40 points
	Oral exam	2	3	4	5
		25 points	30 points	35 points	40 points

4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)	Numerical grade	ECTS grade
	90 – 100%	5 (excellent)	A
	80 – 89,9%	4 (very good)	B
	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (sufficient)	D

5. ADDITIONAL INFORMATION ABOUT THE COURSE

5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
	Katja Bošković Gazdović: "English textbook of Transport I", Faculty of transport nad traffic sciences, University of Zagreb, Zagreb, 2002. (selected chapters)	10	X
5.2. . Additional literature (at the moment of changes and/or amended of study programme)	Tamara Polić: „The English Langzage I and II, English Textbook of Road and Rail Transport and Postal Services with Grammar and Exercises for 1st Year Students“, Department for traffic, Polytechnic of Rijeka, 2007. Adrian Pilbeam, Nina O’Driscoll: „Logistics Management“, Market Leader, Pearson Longman, 2010 A.J. Thomson, A. V. Martinet: "A practical English Grammar", Oxford University A.J. Thomson, A.V. Martinet: "A Practical English Grammar Exercises", Oxford University A.J. Thomson, A.V. Martinat: "A Practical English Grammar exercises II", Oxford University	10	X (e-learning, handouts)
5.3. Quality assurance methods that ensure the acquisition of	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for		

knowledge, skills and competences	further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.
5.4. Informing about the course and contacting the teacher	It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	ENGLISH LANGUAGE III	1.8. Course code in ISVU	140775 / 202089
1.2. Course lecturer	Ivana Kardum Goleš	1.9. Course code in MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(15 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	2
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	3	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The aim of the course is to expand the vocabulary related to road and postal traffic as well as predicted grammatical structures that include tenses, the creation and use of passives, causative constructions, mastery of conditional sentences, transformation of direct into reported speech in the past. The aim is also to expand the vocabulary related to traffic, while exercises determine and practice grammar and new vocabulary. Another goal of the course is to write different kinds of business letters. By attending a foreign language classes, students are introduced with new communication systems, enabling their easier and more direct involvement in world events and getting acquainted with the elements of English culture and civilization of the English speaking world. Learning a foreign language is in line with the aspiration to preserve the richness of the diversity of multi-faceted Europe as well as with fostering the development of the culture of dialogue and civilization.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF, Completed course English language II		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.		
	LO3: Independently and responsibly analyse the relevant literature necessary for decision-making.		

	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)				Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis	
	1.	to apply and link terms from the professional terminology of English road traffic and use them in written and oral communication.			3	
	2.	to apply grammatical structures in texts and assignments and real-life context.			3, 4	
	3.	to present own ideas for development of traffic problems.			5, 6	
	4.	to develop an essay within the topics of the course.			3	
	5.	to communicate in a foreign language within the subjects of the course, to express one own opinions.			6	
	6.	to compare and evaluate different traffic solutions.			5	
	7.	to use part of the general language competency at levels B1/B2.			6	
2.5. Course content according to detailed curriculum schedule	Constructive allignement					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Listen to lectures. Work independently on computer, get to know course content and elearning documents.	-	2 h
2.	Britains Earliest Roads – Tenses	1, 2	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, understand, apply and link terms from the professional terminology of English road traffic and use them in written and oral communication verb tenses are interpreted in a real linguistic context, use part of other language competences at B1 level.	4 h	

	3.	The Age Of Bad Roads - The Passive Voice	1, 2, 3, 4	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	4.	Roads And The Church - The Passive Voice, Present times	1, 2, 3	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	5.	Early Carriages - The Passive Voice, Past times	1, 2, 3, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of	4 h

					other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	6.	Trade And Transport In The Turnpike Era - The Passive Voice, Future times	1, 2, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	7.	Rivers And River Transport - The Passive Voice	1, 2, 3, 5, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	8.	The World Of Transport - I colloquium	1, 2, 3, 5, 6	Listen to lectures and take part in discussion. Write the colloquium.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to	10 h

					the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	9.	The Satellite - The Infinitive and the Gerund	1, 2, 3, 5, 6	Listen to lectures and read literature. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	10.	Technology And The Relation Between Transport And Communication - Conditional Sentences (0 And I Type)	1, 2, 3, 5, 6	Listen to lectures and read literature. Solve exercises. Discuss.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	11.	Transport, Communications And City Organisation -	1, 2, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real	10 h

		Conditional Sentences (II Type)			linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	12.	Navigation Devices - Conditional Sentences (III Type)	1, 2, 3, 4, 5, 6, 7	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h
	13.	Safe And Clean Road Transport - Conditional Sentences (Mixed Types)	1, 2, 3, 4, 5, 6, 7	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h

	14.	Scientific Road Making - Conditional Sentences	1, 2, 3, 4, 5, 6, 7	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	15.	Revision – II colloquium	1, 2, 3, 4, 5, 6, 7	Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h

3. EVALUATION OF STUDENTS` WORK

3.1. Students` obligations

In accordance with the Regulations on Studying and the Regulations on Student Assessment and Evaluation: for all full-time students attendance of at least 70% is required. Part-time students are required to attend classes at least 50%.The students` acquired knowledge is tested during the course classes. Special consideration is given to the student's evaluation during the course of the teaching process, with particular attention being paid to the student's active participation in teaching as well as his/her presentation of the written word that the student produces for homework. Of particular importance for the final evaluation are the two written tests that students take during the semester. If the student successfully passes both exams, he / she is exempted from the written part of the final exam and is obliged to take the oral exam only. The final exam consists of a written and an oral part. Ways to check learning outcomes are: essays, objective type assignments, discussion, roleplay, presentation creation, etc. The obligation of each student is to regularly

	inform oneself about the course. All notices about maintenance or eventual postponement of teaching will be published on the web site of the Šibenik University and the e-learning page of the course, where all the information on the course as well as the teaching materials and the list of literature are also available.				
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,5	Written exam	1 (without colloquia)	Project
	Experimental work		Research		Practical work
	Essay		Report		Continuous examination
	Colloquium	1 (without written exam)	Seminar paper		Other
	Class activity	0,5	Oral exam	1	Other
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:				
	<i>Commitment</i>			<i>Hours (estimate)</i>	
	1. Attending classes and exercises			45	
2. Preparation for the Colloquium / exam through self-study			45		
4. GRADING SYSTEM					
4.1. Grading seminar papers	-				
4.2. Grading colloquia/ written and oral exam	Unsatisfactory		Satisfactory		Above average
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.
4.3. Final grade according to evaluation elements	Active course attendance	70-75% of attendance	76-86% of attendance	87-100% of attendance	Maximum points
		3 points	7 points	20 points	20 points

	Seminar paper					
	Colloquia/ Written exam	2	3	4	5	
		50-64,9%	65-79,9%	80-89,9%	90-100%	
		25 points	30 points	35 points	40 points	
	Oral exam	2	3	4	5	
25 points		30 points	35 points	40 points		
4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	
	65 – 79,9%		3 (good)		C	
	50 – 64,9%		2 (sufficient)		D	
5. ADDITIONAL INFORMATION ABOUT THE COURSE						
5.1. Compulsory literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	Katja Bošković Gazdović: "English textbook of Transport I", Faculty for transport and traffic sciences, University of Zagreb, Zagreb, 2002. (selected chapters)			10	X	
5.2. . Additional literature (at the moment of changes and/or amended of study programme)	Tamara Polić: „The English Langzage I and II, English Textbook of Road and Rail Transport and Postal Services with Grammar and Exercises for 1st Year Students“, Department for traffic, Polytechnic of Rijeka, 2007. Adrian Pilbeam and Nina O’Driscoll: „Logistics Management“, Market Leader, Pearson Longman, 2010 A.J. Thomson, A. V. Martinet: "A practical English Grammar", Oxford University A.J. Thomson, A.V. Martinet: "A Practical English Grammar Exercises", Oxford University A.J. Thomson, A.V. Martinat: "A Practical English Grammar exercises II", Oxford University			10	X (e-learning, handouts)	

<p>5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences</p>	<p>The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students' progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>
<p>5.4. Informing about the course and contacting the teacher</p>	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	ENGLISH LANGUAGE IV	1.8. Course code in ISVU	140784 / 202097
1.2. Course lecturer	Ivana Kardum Goleš	1.9. Course code in MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(15 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	1
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	3	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The aim of the course is to expand the vocabulary related to road and postal traffic as well as predicted grammatical structures that include tenses, the relational and causative sentences, sequence of tenses, word formation, usage of abbreviations in business English. The aim is also to expand the vocabulary related to traffic, while exercises determine and practice grammar and new vocabulary. Another goal of the course is to write different kinds of business letters. By attending a foreign language classes, students are introduced with new communication systems, enabling their easier and more direct involvement in world events and getting acquainted with the elements of English culture and civilization of the English speaking world. Learning a foreign language is in line with the aspiration to preserve the richness of the diversity of multi-faceted Europe as well as with fostering the development of the culture of dialogue and civilization.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF, Completed course English language III		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.		
	LO3: Independently and responsibly analyse the relevant literature necessary for decision-making.		

	Learning outcomes according to the Bloom`s taxonomy: (up to two verbs per LO)				Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis	
	1.	to apply and link terms from the professional terminology of English road traffic and use them in written and oral communication.			3	
	2.	to create CV (Europass template), job application, offer, complaint.			4, 6	
	3.	to interpret and use tenses in real-life context.			3, 4	
	4.	to present own ideas for development of traffic problems.			3	
	5.	to communicate in a foreign language within the subjects of the course, to express one own opinions.			6	
	6.	to compare and evaluate different traffic solutions.			5	
	7.	to use part of the general language competency at levels B2.			6	
2.5. Course content according to detailed curriculum schedule	Constructive allignement					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	Listen to lectures. Work independently on computer, get to know course content and elearning documents.	-	2 h
2.	Early Trading Conditions – Tenses CV – Europass template	1, 2	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, understand, apply and link terms from the professional terminology of English road traffic and use them in written and oral communication verb tenses are interpreted in a real linguistic context, use part of other language competences at B1 level.	4 h	

	3.	Travel And Traffic Information - The Sequence Of Tenses	1, 3, 4	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	4.	Public Transport - Direct And Indirect Speech - Statements Past	1, 3	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	5.	Transport And Tourism - Direct And Indirect Speech – Questions Past	1, 3, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of	4 h

					other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	6.	Tehnological Advances In The Twenty - First Century - Direct And Indirect Speech - Commands, Requests, Advice Past	1, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h
	7.	The History Of The Motor Car	1, 3, 5, 6	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	8.	The World Of Transport - I colloquium	1, 3, 5, 6	Listen to lectures and take part in discussion. Write the colloquium.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to	10 h

					the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	9.	Professionalism In The Public Sector - Defining Relative Clauses	1, 3, 5, 6	Listen to lectures and read literature. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	10.	America On Wheels - Non-Defining Relative Clauses	1, 3, 5, 6	Listen to lectures and read literature. Solve exercises. Discuss.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	11.	The History Of Railways - Connective Relative Clauses	1, 3, 5, 6	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real	10 h

					linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	
	12.	The Telephone Of Today And Tomorrow - Business Letters – Abbreviations In Business English	1, 2, 3, 4, 5, 6, 7	Listen to lectures and read literature. Use multimedia and internet. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h
	13.	The Modern Wonder Of Electronics - Business Letters – Job Interview	1, 2, 3, 4, 5, 6, 7	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	4 h

	14.	Problems Of Modern Transportation	1, 3, 4, 5, 6, 7	Listen to lectures and read literature. During lectures individually research the content of this thematic field by searching data bases, presentt acquired knowledge, express their own ideas and ways of problem solving. Brainstorming, discussion. Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	6 h
	15.	Revision – II colloquium	1, 2, 3, 4, 5, 6, 7	Solve exercises.	In colloquium or written and oral exams the applied grammatical structures on texts and tasks are evaluated, verb tenses are interpreted in a real linguistic context, can communicate in foreign languages within the course topic, express their own opinions, present their own ideas related to the development of transport solutions to develop a longer essay within course topics, comparing and evaluating different solutions in the traffic of other countries, analyze medium complex texts and solve tasks, use part of other language competences at B1 level.	10 h

