UNIVERSITY OF EAST SARAJEVO FACULTY OF TRANSPORT AND TRAFFIC ENGINEERING DOBOJ



I CYCLE OF STUDY STUDY PROGRAMME TRANSPORT AND TRAFFIC

Doboj, 2021

CURRICULUM

FIRST CYCLE OF STUDY (BACHELOR OF SCIENCE WITH HONOURS)

- TRANSPORT AND TRAFFIC-

The Faculty of Transport and Traffic Engineering is an educational – scientific institution that provides all levels of higher education 4+1+3 (four years of the first cycle of study, one year of the second cycle of study and three years of the third cycle of study), pursues knowledge innovations and invests constantly in professional development in the field of transport and traffic engineering and its applications in informatics and motor vehicles.

In the academic year 2005/06 students were enrolled at two out of five Departments: Road and Urban Transport and Traffic and Rail Transport and Traffic. After completing studies at these departments, students are awarded titles of Bachelor of Science in respective fields. Since the academic year 2006/07 students enrolled at the other three Departments as well: Postal Transport and Traffic, Telecommunications and Logistics.

In 2014 the Ministry od Education and Culture of the Republic of Srpska, by the Decision numbered 07.050/612-10-1-2/14 of 2 July 2014, approved the implementation of the innovated programme of the first and second cycle of studies in the study program Transport and Traffic. Thereby eight teaching modules were approved, six of them being active at the Faculty:

- Road Transport and Traffic
- Rail Transport and Traffic
- Logistics
- Telecommunications and Postal Transport and Traffic
- Informatics in Transport and Traffic
- Motor Vehicles

The main characteristics of the innovated curriculum was its harmonization with the Bologna process. It had been conducted together with other high education institutions in the country and the region. In comparison to the previous, the content of the new syllabi was optimized together with the number of courses thus achieving not only rationalisation but also the flexibility of the syllabi.

First and second year of the study consist of common subjects, mandatory for all students regardless the study module. Students gain general knowledge they need for further education. Third and fourth year of study is when students choose specific module. Students gain knowledge from the field they have chosen. Certain number of courses are mandatory but there are also elective courses which students choose based on their wishes and interests.

After eight semesters, students who pass all the exams proscribed in the curriculum at the study programme Transport and Traffic and successfully defend the B.Sc. thesis are awarded the title of Bachelor of Science in Transport and Traffic.

Together with the Degree certificate a Diploma supplement is also issued (in English at request) containing skills, competencies and knowledge of the degree bearer.

Vice Dean

Miroslav Kostadinović, PhD

Common courses – first and second year of study

G	Ho	Fa	UNIVERSITY OF EAST SARAJEVO aculty of Transport and Traffic Engineerin Study program: Traffic Profile: Common Courses	ıg				Serane		
Number	Code Course title Containing the status								s ter	ECTS
			l year of study	T		-	-			
1.		07100116,0320	MATHEMATICS I	0			3	2	0	6.00
2.		07100914,0211	INFORMATICS	0			2	1	1	4.00
3.	САФ11С3	07100316,0321	ELECTRICAL ENGINEERING	0		Ι	3	2	1	6.00
4.	САФ11С3	07100415,0220	NARRATIVE GEOMETRY WITH TECHNICAL DRAIN	0		Ι	2	2	0	5.00
5.	САФ11С3	07100516,0321	PHYSICS	0		Ι	3	2	1	6.00
6.		07100613,0120	ENGLISH LANGUAGE I	0						
7.		07100713,0120	GERMAN LANGUAGE I	0		I	1	2	0	3.00
8.		07100826,0320	MATHEMATICS II	0	1	П	3	2	0	6.00
9.	САФ11С3	07133125,0211	INTRODUCTION TO TRAFFIC AND TRANSPORT	о		Ш	2	1	1	5.00
10.	САФ11С3	07101026,0220	MECHANICS	0		Ш	2	2	0	6.00
11.		07101124,0210	TRANSPORT GOODS OF GOODS	0		II	2	1	0	4.00
12.		07133226,0211	COMPUTER AIDED DESIGN IN ENGINEERING	0		П	2	1	1	6.00
13.	САФ11С3	07101323,0110	ENGLISH LANGUAGE II	0	6					
14.		07101423,0110	GERMAN LANGUAGE II	0	7	Ш	1	1	0	3.00
		,			тс	TAL	26	19	5	60
			II year of study							<u> </u>
15.	САФ11С3	07133334,0210	TRANSPORTATION TRAFFIC LAW	0		111	2	1	0	4.00
16.		07101636,0320	TECHNICAL ELEMENTS	0		111	3	2	0	6.00
17.		07133536,0220	MATHEMATICS III	0		111	2	2	0	6.00
18.		07133435,0220	ECONOMICS	0		111	2	2	0	5.00
19.		07130136,0220	ANALYSIS OF TRANSPORT NETWORKS	0		111	2	2	0	6.00
20.		07102033,0120	ENGLISH LANGUAGE III	0	13			_	_	
21.	САФ11С3	07102133,0120	GERMAN LANGUAGE III	0	14	111	1	2	0	3.00
22.	САФ11С3	0711746,0320	MATHEMATICAL STATISTICS	0		IV	3	2	0	6.00
23.		07133645,0311	BASICS PROGRAMMING	0		IV	3	1	1	5.00
24.		07102445,0220	LOGISTICS IN TRAFFIC	0		IV	2	2	0	5.00
25.		07102645,0220	TRANSPORT MEANS AND DEVICES	0		IV	2	2	0	5.00
26.		07102744,0220	TRAFFIC PSYCHOLOGY	0		IV	2	2	0	4.00
		07233845,0320	DATABASES IN TRAFFIC ENGINEERING	1						
27.	САФ11С3	07202245,0320	OPERATIONS RESEARCH	I ₁		IV	3	2	0	5.00
	САФ11С3	1								
						TAL:	27	22	1	60

• L - lectures

TE - theoretical exercises
LE - laboratory exercises

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						ffic Engineering	5	Signa hAllHH @	AST TIC	
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				rofile: Comm	on Co		alı i	AOEOJ		
Course title		-	I cycle		N	l year of stu				
Department			MATHEMATICS I							
-										
C	ode		Coι	urse status		Semes	ster	ECTS cre	edits	
САФ11С3071002				andatory		I		6,00		
Professor/s		hD Dragana N		-						
Associate/s	P	hD Dragana N	Vedic, Asso	ociate profess	sor			Churchenster		
,	Weekly	hours		Individua	l stu	dent hours (pe	r semester)	Student v coeffic		
L	TE	:	LE	L		TE	LE	S		
3	2		0	60		45	0	1.3	33	
		load (hours,		ter)		Total student	workload (ho	urs, per semes	ster)	
W= 3'	*15 + 3*	*15 + 0*15 =9				T= 3*15*S _o + 3		15*S _o = 120 ho	ours	
				•		= 210 hours per	r semester			
		Adoption of								
Course aims and		. Mastering N			es					
learning outcom		. Limit value (. Testing fund		nd functions						
Prerequisites		here are no conditions for listening and laying objects.								
	Té					h the frontal fo	orm of work -	lectures and i	nteractive	
Teaching metho	and c	orms of work								
	1.	. Basic conce	ots from th	ne theory of s	sets a	nd mathemati	cal logic			
	2.	. Binomial for	mula							
		. Complex nu		-						
		4. Trigonometric form of a complex number								
		5. Exponential form of a complex number								
			ree and root of a complex number term matrix. Determinants and their properties							
					i thei	rproperties				
		Colloquium 1 Methods for solving a system of linear equations. Inverse matrix and matrix operations								
Course content	1:	1. Concept of	Limit value of arrays. Convergent arrays. Concept of vector and operation over vectors. Linear dependence and vector coordinates							
	12	2. Scalar, vec	tor and mi	xed product	ofthe	e vector. Equat	ion level. A l	evel equation t	through	
		nree points				_				
		-				of the equation				
				-		d the plane. Th	ie cross is tw	o real. The		
		reakthrough 5. II colloquiu		rougn the pla	ane					
	1	-								
		.7								
				Textbo						
Autho	r/s			of publication	on, pi	ublisher	Year	Pages (1	from-to)	
		Mate	ematika 1			Yaniana D. +				
1. V. Miš	1. V. Mišić, R. Mišić			Matematika 1 za inženjere, Đurđica						
	,			Takači, Stojan Radenović						
				Additional	readi	ings				
Autho	r/s		Nam	e of publicat		-	Year	Pages (rom-to)	
	-									

		Assesment methods		Poi	nts	Percentage			
	Pre-exar	n obligations							
		Presence and activity in te	aching	10		10%			
Evaluation criteria		And the collo	30		30%				
Evaluation criteria		II collo	30		30%				
	Final exam								
		final exam (oral / w	ritten)	30		30%			
				100)	100 %			
Web sources	http://sf	.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-cik	us-2021	L.pdf			
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj			

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			F	-	Fransport and ⁻	-		σ		Stahaine of a	
-18.					Study program			5	2		
• *82*					rofile: Commoi						
2.5mm 10				l cycle				dv		AOEOJ	
Course title			I cycle I year of study INFORMATICS								
		Der	Department for Computer and Information Sciences and Bioinformatics, Faculty of								
Electrical Engineering East Sarajevo										, raddity of	
c	Code			Cοι	urse status		Seme	ster	E	CTS credits	
САФ11С307100	914,02	11		M	andatory					4.00	
Professor/s	Ž	Željko St	tjepano	ović, PhD, J	Associate profe	essor					
Associate/s	(Goran K	uzmić,	PhD, Assis	stant professor						
	Weekly	y hours			Individual	tuder	nt hours (pe	er semester)	St	udent workload coefficient S _o	
L	т	E	[LE	L		TE	LE		So	
2	1			1	37.5		18.75	18.75		1.25	
Total teach	ner wor	kload (ł	hours,	per semes	ter)	Tot	tal student	workload (h	ours, pe		
		-		15 + 15 =	-			; + 1*25*1.2		,	
		Tot	tal wor	kload: W+	T=U _{opt} = 60 + 7	5 = 13	5 hours pe	r semester			
	1				asic knowledg				ems		
Course aims and	a 2	2. Stude	nts wil	l acquire b	asic knowledg	e relat	ed to data	bases			
	- 2	3. Stude	nts wil	l acquire b	asic knowledg	e relat	ed to appli	cation and s	ystemic	software	
learning outcon	1es 4	1. Stude	Students will acquire basic knowledge related to business intelligence systems								
	5	5. Stude	nts wil	l be acqua	inted with com	puter	architectu	re and comp	outer net	tworks	
Prerequisites	١	No form	al prer	equisites							
Teaching metho	ods L	ectures	s, labor	atory exer	cises, compute	er clas	sroom exer	cises and tu	torials. S	Studying and	
reaching metho	s	seminar	paper	s.							
				rchitecture							
		2. Programming methodology and development of programming languages									
		3. Structure and types of information systems									
		4. Design of information systems									
		5. An integral approach to the organization of information systems									
		6. Protection and security of data and information									
Course content		7. Basic concepts of data organization 8. Colloquium I									
Course content			-		ges in data mar	agem	ent				
				-		-ugenn					
		10. Database structure 11. Basic trends in further development of computer networks									
		11. Basic trends in further development of computer networks 12. Basic components of computer networks									
					nnection to the		net				
		L4. Inter									
	1	L5. Collo	oquium	n II							
					Textbook	(s)					
Autho	or/s			Name	of publication	, publi	isher	Yea	r I	Pages (from-to)	
Dr Krstan Rošnia	Dr Krstan Bošnjak				Informatics, National University Library Banja						
	u IX		Luka								
					Additional re						
Autho					e of publicatio					Pages (from-to)	
Željko Stjepanov	vić		Teach	_	ials, Traffic Eng		ing Doboj	2014		1 - 149	
	_				sessment met	hods			Points	Percentage	
Evaluation crite	eria F	Pre-exar	n oblig	gations	• • •	1			_		
	_						to lectures		5	5%	
				Seminar	paper / projec	t / ess	ay positivel	y assessed	15	15%	

	Test / colloquium	40	40%						
	Final exam								
	TOTAL	100	100%						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj								

		Faculty of	ERSITY OF EA Transport and Study progra	Traffi	ic Engineerir	ng	Set MAINE Odge		
82		Pi							
1.500 JO 300		l cycle	A0E0J						
Course title			EL	ECTRI	CAL ENGINE	EERING			
Department		Department	t of General E	lectro	technics - Fa	aculty of Elec	trical Engineering		
Code			urse status		Seme	ester	ECTS credits		
САФ11С307100316		required I					6,00		
Professor/s	PhD Miroslav								
Associate/s	PhD Miroslav	KOSLAUINOV	ic, Associate	Jioles	SOF		Student workload		
We	ekly hours		Individual	stude	ent hours (p	er semester)	coefficient So		
L	TE	LE	L		TE	LE	So		
3	2	1	X*15*S₀		Y*15*S₀	Z*15*S₀			
	vorkload (hours + 1*15 + 1*15	· ·	iter)				ours, per semester) 1*15*S₀ = 90 hours		
	Total wo	rkload: W+1	Γ=U _{opt} = 60 +90) = 15	0 hours p	er semester			
	-						e constant currents, basic		
		-	ws of electror	-					
					-		otential difference of the		
		-				i, determine	s the expression for the		
Course aims and		capacitance of the different conductor bodies. 3. 3. Apply Om's law, Kirchhoff laws, and theorem of electrical networks to solve							
learning outcomes		electric networks with time constant currents, with and without capacitors.							
							eld and magnetic energy.		
		5. 5. It distinguishes the general equations of electric networks with time-varying							
	curre	ents and sin	nple-current c	urren	ts.				
	6. 6. Ap	oply a phase	e and complex	ассог	unt for solvi	ng the circuit	of simple-time current.		
Prerequisites	There is no lis								
Teaching methods			s, auditory exe						
		,	llonov law, the	e conc	cept of elect	rostatic field	, potential, voltage		
	2. Capa			_					
			ectric current,	Omov	v and Julius	Law, Kirchho	ff's laws		
		our current							
		ential of kno enen's theor							
			-	o that	+ charactoria	it.			
		loquium	eld and the siz	e mai	l characteriz	en			
Course content		tromagnetic	induction						
		-		of alte	arnating size	es circuits of	f alternating current with		
		c elements	presentation				r diternating current with		
			nections, imp	edanc	ce, concept o	of resonance			
			nection, admi						
			collisions wit			nod			
			s, transforme						
	15. II co	15. Il colloquium							
			Textboo						
Author/s		Name	e of publication	on, pu	blisher	Yea	ar Pages (from-to)		

Поповић Б.		Основи електротехнике 1, Грађевинска књига Београд	1989								
Поповић Б.		Основи електротехнике 2, Грађевинска књига Београд	1990								
М. Костадиновић		Практикум за аудиторне вјежбе из електротехнике, Саобраћајни факултет Добој	2012								
Additional readings											
Author/s	Yea	ar	Pages	(from-to)							
Божиловић СпасојевићЖ., Бож Г.	Х. <i>,</i> киловић	Збирка задатака из основа електротехнике, електростатика, сталне једносмерне струје, Академска мисао Београд	1998								
БожиловићХ.,		Збирка задатака из основа електротехнике,									
СпасојевићЖ.,		магнетизам, наизменичне струје, Академска	1998								
БожиловићГ.		мисао Београд									
		Assesment methods		Poi	nts	Percentage					
		Pre-exam obligations									
	attenda	nce at lectures	5			5					
	1st collo	quium	25			25					
Evaluation criteria	2nd coll	oquium		25		25					
	laborato	pry exercises		15		15					
		Final exam									
	oral or v	vritten		30		30					
	IN TOTA	L		100)	100 %					
Web sources	http://st	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Englesk	i-NPP-	I-cikl	us-2021.	<u>pdf</u>					
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transport	t and T	raffi	c enginee	ering Doboj					

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				VERSITY OF EA Transport and				PATALINA ONE		
18-				Study program		<u> </u>	5			
				Profile: Commo						
100 JO 10	II.		l cycle	Tojne. comine		l year of stu	dv	AOEOJ		
Course title			reycie	NARRATIVE	FOM		-	RAIN		
course title		Chair of N	/echanica					Faculty of Mechanical		
Department		Engineeri		il Structures al		incering 1100	luct Design	racuity of Mechanical		
		Lingineen								
	Code		Co	ourse status		Semes	ter	ECTS credits		
САФ11С307100)415.022(0		required		1		5,0		
Professor/s		D Perica Go	iković. Fu	-				0,0		
Associate/s			-	stant professor	r					
-								Student workload		
	Weekly h	nours		Individual	stude	nt hours (per	semester)	coefficient S _o		
L	TE		LE	L		TE	LE	So		
2	2		Z	X*15*S _o		Y*15*S₀	Z*15*S₀			
Total teac	her work	load (hours,	per seme	ester)	T	otal student v	vorkload (ho	ours, per semester)		
W= 3	3*15 + 2*	°15 + 0*15 =	75 hours		T	= 3*15*S _o + 2	*15*S _o + 0*	15*S _o = 105 hours		
		Total wor	kload: W	+T=U _{opt} = 75 + 1	105 = 1	180 hours pe	r semester			
								presentation of		
				stering the bas	ic prod	cedures, conc	epts and me	thods of forming		
Course aims an		chnical draw	-							
learning outcom			es that are necessarily followed by the design process. g of students for independent production of technical drawings both by manual and							
				or independer	nt proc	luction of tec	hnical drawi	ngs both by manual and		
		using comp								
Prerequisites				d laying require						
Teaching meth				rs and auditory						
				eometric elem	ents o	f the space in	a slit projec	tion and a pair of		
		thogonal pro	-							
			al spatial relationships of points, real and straight ing new projections based on two known transformations							
		Rotation								
			playing some geometric bodies and surfaces e quoted projection							
	7.	I colloquium								
Course content		Standardiza		olerance						
	9.	Technical dr	awing							
	10	D. Automated drawing of technical drawings								
	11	. Mechanica	. Mechanical materials and operating voltages							
		2. Basic machine elements								
		B. Bearings								
		4. Couplings and brakes								
	15	5. II colloquiu	IM	T	1. /->					
۸+۱.	or la		Ners	Textboo		lichor	Vecr	Dagos (from to)		
Autho				e of publicatio			Year	Pages (from-to)		
1. Сорак, М., Го	лковип,			метрија и с þакултет, Бања		л машинств	a, 2003			
2. Алексић, В	Kocia			геометрија		Савлеме	-12			
нинчић, М.	.,		Нацртна геометрија, Савремена 1 администрација							
		адии	рац	Additional r	readin	gs				
Autho	or/s		Nar	me of publicati		-	Year	Pages (from-to)		
3. Станковић, Г		Збир		јених задат		из нацрті	10			
,			-	. део, Саобраћ			2002			

	Assesment methods	Points	Percentage						
	Pre-exam obligations								
	presence in lectures / exercises	10	10 %						
	graphic tasks	10	10 %						
Evaluation criteria	And a colloquium	25	25 %						
	II colloquium	25	25 %						
	Final exam								
	final exam (oral)	30	30%						
	IN TOTAL	100	100 %						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engin	eering Doboj						

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			-	Transport and			g		S.S.	TAINH QARLE		
	Jeav			Study program			0	1	3			
82		Profile: Common Courses										
150 10 Line			I cycle I year of study									
Course title			PHYSICS									
Department		Departme	ent of Phys	ics - Faculty of	Phi	losophy Pale						
C.			Car	urso status		Somo	ctor		ECTS credits			
CC CC	ode		COL	urse status		Seme	ster		ECI	scredits		
САФ11С3071005	16,0321		required			Ι		6,0	0			
Professor/s	Ph.	D. Zoran Ć	urguz, Asso	ociate professo	or							
Associate/s	Ph.	D. Zoran Ć	urguz, Asso	ociate professo	or							
v	Veekly h	ours		Individual	stuc	dent hours (po	er semester)		ent workload efficient S _o		
L	TE		LE	L		TE	LE			So		
3	2		1	45		22,5	22,5			1,5		
Total teache	er worklo	oad (hours,	per semes	ter)		Total student	workload (h	nours	, per se	emester)		
3*15		+ 1*15 = 90				3*15*So + 2	*15*So + 1*	15*S	o = 13	5 hours		
				=Uopt= 90 +13			per semeste					
				ts with the bas	ics o	of certain phy	sics fields th	nat ar	e neec	led for		
Course aims and		dents of tra										
learning outcom				classical mecha		-						
		Introduction to specific fields of thermodynamics and optics here are no conditions for listening and laying objects										
Prerequisites												
Teaching method			-	ses, seminar p		-						
				ion to Newton	ian	mechanics. Ki	inematics. T	ransl	ated m	ovement of		
		material p				al maint						
			-	tion of the mat	teria	ai point						
		3.Dynamics of the material point 4.Work, power and energy										
		4. work, power and energy 5. Dynamics of rotational motion of solid bodies										
		6.Oscillatory motion										
		olloquium I										
Course content		Aechanical v										
	9.E	lements of	thermodyr	namics. Ideal g	as							
	10.	Work and h	eat. Laws	of thermodyna	amio	cs						
	11.	Fundament	als of mole	ecular-kinetic t	hec	ory of gases						
		Optics										
		Electromag										
				atomic nucleu	us							
	15.	Colloquium	11									
A 41	10		News	Textbook			V		Dr	an (frame to)		
Author				of publication I, III Scientific			Yea		Pa	ges (from-to)		
V.Vucic, D IN J. Setrajcic, D.			• •			•	199					
F. Adrovic, Z.	-			hysical basics of technique 20 ics I Traffic Faculty Doboj 20								
	Curguz		riysi	Additional re			201					
Author	/s		Nam	e of publicatio			Yea	r	Pag	ges (from-to)		
G. Dimic, M.Mitri		Colle		ivics, Advanced			1991		1 48			
			· ·				1991	- ·		Dever		
		overe		ssesment met	nod	IS		Poi	nts	Percentage		
Evaluation criter	ia —	e-exam oblig	-	orologo				-				
	<u> </u>	esence in lea	Lures / ex	ercises				5 5%		20%		
		loquium I						20		2070		

	Colloquium I	20	20%						
	Test and seminar work, laboratory exercises	15	15%						
	20	20%							
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj								