3. EVALUATION OF STUDENTS` WORK

3.1. Students` obligations

In accordance with the Regulations on Studying and the Regulations on Student Assessment and Evaluation: for all full-time students` attendance of at least 70% is required. Part-time students are required to attend classes at least 50%. The students` acquired knowledge is tested during the course classes. Special consideration is given to the student's evaluation during the course of the teaching process, with particular attention being paid to the student's active participation in teaching as well as his/her presentation of the written work that the student produces for homework. Of particular importance for the final evaluation are the two written tests that students take during the semester. If the student successfully passes both exams, he / she is exempted from the written part of the final exam and is obliged to take the oral exam only. The final exam consists of a written and an oral part. Ways to check learning outcomes are: essays, objective type assignments, discussion, roleplay, presentation creation, etc. The obligation of each student is to regularly inform

	oneself about the course. All notices about maintenance or eventual postponement of teaching will be published on the web site of the Šibenik University and the e-learning page of the course, where all the information on the course as well as the teaching materials and the list of literature are also available.				
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	0,5	Written exam	1 (without colloquia)	Project
	Experimental work		Research		Practical work
	Essay		Report		Continuous examination
	Colloquium	1 (without written exam)	Seminar paper		Other
	Class activity	0,5	Oral exam	1	Other
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:				
	Commitment		Hours (estimate)		
	1. Attending classes and exercises		45		
2. Preparation for the Colloquium / exam through self-study		45			
4. GRADING SYSTEM					
4.1. Grading seminar papers	-				
4.2. Grading colloquia/ written and oral exam	Unsatisfactory	Satisfactory		Above average	
	Responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.	Reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supported with examples.		Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts supported with examples. Finds solutions that were not originally given. Notes correlations with related material.	
4.3. Final grade according to evaluation elements	Active course attendance	70-75% of attendance	76-86% of attendance	87-100% of attendance	Maximum points
		3 points	7 points	20 points	20 points
	Seminar paper				

	Colloquia/ Written exam	2	3	4	5	
		50-64,9%	65-79,9%	80-89,9%	90-100%	
		25 points	30 points	35 points	40 points	
	Oral exam	2	3	4	5	
25 points		30 points	35 points	40 points		
4.3. Final grade according to absolute division	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	
	65 – 79,9%		3 (good)		C	
	50 – 64,9%		2 (sufficient)		D	
5. ADDITIONAL INFORMATION ABOUT THE COURSE						
5.1. Compulsory literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	Katja Bošković Gazdović: "English textbook of Transport I", Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2002. (selected chapters)			10	X	
5.2. . Additional literature (at the moment of changes and/or amended of study programme)	Tamara Polić: „The English Langzage I and II, English Textbook of Road and Rail Transport and Postal Services with Grammar and Exercises for 1st Year Students“, Department for Traffic, Polytechnic of Rijeka, 2007. Adrian Pilbeam, Nina O’Driscoll: "Logistics Management", Market Leader, Pearson Longman, 2010 A.J. Thomson, A. V. Martinet: "A practical English Grammar", Oxford University A.J. Thomson, A.V. Martinet: "A Practical English Grammar Exercises", Oxford University A.J. Thomson, A.V. Martinat: "A Practical English Grammar exercises II", Oxford University			10	X (e-learning, handouts)	

<p>5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences</p>	<p>The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students' progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>
<p>5.4. Informing about the course and contacting the teacher</p>	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>

PK-SP-2. Description of a new course or an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	GRAPHIC COMMUNICATIONS	1.8. Course code in ISVU	201132 / 202070
1.2. Course lecturer	Luka Olivari	1.9. Course code in MOZVAG	
1.3. Assistants and/or associates		Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	6
1.6. Year of study	1 st	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	5	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The aim of the course is to provide students with theoretical knowledge, acquired skills and practical examples to: Gain the knowledge and skills necessary to read, understand and produce technical drawings, use and understand the standards of drawing in technical drawings, orthogonal projections, spatial rendering and cross sections, they use computers (the Auto-CAD computer program) when creating technical documentation.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.		
2.3. Learning outcomes on the study programme level	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.		
	LO7: Apply computer tools for analyzing and comparing data.		
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.		
	Learning outcomes by Bloom: (maximum 2 verbs for LO)	Level of LO: 1- memory, 2- understanding,	

2.4. Expected learning outcomes on the course level (4-10 learning outcomes)						3- application, 4- analysis, 5- evaluation, 6- synthesis.
	1. Differentiate concepts in graphical communication.					4
	2. Select the view that best depicts the object and draw orthogonal projections based on the given isometric view.					5, 5
	3. Design an isometric representation of the body based on the given orthogonal projections.					5
	4. Distinguish the rules of technical presentation and apply them to the technical drawing.					5, 5
	5. Draw a technical drawing in the AutoCAD computer program.					5
2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	No	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introductory presentation (introducing students to the content and obligations of the course). The importance of graphical communications. Short history and development of graphic communications	1	Listen to a lecture. By working independently on a computer, they become acquainted with the course content, obligations, literature and documents on the e-learning course page.	At the colloquium or the written and oral exam they define and explain the basic concepts.	4 h
	2.	Technical letter, line types and widths, paper formats, scale and components of the technical drawing.	1, 4	Listen to a lecture and read literature. The exercises demonstrate the rules of technical display. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing.	4 h
	3.	Fundamentals of geometric structures.	1, 2, 4	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; draw orthogonal projections based on a given isometric view; distinguish between the rules of the	4 h

					technical layout and apply them to the technical drawing.	
	4.	Technical spatial sketching and construction. Orthogonal projections. European and American display mode.	1, 2, 3	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; draw orthogonal projections based on a given isometric view; form an isometric representation of the body based on given orthogonal projections.	4 h
	5.	Display rules in technical drawings. Applying measures.	1, 2, 4	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; draw orthogonal projections based on a given isometric view; distinguish between the rules of the technical layout and apply them to the technical drawing.	4 h
	6.	Markings on the technical drawing (marks of machining, roughness, tolerances of dimensions and shape)	1, 2, 4	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; draw orthogonal projections based on a given isometric view; distinguish between the rules of the technical layout and apply them to the technical drawing.	4 h
	7.	Cross sections and rules for screwing.	1, 2, 4	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; draw orthogonal projections based on a given isometric view; distinguish between the rules of the technical layout and apply them to the technical drawing.	4 h
	8.	Spatial presentation.	1, 3, 4	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; form an isometric representation of the body based on given	4 h

					orthogonal projections; distinguish between the rules of the technical view and apply them to the technical drawing.	
	9.	Introduction to Computer-Aided Design. CAD / CAM systems. Software packages and scope.	1, 4, 5	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing; draw a technical drawing in an AutoCAD computer program.	4 h
	10.	Special markings on technical drawings and simplifications. Details on technical drawings. AutoCAD, interface and basic commands.	1, 4, 5	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing; draw a technical drawing in an AutoCAD computer program.	4 h
	11.	AutoCAD, commands for drawing, using and creating a new layer.	1, 4, 5	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing; draw a technical drawing in an AutoCAD computer program.	4 h
	12.	AutoCAD, commands for applying measures, creating a template, printing drawings.	1, 4, 5	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing; draw a technical drawing in an AutoCAD computer program.	4 h

	13.	AutoCAD, creation and manipulation of objects.	1, 4, 5	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing; draw a technical drawing in an AutoCAD computer program.	4 h
	14.	AutoCAD, self-made workshop drawing.	1, 4, 5	Listen to a lecture and read literature. The exercises demonstrate the rules of technical presentation. Independent exercise.	At the colloquium or the written and oral exam: define and explain the basic concepts; distinguish between the rules of the technical layout and apply them to the technical drawing; draw a technical drawing in an AutoCAD computer program.	4 h
	15.	Review, recapitulation, and preparation for the exam.	-	Listen to a lecture and read literature. They prepare individually for the exam.	-	4 h

3. EVALUATION OF STUDENT WORK

3.1. Student obligations	In accordance with the Rulebook on Study and the Rulebook on Assessment and Evaluation of Student Performance: Full-time students are required to attend classes at least 70%, which is also a requirement for obtaining the lecturer's signature. Students are required to bring equipment necessary for solving tasks and participating in lectures and exercises. Students who achieve the following during the course: From 0 to 49.9% of ECTS credits - are graded Fail and must take and pass a written exam (test). More than 50% - students earn the right to take the final exam for the course. Students can pass the final exam for the course in two ways: a) during the course by passing two colloquiums and the oral part of the exam; b) by passing the written and oral parts of the exam.					
3.2. Student work monitoring (enter the share of ECTS credits for each activity so that the total number of ECTS credits corresponds to the course credit value)	Attending classes	2	Written exam	2 (without colloquiums)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous check	
	Colloquiums	2 (without written exam)	Seminar paper		Field works or Study trips	
	Teaching activities		The oral part of exam	1	(other)	

3.3. Student work-load	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:	
	<i>Obligation</i>	<i>Hours (estimated)</i>
	1. Attending classes	60
	2. Colloquiums and written exam individual preparation (drawing)	30
	3. Colloquiums and written exam individual preparation (AutoCAD)	30
	4. Oral exam individual preparation	30

4. GRADING SYSTEM

	Elements of evaluation	Bad	Satisfying	Above average
4.1. Evaluation of written exam	Technical drawing	Drawing incomplete, imprecise and sloppy. Made on inadequate paper size.	Drawing neatly crafted with a small number of imprecise errors, a clear distinction between types of lines.	Drawing very neatly made without errors.
	Distinguish and apply the rules of technical drawing	Does not know the rules, does not apply or misapplies the elements of the technical representation.	Knows most of the rules of the technical view, correctly applies the basic, and with minor mistakes, the other elements of the technical view.	Knows the rules of the technical view, and correctly applies the elements of the technical view.
	AutoCAD computer program	Does not know interface or basic commands. It is not capable of drawing in a computer program.	Knows basic and some advanced commands in a computer program, uses them with minor errors. He is able to create a technical drawing in a computer program with a little help and suggestions.	Knows basic and advanced commands in a computer program, uses them without errors. Able to fully draw a technical drawing in a computer program.
4.2. Evaluation of oral exam	Knowledge and expression.	It responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.	It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supports them with examples. Knows the expert terminology.	Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles of physical laws, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts and supports them with examples. Finds solutions that were not originally given. It notes correlations with related

				material. Fluent in professional terminology.		
4.3. Forming the final grade according to the evaluation elements	Colloquiums/ Written exam	2	3	4	5	
		10-12 points	13-15 points	16-17 points	18-20 points	
	Colloquiums/ AutoCAD	2	3	4	5	
		10-12 points	13-15 points	16-17 points	18-20 points	
	The oral part of exem	2	3	4	5	
		10-12 points	13-15 points	16-17 points	18-20 points	
4.4. Formation of the final grade based on the absolute distribution	Percentage of acquired knowledge, skills and competencies (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	
	65 – 79,9%		3 (good)		C	
	50 – 64,9%		2 (sufficient)		D	
5. ADDITIONAL INFORMATION ABOUT COURSE						
5.1. Compulsory literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	I Lučić, M.: tehcnical drawings s AutoCAD-om [Book, 2. izd.]. Naklada Lučić, Osijek, 2020.			5	-	
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Teaching materials from the lectures and exercises on the e-learning system of the Šibenik University of Applied Sciences for the course.			-	on-line (e-learning)	
	Opalić, M., Kljajin, M., Sebastijanović, S.: Technical drawing, Zrinski d.d., Čakovec/Slavonski Brod, 2007.				-	
Klem N., Koški Ž., Otković I.: Technical drawing and CAD, Faculty of civil engineering, University of Osijek, Osijek 2006.			-		On-line	
Galeta T., Glazina V., Kljajin M.: AutoCAD Fundamentals of Technical Drawing, Faculty of mechanical engineering, University of Osijek, Slavonski brod, 2005.					On-line	

	<p>Herold Z .: Computer and Engineering Graphics, Faculty of mechanical and naval engineering, University of Zagreb, Zagreb 2003.</p> <p>Budimir D .: Exercises from AutoCAD, Faculty of transport and traffic sciences, University of Zagreb, Zagreb 2010.</p>		
<p>5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences</p>	<p>The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>		
<p>5.4. Informing about the course and contacting the course lecturer</p>	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address name@vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	THEORY OF VEHICLE MOVEMENT	1.8. Course code in ISVU	284487 / 284492
1.2. Course lecturer	Luka Olivari	1.9. Course code in MOZVAG	
1.3. Assistants and/or associates		Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1st, course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	8.
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The aim of the course is to provide students with theoretical knowledge and practical examples to acquire the knowledge necessary to successfully solve the vehicle dynamics problems.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.		
	LO4: To apply knowledge from the field of natural and technical sciences to problems in road traffic.		
	LO7: Apply computer tools for analyzing and comparing data.		
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.		

	LO9: Solve problems in the field of road transport using analytical methods.					
	LO13: Monitor trends in the development of technology, techniques, and road transport safety.					
2.4. Expected learning outcomes on the course level (4-10 learning outcomes)	Learning outcomes by Bloom: (maximum 2 verbs for LO)					Level of LO: 1- memory, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis.
	1.	Differentiate concepts in vehicle dynamics.				5
	2.	Distinguish the drive engines, concepts and elements of transmission of road vehicles.				5
	3.	Formulate the final equation of motion of the vehicle based on the traction forces and the resistance of the movement of the vehicle.				6
	4.	Evaluate the fuel economy of a road vehicle.				5
	5.	Analyze the properties and performance of the road vehicle under different operating conditions.				5
	6.	Perform vehicle dynamics calculation for a road vehicle				6
2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	No	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introductory presentation (introducing students to the content and obligations of the course). Area of study of vehicle motion theory. Exploitation of vehicle technical characteristics.	1	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	2.	Construction of motor vehicles. IC engines. Power transmission.	1, 2	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h

	3.	Forces on the vehicle. Static and dynamic axle reactions.	1, 3, 5	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	4.	Tire. Tire hysteresis. Rolling resistance factor. Wheel slipping and rolling.	1, 3, 5	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	5.	Movement resistances. Rolling resistance. Air resistance. Climb resistance. Inertia resistance.	1, 3	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	6.	Traction force. Traction force hyperbole. Traction diagram. Adhesion force.	1, 3	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	7.	Engine characteristic. Engine elasticity. Power balance. Traction-speed characteristics.	1, 3, 5	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	8.	Vehicle economy. Fuel consumption equation.	1, 3, 4	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
	9.	Vehicle steering. Oversteering and understeering.	1, 5	Listen to a lecture and read literature. The exercises demonstrate how to solve tasks.	At the colloquium or the written and oral exam, students: differentiate concepts from	4 h

				Independent task solving. Individual preparation for colloquiums.	statics; solve numerical problems from the specified unit.	
10.	Vehicle stability. Longitudinal and transverse stability.	1, 5		Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
11.	Acceleration. Dynamic characteristic. Time and path of acceleration. Overtaking.	1, 3, 5		Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
12.	Braking. Braking characteristic. Distribution of braking forces.	1, 3, 5		Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
13.	Active stability systems. Braking with active stability systems. Anti-blocking devices.	1, 5		Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit.	4 h
14.	Vehicle dynamics calculations.	3, 5, 6		Listen to a lecture and read literature. The exercises demonstrate how to solve tasks. Independent task solving. Individual preparation for colloquiums.	At the colloquium or the written and oral exam, students: differentiate concepts from statics; solve numerical problems from the specified unit. Submit vehicle dynamics calculation.	4 h
15.	Review, recapitulation, and preparation for the exam.	-		Listen to a lecture and read literature. Prepare individually for the exam.	-	4 h

3. EVALUATION OF STUDENT WORK

3.1. Student obligations	In accordance with the Rulebook on Study and the Rulebook on Assessment and Evaluation of Student Performance: Full-time students are required to attend classes at least 70%, which is also a requirement for obtaining the lecturer`s signature. All students must submit seminar paper (vehicle dynamics calculation), which is also a requirement for obtaining the lecturer`s signature. Students are required to bring a calculator and other equipment necessary for solving tasks and participating in lectures and exercises. Students who achieve the following during the course: From 0 to 49.9% of ECTS credits - are graded Fail and must take and pass a written exam (test). More than 50% - students earn the right to take the final exam for the course. Students can pass the final exam for the course in two ways: a) during the course by passing two colloquiums and the oral part of the exam; b) by passing the written and oral parts of the exam.					
3.2. Student work monitoring (enter the share of ECTS credits for each activity so that the total number of ECTS credits corresponds to the course credit value)	Attending classes	2	Written exam	1 (without colloquiums)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous check	
	Colloquiums	1 (without written exam)	Seminar paper	0,5	Field works or Study trips	
	Teaching activities		The oral part of exam	0,5	(other)	
3.3. Student work-load	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	Obligation			Hours (estimated)		
	1. Attending classes			60		
	2. Seminar paper			15		
	3. Colloquiums and written exam individual preparation			30		
4. Oral exam individual preparation			15			
4. GRADING SYSTEM						
4.1. Evaluation of written exam	Elements of evaluation	Bad	Satisfying	Above average		
	Physical quantities and their units of measurement	Nonstandard physical units have not been converted to basic or have been converted wrong.	Nonstandard units have been converted to basic units with minor errors in calculation.	Nonstandard units have been converted to base units without error.		
Structure, traceability, legibility and orderliness	The task is not properly structured, it is not traceable, and it is not readable. Diagrams and sketches are non-	The task is satisfactorily structured, traceable and readable. The diagrams and	The task is clearly structured, complete, very neat and legible. The diagrams are			

	of the procedure, diagrams and sketches	existent, inaccurate, messy, unclear and ambiguous.	sketches are meaningful, neat with minor errors.	completely accurate, clear and very neat.		
	Application of appropriate equation (formulas) and the final result.	Uses expressions that do not describe the problem specified, or incorrectly expresses the physical unit from the expression. Numeric values are not included in the expression. The end result is incorrect.	Uses expressions that describe the problem in question, accurately derives physical quantities from the expression, incorporates numerical values into the expression with smaller numbers, the final result has smaller deviations from the exact result.	Uses expressions that describe the problem in question, accurately derives physical quantities from expressions, lists units of measure without errors, the final result is completely accurate.		
4.2. Evaluation of oral exam	Knowledge and expression.	It responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.	It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts supports them with examples. Knows the expert terminology.	Knowledge is at the level of analysis, synthesis and evaluation. Observes the principles of physical laws, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts and supports them with examples. Finds solutions that were not originally given. It notes correlations with related material. Fluent in professional terminology.		
4.3. Forming the final grade according to the evaluation elements						
	Colloquiums/ Written exam	2	3	4	5	
		50-64,9%	65-79,9%	80-89,9%	90-100%	
		50-64,9 points	65-79,9 points	80-89,9 points	90-100 points	
	The oral part of exam	2	3	4	5	
50-64,9 points		65-79,9 points	80-89,9 points	90-100 points		
4.4. Formation of the final grade based on the absolute distribution	Percentage of acquired knowledge, skills and competencies (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	

	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (sufficient)	D

5. ADDITIONAL INFORMATION ABOUT COURSE

	Title	Number of copies in the library	Availability via other media
5.1. Compulsory literature (available in the library and via other media)	Olivari L.: Theory of vehicle movement: a collection of tasks and instructions for drawing up a traction calculation, Polytechnic in Šibenik, Šibenik, 2023.	-	On-line (e-learning)
	Mikulić, D.: Motor vehicles: Theory of movement and construction (III edition), Polytechnic of Velika Gorica, Velika Gorica, 2020 (selected chapters)	5	On-line (e-learning)
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Lectures and exercises of the course Technical Mechanics.	-	On-line (e-learning)
	Perše, S., Višnjić, V.: Mechanical engineering in traffic, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2005. (selected chapters)	5	-
	Cerovac V.: Technique and safety of road traffic, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2001. (selected chapters)	5	-
	Vrhovski D., Nikšić M.: Basics of mechanical engineering - a collection of solved tasks, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2000. (selected chapters)	10	-
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students' progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.		
5.4. Informing about the course and contacting the course lecturer	It is the responsibility of each student to be regularly informed about the course, the coursework, and classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address name@vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	TRAFFIC IN TOURISM	1.8. Course code at ISVU	201142 / 202110
1.2. Course lecturer	Ana-Mari Poljičak	1.9. Course code at MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 0 + 15 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1st, course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Optional	1.12. Number of course revisions	4.
1.6. Year of study	3 rd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit point (ECTS)	3	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The goal is to provide students with theoretical knowledge: Define basic transport and tourism terms; Understand synergies between transport and tourism, Apply the learned content of this course in business practice.
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.
	LO3: Independently and responsibly analyze the relevant literature necessary for decision-making.
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.

2.4. Expected learning outcomes on the course level	Learning outcomes according to Bloom's taxonomy: (maximum 2 verbs for LO)	Level of LO: 1- <i>memory</i> , 2- <i>understanding</i> , 3- <i>application</i> , 4- <i>analysis</i> , 5- <i>evaluation</i> , 6- <i>synthesis</i> .
	1. distinguish the basic terms in traffic and tourism.	4
	2. comment on the branches of traffic in tourism.	4
	3. choose the form of tourist transport as part of a tourism product.	5
	4. use materials and tools to search scientific and professional literature in their native and English languages.	3
	5. present the acquired knowledge, ideas and solutions independently and in a team.	6

2.5. Course content according to detailed curriculum schedule	Constructive allignment					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	They listen to a lecture. During the individual work on the computer at the seminar teaching, they are introduced to the course content and documents on the e-learning page of the course.	-	2 h
Theoretical basis of traffic		1, 6	They listen to a lecture and read literature.	At the midterm or the written and oral exam they define the traffic system and state the division of traffic. Define traffic product and cite and explain the elements of production of transport products.	1 h	
Interdependence of transport and tourism.		1	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper	At the colloquium or the written and oral exam, they can enumerate and explain ways of influencing tourism on traffic and explaining the impact of traffic on tourism. Explain the limiting impact of transport on	5 h	

				that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	tourism and tourism on transport. Define transport service and tourism product. Explain the transport service as a tourism product and give an example of the absence of a transport service in a tourism product. List and explain the categories of users of tourist trips and motives for traveling. Define and explain tourism as a system.	
	3.	Transport branches in the connection of emitting and receptive areas.	1, 2	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can explain the emissive and receptive tourist countries and give an example. Explain the characteristics of traffic branches in the interconnection of emissive and receptive areas.	4 h
	4.	Traffic as part of a tourist product.	1, 2, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can define trips and multi-day bus trips. Explain panoramic and shuttle transportation. Give an example of local tourist lines. Define the rental of road vehicles in a tourist destination. List ways to use your bike while on vacation. At the colloquium or the written and oral exam they can explain the panoramic transport by rail in a limited area of the tourist destination. Define cable cars and funiculars and give an example of their use in tourist destinations. Explain nautical tourism and list its parts. Give an example of river-lake-canal round-trip cruises.	4 h

					Seminar paper created and presented (using computer programs independently).	
	5.	Field teaching - travel agency Pražen putovanja d.o.o.	3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can explain the excursions and multi-day bus trips, explain the rental of road vehicles in the tourist destination and give an example of panoramic and shuttle transportation. Seminar paper created and presented (using computer programs independently).	3 h
	6.	Guest lecture in English: Tourism and Railways (Basic knowledge), Glacier Express - the slowest express Train in the World, the Trans-Siberian Railway (Russian tourism offer).	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can describe the first rail trip in the World. Give an example of rail transport as part of a tourism product and describe it. Define high-speed rail and give examples. Seminar paper created and presented (using computer programs independently).	8 h
	7.	Air traffic as part of the tourist product, charter travel.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or written and oral exam, they can explain the history of air transport and define tourist services based on air transport. Comment on the role of air transport in tourism in the Republic of Croatia. Establish the difference between scheduled and charter air transport. Seminar paper created and presented (using computer programs independently).	4 h
	8.	The repetition and preparation for the colloquium. Colloquium I.	1, 2, 3, 4, 5	They listen to a lecture and read literature. They prepare individually for the colloquium.	-	12 h

	9.	Field teaching - Airport Zadar/Split	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can explain regular and charter air traffic. Explain the features of low-cost companies. Give examples of low cost airlines. Explain pick-up and departure technology for airport passengers. Give an example of air traffic services to tourists with special requirements.	3 h
	10.	Field teaching - Dogus Marine in Šibenik (Mandalina)	1, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can explain the purpose of marinas and rent a boat. Seminar paper created and presented (using computer programs independently).	3 h
	11.	Logistics in tourism	1, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can enumerate the elements of the logistics system and distinguish between the logistics models. Comment on the role of logistics processes in supplying a tourist destination. Seminar paper created and presented (using computer programs independently).	4 h
	12.	Economics of Exploitation of Traffic Vehicles and Traffic Infrastructure.	1, 2, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the	At the colloquium or the written and oral exam they can state the determinants of the quality of the transport service in tourism. Define the fare and explain the specificities of costs and fares in individual traffic branches. At the colloquium or the written	5 h

				group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	and oral exam they can define and list the types of oscillations. Explain measures to mitigate the effects of oscillations. Seminar paper created and presented (using computer programs independently).	
	13.	Parking in tourist destinations.	1, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or written and oral exam knows define basic terms of parking and differentiate ways of parking in tourist destinations. Seminar paper created and presented (using computer programs independently).	3 h
	14.	The repetition and preparation for the colloquium. Colloquium II.	1, 2, 3, 4, 5	They listen to a lecture and read literature. They prepare individually for the colloquium.	-	12 h
	15.	Concluding considerations. Repeating and preparing for the exam.	-	They listen to a lecture and prepare individually for the exam.	-	17 h