				ERSITY OF E	AST S	ΔΒΔΙΕΛΟ			-	0.0 80	
		1	-			ffic Engineering			SPAT	AIRE WART	
		-		Study progra					3		
82				rofile: Comn					D		
10 10 10 10 10 10 10 10 10 10 10 10 10 1			I cycle			I year of study	,			40E0J	
Course title			English language I								
Department											
Code			Cou	ırse status		Semeste	r		ECTO	credits	
				inse status		Jemeste			LUIS	, creates	
САФ11С307100				andatory		I			3	3.00	
Professor/s				nguage teac							
Associate/s	Tanja Po	etrović	, foreign la	nguage teac	cher				- · ·		
Wee	kly hours	;		Individu	al stu	dent hours (per s	semester)		ent workload efficient S _o	
L	TE		LE	L		TE	LE			So	
1	2		0	21		42	0			1.4	
Total teacher w	vorkload (hours,	per semes	ter)	•	Total student wo	orkload (h	ours	, per se	mester)	
	45 hou	urs					63 hou	rs			
	1					per semester					
						e students to im					
.				-	-	nce in English lar				-	
Course aims and		-		-	-	ng, writing) skills		-		-	
learning outcomes					-	er completing the					
		-	ully read and understand English texts, understand and use grammatical concepts presentations in English.								
Prerequisites	None	e prese									
Teaching methods		inicativ	e. inductiv	e, structural	I. TPR	method					
	1			verb forms	,						
	2	2 Uses of auxiliary verbs									
	3	Forming adjectives									
	4		Forming nouns and gerunds								
	5	Narrat	Varrative tenss								
	6	Contin	Continuous aspects in other tenses								
	7	Midte	rm test								
Course content	8			of the passi							
	9			th have or g	et						
	10		v of future	-							
	11			lestions form	ns						
	12	-	t tenses	inante ere d	o						
	13			imple and co	ontinu	ous					
	<u>14</u> 15	Revisio	on [•] the term t	oct							
	1 13	LIIU UJ		Textbo	nok (s)						
Author/s			Name	of publicati		ıblisher	Yea	r	Pag	es (from-to)	
	D :	Cut		-	-	er intermediate,					
Sarah Cunningam				on, Harlow E			2015		1-66		
Moor, Johnatan Byg	iave										
				Additional		-					
Author/s				e of publica		editor	Yea	r		es (from-to)	
Raymond Murphy		Engli		ar in Use, CL			2009	_	1-313	-	
			As	sessment m	netho	ds		Poi	ints	Percentage	
Evaluation criteria								10	40		
	Attendo	ince						10		10%	

	Midterm test	20	20%				
	End of the term test	20	20%				
	50	50%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

			UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Common Courses I cycle I year of study					Contraction of the second	AOGOJ
Course title			l cycle		GEP	MAN LANGUA			
Department					ULN				
	Code	I	Cou	Course status Semester		ster	ECT	S credits	
САФ11С30	7100713,	0120	M	andatory		I			3.00
Professor/s									
Associate/s									
	Weekly hours Individual student hours (per semester)						ent workload efficient S₀		
L	TE		LE	L		TE	LE		So
1	2		0	21		42	0		1.4
Total teach		orkload (hours, per semester) Total student workload (hours, per semester) 45 hours 63 hours							
			Total wo	rkload: 10	8 hours	per semester			
Course aims and	d								
learning outcon	nes								
Prerequisites									
Teaching metho	ods								
Course content									
					ook (s)				
Autho	or/s		Name	of publica	tion, pı	ublisher	Yea	Year Pages (fror	
			Nama	Addition		-	Vac	n De	
Autho	or/s	-	INAM	e of public	cation,	ealtor	Yea	r Pa	ges (from-to)
			-						
			As	ssesment i	methoo	ls		Points	Percentage
	. –								
Evaluation crite	eria								
Mah sources		n.//cf	une re he ler - le	un contest	lunlas			Laikina 201)1 ndf
Web sources			.ues.rs.ba/eng/w						
Applicable from	ן 11/	1/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

THE TOWN			UNIV	ERSITY OF	EAST S	ARAJEVO			2005
		I	-			ffic Engineering	5		STARAINE OUT I
■ xinc	CaY +		9	Study prog	<i>ram:</i> T	raffic			
				<i>rofile:</i> Com	nmon c				AOEOJ
4303 10 5			I cycle			I year of stud			
Course title					N	IATHEMATICS			
Department									
Co	de		C οι	urse status		Semes	ter		ECTS credits
САФ11С3071				andatory		II			6,00
Professor/s		-		ciate profe					
Associate/s	PhD I	Dragana N	ledic, Asso	ciate profe	essor			_	
W	/eekly hou	urs		Individ	ual stu	dent hours (pe	r semester)		Student workload coefficient S _o
L	TE		LE	L		TE	LE		So
3	2		0	60		45	0		1.33
Total teache W = 3	r workloa *15+3*15		-	ter)		Total student v T=3*15*S _o + 3	•		
	0 10			+T=U _{opt} =90	+120=	210 hours per :			
	1. Ac			rom an int					
Course aims and		-	-	rom many	-				
learning outcome	es 3. Ac	quiring kr	iowledge f	rom the pr	opertie	es of a given int	egral.		
			iowledge f	rom differe	ential e	quations.			
Prerequisites		ematics I							
Teaching method					throug	h the frontal fo	orm of work	- lecti	ures and interactive
			- auditory		o funct	ion of two or i	moro indon	andor	ntly variable. Partial
	copie			Turty OF th	e iunci			enuer	iltiy valiable. Faltiai
			lity. Excern	ot of the fu	nction	in the given dir	ection. Diffe	erenti	als of higher orders
			ed integral						
			-	s is variabl	e. Parti	al integration			
	5. Int	egration	of rational	functions					
		-	-			rrational function			
			nition and basic properties of a particular integral. Newton-Leibniz formula						
Course content		olloquium	oquium ating a given integral. Application of a specific integral						
		-	-		cation	or a specific int	egrai		
		-	al integrals	s. s of the firs	t orde	r			
			-			with constant of	coefficients		
								with	positive members.
						per and Koši crit			
	14. A	lternative	and stepp	ed rows. N	/lacLoc	ation Order. Su	mming the	range	25
	15. II	colloquiu	m						
					ook (s)				
Author	s			of publica	-		Year		Pages (from-to)
4 17 84.4	6 D 84111			Vesna Miši					
1. V. Mišio		Zadaci i riješeni primjeri iz više matematike s primjenom na tehničke nauke, B.P. Demidovič							
		printj	chon na t						
Author	Additional readings Author/s Name of publication, editor				Year		Pages (from-to)		
							.cu		
					mathe	la		Delia	to Devecutors
Evaluation criteri	a Dro -	wam ahlis		ssesment r	nethod	15		Poin	ts Percentage
	Pre-exam obligations								

	Presence and activity in teaching	10	10%				
	I colloquium	30	30%				
	II colloquium	30	30%				
	Final exam						
	final exam (oral / written)	30	30%				
	IN TOTAL	100	100 %				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

I WETCH	•		UNIV	ERSITY OF E	AST S	ARAJEVO		2005
			Faculty of		STATAINA ONE			
- Xigc			2	Study progra	am: Ti	raffic		
)			<i>rofile:</i> Comr	non c			AOE0J
4583.00			I cycle			I year of study		
Course title						TO TRAFFIC AND	D TRANSPOR	T
Department		Faculty of	Transport	and Traffic I	Engin	eering		
	Code			urse status		Semeste	r	ECTS credits
САФ11С30				bligatory				5.00
Professor/s			-	ssociate pro	tessoi	•		
Associate/s	Via	dimir Malci	c, senior a	ssistant				Student workload
	Weeklyh	nours		Individua	al stu	dent hours (per s	semester)	coefficient So
L	TE		LE	L		TE	LE	So
2	1		1	45		22,5	22,5	1,5
		oad (hours, 15 + 1*15 =		ter)		Total student wo 2*15*1,5 + 1*1		-
		Total wor	kload: W+	T=U _{opt} = 60 +	+90 =	= 150 hours per s	emester	
	Aft		-	-		am, the student v		
	~						alyze the fa	ctors that caused the
		-		evelopment				
			-		-	cifics of traffic ser		und auchaustaura
Course aims an	v nd √					ensional concept		echnical characteristics
learning outco					-		-	traffic system and the
		market;		,		p		
	✓	compare	types	of transp	port	and argume	nt compa	rative analysis of
			istics/perfo					
						the developmen	-	-
	✓ 		ind debate	modern tre	nds ir	the developmer	nt of traffic sy	/stems.
Prerequisites		conditions						
Teaching meth				ses, consulta		orical developme	nt of traffic	
		Division o			= mstc			
				-	of tra	ffic and transport	:	
				-		ansformation an		
		Elements	of product	ion in traffic	2		-	
	6.	•				f transport, and		racteristics
	7.	-	-			vels (I colloquiun	n)	
Course content	-			basic terms a				
			-	e specifics of ansport sup		port services		
						d communicatior	'n	
							•	
	12. Transport, traffic, and the environment13. Sustainable development of traffic and transport							
	14. Globalization, informational society, and the new concept of traffic and transport							
	15	5. Regulatio	n of the tra			: market (II collo	quium)	
				Textbo				
Autho	or/s			of publication			Year	Pages (from-to)
Bojković, N. I	Petrović, N					sport", Belgrade:	2018	-
- /		Facu				offic Engineering		
Adamo	vić M.					of Transport and	2003	-
	Traffic Engineering, Belgrade							

		Additional readings					
Author/s		Name of publication, editor	Yea	· F	Pages (from-to)		
Rodrigue, J-P et al		The Geography of Transport Systems, Hofstra University, Department of Global Studies & Geography	-				
	Presentations from lectures -						
		Assesment methods		Point	s Percentage		
	pre-exar	n obligations					
		Attendance at lectures and ex	ercises	5	5%		
		Positively graded seminar	15	15%			
Evaluation criteria		Colloc	2x20	40%			
			Test				
	Final exa	amination					
		Oral exami	nation	40	40%		
	TOTAL		100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic en	gineering Doboj		

TH WETOWE			UNIV	ERSITY OF E	EAST S	ARAJEVO		201	05
-18°		F				ffic Engineerir	Ig	Costa ha Ma	AATAICI .
				Study progra Profile: Comi					
	/		l cycle	rojne. com		l year of stu	udv	405	L01
Course title						MECHANICS	,		
Department		Departme	nt of Phys	ics - Faculty	of Ph	losophy, Pale			
Co	de		Coι	urse status		Seme	ster	ECTS c	redits
САФ11С3071				bligatory		II		6.0	0
Professor/s				iate profess					
Associate/s	PhD) Zoran Rist	ikić, assist	ant professo	ors			Student	workload
w	eekly h	ours		Individu	al stu	dent hours (p	er semester)		icient S _o
L	TE		LE	L		TE	LE		So
2	2		0	30		30	0		33
Total teache		ad (hours, .5 + 0*15 =6		ter)				ours, per seme 1*15*So = 80 ł	-
VV-2	1.) + 2 1			-T=Uopt= 90	+ 80 =	170 hours pe		10 30 - 801	10013
	1. T					mulate and so		onal tasks.	
Course aims and				-	impor	tant laws and	methods of	mechanics - S	tatics,
learning outcome		Kinematics and Dynamics.							
U	3. P			solving prob		-	c araa		
Prerequisites						owledge in thi aking the cour			
Teaching method				ses, seminal		-	30		
							mechanics a	nd definitions	s, axioms of
	stat								
				orces. Mom	nent o	f force in rela	ation to a po	oint, Varignor	n's theorem
		oment rule)		lane. Stackiı	ng for	200			
			-		-	orces in the pl	ane.		
			-		-	-		ler the action	of a plane
			-		eam g	irders differe	ntly supporte	ed and differer	ntly loaded.
		liding and r	-				S		f
		-	-	rigid and ho i known geo	-	-	Determinatio	n of the cente	er of gravity
		colloquium		i kilowil gec	metri	c surfaces.			
		-		of degrees	of fr	eedom of m	ovement. Po	int kinematio	s. Position,
Course content		•				, polar and na		•	
course content						-	xed axis, ang	ular velocity	and angular
			•	acceleration		•	hadu natak	. Duonoution	of anoular
			-		-			 s. Properties point connection 	-
		e accelerati	-		linem	pole speed. P			on. current
	-			ment. Absol	ute ve	locity of a poi	nt. Absolute	acceleration p	point.
	12.	Dynamics.	Material	point dyna	amics.	Newton's la	ws of dynai	mics. Inertial	coordinate
			of forces.	Two dynam	ics tas	sks. Differentia	al equations	of point motio	on. The first
		egrals.	of masks	nical maria	mont	Maggiros	machanical	action Con-	val laws of
								action. Gene hot. Impact o	
		-	-	-		-	-	not: impact o ne plane motio	
	bod							,	
	14.	Dynamics	of the sys	stem of ma	terial	points. Rigid	body dynam	ics. Analytica	l dynamics.

Lagrange-Dalambert principle. Lagrangian equations of the second kind.								
	15. II collo	•						
		Textbook (s)						
Author/s		Name of publication, publisher	Year	r Pag	ges (from-to)			
Rusov, L.:		Mehanika – Statika, Naučna knjiga, Beograd	1992					
Rusov, L.:		Kinematika, Dinamika, Naučna knjiga, Beograd	1992					
Mišić,B.;Ćurguz,Z.;M	ilotić,M:	Mehanika –Statika, Kinematika, Dinamika, Tehnička knjiga-udžbenik,UIS, S-TF, Doboj	2010).				
		Additional readings						
Author/s		Name of publication, editor	Year	· Paį	ges (from-to)			
T.P.Anđelić	ić Teorija vektora, Građevinska knjiga, Beograd							
Blagojević,D;Babić,Ž.	.:	Statika-repitorijum i riješeni zadaci, UuBL, MF	2000).				
		Assesment methods		Points	Percentage			
	Pre-exam	ination obligations						
		e.g. attendance at lectures / exe	ercises	10	10%			
		e.g. positively evaluated seminar paper / project /	essay /	10	10%			
Evaluation criteria		e.g. test / col	lloquia	25x25	50%			
Evaluation cinteria	e.g. integ	ral written exam (for students who do not pass the	e test / oguia)	(50)	(50%)			
		Final test	oquiu)					
		orally or in v	30	30%				
	TOTAL	,	5	100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
web sources	<u>nup.//si.</u>	content/uploads/2022/05/Engles			<u></u>			

A VICTORIES		UNI	VERSITY OF	EAST S	ARAJEVO			2005	
		Faculty of	Transport a	nd Tra	ffic Engineerin	Ig	1	Stata Allen Over	
			Study prog						
			P <i>rofile:</i> Com	mon c				40E01	
Course title		l cycle	TD		I year of stu	-			
Course title	Donartm	ont of Trar			ORT GOODS O		rt and Tr	offic Engineering	
Department	Departm	ent of Tran	sportation	Engene	ering - Facult	y or Transpo		affic Engineering	
Code			urse status		Seme		E	CTS credits	
САФ11С307101			required					4,0	
Professor/s	PhD Perica Go	-	-						
Associate/s	Bojana Ristic,	senior ass	istant						
Weel	dy hours		Individu	al stud	lent hours (pe	er semester)		udent workload coefficient S _o	
L	TE	LE	L		TE	LE		So	
2	1	0	X*15*Sc		Y*15*So	Z*15*S _o			
Total teacher w			ster)		Total student	-	-		
W = 2*15	+ 1*15 +0*15=			400	T = 2*15*S₀-)*15*S₀=	75 hours	
	1				nours per sem			f turn and the	
	1. To analyze well as the ch			ication	i of goods fror	n the point o	or view o	f transport, as	
Course aims and	2. To get acqu			aina ai	nd nackaging c	of goods as y	woll as tr	ansit funds:	
learning outcomes	3. Engage acti					1 50003, 03	wen as ti	ansie ranas,	
curring outcomes		•				ulations as w	vell as to	acquire acquired	
	knowledge in								
Prerequisites	There are no o		for listening	g and la	aying objects.				
Teaching methods	Lectures, audi	tory exerc	ises, semina	r pape	ers.				
	1. Division and	d classifica	tion of good	ls from	the point of v	iew of trans	port		
		2. Quality of goods and its control in the transport process							
	3. Properties of goods								
	4. Quality of service quality in the transport of goods. Stability of service								
	 5. Packaging and packaging of goods from the aspect of the transport process 6. Properties of transport means from the aspect of transport of goods 								
	7. I colloquiun		rt means fro	m the	aspect of tran	sport of goo	as		
	8. Division and		tion of mea	ns of ti	ansport				
Course content	9. Safety aspe	_		15 01 1	ansport				
	10. Marking o								
	11. Types of la	-	e goods						
	12. Division a		-	ans of	transport				
	13. Internatio	nal and na	tional regula	ations	related to the	transport of	f goods a	nd dangerous	
	goods								
	14. Standardiz		standards						
	15. Il colloqui	um	-						
Author/a		Nor	Textb			Ver		Dagas (from to)	
Author/s	The	мате испортне	e of publicat особине			Yea		Pages (from-to)	
Гојковић, П.		испортне илтет Добо		μυσε	, caoopanaj	рни 2012			
	ψακ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Additiona	l read	ings				
Author/s		Nan	ne of public			Yea	r F	Pages (from-to)	
			•						
			Assesment n	nethor	lc		Points	Percentage	
Evaluation criteria	Pre-exam obli			ietiiut	15		FUILS	reiteillage	
Evaluation criteria		-	or example	nreser	ce in lectures	/ exercises			
	I		. champie.			, exercises	I		

	colloquium					
	tests					
	Final exam					
	final exam (oral)					
	IN TOTAL					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj					

Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Common course Lycle Lycar of study Course title Computer Aided Design in Engineering Department of computers, information technologies and biotechnology, ETF, Uni of East Sarajevo Code Course status Semester ECTS cred Code Course status Semester Student wi Veekelky hours Individual student hours (per semester) Student wi Code Course in ausewac. Assistant Proffesor Associate/s PhD Goran Jausevac. Assistant Proffesor Associate/s Student wi Veeketky hours <th< th=""><th>0 50</th><th>- <u>1</u>0</th><th> </th><th>ΔΡΔΙΕΙ/Ο</th><th>ERSITY OF EAST</th><th></th><th></th><th></th><th></th></th<>	0 50	- <u>1</u> 0		ΔΡΔΙΕΙ/Ο	ERSITY OF EAST						
Study program: Traffic Profile: Common course I cycle I cycle Computer Xided Design in Engineering Department Department of computers, information technologies and biotechnology, ETF, Uniof East Sarajevo Code Code Course status Semester ECTS cred CAD11C307133226,0211 mandatory II 6,00 Professor/s PhD Goran Jauševac, Assistant Proffesor Student wit coefficie Associate/s PhD Goran Jauševac, Assistant Proffesor Student wit coefficie L TE LE L TE Student wit coefficie <	H ØARY	Staballill Ø,	σ			-					
Profile: Common course I year of study Course title Computer Aided Design in Engineering Department Department of computers, information technologies and biotechnology, ETF, Uniof East Sarajevo Code Course status Semester ECTS cred Code Course status Semester Code Course status Semester ECTS cred CA011C307133226,0211 mandatory II 6,00 Professor/s PhD Goran Jauševac, Assistant Proffesor Associate/s PhD Goran Jauševac Assistant Proffesor Associate/s PhD Goran Jauševac Assistant Proffesor Student workload (hours, per semester) Total student workload (hours, per semester) Total workload: W+T=U _{opt} = 60 + 75 = 135 hours per semester By mastering this course the student will be able to: . properly displays and dimensionally defines objects by standards in electronic for computer CAD programs. Course aims and learning outcomes Sementrically models and presents conceptual solutions. Sementrically models and presents conceptual solutions. Course aims and learning outcomes Introduction. Graphic communication in		8 🕅	<u> </u>						18.		
I cycle I year of study Course title Computer Alded Design in Engineering Department Department of computers, information technologies and biotechnology, ETF, Uniof East Sarajevo Code Course status Semester ECTS cred CAD11C307133226,0211 mandatory II 6,00 Professor/s PhD Goran Jauševac, Assistant Proffesor Student with control of the semester Student with control of the semester Associate/s PhD Goran Jauševac, Assistant Proffesor Associate Student with control of the semester U TE LE L TE LE Student with control of the semester Course alms and learning this course the student will be able to: 137,5 18,75 18,75 1,25 7,15 Course aims and learning outcomes By mastering this course the student will be able to: 1, properly displays and dimensionally defines objects by standards in electronic for computer CAD programs. 2, compares solutions to traffic problems in the form of CAD programs. Burgeraming this course the student will be able to: 1, properly displays and dimensionally defines objects by standards in electronic for computer CAD programs for About the protein of traffic able hous. Course aims and									· · · · 82·		
Course title Computer Aided Design in Engineering Department Department of computers, information technologies and biotechnology, ETF, Uniof East Sarajevo Code Course status Semester ECTS cred CA011C307133226,0211 mandatory II 6,00 Professor/s PhD Goran Jauševac, Assistant Proffesor Associate/s Student work Associate/s PhD Goran Jauševac, Assistant Proffesor Student work Student work L TE LE L TE LE Sociate/s 2 1 1 37,5 18,75 12,25 12,55	EOJ	AOEOJ	dy								
Department Department of computers, information technologies and biotechnology, ETF, Uni of East Sarajevo Code Course status Semester ECTS cred CA011C307133226,0211 mandatory II 6,00 Professor/s PhD Goran Jauševac, Assistant Proffesor Student with coefficie L TE LE L TE LE Student with coefficie 2 1 1 37,5 18,75 18,75 1,25 2 1 1 37,5 18,75 1,25 1,25 2 1 1 37,5 18,75 1,25											
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Author/s Name of nublication nublisher Vear Dages (free					Textbook (s						
Addition and a mane of publication, publisher real rages (if	(from-to)	Pages (f	Year	ublisher	of publication, p	Name		or/s	Author		

Z. Božičković		Osnove AutoCAD-a, Sobraćajni fakultet Doboj	2012	2			
		Additional readings					
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)	
M. Živanović		Inženjersko crtanje primenom računara (praktikum za vežbe),Saobraćajni fakultet, Beograd.	2012				
		Assesment methods		Poi	nts	Percentage	
	Pre-exa	n obligations					
		attendance at l	5		5%		
		Seminar	15		15%		
Evaluation criteria		I Colle	20		20%		
		II Colle	20		20%		
	Final exam						
		Writin	g exam	40		40%	
	TOTAL			100)	100%	
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	<u>ski-NPP-</u>	I-cik	us-202	1.pdf	
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transp	ort and T	raffi	c engin	eering Doboj	

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			Faculty of Transport and Traffic Engineering						STATAINS OFFICE		
			Study program: Traffic						Ĩ		
					<i>rofile:</i> Com	nmon c					AOEOJ
				l cycle			I year of study				
Course title						En	glish language II				
Department											
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Associate/s		Tanja Pe	etrović	, foreign la	nguage tea	cher				a. 1	
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Teaching metho											
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		7	Midte	rm test							
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		15	End of	f the term		ook (-)					
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Sarah Cunningam, Peter Moor, Johnatan Bygrave					on, Harlow			2015		67-17	9
					Additiona	al readi	ngs			l	
Autho	r/s			Nam	e of public		-	Yea	r	Pag	es (from-to)
Raymond Murph	-		Engli		ar in Use, C			2009		1-313	()
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		Attenda	ince						10		10%

	Midterm test	20	20%				
	End of the term test	20	20%				
	Final test	50	50%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