3. EVALUATION OF STUDENT WORK

3.1. Students` obligations	In accordance with the Rulebook on Study and the Rulebook on Student Assessment and Evaluation: for all full-time students attendance of at least 70%. Part-time students are required to attend a class of at least 50%. All students must create, present and positively colloquy seminar paper. Students who have achieved during the course: From 0 - 24.9% of ECTS credits - they are rated unsuccessful and cannot earn ECTS credits and must re-enroll in the next academic year; From 25-49.9% - are assessed by insufficient and must pass and pass the written exam (test). Written exam (test) can be held in regular or extraordinary exam period; More than 50% - students have the right to take the final exam. Students can take the final exam in the course in two ways: a) during the course of teaching through continuous monitoring of students (active participation in classes and preparation of a mental map and case study, preparation and presentation of seminar work and two colloquium); b) during class (active participation in class and preparation of a mental map and case study, preparation and presentation of seminar work) and passing exams (written and oral part of the exam).					
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total	Attendance		Written exam	1,5 (without colloquia)	Project	
	Experimental work		Research		Practical work	

number of ECTS points corresponds to the credit score of the course)	Essay		Report		Continuous examination	
	Colloquium	1,5 (without written exam)	Seminar paper	0,5	Other	
	Class activity	0,5	Oral exam	0,5	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	<i>Obligation</i>			<i>Hours (estimated)</i>		
	1. Active class attendance			45		
	2. Designing a seminar paper and presentation			10		
3. Preparing colloquia or exams through individual work			35			
4. FORMATION OF GRADES						
4.1. Evaluation of a seminar work	Element of evaluation	Bad		Satisfying		Above average
	Organization	The paper is not organized in a logical order and lacks structure.		The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion.		The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion, which are logically interconnected.
	Terminology, writing style	Words and expressions low in line with official terminology. The writing style is not appropriate, the sentences are too long, of a modest vocabulary and with frequent and repeated grammatical errors.		Words and expressions are in line with official terminology. The writing style is appropriate, the sentence structure is clear, the vocabulary is appropriate and there are few grammatical errors.		Words and expressions are aligned with official terminology and show an understanding of their meaning. The writing style is excellent, the sentences are clear and concise, the vocabulary is rich and there are no grammatical errors.
	Citing and referencing references	The sources are not listed at all. The references do not fit the topic and show a cursory approach to exploring the topic.		The sources are listed but incomplete and with errors. The references are relevant to the topic and show a satisfactory research attitude.		The sources are accurately, completely and consistently listed. The references are appropriate, their list is "rich" and comprehensive and shows a detailed research approach.

4.2. Grading of the colloquium / written and oral exam	Bad		Satisfying		Above average		
	It responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts that it supports with examples.		Knowledge is at the level of analysis, synthesis and evaluation. It observes the legality, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts that it supports with examples. Finds solutions that were not originally given. It notes correlations with related material.		
4.3. Forming the final grade according to the evaluation elements	Active attendance	70-75% of the presence	76-86% of the presence	87-100% of the presence	Case studies resolved		
		2 points	4 points	7 points	10 points		
	Seminar paper	2	3	4	5		
		5 points	7 points	8 points	10 points		
	Examination / Written examination	2	3	4	5		
		50-64,9%	65-79,9%	80-89,9%	90-100%		
Oral part of the exam	25 points	30 points	35 points	40 points			
	2	3	4	5			
4.4. Formation of final grade based on absolute distribution	Percentage of acquired knowledge, skills and competences (teaching + final exam)	25 points		30 points		40 points	
		30 points		35 points		40 points	
		30 points		35 points		40 points	
		30 points		35 points		40 points	
		30 points		35 points		40 points	
		30 points		35 points		40 points	
5. ADDITIONAL INFORMATION ON THE SUBJECT	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Number rating		ECTS grade		
	90 – 100%		5 (excellent)		A		
	80 – 89,9%		4 (very good)		B		
	65 – 79,9%		3 (good)		C		
	60 – 64,9%		2 (sufficient)		D		
	50 – 59,9%		2 (sufficient)		E		

5.1. Required literature (available in the library and through other media)	Title	Number of copies in the library	Availability via other media
5.2. Supplementary literature (at the time of the submission of changes and / or additions to the study program)	<p>Mrnjavac E.: Traffic in tourism, Faculty of tourism and hotel management, University of Rijeka, Opatija, 2006. (selected chapters)</p> <p>Maršanić R.: Parking in tourist destination, IQPLUS d.o.o., Rijeka, 2008.</p>	<p>5</p> <p>5</p>	
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	<p>Baričević H.: Traffic in tourism, Collegue of tourism, Šibenik, 2003.</p> <p>Lumsdon L. M., Page S. J.: Tourism and Transport, Issues and Agenda for the New Millennium, Routledge, 2003.</p>	<p>11</p> <p>0</p>	Available online
5.4. Informing about the course and contacting the teacher	<p>Quality control of students' work and the acquisition of necessary knowledge and skills will be ensured through interactive work. Keeping records of students' attendance and activity in the classroom and information obtained about student progress through the midterm will provide the information needed for further guidance to students in order to increase their work efficiency. Students will be instructed in their rights and obligations as well as working methods and required literature. Quality assurance system indicators: Student survey, monitoring of CES annual data on annual employment status of students, employer survey and Alumni Association.</p> <p>It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @ vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	FREIGHT-DISTRIBUTIONAL CENTRES AND TERMINALS	1.8. Course code at ISVU	140777 / 202101
1.2. Course lecturer	Ana-Mari Poljičak	1.9. Course code at MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 0 + 30 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st - course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	4.
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit point (ECTS)	5	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The goal is to provide students with theoretical knowledge: Define basic goods-distribution terms; Understand the division, structure and function of goods-distribution centers and terminals; Understand the technical and technological characteristics of goods-distribution centers and terminals and the design and planning of management systems; Apply the learned content of this course in business practice.
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.
	LO3: Independently and responsibly analyze the relevant literature necessary for decision-making.
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.

	LO11: Choose technical and technological solutions when carrying out traffic and/or goods flows.	
2.4. Expected learning outcomes on the course level	<p>Learning outcomes according to Bloom's taxonomy: (maximum 2 verbs for LO)</p>	<p>Level of LO: 1- memory, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis.</p>
	1. distinguish the basic concepts in the field of distribution and trade in goods.	4
	2. comment on the fundamental characteristics of the goods centers and terminals in the transport system.	4
	3. critically evaluate technological processes in goods distribution centers and terminals.	5
	4. to choose transshipment facilities at terminals according to the type of goods and technological procedures.	3
	5. distinguish between types of storage and technological storage procedures.	4
	6. present the acquired knowledge independently and in a team.	6

2.5. Course content according to detailed curriculum schedule	Constructive allignement					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	They listen to a lecture. During the individual work on the computer at the seminar teaching, they are introduced to the course content and documents on the e-learning page of the course. at the seminar teaching, they are introduced to the methodology of writing seminar papers. They choose the topic of the seminar papers and the brainstorming method and the method of discussing the selected topic are applied.	-	2 h
	Goods transport centers and types of goods transport centers	1, 2	They listen to a lecture and read literature.	At the colloquium or the written and oral exam define the basic goods-distribution terms. They describe the role and difference of goods-distribution centers, warehouses and	2 h	

					goods-transport centers and know how to list and explain logistic activities of goods-transport centers.	
	2.	Field teaching LDC KONZUM in Dugopolje.	2, 3	They listen to a lecture. (Touring the goods distribution center. Getting acquainted with the technology of receiving and distributing goods, ways of storing and storing goods, and commissioning goods for distribution. Monitoring the process of storing and issuing different types of goods in the rack warehouse and cold storage. Provision of additional services to goods. Types of forklifts. The method of experiential learning and self-discovery is applied. At seminar classes, they make seminar papers individually or in pairs and discuss the given topic .	At the colloquium or written and oral examination know to describe and explain the technological processes of work in the goods center, list loading-unloading devices.	2 h
	3.	Terminals and terminal types	1, 2	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. The brainstorming method and the method of discussing the topic discussed are applied in the seminar teaching.	At the colloquium or the written and oral exam they define the basic terms of the terminal. They know how to list and distinguish types of terminals.	4 h
	4.	Port Terminals. Multifunctional and universal terminals.	1, 2, 3	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and the literature read, create a seminar paper that presents the acquired knowledge. The brainstorming method and the method of discussing the topic discussed are applied in the seminar teaching.	At the colloquium or the written and oral exam they know how to define and enumerate port terminals. Describe the role and characteristics of multipurpose and universal terminals. Seminar paper created and presented (using computer programs independently).	4 h

	5.	Container terminals.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they can define what containerization and container is, and list the advantages and disadvantages of containerization. Enumerate and describe container types. Describe container port terminals, their technological processes, types of warehouses and list loading and unloading devices. At the colloquium or written and oral exam knows enumerate the types of container ships. Define and describe land-based container terminals. Explain Huckepack technologies and list loading and unloading devices. Describe storage types. Seminar paper created and presented (using computer programs independently).	10 h
	6.	Ro-Ro terminals.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or written and oral exam knows define and describe Ro-Ro terminals, explained by technological processes of work on them, enumerate and describe the loading and unloading devices and describe storage. List the advantages and disadvantages of Ro-Ro technology. Seminar paper created and presented (using computer programs independently).	7 h
	7.	LUF terminals. LASH terminals.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the	At the colloquium or written and oral exam knows define and describe LUF and LASH terminals explain the	7 h

				database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	technological processes of work on them, enumerate and describe the loading and unloading devices and describe storage. List the advantages of the LUF system and the advantages and disadvantages of the LASH system. List the types of LASH ships and describe the technology of loading / unloading barges on ships. Seminar paper created and presented (using computer programs independently).	
	8.	The repetition and preparation for the colloquium. Colloquium I.	1, 2, 3, 4, 5	They listen to a lecture and read literature. They prepare individually for the colloquium.	-	25 h
	9.	Terminals for the transshipment of dry and bulk cargo.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they know how to define and describe ways of transshipment in ports and terminals. Describe the coal and iron ore transshipment terminal and the phosphate transshipment terminal and explain their technological processes. Enumerate loading and unloading devices and explain storage of coal and iron ore and phosphate. At the colloquium or the written and oral exam they can define and describe cereals and cement transshipment terminals. Explain their technological processes of work and the list of loading unloading devices. Explain storage of cereals and cement. Seminar	10 h

					paper created and presented (using computer programs independently).	
	10.	Field teaching Port of Split.	2, 3, 4, 5	They listen to a lecture. (Visiting Split RO-RO, container and truck terminals, coastal and refrigeration warehouses, bulk cargo terminals, timber terminals, iron terminals. Getting acquainted with technological processes at terminals, warehousing and issuing of goods and transshipment machinery. The method of experiential learning and self-discovery is applied.	At the colloquium or written and oral examination know to describe and explain the technological processes of work on terminals, state of loading-unloading devices and explain storage.	2 h
	11.	Terminals for the transshipment of liquid and liquefied gases.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam they know how to define and describe the terminals for transshipment of oil and petroleum products and terminals for transshipment of liquefied gases. Explain their technological processes of work and the list of loading unloading devices. List the types of storage and explain storage. Enumerate and describe systems with buoys for cargo handling. Seminar paper created and presented (using computer programs independently).	8 h
12.	Dangerous goods terminals. Terminals for the transshipment of heavy and very heavy loads. The terminals for the transshipment of wood and wood products.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming	At the colloquium or written and oral exam knows define and enumerate dangerous cargoes. List the systems by which the classification of the transport of dangerous goods is carried out. Describe the technological process of handling hazardous materials. Give an example for very	10 h	

				method and the discussion method on the topic are applied.	heavy loads. List and describe methods for loading heavy loads on board. Enumerate loading / unloading devices and explain storage of heavy loads. Describe the technological process of work on the terminal for wood and wood products. Enumerate the loading and unloading devices and describe storage at the terminal for wood. Seminar paper created and presented (using computer programs independently).	
	13.	Terminals for animal transshipment. Terminals for the transshipment of southern fruit and food products.	1, 3, 4, 5	They listen to a lecture and read literature. At the seminar teaching, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems. In the group work on seminar teaching, the brainstorming method and the discussion method on the topic are applied.	At the colloquium or the written and oral exam, they are able to list the factors on which the transport, transshipment and storage of perishable products depends. List the groups of frozen foods and give an example. Explain the technological process of working at a food product terminal. List the infrastructure and superstructure that the animal terminal must have at its disposal. Describe the technological process of work and the list of loading unloading devices for animals. Seminar paper created and presented (using computer programs independently).	6 h
	14.	The repetition and preparation for the colloquium. Colloquium II.	1, 2, 3, 4, 5	They listen to a lecture and read literature. They prepare individually for the colloquium.	-	25 h
	15.	Concluding considerations.		They listen to a lecture and prepare individually for the exam.	-	26 h

		Repeating and preparing for the exam.				
3. EVALUATION OF STUDENT WORK						
3.1. Students` obligations	In accordance with the Rulebook on Study and the Rulebook on Student Assessment and Evaluation: for all full-time students attendance of at least 70%. Part-time students are required to attend a class of at least 50%. All students must create, present and positively colloquy seminar paper. Students who have achieved during the course: From 0 - 24.9% of ECTS credits - they are rated unsuccessful and cannot earn ECTS credits and must re-enroll in the next academic year; From 25-49.9% - are assessed by insufficient and must pass and pass the written exam (test). Written exam (test) can be held in regular or extraordinary exam period; More than 50% - students have the right to take the final exam. Students can take the final exam in the course in two ways: a) during the course of teaching through continuous monitoring of students (active participation in classes and development and presentation of seminar work and two colloquium); b) during class (active participation in class and development and presentation of seminar work) and passing exams (written and oral part of the exam).					
3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance		Written exam	3 (without colloquia)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous examination	
	Colloquium	3 (without written exam)	Seminar paper	0,5	Other	
	Class activity	0,5	Oral exam	1 (without colloquia)	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	<i>Obligation</i>			<i>Hours (estimated)</i>		
	1. Active class attendance			60		
	2. Designing a seminar paper and presentation			20		
3. Preparing colloquia or exams through individual work			70			
4. GRADING SYSTEM						
4.1. Evaluation of a seminar work	Element of evaluation	Bad	Satisfying	Above average		

	Organization	The paper is not organized in a logical order and lacks structure.	The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion.	The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion, which are logically interconnected.		
	Terminology, writing style	Words and expressions low in line with official terminology. The writing style is not appropriate, the sentences are too long, of a modest vocabulary and with frequent and repeated grammatical errors.	Words and expressions are in line with official terminology. The writing style is appropriate, the sentence structure is clear, the vocabulary is appropriate and there are few grammatical errors.	Words and expressions are aligned with official terminology and show an understanding of their meaning. The writing style is excellent, the sentences are clear and concise, the vocabulary is rich and there are no grammatical errors.		
	Citing and referencing references	The sources are not listed at all. The references do not fit the topic and show a cursory approach to exploring the topic.	The sources are listed but incomplete and with errors. The references are relevant to the topic and show a satisfactory research attitude.	The sources are accurately, completely and consistently listed. The references are appropriate, their list is "rich" and comprehensive and shows a detailed research approach.		
4.2. Grading of the colloquium / written and oral exam	Bad		Satisfying		Above average	
	It responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts that it supports with examples.		Knowledge is at the level of analysis, synthesis and evaluation. It observes the legality, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts that it supports with examples. Finds solutions that were not originally given. It notes correlations with related material.	
4.3. Forming the final grade according to the evaluation elements	Active attendance	70-75% of the presence	76-86% of the presence	87-100% of the presence	Case studies resolved	
		2 points	4 points	7 points	10 points	
	Seminar paper	2	3	4	5	
		5 points	7 points	8 points	10 points	
	Examination / Written examination	2	3	4	5	
		50-64,9%	65-79,9%	80-89,9%	90-100%	
25 points		30 points	35 points	40 points		
	2	3	4	5		

	Oral part of the exam	25 points	30 points	35 points	40 points
4.4. Formation of final grade based on absolute distribution	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Number rating	ECTS grade	
	90 – 100%		5 (excellent)	A	
	80 – 89,9%		4 (very good)	B	
	65 – 79,9%		3 (good)	C	
	60 – 64,9%		2 (sufficient)	D	
	50 – 59,9%		2 (sufficient)	E	
5. ADDITIONAL INFORMATION ON THE SUBJECT					
5.1. Required literature (available in the library and through other media)	Title			Number of copies in the library	Availability via other media
	Poljičak, A.-M., Ljubić Hinić, M.: Freight Terminals - Authorized script, Polytechnic of Šibenik, Šibenik, 2016.				Available online
5.2. Supplementary literature (at the time of the submission of changes and / or additions to the study program)	Dundović, Č.: Freight terminals, Faculty of Maritime Studies, University of Rijeka, Rijeka, 2002.			3	Available online
	Mlinarić T. J.: Freight-distributional centres, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2013.				
	Dundović, Č., Kesić, B.: Technology and organization of ports, Faculty of Maritime Studies, University of Rijeka, Rijeka, 2001.				
	Kirinčić, J.: Ports and terminals, School book, Zagreb, 1991.				
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	Quality control of students' work and the acquisition of necessary knowledge and skills will be ensured through interactive work. Keeping records of students' attendance and activity in the classroom and information obtained about student progress through the midterm will provide the information needed for further guidance to students in order to increase their work efficiency. Students will be instructed in their rights and obligations as well as working methods and required literature. Quality assurance system indicators: Student survey, monitoring of CES annual data on annual employment status of students, employer survey and Alumni Association.				



5.4. Informing about the course
and contacting the teacher

It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	TRANSSHIPMENT RESOURCES	1.8. Course code at ISVU	284501 / 284502
1.2. Course lecturer	Ana-Mari Poljičak	1.9. Course code at MOZVAG	
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 30 + 0 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	4.
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit point (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The goal is to provide students with theoretical knowledge: Distinguish between types of transshipment resources; Understand the principle of continuous operation of transshipment machinery and set an example for application in business practice; Calculate the efficiency of uninterrupted handling equipment; Learn how to choose uninterrupted handling equipment based on the type of goods. Describe and distinguish between basic features and performance of transshipment mechanization with periodically action; Understand the application and purpose of transshipment mechanization with periodically action; Apply the learned content of this course in business practice.
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.
	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.

	LO9: Solve problems in the field of road transport using analytical methods.	
	LO11: Choose technical and technological solutions when carrying out traffic and/or goods flows.	
2.4. Expected learning outcomes on the course level	Learning outcomes according to Bloom's taxonomy:	
		Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis
	1. differentiate goods according to the technical suitability for transport and transshipment,	4
	2. to sketch and comment on continuous operation transshipments,	3, 4
	3. calculate the productivity of individual continuous action transshipment means,	4
	4. recommend loading and unloading means depending on the type of goods and productivity,	5
	5. sketch and select the required elements of the crane,	4, 5
	6. calculate the productivity of transshipment mechanization with periodically action for specific transshipment and transport tasks,	3
7. suggest a crane type considering the area of application.	6	

2.5. Course content according to detailed curriculum schedule	Constructive allignment					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introduction into the course and detailed plan.	-	They listen to a lecture. They are introduced to the course content and documents on the e-learning page of the course as well as the literature available in the library.	-	1 h
	Basics of transshipment mechanization.	1	They listen to lectures and read literature. During the exercises classes they repeat the units of measurement and formulas needed to calculate the productivity of transshipment machinery.	At the colloquium or written and oral exam, they differentiate the goods according to their technical convenience for transport and transshipment. They comment on the loading angle. They distinguish between types of	4 h	

					productivity of transshipment machinery with continuous operation.	
	2.	Belt conveyors. Band conveyor belts.	2, 3, 4	They listen to lectures and read literature. In the exercises classes, they calculate the productivity of the conveyor by analytical methods.	At the colloquium or written and oral exam, they can sketch and comment the belt conveyor and its constituent elements. Give an example of application. Choose the material and shapes of the bearing surfaces of the conveyor belts of the belt conveyor. They know how to calculate the productivity of belt conveyors.	6 h
	3.	Drums and rollers of belt conveyors. Devices for loading and unloading. Calculation of belt conveyors.	2, 3, 4	They listen to lectures and read literature. In the exercises classes, they calculate the productivity of the conveyor by analytical methods.	At the colloquium or written and oral exam, they can sketch and comment the belt conveyor drive with one, two and three drive drums. Sketch the types of rollers according to construction solutions and shape. They can sketch and comment the role of loading and unloading devices. They know how to calculate the required belt width for a belt conveyor. They know how to calculate the productivity of belt conveyors.	6 h
	4.	Screw conveyors. Field of application, shapes and calculation of a screw conveyor.	2, 3, 4	They listen to lectures and read literature. In the exercises classes they calculate the productivity of the conveyor by analytical methods.	At the colloquium or written and oral exam, they can sketch and comment on a screw conveyor. Give an example of application. They can choose the shape of the screw conveyor according to the type of material. Sketch and comment on a screw conveyor for piece goods. They know how to calculate the productivity of belt conveyors.	6 h
	5.	Elevators. Forms of construction and calculation. Pneumatic conveyors. Forms of construction and calculation.	2, 3, 4	They listen to lectures and read literature. In the exercises classes, they calculate the productivity of the conveyor by analytical methods.	At the colloquium or written and oral exam, they can sketch and comment on elevators. They know how to choose types of buckets based on the type of material and elements for transporting piece goods. At the colloquium	6 h

					or written and oral exam, they can sketch and comment on pneumatic conveyors. They know how to calculate the productivity of elevators.	
	6.	Sectional conveyors. Features and calculation of sectional conveyors. Vibrating conveyors. Field of application, forms and calculation.	2, 3, 4	They listen to lectures and read literature. In the exercises classes, they calculate the productivity of the conveyor by analytical methods.	At the colloquium or written and oral exam, they can sketch and comment on sectional conveyors. At the colloquium or written and oral exam, they can sketch and comment on vibrating conveyors. They know how to calculate the productivity of pneumatic conveyors.	6 h
	7.	Gravity conveyors. Field of application, shapes and calculation of gravity conveyors. Conveyors scrapers. Field of application, forms and calculation of scraper conveyors.	2, 3, 4	They listen to lectures and read literature. In the exercises classes, they calculate the productivity of the conveyor by analytical methods.	At the colloquium or written and oral exam, they know how to sketch and comment on gravity conveyors. Give an example of application. They know how to sketch and comment on a scraper conveyor. Give an example of application. They know how to calculate the productivity of pneumatic conveyors.	6 h
	8.	Repetition and preparation for the colloquium. Colloquium I.	1, 2, 3, 4	They listen to lectures and read literature and individually prepare for the colloquium.	-	20 h
	9.	Crane operating class. Crane elements.	5, 6	They listen to lectures and read literature. In the exercises classes, they learn about the parameters for classifying cranes into classes and calculating the productivity of transshipment machinery with periodically action. They calculate the productivity with an analytical method.	At the colloquium or written and oral exam, they sketch and comment on crane elements and identify the crane class. Calculate theoretical and operational productivity.	4 h
	10.	Ropes and steel ropes. Hooks.Chain. Grippers.	5, 6	They listen to lectures and read literature. They calculate the productivity with an analytical method.	At the colloquium or written and oral exam, they know how to sketch the types of ropes and choose the necessary rope. Sketch ways of fixing steel ropes. Sketch and comment on	4 h

					types of hooks, calculate the dangerous cross-section of the hook. Sketch and comment on types of chains and give an example from practice. They know how to sketch and comment on types of grabs and give an example from practice. Calculate parameters for classifying cranes into classes.	
	11.	Pulleys. Brakes.	5, 6	They listen to lectures and read literature. In the exercises classes they calculate the productivity with an analytical method.	At the colloquium or written and oral exam, they know how to sketch and comment on pulleys. They know how to sketch and comment on brakes and give an example from practice. Calculate parameters for classifying cranes into classes.	6 h
	12.	Division of the crane. Design of small cranes.	5, 6, 7	They listen to lectures and read literature. In the exercises classes they calculate the productivity with an analytical method.	At the colloquium or written and oral exam, they can sketch and comment on small cranes and give an example from practice. Calculate the required pressure in the cylinder of a hydraulic crane, the required force at the end of the driving lever, and the diameter of the piston.	6 h
	13.	Large cranes.	5, 6, 7	They listen to lectures and read literature. In the exercises classes they calculate the productivity with an analytical method.	At the colloquium or written and oral exam they they can sketch and comment on large cranes and give a practical example. Calculate the required number of containers.	10 h
	14.	Universal manipulative vehicles. Forklifts, loaders and small towing vehicles. Pallets and containers.	4, 6	They listen to lectures and read literature. In the exercises classes they calculate the productivity with an analytical method.	At the colloquium or written and oral exam, they they can comment on universal manipulative vehicles and give an example from practice. At the colloquium or written and oral exam, they can comment on the types of pallets and containers and give an example from practice. Calculate the control number of the container.	4 h

	15.	Repetition and preparation for the colloquium. Colloquium II. Concluding considerations. Repeating and preparing for the exam.	4, 5, 6, 7	They listen to the lecture and read the literature and individually prepare for the colloquium/ exam.	-	25 h
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3. EVALUATION OF STUDENT WORK

3.1. Students` obligations	In accordance with the Rulebook on Study and the Rulebook on Student Assessment and Evaluation: for all full-time students attendance of at least 70%. Part-time students are required to attend a class of at least 50%. All students must create, present and positively colloquy seminar paper. Students who have achieved during the course: From 0 - 24.9% of ECTS credits - they are rated unsuccessful and cannot earn ECTS credits and must re-enroll in the next academic year; From 25-49.9% - are assessed by insufficient and must pass and pass the written exam (test). Written exam (test) can be held in regular or extraordinary exam period; More than 50% - students have the right to take the final exam. Students can pass the final exam in the course in two ways: a) during classes through continuous monitoring of students (active participation in classes and preparation and presentation of seminar paper and two colloquia); b) during classes (active participation in classes and preparation and presentation of seminar paper) and taking exams (written and oral part of the exam).
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3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance		Written exam	2,5 (without colloquia)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous examination	
	Colloquium	2,5 (without written exam)	Seminar paper		Other	
	Class activity	0,5	Oral exam	1 (without colloquia)	Other	