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Course title	Course title				GERI	MAN LANGUA	-			
Department										
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Teaching meth	ods									
Course content										
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Autho	or/s		Name	Name of publication, publisher			Yea	r Pa	ges (from-to)	
				Addition	al readi	ngs				
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Professor/s	PhD Tihomir	Djuric, Ass	ociate Profes	sor					
Associate/s	Miroslav Pav	lovic, assist	ant						
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total teachi	ng load (in hou	rs, semeste	r)				n hours, semester)		
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Tot	al course load (Ň U							
							equisite for a fuller onditions and behavior in		
	traffic.	ing of those is	egai norms that	tiegu	nate interperson	ai relations, et	inditions and benavior in		
Course aims and	2. The study	of legal nor	ms as limiting	g fac	tors.				
learning outcomes	5. The influe	3. The influence of factors on the behavior of traffic participants.							
		4. Application of national and international regulations in the function of planning, organization, regulation and safety of traffic.							
Prerequisites	There are no					-1 f			
Teaching methods		aching process is realized mainly through the frontal form of work - lectures and the ctive form of work - classroom exercises							
	1. The subject of traffic law, The similarity and differences of the traffic branches of law and								
		Sources of traffic law.							
	2. Traffic Organization, Traffic Roads, Traffic Safety and Vehicles.								
	3. Railway traffic law and the concept and subject of the study of railway traffic law.								
	4. Contract for the Carriage of Goods by Rail, Term of Contract, Obligations of the Railway								
	from the Contract for Carriage of Goods, Liability of the Railway and Right of Railway.								
	5. Rail Passenger Agreement, Rail Baggage Agreement and Unification of Rail Transport Rights.								
	6. Road Traffic Law, Rights and Obligations of the Contracting Parties and the Convention								
	on Road Transport.7. Customs relief and Customs Convention on the temporary importation of commercial road								
	vehicles (I colloquium).								
Course content	8. Air Traffic Law and Air Transport Contract, Successive International Transport, Combined								
Course content	International Transport.								
		9. International air carrier responsibility and Air waybill.10. Maritime Transport Law, Participants in the Navigation and the Contract on Carriage of							
		Goods by Ship.							
		11. Shippers' liability for cargo, General notion of liability and Unification of liability rules.							
							ntract, Types of Carriage		
		of Passengers and Rights and Obligations of the Parties. 13. The towing contract, the concept of the towing contract, the rights and obligations of the							
			the concept of ime insurance			act, the rights	and obligations of the		
						- FIATA Co	mbined Transport Bill of		
	Lading.		Transpor		,				
	15. Freight F								
	Contemp	15. Freight Forwarding, Importance and Development of Freight Forwarding, Features of Contemporary Forwarding, and Economic Functions of Forwarding (II Colloquium)							

Textbook (s)								
Author/s		Name of publication, publisher	Yea	r	Page	es (from-to)		
1. Djuric, T., Kasaş	gic, R.	Traffic Law, University of East Sarajevo, Faculty of Transportation Doboj	2019.			1-265		
Additional readings								
Author/s		Name of publication, editor	Yea	r	Page	es (from-to)		
1. Inic, M., Jovanov	vic, D.	Traffic Regulations, Faculty of Technical Sciences, Novi Sad	2009).	1-184			
Law on Basics of Road Traffic Safety in BiH (Official Gazette of BiH, No. 6/06, 75/06, 44/07, 84/09, 48/10, 18/13, 8/17, 89/17 and 9/18)				2018.				
Law on Road Safety	Law on Road Safety, (Official Gazette of the Republika Srpska, No. 41/09, 53/10, 101/11, 32/13 -US, 55/14).							
		Assessment methods	Poi	nts	Percentage			
	Pre-exam obligations							
	Class attendance and activity					10%		
Evaluation criteria	I colloquium					30%		
Evaluation criteria	II colloquium					30%		
	Final exam							
	final exam (oral / written)					30%		
	TOTAL					100 %		
Web sources	http://s	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-cikl	us-2021	L.pdf		
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			•		raffic Engineering	Ţ		SPARALAN PAR	A
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10 4900 30 K			l cycle		I year of stud	dy		TOPO1	9
Course title				TE	CHNICAL ELEME	NTS			
Department		-	rtment of Mech anical Enginee		es and Engineerir	ng Product	Design	- Faculty o	f
	Code		Cou	Irse status	Semes	ter		ECTS credi	its
САФ11С30	0710163	36,0320						6.00	
Professor/s	l	PhD Milan	i Milotić, associ	ate profesor					
Associate/s		Milan Erer	mija assistent						
	1	y hours		Individual s	tudent hours (pe	r semester))	Student wo coefficie	
L	Т	ſE	LE	L	TE	LE		So	
3		2	0	63	42	0		1,4	
			ours, per semes	ter)	Total student v	•			•
			0*15 =75 h		T= 3*15*So +				1
10		-	-	-	lopt = 75 + 105 =	-			
Course aims an					ements, standard	is and toler	rances.		
		 Friction, sliding, rolling. Reliability and wear of mechanical systems and mechanisms. 							
learning outcom			springs and sus	-		1151115.			
Prerequisites		Does not h		pensions					
Teaching meth				ses, seminar pa	nor				
reaching meth					реі				
		1. Basic concepts of technical elements 2. Standardization and tolerances							
		3. Sliding friction and rolling friction							
		4. Reliability and wear							
		5. Materials for making technical elements							
		6. Screws, mechanisms and power transmissions							
		7. Friction gears (I colloquium)							
Course content	t 8	8. Gears							
	9	9. Chain gears							
		10. Gearboxes, reducers and manipulators							
		11. Shafts and shafts							
		12. Welding procedures and methods							
		13. Couplings 14. Bearings - sliding and rolling							
			• •	-	الم مينيسم)				
		15. Shung	s and vehicle st	uspension (II co Required liter	<u> </u>				
Autho	nr/s		Name	of publication,		Yea	r	Pages (fro	m-to)
				•	, Scientific book,				
1.Vitac, D. Tr	bojevic	;, М.	meenanical	Belgrade.	, selentine book,	2002	2	1-31	7
				Additional rea	adings				
Autho	or/s		Nam	e of publicatio		Yea	r	Pages (fro	om-to)
1.Misi		1		ents, script, SF,		1997	-	L-135	
1.1115				ssesment meth	-		Point		centage
							[
Evaluation crite	eria	Pre-exam	obligations	_					
	_	Attendance and activity in classes					10	10%	
					l co	olloquium	30	30%)

	II colloquium	30	30%			
	Final exam					
	final exam (oral / written)	30	30%			
	IN TOTAL	100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf			
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj					

Course title Department	Mathem	UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Common course I cycle II year of study MATHEMATICS III Mathematics Department- Faculty of Philosophy Pale				AUGOJ		
Code		urse status	Semes		ECT	S credits		
САФ11С307133	3536.0220	M	landatory				6,0	
Professor/s			ciate professor				0,0	
Associate/s	-		ciate professor					
	ekly hours	· ·		udent hours (pe	er semester)		ent workload efficient S _o	
L	TE	LE	L	TE LE			So	
2	2	2 0 63 42 0					1.4	
		d (hours, per semester)Total student workload (hours, per semester) $0*15 = 75$ hours $T=X*15*S_0 + Y*15*S_0 + Z*15*S_0 = 105$ hoursal workload: W+T=U_{opt}=75 + 105 = 180 hours per semester						
Course aims and learning outcomes Prerequisites Teaching methods Course content	None.							
Author/s		Name	ame of publication, publisher Ye			ar Pages (from-to		
Author/a		NI	Additional rea	-				
Author/s		inam	ne of publication	, editor	Year	r Pa	ges (from-to)	
		٨	ssassmant math	ods		Points	Percentage	
	Pre-exam ob	Assessment methods F Pre-exam obligations						
				A	ttendance	10	10%	
	Midterm test					20	20%	
Evaluation criteria	End of the term test					20	20%	
	Final exam							
		(oral part/written part)					50%	
	TOTAL					100	100 %	
Web sources		http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 -	198 Session	n of the Councile	, Faculty of Tran	sport and T	raffic engi	neering Doboj	

CT WOTOWOD		UN	IVERSITY OF EA	ST S	ARAJEVO			2005
-18-	_	Faculty of Transport and Traffic Engineering						Seven man and the second
- SP		Study program: Tra Profile: Common cou						
		l cycle			Il year of stu	dy		A OE OI
Course title			I		ECONOMICS	,		
Department Of Marketing and Management, Faculty of Economics in Brčko								
Code	!	с	ourse status		Semes	ter		ECTS credits
САФ11С30713		35,0220 obligatory III						5,0
Professor/s		co Erceg, associ						
Associate/s	Siniša Bo	ožičković, senio	r assistant					
Wee	ekly hours		Individual	stu	dent hours (pe	r semester)		Student workload coefficient S _o
L	TE	LE	L		TE	LE		So
2	2	0	45		45	0		1,5
Total teacher v W=2*15 -		nours, per sem *15 = 60 hours	-		Total student v T=2*15*So + 2	-		
	-		/+T=Uopt= 60 +					
		-	wledge about f	acts,	, principles, pro	ocesses and	gen	eral concepts in the
Course aires and		omy of traffic.		+h -		f comment:-	.	
Course aims and learning outcomes			ial solutions in ory and decisio			o companie	s, usi	ing basic knowledge
learning outcomes			-			of productio	<u>-</u>	rice calculations and
		-	f economic qua		and elements		л, рі	
Prerequisites		equisites	4					
Teaching methods		•	cises, seminar v	work				
	1. Introc							
	2. Econo	mic structure o	of the traffic en	terp	rise			
			nomy of the tra	ffic e	enterprise			
		al circulation in						
			et and market	playe	ers			
		ess cost theory						
Course content		olloquium	of cost behavior					
course content	9. Cost p	•						
			ductivity in tra	ffic				
			onomy in traffic					
		ciple of rentabi	-					
			traffic enterpris					
			y of traffic ente	rpris	es			
	15. Seco	nd colloquium						
			Textboo					D ((
Author/s	1e: ::¥:4		e of publicatio			Year		Pages (from-to)
Stavrić Božidar, Miladin	Jovičić	Business	Business Economics, Faculty of Business Economics Bijeljina 2012					
Berberović Šefkija	, Živko	Theory Business Economics, High business and 2012						
Erceg		technical scho				2012		
			Additional r		-			D
Author/s			me of publicati			Year		Pages (from-to)
Berberović Šefkija,			nomics, Faculty	ofeo	conomics Banja	2009		
Todorović Zdravko		Luka						
L. Blank, A. Tarquin		Basics Of E	ngineering Eco	onon	ny McGraw-Hi	II, 2008		

	Higher Education, New York								
	Assesment methods	Points	Percentage						
	Pre-exam obligations								
	Presence of lectures / exercises	10	10%						
Evaluation criteria	Colloquium	40	40%						
	Final exam								
	Final exam (oral / written)	50	50%						
	TOTAL	100	100 %						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport a	and Traffic engi	neering Doboj						

ST WCTOWIC			UNIV	ERSITY OF	EAST	SARAJEVO		2005	
			Faculty of ⁻	5	Superverse and the second				
		Study program: Traffic							
)		Profile: Common course						
Course title		I cycle II year of study ANALYSIS OF TRANSPORT NETWORKS							
Department of Information - Communication Systems in Traffic								Faculty of Transport and	
Department		Deputition				Engineering in			
	Code		Соц	urse status	;	Semes	ter	ECTS credits	
	САФ11С307130136,0220							6.0	
Professor/s		nD Aleksanda			-	ofessor			
Associate/s	PI	nD Mirko Sto	jcic, assista	ant profess I	sor			Chudant worklasd	
	Weekly				ual stu	dent hours (pe	-	Student workload coefficient So	
L	TE		LE	L		TE	LE	So	
2	2		0	63		42	0	1,4	
		load (hours, 5 +0*15 = 75	-	iter)			-	urs, per semester)	
3*1	13 + 211	$5 + 0^{*}15 = 75$ Total workl		-llaw - 75	+75	$3*15*S_0 + 2'$ = 150 hours p		5*S ₀ =105 hours	
	B	/ mastering t					el semester		
							anning and c	design in communication	
Course aims an		etworks and	-		, pe.	p.cc c. c. c. c. c. p.			
learning outcor			Nathematical methods for traffic analysis						
	3. Routing systems								
	4.	Introduction	n to locatio	on problem	is and r	methods of solv	ing		
Prerequisites	th	iere are no s	pecial cond	ditions					
Teaching metho						ercises, consult			
				-	-	rt and commun	ication netwo	orks	
		Algorithms				anta af tha abaw	****	hlam	
						ants of the shor		es in the network	
		5. Algorithms for finding the second shortest path in the network 6. Algorithms for finding the shortest paths between all pairs of nodes in the network							
								nted network (I	
		olloquium)							
Course content					esman ·	- mathematical	formulation	and computational	
	cc	omplexity of	-						
		-	-	-	-	blem of a travel	-	1	
). Problems (1. Routing of	-	-	-	f means of trans	sport		
		2. Routing tra				Dases			
		-				s of location the	ory. Classific	ation of location	
		roblems					,		
	14	4. Median an	d network	center pro	blems				
	1	5. Application	n of artifici			s in traffic rout	ing problems	in networks	
					ook (s	•			
Autho	or/s			of publica			Year	Pages (from-to)	
Teodoro	ovic D.	Tra	-		-	f Transport and	2007		
			Traffi	c Engineer					
Autho	or/s		Nam	Addition e of public		-	Year	Pages (from-to)	
Autho	5173		Naff		cation,	cuitor	rear	rages (110111-10)	

	Assesment methods	Points	Percentage					
	Pre-exam obligations							
	attendance at lectures / exercises	5	5%					
Evaluation criteria	I am positively assessed. paper / project / essay	15	15%					
Evaluation criteria	colloquium	30	30%					
	Final exam							
	oral	50	50%					
	SUM	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj					

S I WCTO WAS			UNIV	ERSITY OF	EAST S	ARAJEVO			2005
			-	ty of Transport and Traffic Engineering				5	Staradine One
PARCE	1 + VR	Study program: Traffic							
			Profile: Common course					AOEOJ	
			l cycle			II year of stu	-		a print available
Course title		English language III							
Department									
Code			C οι	urse status		Semes	ster	E	CTS credits
САФ11С307:				andatory					3.00
Professor/s		-		nguage tea					
Associate/s	Tan	ja Petrović	, foreign la	nguage tea	cher				
N	/eekly h	ours		Individu	ual stud	dent hours (pe	er semester)	St	udent workload coefficient S _o
L	TE		LE	L		TE	LE		So
1	2		0	21		42	0		1.4
Total teache		oad (hours, 5 hours	per semes	ter)		Total student v	workload (h 63 hour		r semester)
			Total wo	rkload: 108	hours	per semester			
	Afte	er completi				uld be able to:			
	1. U	Inderstand	professior	nal texts in E	English				
	2. S	uccessfully	use langua	age of the t	raffic p	profession geni	re.		
Course aims and	3. lo	dentify key	words and	l sentences	in pro	fessional Englis	sh.		
learning outcome		4. Translate professional / scientific texts from English to Serbian and vice versa.							
				es / parts o	of traffi	с.			
		Vrite e-mai							
			-	obs in Englis					
Prerequisites		-	-			nguage I and Er	nglish langu	age II	
Teaching method				e, structura		method			
		7.		Parts of Roa	ads				
		<i>,</i> ,	Types of Intersections Materials Magsurements						
			Materials, Measurements						
			Tools, Safety Equipment Basic Actions, Machines						
				andscapes					
			rm test	anuscupes					
Course content				ying Equipn	nent				
searce content				,					
	1		Drains						
	1			nt, Rigid Pav	vemen	t			
	1		Control						
	1	,,,							
	1			nce, Road N	Mainte	nance			
	1	5 End oj	f the term	test					
				Textbo	oo <u>k (</u> s)				
Author	/s			of publicat			Year	·	Pages (from-to)
Virginia Evans	s lei	nny Road	ls & Highw			ishing, Newbu	-		
Dooley, Mark Cha	,	,		Berksh			2013	1-4	40x3
	(selected topics)								
				Additiona		-			
Author				e of publica		editor	Year		Pages (from-to)
Raymond Murphy		Engli		ar in Use, C		•	2009		313
Evaluation criteri	a		As	sessment r	netho	35		Points	Percentage

	Attendance	10	10%				
	Midterm test	20	20%				
	20	20%					
	Final test	50	50%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

			Faculty of T	UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Common Courses I cycle II year of study					
Course title		GERMAN LANGUAGE III							
Department									
Co	ode		Cou	irse status		Seme	ster	ECT	S credits
САФ11С307	102133,0	0120	M	andatory		III			3.00
Professor/s									
Associate/s									
v	Veekly h	ours		Individ	ual stu	dent hours (pe	er semester)		ent workload efficient So
L	TE		LE	L		TE	LE		So
1	2		0	21		42	0		1.4
Total teache	er worklo	rkload (hours, per semester) Total student workload (hours, per semester)							
	45	45 hours 63 hours							
Total workload: 108 hours per semester									
Course aims and									
learning outcome	es								
Prerequisites									
Teaching method	as								
Course content				Toyth	ook (s)				
Author	/s		Name	of publica		uhlishor	Yea	r Dag	ges (from-to)
Aution	/3		Name		uon, pu		i ca	ι τα	
		<u>l</u>		Addition	al readi	ngs			
Author	/s		Nam	e of public			Yea	r Pa	ges (from-to)
				-					
		I	As	ssesment	methoo	ls		Points	Percentage
						-			
Evaluation criter	ia								
									- 1
Web sources	http	o://sf.	ues.rs.ba/eng/w	<u>/p-content</u>	/upload	ds/2022/05/Er	ngleski-NPP-	I-ciklus-202	21.pdf
Applicable from	11/	15/20)22 - 198 Session	of the Co	uncile,	Faculty of Trai	nsport and T	raffic engir	neering Doboj

A VICTO BIO			UNIV	ERSITY OF EAS	ST SARAJEVO		2005		
			Faculty of Transport and Traffic Engineering Study program: Traffic				State Ballane		
			P		AOEOJ				
Course title			l cycle		dy ristics				
Course title Department		Mathema	tics Denar						
•		Iviatileilla	ties Depai	intente racuity	of Philosophy Pale				
C	ode		Coι	urse status	Semes	ter	ECTS credits		
САФ11С30				andatory			6,0		
Professor/s		-		ociate professo					
Associate/s	Dra	agana Nedić	, PhD, asso	pciate professo	or				
١	Neekly h	nours		Individual	student hours (pe	r semester)	Student workload coefficient S _o		
L	TE		LE	L	TE	LE	So		
3	2		0	63	42	0	1.4		
Total teach	er workl	oad (hours,	per semes	ter)	Total student v	vorkload (hou	ırs, per semester)		
W=3*		5 + 0*15 =					5*S₀ = 105 hours		
)5 = 180 hours	per semester			
		-			robability theory.				
Course aims and		2. To gain fundamental knowledge in mathematical statistics necessary for understanding							
learning outcom		ther courses.							
Ū	3.1	•	nparametric tests.						
Ducucavisitos		4. Application in transport and traffic.							
Prerequisites		None.							
Teaching metho		Lectures, exercises. 1. Introduction to course content, teaching and assessment methods.							
					-		finition of probability		
		Statistical experiment. Random events. Operations with events. Definition of probability. Theorem of probability of two events. Conditional probability. Bayes' theorem.							
		andom variable and its probability distributions. Discrete random variables.							
		fodels of exchangeable random variable and its distribution. Binominal, Poisson, and							
		pergeometric distributions.							
		Continuous random variable. Functions, distributions and parameters.							
			mal distribution. Standard normal distribution and its parameters.						
Course content	8.1	Mid-term te	d-term test. (I colloquium)						
	9.1	Population,	pulation, character and pattern. Simple random sample. Sampling statistics.						
			ng distribution.						
			tral limit theorem. Normal approximations. Student's distribution. Chi-squared						
		tribution.	ution. ameter set estimation based on a sample. Point and interval estimation.						
				Chi-squared te	set parameters ba	iseu on a sam	pie.		
				(Il colloquium)	est.				
	15.		lenn lest (Textbook	· (c)				
Autho	r/s		Name	of publication		Year	Pages (from-to)		
Autio	173	Mate		-		2008.			
Vukadinović, S., Popović, J.Matematička statistika, Saobraćajni fakultet2008.									
Merkle, M.				statistika za i	nžinjere i studen	te			
/ ····				mska misao, Be	-	2002.			
				Additional re		I			
Autho	r/s		Nam	e of publicatio	on, editor	Year	Pages (from-to)		
Author Vukadinović,S., F		Zbirk		-	on, editor tematičke statistik		Pages (from-to)		

	Assessment methods	Points	Percentage					
	Pre-exam obligations							
	Attendance	10	10%					
Evaluation criteria	Midterm test	20	20%					
Evaluation criteria	End of the term test	20	20%					
	Final exam							
	(oral part/written part)	50	50%					
	TOTAL	100	100 %					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj					

			LININ		FAST	SARAJEVO		15 D.D. PM	
				g	AVA BALLAND BALLAN				
- MC			Faculty of Transport and Traffic Engineering Study program: Traffic						
82			Profile: Common course						
00 - 200 - 200			I cycle			ll year of stu	ıdy	TOPO	
Course title					BAS	ICS PROGRAM	MING		
Department		Departm of East S		outers, info	ormat	ion technologie	s and biotechn	ology, ETF, University	
	Code		Соц	urse status		Seme	ster	ECTS credits	
САФ11С30	713364	5,0311	m	andatory		IV		5,00	
Professor/s	Р	h.D. Gordan	a Jotanovic	, Assistant	Profe	ssor			
Associate/s	P	hD Goran Kı	uzmic, assist	ant profes	sor				
	Weekly	hours		Individ	ual st	udent hours (pe	er semester)	Student workload coefficient So	
L	TE	E	LE	L		TE	LE	So	
3	1		1	X*15*3	So	Y*15*S₀	Z*15*S _o		
		kload (hours		ter)				rs, per semester)	
X*:	15 + Y*1	5 + Z*15 = \					Y*15*S _o + Z*15	$5*S_0 = T$ hours	
						= hours per s			
			-	re basic kn	owled	lge related to pr	rogramming lai	nguages and	
	-	programmin,	-	fina tha ha		ncepts of progr		ithm program	
		ompiler, syn				incepts of progr	amming. algor	itilli, prografii,	
					n ind	anondontly impl	ement all nha	ses of the	
Course aims an		3. It is expected that the student can independently implement all phases of the programming process in a visual programming language environment for known algorithms.							
learning outcor			tudents should acquire basic knowledge about the types of programming languages and						
		ays of prog					pee et pre8		
			-			he JAVA program	n environment	t.	
			-	-				rom programming in	
	tł	he JAVA pro	gramming la	anguage.					
Prerequisites	N	lo							
Teaching meth	ods Le	ectures. Lab	oratory exe	rcises.					
		-				e field of transpo			
	2	•	• •		er an	d lower level	programming	languages. Procedural	
			ning langua	-					
		-		-		•		stem (JAVA, HTML).	
	4	-		-	struct	urai programm	ing (modular	programming). Object	
	-	. Programm	Programmi	ng.					
		. Algorithm:	• •	thmic strue	rturor				
Course content		. Writing pr							
course content		. Colloquiu	-	•					
		. Java progr		guage.					
			-		nts in t	the Java program	nming languag	je.	
		1. Data type							
		2. Variables	-	t of values					
	1	3. Read inpu	ut data. Obje	ect (System	n.in).				
		4. Classes in		amming lar	nguag	e.			
	1	5. Colloquiu	im 2						
				Textb		-			
Autho	or/s			of publica			Year	Pages (from-to)	
Ivor Horton		-	inning Jav			1.4 Edition	by, 2002		
		ISBI	N:07645436	52, Wrox F	ress.				

Y. Daniel Liang		JAVA programming, Inc., publishing as Prentice Hall, ISBN 13: 978-0-13-376131-3.	201	5				
Yakov Fain		Јава 8 програмирање. Компјутер библиотека. Београд. Србија.	201	5				
		Additional readings	I					
Author/s		Name of publication, editor	Yea	r	Page	es (from-to)		
R. Kulkarni		Java EE Development with Eclipse. 2nd edition. Packt Publishing. Birmingham, UK.	201	2015				
		Assesment methods		Poi	nts	Percentage		
	Pre-exam							
		lectures/ exercises atter	10		10%			
		Colloq	15		15%			
Evaluation criteria		Colloquium 2				15%		
		laboratory exe	ercises	10		10%		
	Final exam							
		ora	50		50%			
	TOTAL			100)	100%		
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

Course title Department Code	Transport	Faculty of	ERSITY OF EAST Transport and Tr Study program: rofile: Common	raffic Engineering		Santaine of the		
Department		P	Study program:	Traffic				
Department	Transport	Р						
Department	Transport			COURSE				
Department	Transport	reycie		Il year of study	dopo1			
Department	Transport		I	Logistics in traffic		The second se		
	riunspor	Engineeri						
Code			18					
		C οι	irse status	Semeste	r	ECTS credits		
САФ11С3071024	145,0220	m	andatory	IV		5.00		
Professor/s	PhD Marko Va			1				
Associate/s	Sanja Simic, se							
Week	dy hours		Individual st	udent hours (per s	semester)	Student workload coefficient S _o		
L	TE	LE	L	TE	LE	So		
2	2		X*15*S _o	Y*15*S₀	Z*15*S _o			
Total teacher wo	orkload (hours,	per semes		Total student wo	orkload (hour	rs, per semester)		
	*15 + 0*15 = 6			2*15*1,4+ 2*1	-			
	Total work	load: W+T=	$U_{opt} = 60 + 84$	= 144 hours per	semester			
	After this cour	se student	s will be able to:					
	-	-	e of procuremen	t, production, dist	ribution, trar	nsport and logistics		
Course aims and	controlling;							
learning outcomes	earning outcomes 2. creates solutions for different logistics requirements;							
0 • • • • •	 3. apply and use logistics in traffic and transport; 4. determine the place, directions and strategy of planning and optimization of logistics 							
		he place, d	lirections and sti	rategy of planning	and optimiza	ation of logistics		
Due un en claite a	systems.	-1141						
Prerequisites	no special con							
Teaching methods			rcises, consultat	ion				
	1. The goals of hu							
		asks of business logistics nterprise logistics system						
	-			ept				
		gistics strategy and enterprise concept gistics of transport						
	-	5. Logistics of warehouses and commissioning						
	7. I colloquiur			-				
Course content	8. Procureme	nt Logistics	;					
	9. Production	-						
	10. Distributio	-						
	-	-		parts of productio	n			
	-		ure of logistics e		in locistics			
	13. Information 14. Logistics of		logistics and info	ormation systems	III IOBISTICS			
	14. Logistics c 15. Il colloqui	-						
			Textbook (s)				
Author/s		Name	of publication,	-	Year	Pages (from-to)		
	Logic		fic, University of					
Marko Vasiljević	-		port and Traffic	•	2015			
		,	Additional read		1			
Author/s		Nam	e of publication		Year	Pages (from-to)		
	Mod	elling of						
Ž. Stević, I. Tanack		icriteria	analysis", Fir					
Vasiljević, K. Dimanos		erence: Tra	ansport for toda	y's society, Bitola,	2016.			
	Mac	edonia						
Evaluation criteria		A	ssesment metho	ods	Po	oints Percentage		

	Preexamination obligations							
	attendance during lectures	5	5					
	attendance during exercise	5	5					
	Seminar work	10	10					
	colloquiums	2x25	50					
	Final examination							
	written examination (2 colloquiums)	50	50					
	oral examination	30	30					
	Overall	100	100					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

JI8. VIIC			UNIV	ERSITY OF	EAST S	ARAJEVO		2005		
>ync<			-	-		ffic Engineerin	8	Starvalue adding		
				Study prog						
				<i>rofile:</i> Com	nmon c			AOEOJ		
4585 30			l cycle			2 nd year of st		4		
Course title		Transport means and devices Department for motor vehicles, exploitation, maintenance and diagnostics of vehicles –								
Department		-			-	itation, mainte eering Doboj	nance and dia	agnostics of vehicles –		
C	ode		C οι	ırse status		Semes	ter	ECTS credits		
САФ11С307				mpulsory		IV		5.00		
Professor/s			, PhD, asoc	ciate profes	ssor					
Associate/s	Milar	i Eremija,	assistant							
١	Veekly hou	urs		Individ	ual stu	dent hours (pe	r semester)	Student workload coefficient So		
L	TE		LE	L		TE	LE	So		
2	2			67.5		45	0	1.5		
Total teach				ter)				irs, per semester)		
	*15 + 2*15						+ 2*15*1.5 +			
	45 + 30 + 0 = 75 hours						+ 45 + 0 = 112	.5 hours		
						= 187.5 hours p				
				-	-	a student will b	e able to:			
			ine the theory of movement of motor vehicles,							
	2. def					hicle in motion	,			
Course aims and	-	asic drives								
learning outcom		-	-			nd structure of				
							n, gear syster	n, motion system, and		
	other	accompanying devices on motor vehicles.								
Prerequisites										
Teaching metho		rors tho	oretical exe	rcicos con	ninarn	apor				
reaching metho						ареі				
			prical development of land vehicles							
				echanical drives of vehicles						
		-	Theory of motion of motor vehicles							
	4.10	Forces acting on a motor vehicle								
	5 Mc	tor vehic	g on a mot		les					
		otor vehic	g on a mot le drive	or vehicle		d gearboxes				
	6. Po	wer trans	g on a mot cle drive ifer from ei	or vehicle		d gearboxes				
	6. Po 7. Co	wer trans I loquium	g on a mot de drive fer from ei	or vehicle ngines to g	ears ar	-	ns			
Course content	6. Po 7. Co 8. Tra	wer trans Iloquium action and	g on a mot de drive der from ei d dynamic e	or vehicle ngines to g	ears ar	id gearboxes transport meai	15			
Course content	6. Por 7. Co 8. Tra 9. Por	wer trans Iloquium action and wer balar	g on a mot cle drive ifer from er I d dynamic o nce	or vehicle ngines to g characteris	ears ar	transport mea				
Course content	6. Po 7. Co 8. Tra 9. Po 10. C	wer trans Iloquium action and wer balar lassificati	g on a mot de drive fer from er l d dynamic nce on, categor	or vehicle ngines to g characteris rization an	ears ar stics of d stanc	transport mean	ehicles			
Course content	6. Por 7. Co 8. Tra 9. Por 10. Cl 11. Co	wer trans Iloquium action and wer balar lassificati oncept of	g on a mot cle drive ifer from er l d dynamic o nce on, categor f constructi	or vehicle ngines to g characteris rization an on and str	ears ar stics of d stand ucture	transport mean lardization of v of motor vehic	ehicles			
Course content	6. Por 7. Co 8. Tra 9. Por 10. Cl 11. Cu 12. Bu	wer trans Iloquium action and wer balar lassificati oncept of earing co	g on a mot cle drive ifer from er l d dynamic nce on, categor f constructi nstruction	or vehicle ngines to g characteris rization and on and str and vehicle	ears ar stics of d stanc ucture e suppo	transport mean lardization of v of motor vehic prts	ehicles les			
Course content	6. Por 7. Co 8. Tra 9. Por 10. Cl 11. Cc 12. Bi 13. Cc	wer trans Iloquium action and wer balar lassificati oncept of earing co ontrol sys	g on a mot de drive fer from er d dynamic d dynamic d dynamic f construction nstruction stem, braki	or vehicle ngines to g characteris rization and on and str and vehicle ng system,	ears ar stics of d stanc ucture e suppo	transport mean lardization of v of motor vehic	ehicles les			
Course content	6. Pov 7. Co 8. Tra 9. Pov 10. Cl 11. Co 12. Bo 13. Co 14. O	wer trans Iloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi	g on a mot effer from en d dynamic of con, categor f construction struction stem, braki ces on a ve	or vehicle ngines to g characteris rization and on and str and vehicle ng system,	ears ar stics of d stanc ucture e suppo	transport mean lardization of v of motor vehic prts	ehicles les			
Course content	6. Pov 7. Co 8. Tra 9. Pov 10. Cl 11. Co 12. Bo 13. Co 14. O	wer trans Iloquium action and wer balar lassificati oncept of earing co ontrol sys	g on a mot effer from en d dynamic of con, categor f construction struction stem, braki ces on a ve	or vehicle ngines to g characteris rization and on and str and vehicle ng system,	ears ar stics of d stanc ucture e suppo	transport mean lardization of v of motor vehic prts	ehicles les			
Course content	6. Pov 7. Co 8. Tra 9. Pov 10. Cl 11. Co 12. Bo 13. Co 14. O	wer trans Iloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi	g on a mot effer from en d dynamic of con, categor f construction struction stem, braki ces on a ve	or vehicle ngines to g characteris rization and on and str and vehicle ng system, hicle	ears ar stics of d stanc ucture e suppo , gear s	transport mean lardization of v of motor vehic orts ystem and mot	ehicles les			
	6. Por 7. Co 8. Tra 9. Por 10. Cl 11. Cd 12. Bi 13. Cd 14. O 15. C	wer trans Iloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi	g on a mot cle drive ifer from en d dynamic on ce on, categor f construction f construction stem, braki ces on a ve n II	or vehicle ngines to g characteris rization and on and str and vehicle ng system, chicle Textb	tics of d stanc ucture e suppo , gear s	transport mean lardization of v of motor vehic orts ystem and mot	ehicles les	Pages (from-to)		
Autho	6. Por 7. Col 8. Tra 9. Por 10. Cl 11. Cd 12. Bd 13. Cd 14. O 15. Cd	wer trans lloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi olloquiur	g on a mot cle drive ifer from en d dynamic on ce on, categor f construction struction stem, braki ces on a ve n II Name	or vehicle ngines to g characteris rization and on and str and vehicle ng system, hicle Textb of publica	ears ar stics of d stanc ucture e suppo , gear s pook (s) tion, pu	transport mean lardization of v of motor vehic orts ystem and mot	ehicles les ion system	Pages (from-to)		
Author 1. Mišić, I	6. Por 7. Col 8. Tra 9. Por 10. Cl 11. Cd 12. Bi 13. Cd 14. O 15. Cd	wer trans lloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi olloquiur	g on a mot cle drive ifer from en d dynamic on ce on, categou f construction f construction f construction stem, braki ces on a ve n II Name ansportna s	or vehicle ngines to g characteris rization and on and str and vehicle ng system, shicle Textb of publica redstva i u	ears ar stics of d stanc ucture e suppo , gear s pook (s) tion, pu rređaji,	transport mean lardization of v of motor vehic orts ystem and mot ublisher (short version)	ehicles les ion system <u>Year</u> 2006	1-142		
Autho	6. Por 7. Col 8. Tra 9. Por 10. Cl 11. Cd 12. Bi 13. Cd 14. O 15. Cd	wer trans lloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi olloquiur	g on a mot cle drive ifer from en d dynamic on ce on, categoo f construction f construction f construction f construction stem, braki ces on a ve n II Name msportna s Trans	or vehicle ngines to g characteris rization and on and str and vehicle ng system, hicle Textb of publica redstva i u portna sree	ears ar stics of d stanc ucture e suppo , gear s book (s) tion, pu iređaji, dstva i	transport mean lardization of v of motor vehic orts ystem and mot ublisher (short version) uređaji	ehicles les ion system			
Author 1. Mišić, I	6. Por 7. Col 8. Tra 9. Por 10. Cl 11. Cd 12. Bi 13. Cd 14. O 15. Cd	wer trans lloquium action and wer balar lassificati oncept of earing co ontrol sys ther devi olloquiur	g on a mot cle drive ifer from en d dynamic on ce on, categoo f construction f construction f construction f construction stem, braki ces on a ve n II Name msportna s Trans	or vehicle ngines to g characteris rization and on and str and vehicle ng system, shicle Textb of publica redstva i u	ears ar stics of d stanc ucture e suppo , gear s book (s) tion, pu iređaji, dstva i ih zada	transport mean lardization of v of motor vehic orts ystem and mot ustem and mot ustem and mot ustem and mot ustem and mot ustem and mot ustem and mot	ehicles les ion system <u>Year</u> 2006	1-142		

Lenasi, J., Žeželj, S., I G.	Danon,	Motorna vozila	1995	5	1-375					
Ivković, I. Spasić, M.		Zbirka rešenih zadataka	2007	7	1-142					
Bukumirović, M.		Zbirka rešenih zadataka iz elemenata transportnih sredstava i uređaja II	2003	3	1-190					
Janković, D.		Rešeni zadaci iz motornih vozila	1991	L	1-261					
		S		Points	Percentage					
	Pre-exar	Pre-exam obligations								
		e.g. attendance to lectures / exe	10	10%						
		e.g. seminar paper/ project/ essay positively as	20	20%						
		e.g. case study – grou	/	/						
Evaluation criteria		e.g. test / collo	quium	70	70%					
Evaluation criteria		e.g. laboratory work / laboratory exe	ercises	/	/					
		e.g. practica	l work	/	/					
	Final exa	im								
		e.g. final exam (oral / w	ritten)	70	70%					
	TOTAL			100	100%					
Web sources	http://sf	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-ciklus-2	021.pdf					
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic en	gineering Doboj					

	1									
		-	ERSITY OF E Transport ar			g		Summing organ		
			Study progr Profile: Com							
		I study cycle			se Il study yea	ar		AOEOJ		
Full name of the iten	ı	TRAFFIC PSYCHOLOGY								
Desk	Departr	epartment of Psychology, Faculty of Humanities and Social Sciences, Pale								
Item code			Irse status		Seme			ECTS		
САФ11С3071027	44,0220		bound IV					4,0		
Teacher (s)		nir Djuric, Ass	sociate Profe	essor						
Contributor/s	PhD Tihon	nir Djuric, Ass	sociate Profe	essor						
Fund hours / tead	ching load (weekly)	Inc		tudent wor ster hours		Studer	nt load coefficient S_o		
L 1	re 🛛	LE	L		TE	LE		So		
2	2	0	45		45	0		1,0		
total teaching W=2*15 + 1	•	ours, semeste 5 = 45 hours	r)			l ent workloa So + 1*15*So		-		
Т	otal course	e load (teachi	ng + studen	t): W + T	= U _{opt} = 45	+ 45 = 90 ser	nester hour	S		
Learning outcomes Prerequisites	 Improv Increas 	ing driver be ving driver cousing traffic saf no condition	mfort. fety.				raffic flow.			
Teaching methods		tutorials, sem								
Course content per week	 Basic c Percep disord Attent Opinio Learnin Emotio Person Person 7. I colloo Social The eti Theore Psycho Basic p Compl 	concepts of p ption - genera lers. ion - nature, on - definition ng, memory a ons, urges, w hality - definit nalities. quium behavior. iology of traf- etical foundar o-medical cor psycho-medic lementing ski culture - the	sychic proce al determina characterist a, characterist and forgettin illpower, se ion, theory, fic traumatis tions of traf traindicatic cal expertise lls in driver	ints, cons cics, scope stics, reas ng - types If awaren structure sm - phen fic trauma ons to driv s. training.	tancy, perc e, test meth oning, type of learning ess. e, developn omenon an atism of rec ring.	eption of ob nods, disorde es, disorders, g, theory, tra nent, identity nd indicators cidivism.	jects, space ers. nsfer, perfo γ, integrity, of traffic νι	nerve impulses. and movement, rmances, disorders. maturity, dynamics, Ilnerability.		
				ired litera						
Author (s)			ne of the pu		-		Year	Pages (from-to)		
1. Milic, A.	TI	raffic Psychol		-		oboj	2007.	1-391		
		•		entary lit				D (())		
Author (s)		Nai	me of the p	ublication	, publishe		Year	Pages (from-to)		

Traffic Psychology, Scientific Book, Belgrade

1. Milosevic, S.

1977.

1-262

2. Milosevic, S.	<i>Perception, attentive motor activity,</i> Institute for Textbooks and Teaching Aids, Belgrade	2002.	1-220						
	Type of student work evaluation	Points	Percentage						
	Pre-exam obligations								
Obligations, forms of	Class attendance and activity	10	10%						
	I colloquium	30	30%						
assessment and	II colloquium	30	30%						
assessment	Final exam								
	written exam (2 colloquiums)	50	50 %						
	oral exam	30	30 %						
	IN TOTAL	100	100 %						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-N	PP-I-ciklus-2	2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport ar	nd Traffic en	gineering Doboj						

			ERSITY OF EAST	SARAJEVO affic Engineering	5	Sabaling Page 2			
			Study program: Profile: Common						
		l cycle		Il year of stu	dv	AOEOJ			
Course title		DATABASES IN TRAFFIC ENGINEERING							
	Departe	Department of Information and Communication Systems, Faculty of Transport and Traffic							
Department		ering in Dobo							
Code		Cou	urse status	ter	ECTS credits				
САФ11С307233	3845,0320		elective	IV		5,00			
Professor/s	Ph.D. Gorda	na Jotanovic,	, Assistant Profe	ssor					
Associate/s	Ph.D. Gorda	na Jotanovic,	Assistant Profe	ssor					
Wee	kly hours		Individual st	udent hours (pe	r semester)	Student workload coefficient So			
L	TE	LE	L	TE	LE	So			
3	2	0	30	30	0	1,2			
Total teacher w	vorkload (houi	rs, per semes	ter)	Total student v	vorkload (hou	ırs, per semester)			
W = 3*15 + 2*2	<u>15 + 0*15</u> = 45	<u>+ 30 = 7</u> 5 ho	ours T =3 ³	<u>*15*1,5 + </u> 2*15*	1,5 + 0*15*1,	5 = 45 + 30 + 0 = 75			
	Total wo	orkload: W +	$T = U_{opt} = 60 + 90$) = 150 hours pe	r semester				
		of the course	the student wil	l be able to und	erstand the e	essence of working with			
	databases:								
Course aims and				ata in traffic engi	-				
learning outcomes				dequate environ					
			abases and prac	tically use them	in traffic engi	neering			
	4. to develo	p databases							
Prerequisites	No								
Teaching methods			atory exercises.						
		cepts of data	bases.						
	2. Database								
		 Basic elements of the database. Collection of data from traffic engineering. 							
	5. Big Data.	Modeling of data from traffic engineering.							
	-	creation lang	-	····6·					
Course content	8. Colloquiu								
Searce content			nt System (DBMS	5).					
		es in traffic er	•	,					
		e manageme							
		es in traffic sa							
			-	on from traffic e	ngineering.				
	-	-	from traffic engi		-				
	15.Colloquiu			-					
			Textbook (5)					
Author/s		Name	of publication, p	oubl isher	Year	Pages (from-to)			
	Inf	ormation sys	stems and Data	ase, University	of				
G Jotanovic G., Jause	evac G. Ea	East Sarajevo, Faculty of Transport and Traffic 2012							
	En	gineering							
Henry A. S., Korth F.		-	em Concepts,	Fourth Editio	n, 2001				
Sudarshan S.		:Graw-Hill							
Ramakrishnan R., Ge	Phrkel	tabase Man :Graw-Hill	agement Syster	ns, Third Editio	n, 2005				
		Additional readings							
Author/s		Nam	e of publication	, editor	Year	Pages (from-to)			

A.Silberschatz, H. K Sudarshan,	Korth, S	Database Internation	System nal Edition	Concepts, n.	McGraw	Hill,	200	5			
		Assesment methods							s Percentage		
	Pre-exar	Pre-exam									
				dance	10	10%					
		Colloquium 1							15%		
Evaluation criteria		Colloquium 2							15%		
		project task							10%		
	Final exam										
			50	50%							
	TOTAL	TOTAL							100%		
Web sources	http://sf	ues.rs.ba/e	ng/wp-co	ntent/upload	ds/2022/05	/Engles	ki-NPP-	I-ciklus	-2021.pdf		
Applicable from	11/15/2	022 - 198 Se	ession of t	he Councile,	Faculty of T	ranspo	rt and T	raffic e	ngineering Doboj		

		Faculty of T	Fransport and T		~					
Price					8		South and State			
			Study program:							
263.30			rofile: Commoi		1		AOEOJ			
	_	I cycle		Il year of stu	-					
Course title			C	perations Resea	arch					
Department										
Code		Cou	irse status	Seme	ster	ECTS credi				
САФ11С307202245,03		elective		IV		5,00				
	PhD Zeljko Ste									
Associate/s	Sanja Simic, se	enior assista	ant				.			
Week	ly hours		Individual s	tudent hours (pe	er semester))	Student workload coefficient S _o			
L ·	TE	LE	L	TE	LE		So			
3	2	0	3*15*1,4	2*15*1,4	0*15*1,4		1,4			
Total teacher wo			ter)	Total student						
3*15 + 2*	*15 + 0*15 = 7			3*15*1,4 + 2*			4 = 105 hours			
				5 = 180 hours	per semeste	er				
	Students shou				into generate	ara	ning			
		-	tion problems	using linear and	integer pro	gramn	ning			
Course aims and										
learning outcomes		 Solve location problems Understand the network planning technique 								
learning outcomes		Understand the queueing theory and its application in transportation engineering								
		Calculate the parameters of appropriate queuing system models								
			els to real prob			0000				
Prerequisites	None		•							
Teaching methods	Lectures, theo	s, theoretical exercises, debates, seminars								
	1. Linea	Linear programming								
	2. Duali									
	-	Integer Linear Programming								
		portation p								
		-	ation problems							
				PM, PERT, PERT/	COST metho	ods)				
Course content			ation and test							
Course content		e theory	ranhical and an	alytical method	linear prog	ammi	ng in game theory)			
			-	ation in transport						
		• •	s without waiti		Cation cham	Sering				
		• •	s with waiting I	•						
		• ·	ite Carlo metho							
		-	ware application							
	<u>15.</u> II par	tial examin	ation and test							
			Textbook	• •						
Author/s			of publication,	-	Yea	r	Pages (from-to)			
M. Čupić, M. Suknović		-		eory: quantitativ	2004	4	1-370			
	ić anal	sis, Faculty		ciences, Novi Sac	d					
Radojević, V. Jovanovi		Additional readings								
				-			Demos (from t.)			
Radojević, V. Jovanovi Author/s			e of publicatio	n, editor	Yea	r	Pages (from-to)			
		sportation	e of publicatio	n, editor Ity of Transport	Yea		Pages (from-to) 1-428			

		problems, Faculty of Transport and Traffic Engineering, Doboj						
F.S. Hillier, G.J. Liebe	rman	Introduction to Operations Research, McGraw- Hill Series, Seventh Edition	2003	1		1-1240		
W.L.Winston, M. Venkataramanan		Introduction to Mathematical Programming: Operations Research, Vol. 1, 4th Edition, Thompson Learning	2002	2		1-1348		
		Assesment methods	Poi	nts	Percentage			
	Preexamination obligations							
Fuelvetien eriterie	Tests (2			40		40 %		
Evaluation criteria	Partial e	xaminations (2)	40		40 %			
	Final exa	amination				·		
	Oral exa	mination			20	20 %		
	Total				100	100 %		
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-cikl	us-202	1.pdf		
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engin	eering Doboj		