3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:	
	<i>Obligation</i>	<i>Hours (estimated)</i>
	1. Class attendance	60
	2. Preparing colloquia or exams through individual work	60

4. GRADING SYSTEM

4.1. Grading of seminar work	-				
4.2. Grading of the colloquium / written and oral exam	Bad		Satisfying		Above average
	It responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.		It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts that it supports with examples.		Knowledge is at the level of analysis, synthesis and evaluation. It observes the legality, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts that it supports with examples. Finds solutions that were not originally given. It notes correlations with related material.
4.3. Forming the final grade according to the evaluation elements	Active attendance	70-75% of the presence	76-86% of the presence	87-100% of the presence	Case studies resolved
		2 points	5 points	10 points	20 points
	Examination / Written examination	2	3	4	5
		50-64,9%	65-79,9%	80-89,9%	90-100%
	Oral part of the exam	25 points	30 points	35 points	40 points
		2	3	4	5
4.4. Formation of final grade based on absolute distribution	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Number rating		ECTS grade
	90 – 100%		5 (excellent)		A
	80 – 89,9%		4 (very good)		B
	65 – 79,9%		3 (good)		C
	60 – 64,9%		2 (sufficient)		D
	50 – 59,9%		2 (sufficient)		E
5. ADDITIONAL INFORMATION ON THE SUBJECT					
	Title			Number of copies in the library	Availability via other media

<p>5.1. Required literature (available in the library and through other media)</p>	<p>Mavrin I.: Conveyors, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 1999. Šćap D.: Transmissions and elevators, Faculty of Mechanical and Naval Engineering, University of Zagreb, Zagreb, 2004. (selected chapters) Bognolo, D., Kršulja, M.: Transshipment means - Collection of solved tasks, Polytechnic of Rijeka, Rijeka 2017. (selected chapters) Boris Ribarić: Examples of solved tasks in the subject of handling machinery, Faculty of transport and traffic sciences, University of Zagreb, Zagreb 1994 (selected chapters)</p>	<p>0 0 3 0</p>	<p>Available online</p>
<p>5.2. Supplementary literature (at the time of the submission of changes and / or additions to the study program)</p>	<p>Serdar J.: Transmissions and elevators, Lexicographic Institute "M. Krleža", Zagreb, 1995.</p>	<p>5</p>	
<p>5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences</p>	<p>Quality control of students' work and the acquisition of necessary knowledge and skills will be ensured through interactive work. Keeping records of students' attendance and activity in the classroom and information obtained about student progress through the midterm will provide the information needed for further guidance to students in order to increase their work efficiency. Students will be instructed in their rights and obligations as well as working methods and required literature. Quality assurance system indicators: Student survey, monitoring of CES annual data on annual employment status of students, employer survey and Alumni Association.</p>		
<p>5.4. Informing about the course and contacting the teacher</p>	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	TRAFFIC CORRIDORS AND MERCHANDISE FLOWS	1.8. Course code in ISVU	140771 / 202099
1.2. Course lecturer	Darijo Šego	1.9. Course code in MOZVAG	-
1.3. Assistants and/or associates		Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 0 + 30 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	4
1.6. Year of study	2 nd	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The goal is that students on the basis of theoretical knowledge and case studies: become familiar with the creation and development of all transport modes, analyze and comment of commodity exchange (trade) in the World and Croatia, distinguish the main transport corridors in Europe and Croatia.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO2: Critically assess the opinions and attitudes of stakeholders in teamwork.		
	LO3: Independently and responsibly analyze the relevant literature necessary for decision-making.		
	LO6: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.		
	LO11: Choose technical and technological solutions when carrying out traffic and/or goods flows.		
	Learning outcomes by Bloom: (maximum 2 verbs for LO)		Level of LO: 1- memory,

2.4. Expected learning outcomes on the course level (4-10 learning outcomes)						2- <i>understanding</i> , 3- <i>application</i> , 4- <i>analysis</i> , 5- <i>evaluation</i> , 6- <i>synthesis</i> .
	1. Distinguish the main factors that determine the emergence of commodity flows in the world.					4
	2. Connect the transport sectors and the commodity flows that take place along them.					5
	3. Identify the most important transport corridors in Europe and the Republic of Croatia in all transport sectors.					4
	4. Present the activities of the EU Marco Polo program.					6
	5. Compare the values of exports and imports of goods in the modern world and in the Republic of Croatia.					4
	6. Critically assess the items of the latest published EU White Paper on Transport.					5
2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	No	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introductory presentation (introducing students to the course content and obligations)	-	Listening to the lecture. In the course of seminars, they are introduced to the course content and documents on the e-learning page of the course by working independently on a computer.	-	2 h
	2.	Geo-traffic factors of formation and location of commodity flows (General geo-traffic factors, natural predispositions, socio-economic factors)	1	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam students know how to define, numerate and distinguish the main factors for the formation and development of commodity flows (general, natural and socio-economic factors). Identify abbreviations of economic groups of the world. Seminar paper created and presented (by computer programs).	5 h

	3.	The development of transport on land (development of road, rail, and pipeline transport)	2	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or written and oral exam students know to present and comment on the historical development of transport on land. Analyze and evaluate the merchandise trade in land traffic, in the world. Seminar paper created and presented (by computer programs).	5 h
	4.	The development of transport on land (development of road, rail, and pipeline transport)	2	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or written and oral exam students know to present and comment on the historical development of transport on land. Analyze and evaluate the merchandise trade in land traffic, in the world. Seminar paper created and presented (by computer programs).	5 h
	5.	The development of transport on the water (history, World and European ports, shipping routes, ships for freight)	2	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam students know how to present and comment on the historical development of water traffic, the development of seaports. Analyze and evaluate the merchandise of trade in the world's water transport. Categorize seaports, regions, and routes. Seminar paper created and presented (by computer programs).	5 h
	6.	The development of transport on the water (video films about merchandise and traffic flows in maritime traffic)	2	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the	At the colloquium or written and oral exam students know present seaports in the world. Identify and distinguish terminals at the seaport.	5 h

				database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	Analyze and evaluate the cargo traffic of the seaport. Categorize seaports, ships, regions, and routes. Seminar paper created and presented (by computer programs).	
	7.	The development of traffic in the air (types of aircraft, aircraft manufacturers, airlines, airports and routes)	2	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or written and oral exam students know to present and comment on the historical development of traffic in the air. Analyze and evaluate the merchandise in air traffic in the world. Categorize airports and airlines. Seminar paper created and presented (by computer programs).	5 h
	8.	Transport corridors in Europe (Trans-European transport network, transport corridors in Western and Northern Europe, Pan-European transport corridors, pipeline corridors, inland waterways)	3	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or written and oral exam students know state and compare the main transport corridors in all parts of Europe and all branches of transport. Define the term of traffic corridor. List the countries through which each transport corridor passes. Seminar paper created and presented (by computer programs).	4 h
	9.	Merchandise and traffic flows in the modern world (Concept and characteristics of traffic flow, commodity flows of food, raw materials, and industrial products)	1, 5	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students know how to define the concept of goods traffic. Categorize, analyze and evaluate the world trade of food, raw materials, and industrial products. List the countries with the largest importers and exporters of all types of goods.	5 h

					Seminar paper created and presented (by computer programs).	
	10.	Merchandise and traffic flows in the modern world (Concept and characteristics of traffic flow, commodity flows of food, raw materials, and industrial products)	1, 5	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students know how to define the concept of goods traffic. Categorize, analyze and evaluate the world trade of food, raw materials, and industrial products. List the countries with the largest importers and exporters of all types of goods. Seminar paper created and presented (by computer programs).	4 h
	11.	Transport corridors in the Republic of Croatia (Geographical location, traffic directions, traffic corridors in the road, rail, air, water, and pipeline transport)	3	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can identify and compare major traffic corridors in Europe and the Republic of Croatia. Present, critically evaluate the traffic connection of the Republic of Croatia in the road, rail, air, pipeline and inland waterway transport. Seminar paper created and presented (by computer programs).	4 h
	12.	Merchandise and traffic flows of the Republic of Croatia (import and export of products, merchandise and traffic flows of the Republic of Croatia in land, water, and air)	1, 5	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam students know how to analyze and evaluate the trade of products in the Republic of Croatia. List the products that the Republic of Croatia imports/exports the most. Present, critically evaluate and comment on the traffic connection of the Republic of Croatia in all branches of traffic. Seminar paper	5 h

					created and presented (by computer programs).	
	13.	Marco Polo Program (program objective, program activities, program projects)	4	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can define the goal and strategy of the Marco Polo program. Distinguish activities Marco Polo. Critically evaluate the professional video films program. Seminar paper created and presented (by computer programs).	4 h
	14.	European Union White Paper on Transport (White Paper titles, key content areas, preparing the European transport area for the future, visions for developing a competitive and sustainable transport system, strategy - what needs to be done)	6	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or written and oral exam, students define objective and strategy of the current EU White Paper on transport. Comment on EU professional projects in the field of transport. Seminar paper created and presented (by computer programs).	4 h
	15.	Final considerations/Repeating and preparing for the exam.	-	They listen to a course lecture and prepare individuals for the exam.	-	60 h

3. EVALUATION OF STUDENT WORK

3.1. Student obligations	In accordance with the Rulebook on Study and the Rulebook on Student Assessment and Evaluation: for all full-time students' attendance of at least 70%. Part-time students are required to attend a class of at least 50%. All students must create, present and positively colloquy seminar papers. Students who have achieved during the course: from 0 - 24,9% ECTS credits are rated unsuccessful and cannot earn ECTS credits, and must re-enroll in the next academic year; from 25 - 49,9% are assessed by insufficient and must pass and pass the written exam (test). Written exam (test) can be held in a regular or extraordinary exam period; more than 50% - students have the right to take the final exam. Students can take the final exam from the course in two ways: a) during the course of teaching through continuous monitoring of students (active participation in classes and through two exams); b) passing the exam (written and oral part of the exam).					
3.2. Student work monitoring (enter the share of ECTS credits for each activity so that the total	Attending classes	1	Written exam	1 (without colloquiums)	Project	
	Experimental work		Research		Practical work	

number of ECTS credits corresponds to the course credit value)	Esaay		Report		Continuous check	
	Colloquiums	1 (without written part of exam)	Seminar paper	0,5	(other)	
	Teaching activities	1	The oral part of exam	0,5	(other)	
3.3. Student work-load	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	<i>Obligation</i>			<i>Hours (estimate)</i>		
	1. Attending classes			30		
	2. Creating and Presenting seminar paper			30		
3. Preparation for the Colloquium / exam through self-study			60			
4. GRADING SYSTEM						
4.1. Evaluation of seminar paper	Elements of evaluation	Bad	Satisfying		Above average	
	Organization	The paper is not organized in a logical order and lacks structure.	The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion.		The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion, which are logically interconnected.	
	Terminology, writing style	Words and expressions are not in line with official terminology. The writing style is not appropriate, the sentences are too long, of a modest vocabulary and with frequent and repeated grammatical errors.	Words and expressions are in line with official terminology. The writing style is appropriate, the sentence structure is clear, the vocabulary is appropriate and there are few grammatical errors.		Words and expressions are aligned with official terminology and show an understanding of their meaning. The writing style is excellent, the sentences are clear and concise, the vocabulary is rich and there are no grammatical errors.	
	Citing and referencing references	The sources are not listed at all. The references do not fit the topic and show a cursory approach to exploring the topic.	The sources are listed but incomplete and with errors. The references are relevant to the topic and show a satisfactory research attitude.		The sources are accurately, completely and consistently listed. The references are appropriate, their list is "rich" and comprehensive and shows a detailed research approach.	