T MCTORICE			UNIV	ERSITY C	OF EAST S	ARAJEVO				2005
		F	aculty of	Transpor	t and Tra	ffic Engineering			-	HAINA OAATA
Yhc					o <i>gram:</i> T					
				rofile: Co	ommon o					AOEOJ
4389.30			I cycle			II year of stud				
Course title						RKETING SERVIO				
Department	De	bartme	nt of Mark	keting an	d Manag	ement, Faculty	of Econom	iics in	Brčko	
Cod	е		Coι	urse stati	us	Semest	ter		ECT	S credits
САФ11С30723				electoral		IV				5,0
Professor/s				sor Svetlana Terzić, PhD						
Associate/s	Associat	te Profe	essor Svet	lana Terz	ić, PhD					
We	ekly hours			Indiv	idual stu	dent hours (pei	semester)		ent workload efficient S _o
L	TE		LE	L		TE	LE			So
3	2		0	45	5	45	0			1,5
Total teacher workload (hours, per semester)Total student w $W=2*15+2*15+0*15=60$ hours $T=2*15*S0+2$							-		-	-
	Tot	tal wor	kload: W+	T=Uopt=	60 + 90	= 150 hours per	semester			
						the field of mar		-		
Course aims and		-	-			ning marketing	goals and s	trate	gies.	
learning outcomes			rketing ma	anageme	ent.					
		4. Internet marketing.								
Prerequisites	No prer	•								
Teaching methods			ory exerci			κ				
		Concept and characteristics of services.								
		 Development of service marketing. Basic differences between products and services 								
		3. Basic differences between products and services.								
		4. The process of deciding to purchase services.								
		5. Consumer behavior in the process of purchasing services.								
		6. Service organization market research.7. Service company strategies								
Course content		8. First colloquium.								
course content		9. Pricing of services.								
		10. Human resource management in the service sector.								
		11. Service product management.								
			tribution c							
	13. Serv	ice qua	ality and m	neasuring	g custome	er satisfaction.				
			npany con	trol.						
	15. Seco	ond col	loquium.							
					tbook (s)					
Author/s					cation, p		Yea		Pag	ges (from-to)
Kancir, R.			-			ool, Belgrade	2012	2.		
Veljkovic, S		Mark	-	rvices,	Faculty	of Economic	s, 2009	Э.		
_ ;		Beog	rad			•				
A. 11 /					nal read	-			-	
Author/s		Deel-			lication,		Yea		Pag	ges (from-to)
Milisavljevic, M. &	waricici,			rketing,	Faculty	of Economic	s, 2004	+.		
<u>B.</u>		Beog			+ mother			Dei	ntc	Dorcontega
	Dro. ove	moblic		ssesmen	t methoo	12		Poi	nts	Percentage
Evaluation criteria	Pre-exa		tures / ex	orcisos				10		10%
	Seminar		luies / ex	61015625				-		
	Seminar	WUIK						10		10

	Colloquium	50	50%					
	Final exam							
	al exam (oral / written) 30 30%							
	TOTAL	100 100 %						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

The road transport and traffic

	V HICTORY		UNIVERSITY OF EAST SARAJEVO						2005		
G			Faculty of Transport and Traffic Engineerin Study program: Traffic Profile: The road transport and traffic	<u>g</u>				Softer C	ALIAN OUT		
Number		Code	Conditionality Semester Conditionality					Hours per semester			
					Ŭ		L	TE	LE		
20	C4+44CF	07424056 0220	III year of study				2		0	6.00	
28.		107134056,0230	The theory of traffic flow	0		V	2	3	0	6.00	
29.	· · ·	LO7102956,0221	Urbanism	0		V	2	2	1	6.00	
30.		407103356,0320	Roads	0		V	3	2	0	6.00	
31.	CAΦ11C/	407103155 <i>,</i> 0220	Ecology in traffic	0		V	2	2	0	5.00	
32.	САФ11СД	07103257,0330	Transhipment mechanization and technology	0		V	3	3	0	7.00	
33.	САФ11СД	l07103566,0321	Regulation of traffic flows	0	28	VI	3	2	1	6.00	
34.	САФ11СД	l07134266,0330	Public transport of passengers	0		VI	3	3	0	6.00	
35.	САФ11СД	l07133966 <i>,</i> 0230	Road capacity and Level of Service (LOS)	0	28	VI	2	3	0	6.00	
20	САФ11СД	107203065,0220	Road vehicle dynamics			VI	2	2	0	F 00	
36.	САФ11С/	07203865,0220	Management in traffic	l ₂		VI	2	2	0	5.00	
27	САФ11СД	07203465,0220	Vehicle operation and maintenance			VI	2	2	0	F 00	
37.	САФ11СД	L07203965,0220	Motors SUS	l ₃		VI	2	2	0	5.00	
38.	САФ11СД	l07132962,0000	Professional practice	0		VI	0	0	0	2.00	
					т	OTAL:	24	24	2	60	
			IV year of study			-					
39.	САФ11СД	l07104375,5220	Training education	0		VII	2	2	0	5.50	
40.	САФ11СД	l07104177,0330	Traffic terminals	0		VII	3	3	0	7.00	
41.	САФ11СД	107104276,0220	Evaluation in traffic	0	35	VII	2	2	0	6.00	
42.	САФ11СД	l07104575,5220	Organization of traffic companies	0		VII	2	2	0	5.50	
43.	САФ11СД	407134176,0230	Road freight transport technology and organisation	0	34	VII	2	3	0	6.00	
44.	САФ11СД	07104885,0311	Traffic accidents investigation	0		VIII	3	1	1	5.00	
45.	САФ11СД	J07104786,0330	Traffic safety	0		VIII	3	3	0	6.00	
46.	САФ11С/	07104085,0211	Transportation planning	0		VIII	2	1	1	5.00	
47	САФ11СД	07219385,0220	Expertise of traffic accidents				_	2	<u>^</u>		
47.		07205085,0220	Traffic design	I 4		VIII	2	2	0	5.00	
40	САФ11СД	07203685,0220	1. Intermodal transport			1/11	2	2	0	F 00	
48.		07204985,0220	2. Freight forwarding	l5		VIII	2	2	0	5.00	
49.		J07105284,0030	Graduate thesis	0		VIII	0	3	0	4.00	

- •
- L lectures TE theoretical exercises LE laboratory exercises •
- ٠

and the second		UNIV	ERSITY OF	FAST SAR			2005		
		Faculty of 1	ng	STRATAINE ONTIN					
		-	Study progr		-				
82		Profile:	The road tr	ansport a	nd traffic				
10 Lars 10 La		l cycle			year of st		A CARL		
Course title					OF TRAFF				
Department Department of Road Traffic and Transport- Faculty of Transport and Traffic Engir									
Code		Cou	ırse status		Seme	ster	ECTS credits		
САФ11СД07134			mpulsory		V		6,0		
Professor/s		o M. Subotić, a	-						
Associate/s	Dunja Rad	lovic Stojcic, se	nior assista	nt					
Wee	kly hours		Individu	ual studen	t hours (p	er semester)	Student workload coefficient S _o		
L	TE	LE	L		TE	LE	So		
2	3	0	42		63	0	1,4		
Total teacher w	-	-	ter)				urs, per semester)		
2*15 + 3		= 75 hours					5*1,4 = 105 hours		
		workload: W+T				er semester			
	-	ing this course				the basic dia	gram and characteristics		
	of the traf		usic paraili		arrie now,	the basic uld			
Course aims and			he empiric	al and ma	thematica	l models use	d to describe the traffic		
learning outcomes	flow								
U U	3. obtains	reliable theore	etical found	dations for	professio	nal and resea	rch work in the fields of		
	traffic eng	ineering							
	4. simulat	e and approxim	nate real an	id ideal tra	ffic flows				
Prerequisites	None								
Teaching methods		exercises, semi							
		and tasks of tra		neory					
		ent of a single			- 14 1 . 1 -				
		affic flow parar affic flow parar			-	• •	altima)		
		ures for determ							
		features of the	-		ai specu ai				
	-	st colloquium		-					
		-	traffic flow,	, design tra	affic flow f	or dimensioni	ng the road cross-		
Course content	section								
		raffic flow diagr	am						
		10 Empirical models							
	-	11. Empirical models of dependence between the flow rate, density and medium spatial							
	-	speed 12. Mathematical models for describing conditions in the traffic flow							
		scopic models-		-			odels		
		parameters for		-					
		econd colloquit	-		, .				
			Textbo	ook (s)					
Author/s			of publicat	-		Year	Pages (from-to)		
Ljubiša Kuzovi	ić		rija saobrać ađevinska l			1987	1-221		
Љубиша Кузовић Богдановић	-	Теорија сао	браћајног	тока, ФТН	Нови Сад	2010	1-337		
			Additiona	I readings					
Author/s		Nam	e of public			Year	Pages (from-to)		
Lily Elefteriado	bu		uction to Tr		-	2014	1-262		
TRB (FHWA)		MONOGRA	PH ON TRA	FFIC FLOW	/ THEORY	2000	Charper 1-10		

	Assesment methods	Points	Percentage
	The regular attendance of the classes	10	10 %
Evoluction critoria	Semestral work	20	20 %
Evaluation criteria	Colloquiums/tests	70	70%
	The final exam	70	70 %
	Total	100	100 %
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP	-I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and	Traffic engin	eering Doboj

18.0		UNIV Faculty of 1	g	Southand San Ta						
			Study prog		raffic rt and traffic					
		l cycle	ine rouu ti	lanspo	III year of stu	udv	AOEOJ			
Course title		i cycic			URBANISM	uuy				
Department	Depa	artment of Traff	ic Enginee	ring						
Code			Irse status		Seme	ster	ECTS credits			
САФ11СД07102	956,0221	M	andatory		V		6,0			
Professor/s	PhD Mile	nko Stankovic,	full-profes	sor						
Associate/s	PhD Mile	enko Stankovic,	full-profes	sor						
Weel	kly hours		Individ	ual stu	dent hours (pe	er semester)	Student workload coefficient So			
L	TE	LE	L		TE	LE	So			
2	2	1	42		63	0	1,4			
Total teacher w			ter)				ırs, per semester)			
		= W hours					5*S₀ = T hours			
30	+45+0=75		/ . T ! .			2+63+0= 105 h	lours			
			5+105=180	0 hours	s = U _{opt}	emester				
		ring this course,								
Course aims and		acquire a basic k	-							
learning outcomes	-	 get to know with urbanism institutions; analyse dwelling problems that depend on dwelling place; 								
						lling place;				
D · · ·	4. a	apply acquired k	nowledge	in prac	ctice.					
Prerequisites Teaching methods	-	Evorcisos Con	sultations							
reaching methods	Lectures,	Exercises, cond	uitations							
Course content	 Lectures, Exercises, Concultations Urbanism - content and course objectives City as a spatial phenomenon Movement in urban theory and practice - methods and techniques Local self-government and urban planning Urbanism institutions Sustainable human settlement development and environmental protection Urban infrastructures and equipment (I colloquium) City architecture - city as a culture object Urban symbols, visual communication and urban traffic network signalizations Urban morphology Urban life problems and dwelling place Village urbanization - the relationship between village and city Dwelling, work, sport and recreation in the city New Athens Charter City traffic and public transportation modes (II colloquium) 									
Author/s		Name	of publica	ook (s		Year	Pages (from-to)			
		Uvod u prostorr	-	-						
Tošković, D.		Akademska mis		-		2006				
		Harmonija i kon				2007				
Stanković, M.		Arhitektonski f				2007				
			Addition	-	ings					
Author/s		Nam	e of public		-	Year	Pages (from-to)			
Stanković, M.		<i>Prostorno-terito</i> Književna zadru	orijalno od	rživ raz		2004.				

	Assesment methods	Points	Percentage
	Pre-exam obligations		
	e.g. lecture/exercise attendence	10	10 %
	a term paper	60	60%
	e.g. a case study -	1	1
Evaluation criteria	group working	/	/
Evaluation criteria	e.g. tests /colloqiums	2x15	30%
	e.g. labaratory exercises	/	/
	e.g. a practial work	/	/
	Exam		
	e.g. an oral/written exam		
	TOTAL	100	100 %
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj

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			Faculty of		STATAINH ONATION							
- Stuck				🥤	S S 4							
			Profile:	The road t	ranspo	rt and traffic						
13 4.5 kg 3/0 1.4 kg			l cycle			III year of st	udy		RORO1			
Course title						ROADS						
Department		Departm	ent of Road	d Traffic ar	nd Trans	port - Faculty	of Transpor	tation Do	oboj			
C	ode		Co	urse status	5	Seme	ster	E	CTS credits			
САФ11СД07	7103356,	0320		required		V	l		6,00			
Professor/s			vic, Ph.D., as		fessor							
Associate/s	Rac	lenka Bjelos	sevic, senior	assistant								
	Veekly h	ours			lual stu	dent hours (p	T		udent workload coefficient So			
L	TE		LE	L		TE	LE		So			
X	Y		Z	X*15*	S _o	Y*15*S _o	Z*15*S _o					
		oad (hours, + Z*15 = W	per semeste / hours	21)			t workload (h + Y*15*S _o + Z [:]					
X .		-		N+T=Uont=	+ =	= hours per s						
	Bv		this course									
Course aims and		-				of roads and ci	ity roads;					
learning outcom		•				he transverse	•	linal prof	ile;			
	3.1	ndepende	ntly design	intersectio	ons and	participate in	road constr	uction;				
Prerequisites		special co										
Teaching metho	ds Leo	tures, aud	itory exerc	ises, semin	ar worl	k, fieldwork						
				of roads and city roads								
		2. Road and surroundings										
		3. Design methodology. Operational and technical indicators										
		4. Relevant design factors										
		5. Elements of project geometry. Route in space										
		6. Track elements in the longitudinal profile. Elements of transparency7. Normal geometric and constructive cross-section (I colloquium)										
Course content		8. Design of road junctions - intersections										
course content		9. Influence of road elements on driving safety. Lower road machine										
		10. Road construction										
			on the road									
			struction. R		ment							
			rest. City ro									
	14.	Road mai	ntenance									
	15.	Road mar	nagement (I	II colloquiu	ım)							
					book (s							
Author				of publica	-			ear	Pages (from-to)			
Mihajlovi	ic, D.	W	ritten lectu	•		ions, Banja Lul •	ka 2007,	/2008.				
	. / -			Addition		-		T	Dama (6			
Author	r/s			ne of publi			Ye	ear	Pages (from-to)			
	Dro	e-exam obl		ssesment	metho	us		Points	Percentage			
	PIE		igatiUIIS	21	Itondar	ice at lectures	/ evercises	10	10%			
				d	LICIUd		assignment	20	20%			
Evaluation criter	ria						colloquium	2x25				
	Fin	al exam						2723	3070			
					f	inal exam (ora	l / written)	20	20%			
	IN	TOTAL		final exam (oral / written)					100 100%			
Web sources			rs.ba/eng/v	vp-conten	t/uploa	ds/2022/05/E	ngleski-NPP-					
Applicable from									gineering Doboj			
	11/	-5,2022 -	100 00000		, anone,	. actaicy of fid		Turne ell	Directing Dobol			

A NOTONIO			UNIV			2	005			
-18-			· ·			affic Engineerin	g		Coste	N TRA
S SNC				Study progra		••				R. /
)			ine roaa tra	nspo	ort and traffic	. al			40E0J
Course title			I cycle		FCC	l year of stu DLOGY IN TRAF	-			
Department		Denartme	ent of Road	Traffic and		sport- Faculty of		and	Traffic I	ngineering
					i i u i i				manne	
	Code		Cou	urse status		Seme	ster		ECTS	credits
САФ11СДО	7103155,	.0220	m	andatory		V			5	5.00
Professor/s	Phi	D Milan Mil	otić, Assoc	iate Professo	r					
Associate/s	Phi	D Milan Mil	otić, Assoc	iate Professo	r					
	Weekly h	ours		Individua	l stu	ident hours (pe	er semester))		nt workload fficient S _o
L	TE		LE	L		TE	LE			So
2	2		0 2		¥5	2*15*1,5=4 5	2*15*1,4=	=0		1,5
		oad (hours,		iter)		Total student			-	
2*1	.5 + 2*15	+0*15 = 6			00	2*15*1,5 + 2		15*1	1,5 = 90	nours
	Dv					= 150 hours pe	er semester			
		-		students wil of environme						
Course aims an		-	-			al regulations re	elated to en	viron	mental	protection.
learning outcor				ne global effe	-	-		viron	interitor	protection,
				-		uture developr	nent of mot	or ve	ehicle pr	ropulsion as
				ired knowled					•	·
Prerequisites	noi									
Teaching metho	ods Leo	tures, audi	tory exerci	ses, consulta	tions	S				
		Biosphere a								
		2. Problems of environmental pollution								
		 Normative and legal regulations Maximum allowable concentrations 								
					S					
		Air pollution				au ality				
		colloquium		egulations on	all (quality				
Course content		-lue gas pur								
		Global effect		tion						
			-	ental pollutio	n					
				he environm						
	12.	Normative	and legal	regulations f	or ex	haust gas emis	sions			
			-	-		mposition in m		S		
				developmen	t of ı	motor vehicle p	propulsion			
	15.	II colloquiu	IM	Tautha	-1- (-)	•				
Autho	or/c		Namo	Textbo of publicatio		-	Yea	r	Dage	es (from-to)
Đurić, S., Sta		FL		-		aćajni fakultet			Fage	
Milotić	-	., LN	ologija u s	Doboj		acajin lakultet	201	6		
	,,			Additional		lings				
Autho	or/s		Nam	e of publicat			Yea	r	Page	es (from-to)
										•
			Δ	ssesment me	etho	ds		Poi	nts	Percentage
	Pre	e-exam oblig								
Evaluation crite		(atte	ndar	nce at lectures	/ exercises	10		10%
							colloquium	2x2	5	50%
							erm paper	10		10%
						-	1 1	-		1

	Final exam		
	Oral exam	30	30%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj

		LINIV	ERSITY OF E	ΔST	SARAIEVO		100		
		Faculty of	STATALING WARTEN						
		,							
84		Profile:							
13 4.90m 10 3.55		l cycle			III year of st	udy	doros		
Course title		TR	ANSHIPMEN	NT ME	ECHANIZATION	AND TECHNO	DLOGY		
Department Of Doboj			sport Engine	eering	g - Faculty of Tr	ansport and T	raffic Engineering		
Code	2	Cou	urse status		Seme	ster	ECTS credits		
САФ11СД0710	m	andatory		V		7.00			
Professor/s	uričić, full pr	ofessor							
Associate/s	Sanja Simic,	senior assist	ant						
Wee	ekly hours		Individua	al stu	dent hours (pe	er semester)	Student workload coefficient So		
L	TE	LE	L		TE	LE	So		
3	3	0	3*15*1,4=	63	2*15*1,4=4 2	0*15*1,4=0	1,4		
Total teacher v 3*15 + 2	vorkload (hour 2*15 + 0*15 =		ter)				urs, per semester) .*S₀ = 105 hours		
			U _{opt} = 75 + 1	105	= 180 hours				
	By mastering	this course,	, students wi	ill be	able to:				
							ftranshipment		
							ffect relationships of		
		commodity flows in the process of reproduction and time-out of synchronization.							
		They will be able to analyze the parameters that affect transhipment, learn the division of							
Course aims and		means of mechanization as well as their good and bad properties							
learning outcomes		3. They will be able to use methods for calculating capacity and required power for							
-	continuous and cyclical transhipment facilities,								
		4. Will be able to demonstrate the establishment of transhipment systems with transhipment effects.							
		Anage transhipment processes, and that, after gaining practical experience in logistics							
							sible for transhipment		
	processes.	intende cel		01 01					
Prerequisites	None								
Teaching methods	Lectures, aud	ditory exerci	ses, consulta	ations	5				
		-				ization and tra	anshipment technology.		
	The role of the		-						
		2. Transhipment task and realization of transhipment process							
	3. CONTINUO			•					
		Articulated conveyor. Conveyor scraper.							
	5. Elevators.			•	_				
		ew conveyor	. Rotary exc	avato	or. Pneumatic c	onveyors (Pre	paration for the first		
		colloquium)							
Course content		7. Feeders. Gravity conveyors (I colloquium)							
		8. (Analysis of the first colloquium) CYCLIC MEANS - Transport-handling vehicles							
		9. Forklift - classification, elements, stability, application 10. Forklift - handling cycle. Determination of power for vehicle movement							
					ng containers.				
		-			cation, loading		determination		
					-				
	13. Automatically guided vehicles. Design of transhipment processes (Preparation for the II colloquium)								
	colloquium)								
	14. Il colloqu								
	14. Il colloqu		loquium) Clo		remarks and si	gnature of the			
	14. Il colloqu	of the II Col		ok (s))	gnature of the			

		Transhipment mechanization, scripts, Doboj Faculty of Transport and Traffic Engineering	2006.					
		Mechanization of transshipment, transshipment machines and design of transshipment processes, Belgrade	1996.					
		Internal transport, warehouses and transhipment, Faculty of Transport and Traffic Engineering, Belgrade	2001.					
		Additional readings						
Author/s		Name of publication, editor Ye		Year Page		es (from-to)		
		Assesment methods		Poi	nts	Percentage		
	Pre-exa	n obligations						
		attendance at lectures / exe	ercises 10			10%		
		teaching a	activity	y 5		5%		
Evaluation criteria		passed colloquia (assign	ments)	nents) 35		35%		
		passed colloquia (t	50		50%			
	Final exa	Final exam						
		for example. final exam (oral / w	ritten)					
	IN TOTAL 100 100%							
	INTOTA	L		-00				
Web sources		Environment of the second state of the seco	ski-NPP-					

4 WCTOWN			UNI	VERSITY OF	EAST S	ARAJEVO			2005	
			Faculty of Transport and Traffic Engineering						SHABAINS @ 48-1	
A			Study program: Traffic							
)		Profile: The road transport and traffic						AOEOJ	
1413 40	I cycle III year of study									
Course title										
Department		Dep	artment of Trai	nsportation	Engene	ering - Faculty	of Transpo	rt and Tra	affic Engineering	
	Code			urse status		Semes	ter	EC	CTS credits	
САФ11СДО				ompulsory		VI			6,0	
Professor/s			rko M. Subotić,		ofesso	•				
Associate/s		Bojana F	Ristic, senior ass	istant				Chu		
		y hours		Individu	ual stud	dent hours (pe			dent workload coefficient S _o	
L		ΓE	LE	L		TE	LE		So	
2		3	0	42		63	0		1,4	
		-	nours, per seme	ster)		Total student v	-	-		
2*1	.5 + 3*		.5 = 75 hours	-		2*15*1,4 + 3*		15*1,4 =	105 hours	
			al workload: W+				er semester			
		-	ering this course					···· · · · · · · · · · · · · · · · · ·		
Course aims an		1. Unde network	-	on of traffic	TIOWS	and design e	lements of	traffic si	gnaling on road	
learning outcor			s re and compete	nco ckills for	, traffic	dosing and ro	gulaton			
learning outcor		-	re and compete			-	-	and traff	ic networks	
		-	re basic knowle			-			ie networks	
Prerequisites		None								
Teaching metho			, exercises, sem	inars. Field	work					
			luction to the tr			hnique				
			mponents of the traffic system. Traffic signalization							
			ork. Streets. Tra				control			
			roads and comp			5.				
		5. Traffio	regulation by l	ight signallin	ng					
		6. Signal	ization of crossi	roads						
			rst colloquium							
Course content		-	signals for regul	-						
			plan of the sigr		ection.	Calculation me	thods of co	ntrol para	ameter	
			dinated signalir	-				hiolo		
			otable traffic ma egies for solving				ne PUPT ve	nicie		
			lating and man			•	et network	Annlicati	on of ITS	
		•	itenance of traf					Applicati	01101115	
			Second colloqui	-						
					ook (s)					
Autho	or/s		Name	e of publicat		ıblisher	Year	P	ages (from-to)	
Smiljan Vu		ić	Regul	isanje saobra	aćajnih	tokova,	2012	,		
Smijan Vu	ikaliOV	ic.		CD izdanje,	SF Dob	ој	2012	<u>-</u>	All	
					-	ojektovanja i				
Marko S	ubotić		regulisanja	-		nćajni fakultet	2012	2	1-96	
				Beogr						
	,			Additiona				-		
Autho		. /		ne of public			Year	P	ages (from-to)	
Osoba Mirosla						oću svetlosnih	1999	9	1-153	
Smiljan, Star	IIC Brai	пко		Saobraćajni				Dointo	Dorosatora	
Evaluation crite	eria			Assesment n	nethod	15		Points	Percentage	

	The regular attendance of the classes	10	10 %
	Semestral work	20	20 %
	Colloquiums/tests	70	70%
	The final exam	70	70 %
	Total	100	100 %
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj

		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic					2005 Seat NAIRS @46 PT	À		
82					rt and traffic			1		
10 1.5 mg 10 1.00		l cycle			I year of stu	dy	AOEOJ			
Course title		,	PUBL	IC TR/	ANSPORT OF P	,				
Department		Department o	of Road Tra	ffic an	d Transport - F	aculty of Tra	nsportation Doboj			
Code		Cou	Course status Semest		ster	ECTS credits	s			
САФ11СД07134			equired		VI		6,00			
Professor/s		. Tica, Ph.D. ass	-							
Associate/s	Radenka	Bjelosevic, senic								
	dy hours			ual stu	dent hours (pe		Student wor coefficient			
L	TE	LE	L		TE		So			
X	Y	Z	X*15*S	0	Y*15*S₀	Z*15*S ₀		`		
Total teacher w	-	-	ter)			•	ours, per semester)		
X*12 + Y		5 = W hours otal workload: W	/+T=11	+ -			15*S₀ = T hours			
		ring this course			-	eniestei				
	by muster		the studen	C VVIII k						
	1. to defir	ne problems rela	ated to pas	senge	r transport in c	ities				
Course aims and		ne the basic terr	•		•					
learning outcomes	3. to desc	ribe and quanti	fy the basic	c chara	acteristics of pu	ıblic mass pa	ssenger transport			
	(JMTP) te	(TP) technology so that they can perform a comparative analysis of the performance of the								
	JMTP syst	em.								
Prerequisites	No specia	l conditions								
Teaching methods	Lectures,	auditory exercis	ses, semina	ar worl	k, fieldwork					
		nd passenger tr								
	-	. Transport systems and subsystems in passenger transport in cities								
	3. Types of services in JMTP									
	4. Transport process - quality loop									
	5. Transport needs and requirements, Transport offer									
		6. JMTP transport networks								
Course content		7. Static and dynamic characteristics of TM JMTP (I colloquium) 3. JMTP line. Functioning of JMTP								
course content	9. Timeta	-								
		. O. Tariff systems, ticket systems and billing								
		ts of work in pas	-		-					
		y of systems an	-	-						
	13. JMTP	system planning	g.							
	-	tives of the syst			-		ment			
	15. Impro	vement and dev			· · ·	olloquium)				
			Textb		-					
Author/s			of publicat			Year	Pages (fron	n-to)		
		Public passenge	-	-						
Slaven Tica			-		management,	7019	all			
		Faculty of Transport and Traffic Engineering, Belgrade								
		Organization			of public urban					
Radovan Banko	vic	Organization and technology of public urban passenger transport, Faculty of Transport and 1995 all								
		passenger transport, Faculty of Transport and 199 Traffic Engineering, Belgrade								
							95 all			
Snezana M. Filipo	ovic	C p chilling a chilling	transport system 1995							
		Additional readings								
Author/s		Nam	e of public		-	Year	Pages (fron	n-to)		
				,						

Vukan Vuchio	C	Urban Transit Operation, Planning and Economics	2005	5	all				
		Assesment methods		Point	s	Percentage			
	Pre-exam obligations								
		attendance at lectures / exe	ercises	10)	10%			
Evaluation criteria		positively evaluated seminar paper / project /	essay /	20)	20%			
Evaluation criteria		test / collo	quium	70)	70%			
	Final exam								
		final exam (oral / w							
	IN TOTA	L	10	0	100%				
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-I	l-ciklus	-2021	pdf			
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic e	engine	ering Doboj			

2" 4 WETCHNOL		-	ERSITY OF					2005	
-18-					fic Engineerin	g		Sara and a state	
			Study prog						
		l cycle	ine road ti	ranspor	t and traffic III year of st	udv		AOEOJ	
Course title		Тсусіе		ΡΔΟΙΤΥ	AND LEVEL C		05)		
Department	Dep	artment of Road						affic Engineering	
Code		Cou	urse status		Seme	ster	ECTS credits		
САФ11СД07133	966,0230	Со	mpulsory		VI			6,0	
Professor/s		ko M. Subotić, a	-						
Associate/s	PhD Mar	ko M. Subotić, a	ssociate pr	rofessor					
Wee	kly hours		Individ	Individual student hours (per semeste				Student workload coefficient S _o	
L	TE	LE	L		TE	LE		So	
2	3	0	30		30	0		1,5	
	orkload (h + 2*15 + 0	ours, per semes	ter)		Total student		-	-	
	+ 2°15 + 0 30+ 30+ 0=				-	+ 2*15*1,5 · 45 + 45 + 0 =		0°° 1,5 = 1	
		Total workload:	Uont = 60 +	90 = 15			5011		
		ering this course							
		es and practical							
		ms detailed ana	•						
Course aims and		-				echnical mea	sures	to eliminate them	
learning outcomes		ms sizing of the	-						
U		cts functional ev			-				
		onally evaluates		-	-		ctiona	I parts of the road	
		et network	inu operat		pacitive analy				
Prerequisites		xam: The theory	of traffic f	flow					
Teaching methods		, exercises, semi							
	1. Basic c	haracteristics of	f traffic flow	ws and	road elements	s significant f	or Cap	acity and Level of	
	Service a	-							
			f traffic flow	ws and	road elements	s significant f	or Cap	acity and Level of	
	Service a	nalysis Ty levels of Capa	city and Lo		orivco analyci	-			
		al methodologic					analys	is of urban and	
	rural roa	•					anarys		
		ty and Level of S	Service ana	alysis of	Basic Freeway	y Segments			
	6. Capaci	ty and Level of S	Service ana	alysis of	Freeway Wea	ving Segmen	its and	Freeway Merge	
Course content		erge segments							
course content	-	ty and Level of S		-		ities: operati	onal, d	design and	
		analysis proced	-						
		ity and Level of S ity and Level of S		-	-				
		city and Level of s		-	-				
	-	city and Level of		-	-				
	-	city analysis met		-		-			
	12. Cupu								
	13. Capa	city and Level of		-					
	13. Capa 14. Capa	city and Level of city and Level of	Servise an	-					
	13. Capa 14. Capa	city and Level of	⁻ Servise an um	alysis o					
Author/s	13. Capa 14. Capa	city and Level of city and Level of Second colloquit	Servise an um Textb	alysis o	f Bicycle Facili	ities		Pages (from to)	
Author/s	13. Capa 14. Capa 15. The S	city and Level of city and Level of Second colloquit Name	Servise an um Textb of publica	nalysis o nook (s) tion, pu	f Bicycle Facili Iblisher			Pages (from-to)	
Author/s Ljubiša Kuzov	13. Capa 14. Capa 15. The S	city and Level of city and Level of Second colloquit Name	Servise an um Textb of publica T I NIVO U	ook (s) tion, pu SLUGE	f Bicycle Facili Iblisher DRUMSKIH	Year		Pages (from-to) all	

		Research Board, National Research Council				
		HIGHWAY CAPACITY MANUAL ,Transportation Research Board, National Research Council	2020	C	all	
Vladan Tubić		KAPACITET I NIVO USLUGE DENIVELISANIH RASKRSNICA	2016			all
		Additional readings	•			
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)
Vladan Tubić		ZBIRKA REŠENIH ZADATAKA I KAPACITETA I NIVOA USLUGE DRUMSKIH SAOBRAĆAJNICA, Saobraćajni fakultet Beograd	2000	C		all
		HANDBUCH FUR DIE BEMESSUNG VON STRABENKVERKEHRSANLAGE, Forchungsgesellschaft fur Strassen – und Verkehrswesen	2001		all	
		Assesment methods		Poi	nts	Percentage
Evaluation criteria	The regular Semestral v	attendance of the classes vork	10 20		10 % 20 %	
Evaluation criteria	Colloquium	s/tests		70		70%
	The final ex	am	70		70 %	
Web sources		s.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-		-	
Applicable from		2 - 198 Session of the Councile, Faculty of Transp				

T HETOWIC		UNI	/ERSITY OF	EAST S	ARAJEVO				2005		
					ffic Engineerin	Ig		Posta	Aline Oracial		
S SAC			Study prog								
		l cycle	The road t	ranspo	rt and traffic I year of stu	ıdv			40E01		
Course title		i cycle		ROAD	VEHICLE DYN						
Department	Der	partment of Road	d Traffic an				and T	raffic	Engineering		
Code			urse status		Seme		ECTS credits				
САФ11СД0720	3065 0220)	elective		VI	1			5,00		
Professor/s		, sud Ajanović, as:		5,00							
Associate/s		v Pavlovic, assist	-		novic, assistan	t					
Wee	ekly hours	urs Individual student hours (per semeste							ent workload efficient So		
L	TE	LE	L		TE	LE			So		
Х	Y	Z	X*15*3	S₀	Y*15*S₀	Z*15*So					
		hours, per seme	ster)		Total student	-			-		
X*15 +		15 = W hours	T 11 00	. 422		Y*15*S₀ + Z	*15*S	₀ = T ŀ	nours		
		al workload: W+				er semester					
		ol modes, kinem				control					
Course aims and			-								
learning outcomes		. Stability of the vehicle on a sloping road in a curve . Collision theory of motor vehicles									
		, tenance and ove									
Prerequisites	/										
Teaching methods		ectures, theoretical exercises, consultations									
		ment of vehicles						ing m	echanics		
		le motion resista		-		-	ristics				
		 Control modes, kinematics, dynamics and stability of control Vehicle stability on a sloping road in a curve 									
		 venicle stability on a sloping road in a curve Definition, classification and typical constructive solutions of vehicle systems and 									
	assemb		Ji anu typi		Structive Solut		JE SYS	tems	anu		
		6. Safety, economy and environmental problems of vehicles									
C		7. I colloquium									
Course content	8. Theor	8. Theory of motor vehicle collisions									
		s of tribology									
		ricants, oils, grea	ses								
	11. Tech 12. Wea	nnical fluids									
			erhaul proc	edures	:						
		. Maintenance and overhaul procedures . Organization of service and repair workshops									
	-	lloquium	•		•						
			Textb	ook (s)			T				
Author/s			of publica	-		Yea	r	Pag	es (from-to)		
Мишић Б.			<i>озила са д</i> раћајнифа		ком, скрипта, Добој,.	2009	Э.				
Јанковић Д., С. Тод	цоровић		-	-	них возила,	1990).				
J.		Маш	ински факу								
Author/a		Ner	Addition			Var	r	Dec	os (from to)		
Author/s			<mark>ne of public</mark> возила Са		еаног ајни факултет	Yea		Pag	es (from-to)		
Дедовић В		Нипалика	Беогр			2004	1.				
		A	ssesment	metho	ls		Poin	ts	Percentage		
Evaluation criteria	Pre-exa	mination obligat	ions				1				
				Acti	vity during lec	tures-tests	10		10%		

	colloquiums	2x20	40%					
	positively evaluated term paper							
	Final exam							
	Final exam – oral examination							
	Total	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

T WGT OHN		UNIV	ERSITY OF	EAST S	ARAJEVO			2	005
		Faculty of ⁻	Transport a	and Tra	ffic Engineerin	g		ROSPANA	IN OART
Yüc		5	Study prog	ram: Ti	raffic			9	
		Profile:	The road t	ranspo	rt and traffic				OEOJ
4319 10		l cycle			III year of st				Address of the second se
Course title					GEMENT IN T				
Department	Depart	ment of Marl	keting and	Manag	ement, Facult	y of Econom	ics in Br	rčko	
Code		Cou	urse status	;	Seme	ster		ECTS	credits
САФ11СД07203			electoral		VI			5	5,0
Professor/s		essor Živko Er							
Associate/s	Sinisa Bozic	kovic, seniior	assistant						
Wee	kly hours		Individ	ual stu	dent hours (p	er semester) 5		nt workload fficient S _o
L	TE	LE	L		TE	LE			So
2 2	0		60		60	0	1,3		
Total teacher w 3*15	orkload (hou + 3*15 + 0*1	5 = 90	-		Total student 3*15*1,33 +	-	-		
	1				= 210 h =U _{opt}				
		this course s							c
0			ils of mana	gement	t as well as the	e principles a	nd defi	nitior	ns of
Course aims and	manageme		aina						
learning outcomes		entals of planr ip and coordi	-						
		ng traffic tasks							
Prerequisites	No prerequ		5						
Teaching methods		uditory exerci	ses, semin	ar work	. fieldwork				
		•			on and principl	es			
		tion of the tra	-						
		entals of plan		•					
	4. Commun	ication in the	traffic						
	5. Fundame	entals of tend	encies of h	uman r	esource mana	gement			
		hip and coordination							
	7. Management Systems in traffic								
Course content	8. I Colloqu		. .						
	-	and importan							
		and methods			managarast				
					management	nioc			
		 Transformation processes of management of companies New concepts and approaches to management 							
		nanagement			abernent.				
	15. Il collog	-		-					
	•		Text	ook (s)					
Author/s		Name	of publica			Yea	r	Page	s (from-to)
Vešović, V.			gement, Fa ic Enginee	-	f Transport an Igrade	d 1996	5.		1-284
Lončarević, R	. 1				ersity, Belgrad	le 2007	7.		1-417
Stavrić, B. i Erce		-	-	nageme	nt, Kiz Center	2020			
			Addition		ings				
Author/s		Nam	ne of publi			Yea	r	Page	s (from-to)
		A	ssesment	method	ls	I	Points	5	Percentage
Evaluation criteria	Pre-exam o	bligations							
				Presen	ce of lectures	/ exercises	10		10%

	Colloquium	2x20	40%					
	Final exam							
	Final exam (oral / written)	50	50%					
	TOTAL	100	100 %					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

	UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: The road transport and traffic I cycle I year of study									
Course title		Тсусе		OPERATION AND		<u>с</u> е	Company and a second second			
Department	Den	artment of Moto		Operation, Mainte			stics of Vehicles			
Code			irse status		ester	ECTS credits				
САФ11СД07203			elective		/I		5.0			
Professor/s		ud Ajanović, ass	-							
Associate/s	PhD Mes	ud Ajanović, ass	ociate profe	ssor			Charlent and shared large			
Wee	kly hours		Individua	l student hours (per semester)	Student workload coefficient So			
L	TE	LE	L	TE	LE		So			
2	2	0	2	2	0		1,5			
2*15	vorkload (h 5 + 2*15 + 0 30+ 30+ 0=		ter)		t workload (h ,5 + 2*15*1,5 45 + 45 + 0	+ 0*2				
		Tota	l workload: 6	60 + 90 = 150 h						
Course aims and learning outcomes	Using kno	ring this course own methods of ment of failure o	monitoring	will be able to: the operation and	l maintenance	e of v	ehicles, with the			
Prerequisites	Does not	Does not have								
Teaching methods	Lectures,	Lectures, auditory exercises, seminar paper								
Course content	 Defining the concept of maintenance. Process approach to maintenance Basic ways of realization of maintenance Determining the condition of the vehicle - diagnostics Set a maintenance goal Vehicle performance Measurement of performance characteristics I colloquium Conditions for realization of maintenance Plant maintenance support functions Requirements in relation to the protection of humans and the environment Quality of maintenance Identification of users and specification of their requirements Defining requirements for suppliers and subcontractors Improving maintenance 									
			Textboo	ok (s)						
Author/s			-	on, publisher	Yea		Pages (from-to)			
Ranko Bozicko	vic	Operation		nance of vehicles	201	1	1-317			
			Additional							
Author/s			e of publicat		Yea	r	Pages (from-to)			
Ranko Bozicko	vic	Collection of tas	sks from the system	reliability of techi s	nical 200	9	1-135			
Evaluation criteria		n obligations for e	oositively ass for exa	ethods ndance at lecture essed. paper / pro mple. case study - for example. test /	oject / essay group work	Poir 10 20 / 70	10% 20% / 70%			

	for example. laboratory work / lab. exercises	/	/					
	for example. practical work	/	/					
Final exam								
	for example. final exam (oral / written)							
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

			ERSITY OF				200 S			
-18-			Transport a Study prog		ffic Engineerin	g	See The			
82					raffic rt and traffic					
15mg 10 15		l cycle	ıdv	A OE OJ						
Course title				I	l year of stu MOTORS SUS					
Department	De	partment of Moto	or Vehicles	, Opera			gnostics of Vehicles			
Code	2	Со	urse status		Seme	ster	ECTS credits			
САФ11СД0720										
Professor/s		ravko Nunic, asso								
Associate/s	PhD Zdı	ravko Nunic, asso	ciate profe	ssor						
Wee	ekly hours			ual stu	dent hours (pe	-	Student workload coefficient S _o			
L	TE	LE	L		TE	LE	So			
3	3	0	3		3 Tatal atu da at	0	1			
		hours, per semes	ster)			•	ours, per semester)			
3*1	o + 3°15 +	0*15 = 90	l workload	· 00 · 0		+ 3~15~1,33 +	- 0*15*1,33 = 90			
	By mad	ering this course								
		arn about the divi				cteristics and	basic elements:			
				-			d four-stroke SUS			
Course aims and	engines									
learning outcomes	-		stems of S	US eng	ines as well as	the processe	s in SUS and other			
	engines	nes;								
	4. acqui	red knowledge a	pplied in p	ractice						
Prerequisites	Does no	ot have								
Teaching methods	Lecture	s, auditory exerci	ses, semin	ar pape	er					
	1. Engin	e definition. Hist	ory of SUS	engine	development					
		engine division								
		-	s of the SU	S engin	e. Basic eleme	nts, mechani	sms and systems of SUS			
	engines									
		iple of operation	of four-str	oke and	d two-stroke S	US engines				
		n mechanism <shaft and="" engine<="" td=""><td>flywhool</td><td></td><td></td><td></td><td></td></shaft>	flywhool							
		anism for changi		king m	aterial (Lcollor	nuium)				
Course content		SUS engine syste	-			1919111				
		retical cycles of S		5						
		rmal - physical pr	-		mixtures and o	combustion p	roducts			
		ual SUS engine cy								
		cesses of changin	-	-		-				
		process of comp								
		pression, combu		•	•	-	S			
	15. Indi	cator and effectiv				olloquium)				
Author/s		Nama		ook (s)	•	Year	Pages (from-to)			
Author/S			of publica		es, Faculty of	Tear	rages (110111-10)			
Todorovic, T., Ant	onic Z.			-	d, Novi Sad,	1997				
Klinar, I.					, FTN, Novi Sad	d, 2008				
······, ··			Addition			,				
Author/s		Nam	e of public		-	Year	Pages (from-to)			
Todorovic, T., Ant	onic Z.	Basics of SUS er Doboj,								
Tomic M Dotro	wic S	-	ction onci		sulty of	2000				
Tomic, M., Petro	vic, 5.	Internal combu	suon engli	ies, ra	Luity Of	2000				

		Mechanical Engineering, Belgrade								
		Assesment methods	Points	Percentage						
	Pre-exam obligations									
		attendance at lectures / ex	ercises	10	10%					
		I am positively assessed. paper / project ,	/ essay	10	10%					
Evaluation criteria	case study - group work									
		test / collo	2x10	20%						
	Final exa	am								
			oral	60	60%					
	IN TOTA	L	100	100%						
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-ciklus-20	<u>21.pdf</u>					
Applicable from	11/15/2	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj								

	Fa		RSITY OF EAST ansport and Tra	SARAJEVO affic Engineering			STERALINE GOLD			
		Study program: Traffic Profile: The road transport and traffic								
		I study c	-	IV year of	study		4060J			
Course title		T Study C	-							
Department	Chair of Tra	ansnortatio		Faculty of Trans		Dohoi				
					Semest	Doboj				
Code			Course stat	us	er		ECTS credits			
САФ11СД071043	75,5220	Requ	ired (road and	city traffic)	VII		5,5			
Professor/s	PhD Tihom	ir Djuric, A	ssociate Profes	sor						
Associate/s	PhD Tihom	ir Djuric, A	ssociate Profes	sor						
Week	y hours		Individual s	er semeste	er)	Student workload coefficient S _o				
L	TE	LE	L	TE	LE		So			
2	2	0	2*15*0,2=6	2*15*0,2=6	0*15*0.2	2=0	0,2			
Total teacher v			nester)				s, per semester)			
2*15 +	2*15 + 0*15 =						*0.2= 12 hours			
				12 = 72 hours p will be able to:	er semeste	er				
Course aims and learning outcomes1. understand what traffic ethics is, traffic culture, traffic psychology; 2. to define the basics of preschool education programs for children aged three to sever years; 3. to explain the safe, ethical and risky behavior of road users; 4. to explain what is prevention and models of improving traffic safety; 5. to define models, measures and programs for working with high-risk drivers; 6. to explain the mutual relations between traffic participants; 7. The concept and consequences of traffic accidents.										
Prerequisites	no conditio	ons								
Teaching methods	ex-chair le	ctures, dise	cussions, focus	groups, individua	al and grou	p work				
Teaching methodsex-chair lectures, discussions, focus groups, individual and group work1. Ethics, Traffic Ethics, Basic Ethical Principles for Traffic Participants.2. Traffic culture, Ethical culture and traffic safety culture and Models.3. Traffic Psychology, Emotions and Motivations, Personality Psychology.4. Aims, tasks and content of pre-school education, Program principles.5. Education on traffic safety in primary school, What are the goals of safety education.saob.6. Children as road users, Suffering of children and young people under 18 in SN in RS and inEU.7. Traffic Safety, Risky Traffic, High Risk Drivers.8. Interactions between traffic participants, Forms of aggressive behavior.9. The concept and behavior of the driver in the event of a traffic accident, Errors of the driver in the detection phase infor.10. Prevention and models of improving traffic safety.11. Coercion as a factor in traffic safety, Ergonomics as a preventive measure.12. Methods and procedures for identifying and handling high-risk drivers.13. Defining and applying models for the identification and classification of high-risk drivers.14. Description and content of models, methods and objectives for high-risk drivereducation.										
			Textboo	priver Rehabilitat k (s)						
Author (s)	N	ame of the pub	lication, publish	er	Year	Pages (from-to)			
-		Traffic Ed	ducation, Facult	y of Transport, D	oboj	2021	1-226			
1. Djuric, T., and Popović Dj Traffic Education, Faculty of Transport, Doboj 2021 1-226 2. Djuric, T., Popović Dj and Boskovic M. Traffic Education, Faculty of Transport, Doboj 2016 1-338										