4.2. Grading of the colloquium/written and oral exam	Bad		Satisfying		Above average	
	It responds by memory, without a deeper understanding. It does not know or apply basic terms and concepts. It does not know how to apply or explain the contents of the course with examples.		It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts that it supports with examples.		Knowledge is at the level of analysis, synthesis, and evaluation. It observes the legality, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts that it supports with examples. Finds solutions that were not originally given. It notes correlations with related material.	
4.3. Forming the final grade according to the evaluation elements	Active attendance on class	70-75% attendance	76-86% attendance	87-100% attendance	Mental map created, Case studies resolved	
		2 points	4 points	7 points	3 points	
	Seminar paper	2	3	4	5	
		5 points	7 points	8 points	10 points	
	Colloquiums/ Written part of exam	2	3	4	5	
		50 - 64,9%	65 - 79,9%	80 - 89,9%	90 - 100%	
		25 points	30 points	35 points	40 points	
	Oral part of exam	2	3	5	5	
25 points		30 points	35 points	40 points		
4.4. Formation of the final grade based on the absolute distribution	Percentage of acquired knowledge, skills and competencies (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	
	80 – 89,9%		4 (very good)		B	
	65 – 79,9%		3 (good)		C	
	50 – 64,9%		2 (sufficient)		D	

5. ADDITIONAL INFORMATION ABOUT THE COURSE

5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
	<p>Šego Darijo: Traffic corridors and merchandise flows, Script for internal use, Polytechnic of Šibenik, Šibenik 2016.</p> <p>Strategy for Transport Development of the Republic of Croatia for the Period 2014-2030. (selected chapters)</p> <p>World trade organization http://www.wto.org/ (selected chapters)</p> <p>Transport in EU http://ec.europa.eu/transport/index_en.htm(selected chapters)</p> <p>Central Bureau of Statistics of the Republic of Croatia https://www.dzs.hr/</p>	<p>-</p> <p>-</p>	<p>e-learning system</p> <p>Internet website Internet website</p> <p>Internet website Internet website</p>
5.2. Additional literature (at the moment of changes and/or amended of study programme)	<p>Teaching materials from lectures and seminars on the e-Learning system of the Šibenik University of Applied Sciences for the mentioned course.</p> <p>International trade statistics https://www.trademap.org/Index.aspx</p> <p>UN agency for food http://www.fao.org/home/en/</p>	<p>-</p>	<p>e-learning system</p> <p>Internet website Internet website</p>
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	<p>The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students` progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.</p>		
5.4. Informing about the course and contacting the course lecturer	<p>It is the responsibility of each student to be regularly informed about the course, the coursework, and classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address name@vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).</p>		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	MODERN TRAFFIC SYSTEMS	1.8. Course code at ISVU	270665 / 270666
1.2. Course lecturer	Darijo Šego	1.9. Course code at MOZVAG	-
1.3. Assistants and/or associates		1.10. Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 0 + 30 + 0)
1.4. Study program (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1st, course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	3.
1.6. Year of study	1 st	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit point (ECTS)	5	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>

2. COURSE DESCRIPTION	
2.1. Course objectives	The aim is to provide students with theoretical knowledge and case studies: define elements and branches of the transport system; learn the elements of the transport system; understand the technical and technological characteristics of the traffic branches; acquire knowledge about the organizational features of the traffic branches and the complexity of the transport system; get to know the interdisciplinary approach to the transport system and transport processes; apply the learned content of this course to practice.
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF
2.3. Learning outcomes on the study program level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.
	LO3: Independently and responsibly analyze the relevant literature necessary for decision-making.
	LO4: Apply knowledge from the field of natural and technical sciences to problems in the field of road transport.

	LO06: Based on the previous analysis, present relevant facts from the field of road transport necessary for drawing conclusions.	
	LO13: Monitor trends in the development of technology, techniques, and road transport safety.	
2.4. Expected learning outcomes on the course level	Learning outcomes according to Bloom's taxonomy:	
		<i>Level of LO: 1- remembering, 2- understanding, 3- application, 4- analysis, 5- evaluation, 6- synthesis</i>
	1. Distinguish elements of transport technology and historical periods of development of transport branches.	4
	2. Connect individual transport branches and associated technological processes.	5
	3. Identify differences, advantages and disadvantages of use between individual transport branches.	4
	4. Analyze the relevant literature searched in Croatian and English.	4
5. Present acquired knowledge about individual elements of transport technology for individual transport branches.	6	

2.5. Course content according to detailed curriculum schedule	Constructive alignment					
	no	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introductory presentation (acquaintance of students with the course content and obligations)	-	They listen to a lecture. During the individual work on the computer, they are introduced to the course content and documents on the e-learning page of the course.	-	2 h
2.	Definition of traffic (the term Traffic and Traffic Technology). Historical development of transport branches.	1, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, the elements of the transport system and explain interdisciplinarity in the transport system, as well as state the historical development of the elements and branches of the transport system.	4 h	

	3.	Road traffic (roads, terminals, means of transport, tachograph, technological processes).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of road transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	5 h
	4.	Road traffic (roads, terminals, means of transport, tachograph, technological processes).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of road transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	4 h
	5.	Railway traffic (railway, terminals, means of transport, timetable, signaling, technological processes).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of railway transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	4 h
	6.	Maritime traffic (sea water ports, means of transport, safety of navigation, technological processes).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of maritime transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	5 h
	7.	Maritime traffic (video film about the largest seaports in Europe).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of maritime transport, and define and describe the role of the technical and technological	4 h

				up with their own ideas, and ways to solve problems.	characteristics of this branch of transport in the transport system.	
	8.	Traffic on Inland Waterways (waterway, classes of inland waterways, ports, means of transport, signalling, technological processes, video film).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of inland waterway transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	4 h
	9.	Air traffic (airport or airfield, means of transport, flight schedule, flight control, technological processes, video film).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of air transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	5 h
	10.	Modern transport technologies (transportation technologies in land, water and air traffic, video film).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they can list and explain modern transport technologies in land, water and air transport, and define and describe the role of transport technologies in the transport system.	5 h
	11.	City transport (public transport of passengers throughout history, modes of public city transport, lines of public city transport).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of urban transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	5 h

	12.	Pipeline and Cableway Traffic (infrastructure, types, video).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of pipeline and cableway transport, and define and describe the roles of the technical and technological characteristics of these transport branches in the transport system.	4 h
	13.	Postal traffic (postal network, postal items and services, addressing and payment of items and services, technological processes).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of postal transport, and define and describe the role of the technical and technological characteristics of this branch of transport in the transport system.	5 h
	14.	Telecommunication traffic (telecommunication services, telecommunications network).	2, 3, 4, 5	They listen to a lecture and read literature. In the course of the seminar, they individually explore the content of this topic area by searching the database, and on the basis of it and the read literature, come up with their own ideas, and ways to solve problems.	In a preliminary exam or written and oral exam, they are able to list and explain the elements and technologies of telecommunications traffic, and define and describe the role of the technical and technological characteristics of this branch of traffic in the traffic system.	4 h
	15.	Final considerations. Repeating and preparing for the exam.	-	They listen to a course lecture and prepare individuals for the exam.	-	90 h

3. EVALUATION OF STUDENT WORK

3.1. Students` obligations	In accordance with the Rulebook on Study and the Rulebook on Student Assessment and Evaluation: for all full-time students` attendance of at least 70%. Part-time students are required to attend a class of at least 50%. All students must create, present and positively colloquy seminar paper. Students who have achieved during the course: from 0 - 24.9% of ECTS they are rated unsuccessful and cannot earn ECTS credits and must re-enroll in the next academic year; from 25-49.9% are assessed by insufficient and must pass and pass the written exam (test). Written exam (test) can be held in regular or extraordinary exam period; more than 50% students have the right to take the final exam. Writing a seminar paper is a prerequisite for obtaining a signature. Students can take the final exam in the course in two ways: a) during the course of teaching through continuous monitoring of students (active participation in classes and two exams); b) during class (active participation in class and passing exams (written and oral part of the exam)).
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3.2. Monitoring student work (enter the share of ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the course)	Attendance	1	Written exam	1 (without colloquia)	Project	
	Experimental work		Research		Practical work	
	Essay		Report		Continuous examination	1
	Colloquium	1 (without written exam)	Seminar paper	0,5	Other	
	Class activity	0,5	Oral exam	1	Other	
3.3. Student workload	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:					
	<i>Obligation</i>			<i>Hours (estimate)</i>		
	1. Attending classes			30		
	2. Creating and Presenting seminar paper			30		
3. Preparation for the Colloquium / exam through self-study			90			
4. GRADING SYSTEM						
4.1. Grading of seminar work	Element of evaluation	Bad		Satisfying		Above average
	Organization	The paper is not organized in a logical order and lacks structure.		The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion.		The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion, which are logically interconnected.
	Terminology, writing style	Words and expressions low in line with official terminology. The writing style is not appropriate, the sentences are too long, of a modest vocabulary and with frequent and repeated grammatical errors.		Words and expressions are in line with official terminology. The writing style is appropriate, the sentence structure is clear, the vocabulary is appropriate and there are few grammatical errors.		Words and expressions are aligned with official terminology and show an understanding of their meaning. The writing style is excellent, the sentences are clear and concise, the vocabulary is rich and there are no grammatical errors.
	Citing and referencing references	The sources are not listed at all. The references do not fit the topic and show		The sources are listed but incomplete and with errors. The references are		The sources are accurately, completely and consistently listed. The references

		a cursory approach to exploring the topic.	relevant to the topic and show a satisfactory research attitude.	are appropriate, their list is "rich" and comprehensive and shows a detailed research approach.		
4.2. Grading of the colloquium / written and oral exam	Bad	It responds by memory, without a deeper understanding. Does not know or apply basic terms and concepts. Does not know how to apply or explain the contents of the course with examples.	Satisfying	It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts that it supports with examples.	Above average	Knowledge is at the level of analysis, synthesis and evaluation. It observes the legality, accurately and thoroughly explains the content of the material, and logically connects and explains the terms and concepts that it supports with examples. Finds solutions that were not originally given. It notes correlations with related material.
4.3. Forming the final grade according to the evaluation elements	Active attendance	70-75% of the presence	76-86% of the presence	87-100% of the presence	Case studies resolved	
		0 points	0 points	0 points	0 points	
	Seminar paper	2	3	4	5	
		Made and handed over	Made and handed over	Made and handed over	Made and handed over	
	Examination / Written examination	2	3	4	5	
		50-64%	65-80%	81-90%	91-100%	
		25-32 points	33-40 points	41-45 points	46-50 points	
	Oral part of the exam	2	3	5	5	
25-32 points		33-40 points	41-45 points	46-50 points		
4.4. Formation of final grade based on absolute distribution	Percentage of acquired knowledge, skills and competences (teaching + final exam)		Numerical grade		ECTS grade	
	90 – 100%		5 (excellent)		A	

	80 – 89,9%	4 (very good)	B
	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (sufficient)	D

5. ADDITIONAL INFORMATION ABOUT THE COURSE

	Title	Number of copies in the library	Availability via other media
5.1. Required literature (available in the library and through other media)	Cerovac, V.: Technology and traffic safety, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2001. (selected chapters) Božičević, D., Kovačević, D.: Modern transport technologies, Faculty of transport and traffic sciences, University of Zagreb, Zagreb, 2002.	3	No
5.2. Supplementary literature (at the time of the submission of changes and / or additions to the study program)	Courses Lectures. Zelenika, R.: Traffic systems, Faculty of economics, University of Rijeka, Rijeka, 2001. Zelenika, R.: Multimodal traffic systems, Faculty of economics, University of Rijeka, Rijeka, 2006. Sussman, J. : Introduction to Transportation Systems, Artech House, United Kingdom, 2000.	3 0 0	No No Yes
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	Quality control of students' work and the acquisition of necessary knowledge and skills will be ensured through interactive work. Keeping records of students' attendance and activity in the classroom and information obtained about student progress through the midterm will provide the information needed for further guidance to students in order to increase their work efficiency. Students will be instructed in their rights and obligations as well as working methods and required literature. Quality assurance system indicators: Student survey, monitoring of CES annual data on annual employment status of students, employer survey and Alumni Association.		
5.4. Informing about the course and contacting the teacher	It is the responsibility of each student to be regularly informed about the course, the coursework, and the classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address at @ vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).		

PK-SP-2. Description of a new course or an amended and/or changed or modernized course.