	Additional readings									
Author (s)		Name of the publication, publisher	Year	Pages (from-to)						
Law on Basics of Road ⁻ 44/07, 84/09, 48/10,		in BiH, (BiH Official Gazette, No. 6/06, 75/06, 89/17, 9/18, and)	2018							
	Law on Road Safety, (Official Gazette of the Republika Srpska, No. 41/09, 53/10, 101/11, 32/13 -US, 55/14).									
		Assesment methods	Points	Percentage						
	Pre-exam obligations									
		activity during class - tests	10	10						
		colloquiums	15	15						
Evaluation criteria		positively evaluated seminar paper	20	20						
	Final exam									
		written part of the exam	35	35						
		final exam - oral	20	20						
	IN TOTAL		100	100 %						
Web sources	http://sf.ue	es.rs.ba/eng/wp-content/uploads/2022/05/Engleski	-NPP-I-cikl	us-2021.pdf						
Applicable from	11/15/2022	2 - 198 Session of the Councile, Faculty of Transport	and Traffic	engineering Doboj						

T WETOWE		UNIV	VERSITY OF E	AST SARAJEVO		2005				
		Faculty of	Transport ar	nd Traffic Engineerii	ng	STRANAINA OARTS				
ANG			Study progr							
		-	The road tro	ansport and traffic	·	AOEOJ				
		l cycle		IV year of s						
Course title				TRAFFIC TERMIN	IALS					
Department	De	partment for roa	id traffic and	transport						
Code			urse status	Seme		ECTS credits				
САФ11СД0710			ompulsory	11	7,00					
Professor/s		jan MARIĆ, assoc	-							
Associate/s	Dunja F	Radovic Stojcic, se	enior assistar	nt						
	ekly hours					Student workload coefficient S _o				
L	TE	LE	L	TE	LE	So				
X	Y	Z	X*15*S		Z*15*S _o					
		(hours, per seme	ster)		-	ours, per semester)				
X*15 +		15 = W hours	M/1 T-11			15*S₀ = T hours				
		Total workload: ' nis course the stu			semester					
				able to: minal users by cate	gories					
		-		nological solution of	-	l depending on the				
	-			te in the terminal,		r depending on the				
Course aims and			-	on of the location of	f the terminal	depending on the				
learning outcomes		on of the city trai								
		-			one or city dep	pending on the degree				
		ictiveness,	•	0	, ,	0 0				
	5. defin	ies the strategy o	of parking ma	inagement in a city,	populated pla	ace or city zone.				
Prerequisites	none									
Teaching methods		s, theoretical exe								
	-			ninals for accommo	odation, storag	ge, supply, care,				
		al maintenance a	-							
		itationary traffic, parking problems								
		Planning and estimate of parking needs								
		Garage parking - types, basic types and characteristics of garages Service stations and motor depots - types and characteristics								
			•		lensuics					
		Criteria for arrangement of objects colloquium								
Course content		stations - plannin	g, estimate a	and design						
		•		er number calculati	ion					
		0. Organization of reception and departure of buses								
	11. Gui	dance systems								
		12. Stations for supply, transport and storage of liquid fuels - types and basic types								
		13. Stations in urban and suburban areas								
		ck stations and m	notels							
	15. II co	olloquium	—							
A the sur / s		N	Textbo			Dense (from to)				
Author/s Marko Subotić, Edis	Softić	Name	e or publicati	ion, publisher	Year	Pages (from-to)				
Bojan Marić	JUILL,	Saobraćajni te	rminali		2017					
Svetozar Kostić, Bra	nko	1								
Davidović, Zoran Pa		Drumski saobr	aćajni termir	nali, FTN Novi Sad	2013	1-214				
Nada Milosavljević	•	Parkiranje, Sac	braćajni fakı	ultet Beograd	2010	1-165				
-				<u>J</u>	2007	2-340				
Nikola Putnik	Autobaze i autostanice 2007 2-340 Elementi za tehnološko projektovanje objekata u 2007 1.127									
Nada Milosavljević		Elementi za tel		ojektovanje objekata		1-127				

		Beograd					
		Additional readings					
Author/s		Name of publication, editor	Yea	r Pag	es (from-to)		
		Assesment methods		Points	Percentage		
	Pre-examination obligations						
		presence in lectures/ theoretical ex	10	10%			
Evaluation criteria		positively evaluated term	10	10%			
Evaluation criteria			30	30%			
			30	30%			
	Final exa	am (oral examination)		20	20%		
	TOTAL		100	100%			
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-ciklus-202	1.pdf		
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic engin	eering Doboj		

		-	ERSITY OF I					2005		
-18-		Faculty of Transport and Traffic Engineering Study program: Traffic						and the second s		
82		Profile: The road transport and traffic								
		l cycle		anoper	IV year of st	udy		QOEO1		
Course title		- /		EVALU	JATION IN TR					
Department	Dep	artment for T	ransport En	igineer	ing - Faculty c	of Transport a	nd Traf	fic Engineering		
Code		Cou	ırse status		Seme	ster	E	CTS credits		
САФ11СД0710	4276,0220	со	mpulsory		VI			6,00		
Professor/s	PhD Marko	Subotić, asso	ciate profes	sor						
Associate/s	Dunja Rado	vic Stojcic, se	nior assista	nt						
Wee	ekly hours		Individu	al stuc	lent hours (pe	er semester)		udent workload coefficient S _o		
L	TE	LE	L		TE	LE		So		
2	2	0	2*15*2=6		2*15*2=60	0*15*2=0		2		
Total teacher w			ter)	-	Total student		-			
2*15	5 + 2*15 + 0*1			120		2 + 2*15*2 +		=		
		orkload: W+T=						luation in traffic		
			-					and economic		
	evaluation						Stiffent			
Course aims and		ntation of mu	lti-criteria e	evaluat	ion					
learning outcomes		nplementation of multi-criteria evaluation tudents will acquire the basic knowledge for engineering application of methods and								
	procedures	ocedures in traffic evaluation on rural road network								
	5. independ	dent creation of	of term pap	er						
Prerequisites	none	none								
Teaching methods										
		jectives, posit				ation in traff	ic			
	 Functional evaluation of road sections Functional evaluation of road sections 									
	 Functional evaluation of road sections Functional evaluation of intersections and road objects 									
	 Functional evaluation of intersections and road objects Functional evaluation of intersections and road objects 									
	6. Environmental evaluation									
	7. CBA and CEA analysis (I test)									
Course content										
		9. Cost models								
		onomic evalua								
		onomic evalua								
		12. Procedures for analysis of indicators on which is based economic evaluation								
		13. Sensitivity test 14. Investment evaluation								
		ulti-criteria ev		test)						
	101 101		Textbo	/						
Author/s		Name	of publicat		blisher	Year	F	Pages (from-to)		
	VI	rednovanje	u uprav	/ljanju	razvojem	i				
Kuzović Lj.:		ksploatacijom	putne mrež	že, Sao	braćajni fakul	tet 1994.		-		
		eograd								
		tvrđivanje po			-	-				
Kuzović Lj.:		-		sa gr		1997		-		
-			bilaznica,	Saobr	aćajni fakul	tet				
Transport Innovatio	n	eograd								
Deployment for Eur	In	npact Assessm	ent Handbo	ook		2013				
· · ·		A	ssesment m	nethod	S		Points	Percentage		
Evaluation criteria Assesment methods Points Percent Pre-examination obligations Pre-examination obligations Percent Percent										

	presence in lectures/ theoretical exercises	10	10 %					
	20	20 %						
	test 1	20	20 %					
	20	20 %						
	Students who pass all tests are released of written part, final exam							
	Final exam							
	oral examination	30	30 %					
	TOTAL	100	100 %					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

C V METON NO		-	ERSITY OF EAS				2005				
18.				Traffic Engineering	3	6	WANN TO THE				
SUCCE *82*			Study program								
			The road trans	port and traffic	, als s		40E0J				
Course title		l cycle		IV year of stu	-						
Course title Department	ORGANIZATION OF TRAFFIC COMPANIES Department for Transport Engineering – Faculty of Traffic Engineering Doboj										
Department	Грера		isport Enginee				boj				
Code			Irse status	Semes		EC	CTS credits				
САФ11СД07104			andatory	VII		<u> </u>	6,00				
Professor/s		a Gojković, full	-								
Associate/s	Bojana Ris	stic, senior assis	tant			Chu					
Wee	kly hours		Individual	student hours (pe	r semester)		dent workload coefficient S _o				
L	TE	LE	L	TE	LE		So				
3	2	0	3*15*1,4=63		0*15*1,4		1,4				
Total teacher w		-	ter)	Total student v	-	-					
3*15	+ 2*15 + 0				· 2*15*1,4+	0*15*1,4	= 105				
				05 = 180 hours per	r semester						
		ring this course,			o o o o o o o o o o o o o o o o o o o		l modola af				
			ts of organizat	ion, as well as type	es and orga	nizationa	models of				
Course aims and	enterprise		the organizati	on of large busine	cc systems	husinoss	and				
learning outcomes		-	-	-	ss systems,	DUSITIESS	anu				
learning outcomes		development policy and development factors; 3. independently organize and lead a meeting according to defined rules;									
	-			ply and establish t			s well as to give				
	-	ons to others how		pry and establish		ompany a	s wen as to give				
Prerequisites	None.										
Teaching methods	lectures, a	lectures, auditory and computational exercises, consultations									
U	1. The concept and development of the organization										
	2. Ty	pes of organizat	ional structur	9							
	3. Or	ganizational mo	dels of the co	mpany							
		ganizing large b	•								
		ganizational mo	-	-							
		isiness and deve		-							
_		aracteristic bus									
Course content		isic methods and		or optimization							
		ganizational cul		onc							
		Organization of b Business informa		0115							
		Organization con	-	ig a meeting							
				of investments							
		-	-	ional transformati	on of the co	ompany					
		colloquium	0 0			. ,					
			Textbook	(s)							
Author/s		Name	of publication	, publisher	Yea	r P;	ages (from-to)				
Vešović, B. V., Bojov		-		mpanies, Faculty o	of 2007	,					
Knežević, Lj. N	J.	Transport an		eering, Belgrade,	2007	·					
			Additional re	-							
Author/s		Nam	e of publication	n, editor	Yea	r Pa	ages (from-to)				
		Δ	ssesment met	hods		Points	Percentage				
Evaluation criteria	Preexami	nation obligatio				1 01113	rereentage				
				Presence durin	g lectures	10	10 %				

	Colloquium 1	10	10 %				
	40	40 %					
	20	20 %					
Final examination							
	Oral examination	10	10 %				
	Total	100	100 %				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

			Faculty of	UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: The road transport and traffic I cycle						
Course title			ROAD FREIGHT TRANSPORT TECHNOLOGY AND ORGANISATION							
Department		Departn Doboj	ent of Road	l Traffic and	Trans	port - Faculty o	of Transport	: and	Traffic Engineering	
Cc	ode		Соц	urse status		Semes	ster		ECTS credits	
САФ11СД07										
Professor/s				ciate profes						
Associate/s	Ph	O Olivera	Medar, asso	ciate profes	sor					
v	Veekly h	ekly hours		Individu	al stu	dent hours (pe	er semester))	Student workload coefficient S ₀	
L	TE		LE	L		TE	LE		So	
Х	Y		Z	X*15*So)	Y*15*S₀	Z*15*S₀			
Total teache				ter)					, per semester)	
X*15	5 + Y*15	+ Z*15 =						*15*	S₀ = T hours	
			workload: V		+ =	hours per s	emester			
	Eac		will be able							
						ole of road freig				
Course aims and			-	acteristics o	t road	freight service	es and defin	ie th	e conditions for their	
learning outcom	es		cution		. .					
Ū									haracteristics of the	
							-	-	ortation demands	
Duouseurisites		4. lear	1 the basic i	ndicators an	ia per	formance mea	sures of an v	venic	cie fieet (KPI)	
Prerequisites Teaching method	de									
Teaching method	J S	1. Roa	freight tra	nsnort: hasi	c conc	epts and chara	octoristics			
								road	d transport operator	
				framework	marke		cupation of	Tout		
					vpes'	and character	ristics'. and	pre	conditions for their	
			ration		/		,	1		
				nsport mark	et					
			•	nd characte						
		7. The	basic proces	sses and sub	proce	sses in the frei	ght transpo	rt se	rvices	
Course content		8. Mai	n activities o	of transport :	servic	es execution p	rocesses			
		9. I col	loquium							
		10. Esse	ntials for so	me types of	servio	ces				
			Vehicle fleets' key performance indicators							
			e-km and pr	•						
				alysis and be		-				
			-		able tr	ansport and th	eir applicat	ion ii	n the enterprise	
			rmation syst							
		16. 11 CO	lloquium an		al: (a)					
Author	10		Nama	Textbo		uhlichar	Vaa		Dagas (from to)	
Author	/3	00		of publicati evoznog pro			Year		Pages (from-to)	
M. Marković		-		i transportu,			2003	2	-	
				raćajni faku			2005			
						eta teretnog				
I. Jovanović			-	, Univerzitet	-	-	2005	<u>.</u>	-	
				ultet (in Serl		,				
						ator's handboo	ok			
D. Lowe			The Transport Manager's & Operator's handbook2006.2006, 36th edition, Kogan Page, London, UK-							

Additional readings									
Author/s		Name of publication, editor	Year		Page	es (from-to)			
A. Manojlović, O. Me	edar	Zbirka zadataka iz tehnologije transporta robe, Univerzitet u Beogradu, Saobraćajni fakultet (in Serbian)	2018.			-			
		Assesment methods		Poi	nts	Percentage			
Evaluation criteria									
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-cikl	us-2021	L.pdf			
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj			

ST NOTONOT		-		AST SARAJI	-		2005		
18.0		Faculty of Tr			gineering		Justan art		
SUC 82°			udy progra						
		-	he road tra	nsport and			AOE01		
Courses title		I cycle	TDAFE		ear of stu				
Course title				IC ACCIDEN					
Department			Departm		u traffic a	nd transport			
Code			se status		Semest	ter	ECTS credits		
САФ11СД07104			pulsory		VII		5,00		
Professor/s	PhD Bojan M								
Associate/s	PhD Bojan M	ARIC, associa	te professo	r			Churchensteinenhlusent		
Wee	kly hours		Individua			r semester)	Student workload coefficient So		
L	TE	LE	L	Т		LE	So		
Х	Y	Z	X*15*S₀		5*S₀	Z*15*S₀			
Total teacher w		•	er)				irs, per semester)		
X*15 +	Y*15 + Z*15 = V					/*15*S₀ + Z*15	*S₀ = 1 hours		
		workload: W-			urs per se	mester			
	After this cou				d atialası	, of traffic as	idonto.		
	1. to underst						idents; idels of traffic safety;		
Course aims and	3. to explain				cluents, a	as well as ino	dels of traffic safety,		
learning outcomes	4. to define t				es of traffi	ic accidents.			
		he elements o	-				specifics:		
	6. to find, see			-					
		d the investig			-	dents.			
Prerequisites	none			-					
Teaching methods	lectures, the	oretical exerci	ises, consul	tations, inc	lividual ar	nd group wor	k		
	Model of t	raffic safety			-		ccident Theories and		
	 Legal basis for performing TAI. Specifics of the TAI in relation to other investigations Methods of fixing the place of a traffic accident (TA) 								
						cal principlos	for the preparation of		
	investigation			umentation	n. rechnic	cal principles	for the preparation of		
		ctions in the i		n of traffic	accidents				
			-				of a traffic accident		
	7. Classificati				0.0				
Course content					ent, brak	ing traces, ve	hicle damage, traces		
		lbs, tire tracks				-	-		
	9. Processing	of traces of t	raffic accid	ents. Findir	ng, Securii	ng and Marki	ng Traces of TA.		
	-	10. Photographing a traffic accident.							
		-spatial analy							
	-	ketches and s	-		scene of	the accident			
		lia investigati							
		of preparing					nto		
	15. Applicatio	on of compute	Textbo		Jei lise of	u anne accide			
Author/s		Name o		on, publish	er	Year	Pages (from-to)		
Aution/3		đaj saobraća							
Krsto Lipovac		acionih plar							
		lova, Beograd	-						
		-		zgoda -	elemen	ti			
Krsto Lipovac		-	Uviđaj saobraćajnih nezgoda - elementi saobraćajne trasologije, Viša škola unutrašnjih 2000						
	540		Joiogije, I		anaciasiiji				
		lova, Beograd							

Additional readings								
Author/s		Name of publication, editor	Yea	ear Page		es (from-to)		
		Assesment methods		Poi	nts	Percentage		
	Pre-exa	nination obligations						
		presence in lectures/ theoretical ex		10	10%			
Free land to a suffer the	positively evaluated term paper					10%		
Evaluation criteria	test 1					30%		
	test 2					30%		
	Final exa	am (oral examination)			20	20%		
	TOTAL					100%		
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic	c engine	eering Doboj		

Study program: Traffic Profile: The road transport and traffic I cycle IV year of study Course title TRAFFIC SAFETY Department Chair of Transportation Engineering - Faculty of Transportation Doboj	0601							
Course title TRAFFIC SAFETY Department Chair of Transportation Engineering - Faculty of Transportation Doboj								
Department Chair of Transportation Engineering - Faculty of Transportation Doboj								
Code Course status Semester EC	ECTS credits							
САФ11СД07104786,0330 Required (road and city traffic) VIII	6,0							
Professor/s PhD Tihomir Djuric, Associate Professor								
Associate/s PhD Tihomir Djuric, Associate Professor								
Weekly hours Individual student hours (per semester) Student w coefficient								
L TE LE L TE LE So	50							
3 3 0 3*15*0,2=9 3*15*0,2=9 0*15*0.2=0 0,2								
Total teacher workload (hours, per semester) Total student workload (hours, per semester)								
3*15 + 3*15 + 0*15 =90 hours 3*15*0.2 + 3*15*0.2 + 0*15*0.2 = 18 ho Total workload: W+T=U _{opt} = 90 + 18 = 108 hours per semester	ours							
Course aims and learning outcomes1. understands the situation and tendencies in traffic safety in the region and in the 2. Explain the concept and elements of the traffic safety management process, 3. Explain traffic safety factors, 	 Explain traffic safety factors, Measures traffic safety performance indicators, 							
Prerequisites no conditions	no conditions							
Teaching methodsex-chair lectures, workshops, discussions, focus groups, individual and group work	k							
1. Introduction, subject and method of study. Traffic Safety Methods2. Scientific discipline basics traffic safety3. Traffic safety situation and tendencies4. Traffic safety factors5. Protective system and responsibilities in traffic safety6. Traffic safety regulations7. Measurement in traffic safety8. Traffic safety indicators9. Traffic safety management10. Traffic safety measures11. Traffic accidents, Traffic accident investigation12. Traffic-technical analysis of traffic accidents13. Modern procedures for improving road safety14. Speed control15. Databases of importance for traffic safety4. Speek (s)								
Textbook (s)								
Author/s Name of publication, publisher Year	Pages (from- to)							
1. Lipovac K., Jovanovic D. and Vujanić M.Fundamentals of Traffic Safety,, Criminal Police Academy, Belgrade2014.	1-388							
2. Lipovac K. Traffic Safety, (Official Gazette SRJ), Belgrade 2008.	1-398							
3. Lipovac K.Traffic Safety, Higher School of Internal Affairs, Banja Luka2007.	1-387							
Additional readings								

Author/s		Author/s	Aut	hor/s	Author/s	
Law on Basics of Road T 44/07, 84/09, 48/10,	18.					
Law on Road Safety, (O 101/11, 32/13 -US, 55)14.					
		Assesment methods		Points	Percentage	
	Pre-e	xam obligations				
		activity during class	10	10		
		colle	15	15		
Evaluation criteria		positive evaluation of the semination	20	20		
	Final	exam				
		written part of t	ne exam	35	35	
		final exa	20	20		
	IN TO	TAL		100	100 %	
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.					
Applicable from	11/15	/2022 - 198 Session of the Councile, Faculty of Transp	ort and T	raffic engi	neering Doboj	

UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic						neering		Statute and a state and a stat	
			P	rofile: The road	d trans	-			AOEOJ
4500	I cycle IV year of st								
Course title									
Department			Chair of T	ransport Engine	eering				
	Code							er	ECTS credits
САФ11С	Д07104			obliga			VII		5,5
Professor/s				vić, Ph.D. asso					
Associate/s		Rade	enka Bjelos	sevic, senior as	sistant				
	Weekly		1		ual stu	ident hours		-	Student workload coefficient S _o
L	TE		LE	L		TE		LE	So
2	1		1	2*15*1,7 5	5=52,	1*15*1,7 5	5=26,2	1*15*1, 75=26,2 5	1,75
			ad (hours, 1*15 = 60	per semester)) hours				t workload	l (hours, per semester) + 1*15*1,75 = 105 hours
				load: W + T = U	J _{opt} = 60				
Course aims learning out		2. co	nducting	procedures in a method of restantly zes and fo	search	in traffic, n	nodeling,	procedur	e
			-	t assignment a		-			
Prerequisites	s	No s	pecial con	ditions					
Teaching me	thods	Lectu	ures, deba	tes, annual ass	ignmer	nt			
Teaching methodsLectures, debates, annual assignment1. Subject introduction - planning process, history, system approach, general procedu2. Information base - research areas, methods and techniques of research3. Generating trips - factors, analysis and travel forecast4. Spatial distribution of travel - factors and models5. Visual distribution of travel6. Network load7. Road and street network - categorization, types (I colloquium)8. Transport work and time9. Public passenger transport - role, systems10. Basic exploitation characteristics, criteria for choosing the type of transport11. Maintenance quality12. Method selection13. Evaluation of variant solutions14. Planning of traffic and other spatial planning areas15. Concluding considerations (II colloquium)							research		
Auth	or/s			Name of public		ook (s) publisher		Year	Pages (from-to)
Đorić V., P Ivanović I	etrović l			ПЛАНИРАЊЕ а транспортни факулте	Е САОБ х захте	РАЋАЈА ева, Саобра	аћајни	2018.	-
Vračarević R	., Mirov	ić V:		ве планирања редавања, Но			ана	2014.	-
Mirov	vić V:		-	паја, Факултет	і задатака из модела у планирању аја, Факултет техничких наука, Нови Сад			2015.	-
Jadranka Jov	ić:		Basics c Belgrade	f Traffic Plan		Written Le	ectures,	2012.	
Jović J., Ivano	ović I.:		Collectio	n of tasks from	n traffic	c planning,	Faculty	2011.	