1. GENERAL INFORMATION ABOUT THE COURSE			
1.1. Course title	TRAFFIC LOGISTIC	1.8. Course code in ISVU	140773 / 202084
1.2. Course lecturer	Darijo Šego	1.9. Course code in MOZVAG	-
1.3. Assistants and/or associates		Forms of teaching (number of hours Lecturing + Practical exercises + Seminars + e-learning)	(30 + 0 + 30 + 0)
1.4. Study programme (professional undergraduate, and professional graduate)	Professional undergraduate study of Traffic	1.11. Level of e- learning application (1 st , 2 nd , 3 rd level), percentage of on line course performance (max. 20%)	1 st , course materials are on-line, 0%
1.5. Course status (obligatory, optional)	Obligatory	1.12. Number of course revisions	4
1.6. Year of study	1 st	1.13. Modernization	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
1.7. Credit score (ECTS)	4	1.14. Percentage estimate of course changes and/or supplements	Less than 20% <input checked="" type="checkbox"/> More than 20 % <input type="checkbox"/>
2. COURSE DESCRIPTION			
2.1. Course objectives	The goal is to get students on the basis of theoretical knowledge and case studies: learn about the elements of the logistics system, identify and overcome logistical processes and activities that are related to storage, transportation, and traffic, mastering the modern logistics concepts and strategies.		
2.2. Terms of course entry and required competences	Four-year secondary education completed; qualification level 4.2 according to the CROQF.		
2.3. Learning outcomes on the study programme level	LO1: Connect professional terms from the field of road transport in written and oral communication with the professional public in Croatian and English.		
	LO8: Propose an optimal solution in the field of road transport using relevant literature and computer programs.		
	LO10: Organize the transport process in the field of road transport.		
	LO11: Choose technical and technological solutions when carrying out traffic and/or goods flows.		
	LO13: Monitor trends in the development of technology, techniques, and road transport safety.		
	Learning outcomes by Bloom: (maximum 2 verbs for LO)		Level of LO: 1- memory, 2- understanding,

2.4. Expected learning outcomes on the course level (4-10 learning outcomes)						3- application, 4- analysis, 5- evaluation, 6- synthesis.
	1. Distinguish the basic terms and divisions in logistics business.					4
	2. Choose appropriate logistics processes necessary for organizing the transport of goods in logistics.					5
	3. Categorize traffic and goods flows in urban areas.					4
	4. Connect the means of transport and transport technologies necessary for the successful implementation of the transport process.					4
	5. Suggest ways to successfully store, handle, reduce inventory holding costs, and distribute merchandise.					6
2.5. Course content according to detailed curriculum schedule	Constructive allignment					
	No	Thematic unit	LO of the course	Content/teaching methods	Evaluation	Time needed
	1.	Introductory presentation (introducing students to the course content and obligations)	-	Listening to the lecture. In the course of seminars, they are introduced to the course content and documents on the e-learning page of the course by working independently on a computer.	-	2 h
	2.	The term of logistics (term, developmental factors, elements of the logistics system, logistics system division)	1	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students know how to define and distinguish basic concepts in logistics, types of logistics, factors of logistics development. Seminar paper created and presented (by computer programs).	4 h
	3.	Human resources in logistics (management, freight forwarders, FIATA documents, customs officers).	1	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that	At the colloquium or the written and oral exam, students know how to define and distinguish the basic concepts in freight forwarding. Enumerate all freight forwarding	4 h

				presents the acquired knowledge and presents their own ideas, and ways to solve problems.	jobs, distinguish between customs documents, human resources working in logistics. Seminar paper created and presented (by computer programs).	
	4.	Warehouses and storage (concept, types and division, the factors for determining the location, equipment and furnishing warehouses, methods of storage operations)	1, 2, 5	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam students know how to define and differentiate the basic concepts of storage. Distinguish, describe and present warehouse equipment. Analyze and evaluate factors for determining location. Select, evaluate and categorize services in the warehouse business. List the rules and methods for storing goods. Seminar paper created and presented (by computer programs).	4 h
	5.	Warehousing and storage of products (video films)	1, 2, 5	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can distinguish, describe and present the warehouse equipment. Choose adequate racks and forklifts for the storage of products and internal transport. Seminar paper created and presented (by computer programs).	5 h
	6.	Freight terminals and Freight-transportation centers (concept and division, development goals of Freight-transportation center, functions, services, 3PL)	1, 2, 5	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that	At the colloquium or the written and oral exam, students can define the basic terms of the Freight terminals and the Freight-transportation centers. Distinguish between Freight-transport centers by size and location. Select and categorize	4 h

				presents the acquired knowledge and presents their own ideas, and ways to solve problems.	services provided at terminals and centers. Seminar paper created and presented (by computer programs).	
	7.	Information and communication system in the function of logistics (elements, methods of communication, modern computer programs, warehouse management system)	1, 2, 5	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can distinguish between information and communication technologies in logistics, warehouse management system, Bar code technology, and RFID identification. Identify the abbreviations of information and communication technologies. Establish the difference, strengths and the weakness of using it. Seminar paper created and presented (by computer programs).	4 h
	8.	Inventory management and manipulation with products (inventory planning and control, supply chain, packaging of goods, palletization and containerization)	1, 2, 5	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can propose ways of manipulating with products (packaging, palletizing) and reducing the cost of supplies (supply chain). Define and describe Supply Chain and Just in time procurement. Identify the difference between applying pallets and containers. Seminar paper created and presented (by computer programs).	4 h
	9.	Transportation in the logistics system (road, rail, air and pipeline transport, inland waterways transport, transport costs, transport documents)	1, 2, 4	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that	At the colloquium or the written and oral exam, students know how to distinguish transport modes in logistics, in all branches of traffic. Identify the advantages, disadvantages and costs of	5 h

				presents the acquired knowledge and presents their own ideas, and ways to solve problems.	transportation. Seminar paper created and presented (by computer programs).	
	10.	Modern transport technologies in transport logistics (conditions for development, integral transport, technologies on the road, rail, water, and air transport)	1, 2, 4	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students know how to isolate and analyze transport technologies in logistics in the road, rail, water, and air transport. Compare, identify similarities/differences in the transportation of products with modern transportation technologies. Seminar paper created and presented (by computer programs).	5 h
	11.	The computer program for stacking pallets STACKBUILDER	5	They use multimedia and network. Using a computer program, students arrange the shipments on the pallet and the means of transport. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students know distinguish information and communication technologies and computer programs in logistics. Use the computer program to choose the appropriate packaging, draw and analyze the optimal packaging on the pallet. Seminar paper created and presented (by computer programs).	5 h
	12.	Distribution and ordering of goods (concept, purpose, and structure of the distribution system, distribution networks, costs in distribution, term of the order, processes in ordering)	4, 5	They use multimedia and network. They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can define the terms of order and distribution. Propose the ways of orders in case of missing products. Determine the difference between physical distribution and distribution channels. Compare and explain	5 h

					distribution network concepts. Identify distribution costs. Seminar paper created and presented (by computer programs).	
	13.	City logistics (concept, task, and goal of city logistics, initiatives, the structure of city logistics system, optimization of logistics flows)	2, 3, 4	They listen to a lecture and read literature. At the seminar class, they individually explore the content of this topic area by searching the database, and on the basis of it and reading the literature, create a seminar paper that presents the acquired knowledge and presents their own ideas, and ways to solve problems.	At the colloquium or the written and oral exam, students can define the concept and the goal of city logistics. Distinguish and isolate participants in city logistics. Categorize flows of products in city logistics. Identify means of transport. Suggest city logistics concepts. Identify the advantages and disadvantages of optimizing the flow of products. Seminar paper created and presented (by computer programs).	5 h
	14.	Study trip to KONZUM or LIDL Logistics-distribution center (located in Dugopolje and Perušić).	1, 2, 3, 4, 5	-	On a study tour, students will be able to define and differentiate basic terms and divisions in logistics, warehousing, and freight forwarding. Select, evaluate and categorize services in the warehouse business. Compare and connect modes of product transport, organization of distribution of products. Suggest ways of manipulation with the products and reducing inventory costs.	5 h
	15.	Final considerations. Repeating and preparing for the exam.	-	They listen to a course lecture and prepare individuals for the exam.	-	60 h

3. EVALUATION OF STUDENT WORK

3.1. Student obligations	In accordance with the Rulebook on Study and the Rulebook on Student Assessment and Evaluation: for all full-time students attendance of at least 70%. Part-time students are required to attend a class of at least 50%. All students must create, present and positively colloquy seminar papers. Students who have achieved during the course: from 0 - 24,9% ECTS credits are rated unsuccessful and cannot earn ECTS credits, and must re-enroll in the next academic year; from 25 - 49,9% are assessed by insufficient and must pass and pass the written exam (test). Written exam (test) can be held in a regular or extraordinary exam period; more than 50% - students have the right to take the final exam. Students can take the final exam from the course in two ways: a) during the course of teaching through continuous monitoring of students (active participation in classes and through two exams); b) passing the exam (written and oral part of the exam).				
3.2. Student work monitoring (enter the share of ECTS credits for each activity so that the total number of ECTS credits corresponds to the course credit value)	Attending classes	1	Written exam	1 (without colloquiums)	Project
	Experimental work		Research		Practical work
	Esaaay		Report		Continuous check
	Colloquiums	1 (without written part of exam)	Seminar paper	0,5	(other)
	Teaching activities	1	The oral part of exam	0,5	(other)
3.3. Student work-load	The student's workload on all bases amounts to 1 ECTS point for 30 hours of work per semester and is estimated as:				
	Obligation			Hours (estimate)	
	1. Attending classes			30	
	2. Creating and Presenting seminar paper			30	
3. Preparation for the Colloquium / exam through self-study			60		
4. GRADING SYSTEM					
4.1. Evaluation of seminar paper	Elements of evaluation	Bad	Satisfying	Above average	
	Organization	The paper is not organized in a logical order and lacks structure.	The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion.	The paper is well structured with a clear distinction between the introduction, the main body of the text and the conclusion, which are logically interconnected.	
	Terminology, writing style	Words and expressions are not in line with official terminology. The writing style is not	Words and expressions are in line with official terminology. The writing style is appropriate, the sentence structure is clear,	Words and expressions are aligned with official terminology and show an understanding of their meaning. The writing	

		appropriate, the sentences are too long, of a modest vocabulary and with frequent and repeated grammatical errors.	the vocabulary is appropriate and there are few grammatical errors.	style is excellent, the sentences are clear and concise, the vocabulary is rich and there are no grammatical errors.	
	Citing and referencing references	The sources are not listed at all. The references do not fit the topic and show a cursory approach to exploring the topic.	The sources are listed but incomplete and with errors. The references are relevant to the topic and show a satisfactory research attitude.	The sources are accurately, completely and consistently listed. The references are appropriate, their list is "rich" and comprehensive and shows a detailed research approach.	
4.2. Grading of the colloquium/written and oral exam	Bad		Satisfying		
	It responds by memory, without a deeper understanding. It does not know or apply basic terms and concepts. It does not know how to apply or explain the contents of the course with examples.		It reproduces the basic concepts and without difficulty imparts new knowledge, understands the material, explains the terms and concepts that it supports with examples.		
4.3. Forming the final grade according to the evaluation elements	Active attendance on class	70-75% attendance	76-86% attendance	87-100% attendance	Mental map created, Case studies resolved
		2 points	4 points	7 points	3 points
	Seminar paper	2	3	4	5
		5 points	7 points	8 points	10 points
	Colloquiums/ Written part of exam	2	3	4	5
		50 - 64,9%	65 - 79,9%	80 - 89,9%	90 - 100%
		25 points	30 points	35 points	40 points
	Oral part of exam	2	3	5	5
25 points		30 points	35 points	40 points	

4.4. Formation of the final grade based on the absolute distribution	Percentage of acquired knowledge, skills and competencies (teaching + final exam)	Numerical grade	ECTS grade
	90 – 100%	5 (excellent)	A
	80 – 89,9%	4 (very good)	B
	65 – 79,9%	3 (good)	C
	50 – 64,9%	2 (sufficient)	D
5. ADDITIONAL INFORMATION ABOUT THE COURSE			
5.1. Compulsory literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
	Ivakovic C., Stankovic R., Šafran M.: Freight Forwarding and Logistics Processes, Faculty of Transport and traffic sciences, University of Zagreb, Zagreb, 2010 (selected chapters)	-	City of Sibenik library
	Mlinarić Josip T.: Freight-transport Centers, Faculty of Transport and traffic sciences, University of Zagreb, 2013 (selected chapters)	-	PDF (Internet website)
	Zelenika R.: Logistics Systems, University of Rijeka, Faculty of Economics, Rijeka, 2005 (selected chapters)	2	
	Bloomberg D.: Logistics, MATE, Zagreb School of Economics and Management, Zagreb, 2006 (selected chapters)	-	City of Sibenik library
5.2. Additional literature (at the moment of changes and/or amended of study programme)	Teaching materials from lectures and seminars on the e-Learning system of the Sibenik University of Applied Sciences for the mentioned course. Zelenika R.: Transport Systems, University of Rijeka, Faculty of Economics, Rijeka, 2001. Zelenika R.: Transport and freight forwarding business, University of Rijeka, Faculty of Economics, Rijeka, 2001. Logistics www.logistika.com.hr		e-learning system City of Sibenik library City of Sibenik library Internet website
5.3. Quality assurance methods that ensure the acquisition of knowledge, skills and competences	The control of students' work quality and the acquisition of necessary knowledge and skills will be ensured through interactive work. By keeping track of attendance and student activity during classes and provided information on students' progress through short colloquiums and homework, information for further guidance to students will be provided in order to increase the efficiency of their work. Students will be informed about their rights and obligations as well as the methods of work and the required literature. Indicators of quality assurance system: Student survey, monitoring of annual data from the Croatian employment service on the annual state of student employment, surveys from employers and Alumni association.		



5.4. Informing about the course and contacting the course lecturer

It is the responsibility of each student to be regularly informed about the course, the coursework, and classroom activities. All notices of classes or possible adjournment will be published in a timely manner on the e-learning site of the course and on the website of the Šibenik University. Students can contact teachers during the consultation period (at least one hour per week), while for short questions and explanations they can be contacted during class. It is also possible to ask questions by e-mail (from the official e-mail address name@vus.hr), which will be answered as soon as possible (no later than five working days after receiving the e-mail).