		of Traffic, Belgrade							
Jadranka Jović:		Traffic Planning in Towns - Practicum, Faculty of Traffic, Belgrade	199	6.					
Cambridge Systematic, Inc.:		Travel Survey Manual, US DoT and US EPA	199	6.					
L.H. Immers, J.E. Stada.:		Traffic Demand Modelling, Katholieke Universiteit Leuven	199	8.					
GTZ.:		Land use planning and urban transport	2004	4.					
		Assesment methods		Point	ts	Percentage			
	Pre-e	xam obligations							
		presence in lectures / exerc	cises	10		10 %			
		Positively evaluated annual assignm	20		20 %				
Evaluation criteria	Final	072m							
	Tillar	final exam (writ	ten)	70		70 %			
	IN TO	· · · · · · · · · · · · · · · · · · ·	icity	100		100 %			
				100		100 /0			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering								

			UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: The road transport and traffic I cycle of study IV years of study					4050J	
Course title				•		•	TS		
Department		Chair of T	ransportat	ion Engineering			-		
(Code		Cou	ırse status	Semest	er	ECT	S credits	
САФ11СДО)7219385	,0220	E	lectoral	11			6,0	
Professor/s		PhD Tihom	nir Djuric, A						
Associate/s		PhD Tihom	nir Djuric, A	ssociate Profes	sor				
	Weekly	hours			student hours (semester)	per		t workload ficient S₀	
L	TE		LE	L	TE	LE		So	
3	1		1	3*15*0,2=9	1*15*0,2=3	1*15 *0.2= 3		0,2	
		15 + 1*15				+ 1*15*0	oad (hours, pe).2+ 1*15*0.2 er	,	
Course aims and learning outcomesBy mastering this course the student will be able to: 1. Understands the concept and importance of traffic accident expertise 2. correctly interprets the traffic accident traces 3. the application of the scientific method in the process of traffic accident analysis 4.for simpler traffic accident analysis							analysis		
Prerequisites		student may take the exam if he or she has passed the traffic safety exam							
Teaching meth	nods			-	ions, focus grou	ps, indivi	dual and grou	p work	
 1. Introduction, subject and method of study. 2. Legal basis of expert evaluation, place and role of traffic and technical expertise in judicial process 3. Methodology of traffic-technical analysis of traffic accidents 4. Ways to express the views of experts 5. Content of expert findings and opinions: Background 6. Classification of traffic accident traces 7. Contents of the expert's findings and opinions: Expert's finding - analysis of injuries and damage to the vehicle 8. Content of expert findings and opinions: Expert Findings - analysis of vehicle traces 9. Content of expert findings and opinions: Expert finding - lamp trace analysis 10. Calculation of vehicle speeds involved in a traffic accident 11. Determining the location of the collision 12. Defining a traffic accident omission 13. Use of computers and specialized software in traffic accident expertise 14. Specificity of expertise of particular traffic accidents 									
				Textbook	: (s)				
Autho	or/s		Nam	e of publicatio	n, publisher		Year	Pages (from- to)	
1. Dragac R.				ident Investigat tte), Belgrade	on and Expertise, (J.P. 2007.			1-560	
2. Dragac R. i	Vujanic N	Л. Traffi Belgr	-	rt II, Faculty of	Fransportation,		2002.	79-220	

3. Vujanic M., Antic B Pesic D. i Lipovac K		2015.	1-240					
	Additional readings							
Author/s	Name of publication, editor	Year	Pages (from- to)					
1. Lipovac K.	Traffic Accident Inspection - Elements of Traffic Tracology, College of Internal Affairs, Belgrade	2000.	1-208					
	Assesment methods	Points	Percentage					
	Pre-exam obligations							
	activity during class - tests	10	10					
	colloquiums	15	15					
Evaluation criteria	positively evaluated seminar paper	20	20					
	Final exam							
	written part of the exam	35	35					
	final exam - oral	20	20					
	IN TOTAL	100	100 %					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-I-ciklus	-2021.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

A DECEMBER OF THE OWNER			/ERSITY OF				21	10 5 HH Q	
-18-					ffic Engineerin	g	Costant	A REAL	
		Study program: Traffic Profile: The road transport and traffic							
			The road li	ranspol		dv	A	DEOJ	
Course title		l cycle		т	l year of stu RAFFIC DESIGI		and the second		
Department Department of Road Traffic and Transport- Faculty of Transport and Traffic Engineering									
Department								Igineering	
Code		Со	urse status		Seme	ster	ECTS	credits	
САФ11СД0720								00	
Professor/s		k Bogdanović, ful							
Associate/s	Bojana I	Ristic, senior assi	istant						
Wee	kly hours	i	Individ	ual stu	dent hours (pe	er semester)		t workload ficient S₀	
L	TE	LE	L		TE	LE		So	
Х	Y	Z	X*15*S	S o	Y*15*S₀	Z*15*S₀			
	•	hours, per seme	ster)		Total student		-		
X*15 + `		15 = W hours					15*S₀ = T ho	urs	
		tal workload: W+			-				
		ledge of the the					-	-	
Course aims and		ng, understandin			•		•	•	
learning outcomes		independent preparation of technical project documentation (projects) for intersections independent work on calculations and optimization of light signals							
Duran and alter					ptimization of	light signals			
Prerequisites		exam: The theory	-						
Teaching methods		s, debate work, g	graphic exer	rcises, a	innual assignm	ient			
	1. 2.	Introduction Basic terms and	dofinition	-					
	3.				ign schools				
	4.								
	5.								
	6.								
	7.								
Course content	8.	Legal bases (of development of) projects (project documentation)							
	9.								
	10.	10. WOONERF concept of city planning, pedestrian zone, SHARED SPASE concept							
	11.	1. Bicycle traffic, design, safety, info-systems							
		NEW CONCEPT		-	-				
		Traffic design a	-						
		Light signals, ca	-	system	s, engineering,	design			
	15.	Closing lectures							
				ook (s)					
Author/s			e of publica			Year	Pages	s (from-to)	
				-	рјектовања — Аластара				
Станић, Б., Вуји	н, Д.,	БИЦИКЛИ сигнализација			БАЈ – стазе, пи: Саобрађај	ни 2006		_	
Радованац, М					395-204-2, CD-		·	-	
		φακγλητιετη,	RON		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		"Елементи		-	ріектовања —				
Здравковић, П., Ста		"Елементи саобраћајног пројектовања — ВЕРТИКАЛНА СИГНАЛИЗАЦИЈА", издавач:							
Вукановић, (Саобраћајни (-		2003	•	-	
Милосављевић	ı, C.:		148-8, CE						
Crouwth E 2-reserve		"Елементи	саобраћај	ног пр	ојектовања -				
Станић, Б., Здравко		ХОРИЗОНТАЛ	ЛНА СИГНА	ЛИЗАЦ	ИЈА", издавач	1: 2003			
Вукановић, (Милосављевић		Саобраћајни	факултет	, Беогр	ад, YU ISBN 8	6- 2003	•	-	
типлосавлеевиг	i, C		7395-147-X,						
Станић, Б., Особ	⊃ M	"Елементи са	обраћајној	г проіе	ктовања - 30Н	IE 2006	.	-	

Вукановић, С	.:	30", издавач: Саобраћајни факултет, Београд,						
		YU 86-7395-205-0, CD-ROM.						
		Additional readings						
Author/s		Name of publication, editor	Yea	r	Page	es (from-to)		
БИХ		ЗАКОН О ОСНОВАМА БЕЗБЈЕДНОСТИ САОБРАЋАЈА НА ПУТЕВИМА У БОСНИ И ХЕРЦЕГОВИНИ	2006.		-			
БИХ		ПРАВИЛНИК О САОБРАЋАЈНИМ ЗНАКОВИМА И СИГНАЛИЗАЦИЈИ НА ПУТЕВИМА, НАЧИНУ ОБИЉЕЖАВАЊА РАДОВА И ПРЕПРЕКА НА ПУТУ И ЗНАКОВИМА КОЈЕ УЧЕСНИЦИМА У САОБРАЋАЈУ ДАЈЕ ОВЛАШТЕНО ЛИЦЕ	2007	2007.		-		
		Assesment methods			nts	Percentage		
	Pre-exar	nination obligations						
		presence in lectures/ theoretical exe	ercises	10		10%		
Evaluation criteria		positively evaluated term	paper	20		20%		
	Final exam							
		Final exam (written examir	70		70%			
TOTAL			100)	100%			
Web sources	http://st	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-cikl	us-2021	1.pdf		
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj		

A WETDING			ERSITY OF EAS				2005			
		Faculty of	_	Sur a la contration						
SVIC 82			Study progran The road trans							
		l cycle		III year of s			AOEOJ			
Course title			IN	FERMODAL TRA	NSPORT					
Department	Dep	artment for Trai	nsport Enginee	ring – Faculty of	f Traffic E	ingineering D	oboj			
Cod	e	Cou	urse status	Sem	ester		ECTS credits			
САФ11СД0720			optional	١	VI		5.00			
Professor/s		odan Zečević, fu								
Associates/s	PhD Snez	iana Tadic, asso	ciate professoi				Student			
We	ekly hours		Individua	al student hours	s (per sen	nester)	workload coefficient So			
L	TE	LE	L	TE		LE	So			
2	2	0	2*15*1,4=4	2 2*15*1,4	=42	0*15*1,4= 0	1,4			
	•	nours, per seme .5 = 60 hours	ster)			ad (hours, po 5*S₀ + 0*15*				
	То	tal workload: W	/+T=U _{opt} = 60 +	84 = 144 hours	per seme	ester				
				d place of interm	nodal tra	nsport for di	fferent			
Course aims and		cipants and use		odal system and	ldatarmai	nos the adve	integes and			
learning							transport chain;			
outcomes		-		ransport chain t						
		4. Assess the basic performance of the intermodal transport chain.								
Prerequisites	No specia	al conditions								
Teaching methods	lectures,	tutorials, case s	tudies, debate	classes						
Incentous	1. Inter	modalism, defin	ition and delin	nitation of basic	concepts	s in intermod	lal transport.			
		modal Transpor			•		·			
		•		nodular chain al	•	•				
							ne transport chain.			
				zation and codif lal transport teri		111.				
				-		atics system	s in IT (Colloquium			
	۱).									
Course content		ainer transport		logies.						
	10. 11.	Container t		ort technologies.						
	12.			ransport techno						
	13.	Vehicle-veh	icle rail-road t	ransport techno	logies.					
	14.	-		-sea and river-se			vehicle.			
	15. 16.			al transport cha			licy and promotion			
		oquium II).	i system. Legis	lation, internati		ociacions, po	ncy and promotion			
			Textboo							
Author/s			e of publicatio			Year	Pages (from-to)			
Zecevic S., Ta	čević S., Tadić S. Intermodalni transport, autorizovana skripta 2016.									
	Additional readings									
Author/s	5	Nam				Year	Pages (from-to)			
Author/s			e of publicatio	n, publisher		Year 2005.	Pages (from-to)			
		Intermo	e of publicatio dal freight trai		rt:		Pages (from-to)			

Kim K.H., Günther H.O.		Container Terminals and Cargo Systems: Design, Operations Management, and Logistics Control 200 Issues, Springer						
		Assesment methods		Points	Percentage			
	Preexami	nation obligations						
		attendance during lectures/exe	5	5%				
		activity during cla	5	5%				
Obligations			20	20%				
Obligations, evaluation		colloqi	20	20%				
criteria		Colloqi	20	20%				
cificilia	Students who pass the colloquia are released							
	written part, final exam							
	Final examination							
		Oral examination	ation	30	30%			
	Overall		100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transport	t and T	raffic engi	neering Doboj			

ST WETOWART		-	ERSITY OF E				2003			
- <u>18</u> -		Faculty of Transport and Traffic Engineering				Seven Prove Pit				
		Study program: Traffic Profile: The road transport and traffic								
		l cycle	The road tra	inspo	IV year of stud	V	A0E01			
Course title		TCYCIE		FRFI	GHT FORWARDI	-				
Department	Departme Doboj	ent of Tran	sport Engine				Traffic Engineering			
Code		Сог	urse status		Semeste	er	ECTS credits			
САФ11СД07204	1985 0220	F	Electoral		VIII		5			
Professor/s	Assistant Profe			. PhD			5			
Associate/s	Sinisa Bozicko			,						
Wee	kly hours			al stu	dent hours (per	semester)	Student workload coefficient So			
L	TE	LE	L		TE	LE	So			
2	2	0	45		45	0	1,5			
	orkload (hours,	-	iter)				ours, per semester)			
2*15 + 2	2*15 + 0*15 = 60						15*1,5 = 90 hours			
			•		150 hours per s	emester				
	Completing th									
	1. performs ba		-		-					
Course aims and					he supply of frei	ght forward	ding activities,			
learning outcomes	3. performs tasks related to the installation,									
		4. participates in customs representation and implementation of customs procedures,								
Dranaguisitas		5. participates in insurance business in transport.								
Prerequisites Teaching methods	· · ·	No prerequisites								
reaching methods	Lectures, auditory exercises, seminar work 1. Basic concepts, development and development of forwarding activities									
		Structure of freight forwarding functions and jobs								
		B. Internal organization of freight forwarding								
		4. Associations for the promotion and development of forwarding activities								
		Commercial operations in freight forwarding and creation of forwarding offers								
		ocuments in international commodity flows								
	7. I colloquium									
Course content	8 Internationa	ernational Delivery Conditions - INCOTERMS 2010								
course content		Technology of organization of forwarding operations in export and import flows								
	-	0. Technology of organization of collective transport and transit flows								
	-	system, ATA carnet, freight forwarding								
	-	2. Freight forwarding activities in customs representation, implementation of customs								
		rocedures 3. Conditions and procedures in international freight forwarding and road transport of goods								
					articular referer	-				
	15. Il colloquit			••••• Þ						
			Textbo	ok (s)						
Author/s		Name	of publicati			Year	Pages (from-to)			
	1.		-		ed script, Facult	/				
		of Transpo	rt and Traffio	c Engi	neering Beograd					
1. Kilibarda, N		-			cum, Faculty o		1-154			
2. Gajić, V., Ca					y of Novi Sad	2013.	1-143			
3. Stojanović,					Department o		1-189			
					ty of Technica	1				
		sciences, U	Iniversity of							
A., the a. / -		Narr	Additional		-	Vaar	Deges (from to)			
Author/s			e of publica			Year	Pages (from-to)			
Zelenika, R.	Foun		Logistics Fre	igni i	oi wai ullig,	2005.	1-672			

		University of Rijeka							
		Assesment methods		Poi	nts	Percentage			
	Pre-exar	n obligations							
	Presence	e of lectures / exercises		10		10 %			
	Seminar	work	20		20 %				
Evaluation criteria	Colloqui	um	2x3	35	70 %				
	Final exam								
	Final exam (oral / written)								
	TOTAL		100)	100 %				
Web sources	http://sf	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transp	ort and T	raffi	c engine	eering Doboj			

RAILWAY TRAFFIC

			UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineerir	ng				State	2005 A1HH @44197		
			Study program: Traffic Profile: Railway traffic				T	ACEO			
Number		Code Course title Course title			ode Contrase status Condition 2000				per ter	ECTS	
				Ŭ	S		L	TE	LE		
		Т	1	1	-						
28.		{07105356,0320	Railway Tracks	М		V	3	2	0	6.00	
29.		(07105457,0330	Railway vehicles	М		V	3	3	0	7.00	
30.	САФ11СЖ	<07105556,0320	Exploatation of railroad wagons	М		V	3	2	0	6.00	
31.	САФ11СЖ	(07103155,0220	Ecology in traffic	М		V	2	2	0	5.00	
32.	САФ11СЖ	{07103256,0320	Mechanization and tehnology of transhipment	М		v	3	2	0	6.00	
33.	САФ11СЖ	(07105866,0330	Railway stations and nodes	М		VI	3	3	0	6.00	
34.	САФ11СЖ	(07106566,0320	· · · · · · · · · · · · · · · · · · ·							6.00	
35.		(07134466,0330	Railway signaling and safety devices and electric power plants	М		VI	3	2 3	0 0	6.00	
	ርልወ11ርዝ	(07203665,0220	1. Intermodal transport			VI					
36.		(07204965,0220	2. Shipping	O ₂		VI	2	2	0	5.00	
			7234365.0220 1. Maintenance of railway infrastructure								
37.		Cor207065,0220 2. Maintenance of railway wagons O ₃			VI VI	2	2	0	5.00		
38.		(07132962,0000	Graduate thesis	М		VI	0	0	0	2.00	
					т	OTAL:	27	23	0	60	
			IV year of study								
39.	САФ11СЖ	{07106276,0321	Freight transport technology and organization	М		VII	3	2	1	6.00	
40.	САФ11СЖ	{07106376,0311	Passenger transport tehnology and organization	М		VII	3	1	1	6.00	
41.	САФ11СЖ	{07106676,0311	Railway traffic technology	М		VII	3	1	1	6.00	
42.	САФ11СЖ	{07106775,0220	Regulatory system of railway transport	М		VII	2	2	0	5.00	
43.		(07120577,0330	Modeling in railway transport	М		VII	3	3	0	7.00	
44.	САФ11СЖ	(07104586,0320	Organization of traffic companies	М		VIII	3	2	0	6.00	
45.		(07104685,0220	Quality management	М		VIII	2	2	0	5.00	
46.		(07105785,0220	Safety of railway traffic	М		VIII	2	2	0	5.00	
		(07234585,0220	1. Railway marketing and marketing operations								
47.	САФ11СЖ	{07234685,0220	2. Engineering economics in railway traffic and transport	O ₄		VIII	2	2	0	5.00	
48.		(07234785,0220	1. Analysis of emergency events on the railway	O 5		VIII	2	2	0	5.00	
40		(07206485,0220	2. Testing of railways and vehicles				_	-		4.00	
49.	CAΦ11Cλ	(07105284,0030	Professional practice	М		VIII	0	3	0	4.00	
		- lectures			Т	OTAL:	25	22	3	60.0	

• L - lectures

TE - theoretical exercises
LE - laboratory exercises

U WCTOL		UNI	/ERSITY OF EAS	T SARAJEVO		2003				
		-		Fraffic Engineering	g	SPRINGING WATLE				
- YUC		-	Study program							
			Profile: Railwa	y traffic						
15 15 mg 00 50		I cycle		III year of stu	ıdy					
Course title		RAILWAY TRACKS								
Department	De	Department for Transport Engineering – Faculty of Traffic Engineering Doboj								
Cod	e	Co	Course status Seme			ECTS credits				
САФ11СЖ071			nandatory	V		6.00				
Professor/s		loš IVIĆ, full prof								
Associate/s	MSc Vla	idimir MALČIĆ, so	enior assistant							
We	ekly hours		Individual	tudent hours (pe	r semester)	Student workload coefficient So				
L	TE	LE	L	TE	LE	So				
3	2	0	3*15*1,4	2*15*1,4	0*15*1,4	1,4				
		hours, per seme	ster)		•	rs, per semester)				
3*15 +		15 = 75 hours				*1,4 =105 hours				
				05 = 180 hours pe	r semester					
		ering this course								
			ex problem of t	echnical means to	or regulating ar	nd securing railway				
Course aims and		traffic.								
learning outcomes		 Knowing modern rail transport systems. It possesses wide knowledge in the field of railway signaling and safety devices and 								
learning outcomes		means of connection on the railway, which is the most important precondition for								
		operation on the railway.								
	-	Follow the world trends in this area and is qualified to propose applications with us.								
		The conditions for passing the course are:								
Prerequisites	2. cor	2. completed and defended elaborate,								
	3. all									
	4. all									
Teaching methods			•	xercises, consulta						
				ents of the supers	tructure					
		ments of the sub	structure							
		ick geometry rizontal alignmer	nt design tang	ents and courves						
				ices and gradients	s (1 st colloquiu	im)				
		ick connections:		iees and gradients		~~~,				
Course content		ick connections:	-	turntables						
				ponents and class	ification (2nd	colloquium)				
		e operation of ra			•	- /				
				ration requiremer	nts for sets of s	switches				
		ecial railway trac								
		sic track characte								
		14. Basic track characteristics for high speed railway lines								
	15. Pla	15. Planning and design methodology for railway lines (3 rd colloquium)								
A .1 /	Textbook (s)									
Author/s			e of publication	-	Year	Pages (from-to)				
lvić M.		-	-	ansport and Traffig	c 2005					
			Engineering, Bel	-						
lvić M.		of Transport	and Traffic Engi		2005					
lvić M., Kosije	r M	of Transport and Traffic Engineering, Belgrade 2000 Railway tracks -workbook Faculty of Transport 1998								

		and Traffic Engineering, Belgrade									
		Additional readings									
Author/s		Name of publication, editor	r Pa	ages (from-to)							
lvić M.		Railway tracks, Lectures in the form of PP									
		presentations									
		Assesment methods		Points	Percentage						
	Preexam	ination obligations									
		The student's activity during le	5	5%							
		Ela	20	20%							
Evaluation criteria			10	10 %							
		Colloc	45	45 %							
	Final exa	amination									
		Oral exami	nation	20	20%						
	Total		100	100%							
Web sources	http://st	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf									
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic eng	ineering Doboj						

			ERSITY OF	FVCLC					
		-			ffic Engineerin	g		SHALAINA OTATI	
		-	Study prog		-	0			
		Profile: Railway traffic						AOEOJ	
10 M		I cycle III year of study							
Course title	Desertes	RAILWAY VEHICLES							
Department	Departmo	epartment for Transport Engineering – Faculty of Traffic Engineering Doboj							
Code		Course status			Semester			ECTS credits	
САФ11СЖ0710			andatory		V			7.00	
Professor/s Associate/s	PhD Marko VA Sanja SIMIĆ, s		-	or					
	ekly hours			ual stu	dent hours (pe	er semester)		Student workload coefficient So	
L	TE	LE	L		TE	LE		S _o	
3	3	0		33	3*15*1,33	0*15*1,33	;	1,33	
	vorkload (hours,	per semes			•			per semester)	
	3*15 + 0*15 = 9					-		,33 = 120 hours	
					= 210 hours pe				
		-						struction of diesel	
Course aims and	towing and to	-		-		-			
learning outcomes								Idying with technical	
		parameters of electric towing vehicles as a necessary condition for the technology of their practical application in railway traffic.							
					seminar work,	. take collogu	iums	s. and attend	
Prerequisites	consultations.			,				,	
Teaching methods	lectures, audit		mputation	al exer	cises, consulta	tions			
	1. Marking,	comparativ	ve characte	ristics	and block diag	grams of diese	el tov	wing vehicles	
	2. Diesel engine. Characteristics and working principles of two and four stroke diesel								
	engines.								
	3. Task, selection and division of power transmission of diesel towing vehicles								
	 Main subsystem and construction of mechanic and hydrodynamic power transducers Turbo locomotives. Motorcycles. Motor trains. 								
	 Turbo locomotives. Motorcycles. Motor trains. Passenger wagons and freight wagons classification and parameters. Box wagons 								
	 Passenger wagons and freight wagons classification and parameters. Box wagons Concept of construction, characteristic and types of high speed classics and diesel motor 								
	sets					0			
Course content			ion and tow	ving ve	hicles. Towing	and reflection	on eq	uipment (l	
	colloquiu	-							
		ehicles bra		otors -	and diasal also	tric locomot:	Voc	gonoral	
			, electric m		and diesel elec es		ves -	general	
						notors for dire	ect cı	urrent systems	
								ingle-phase system	
	13. Automati	c control, c	controls and	d contr	ols for electric	towing vehic			
					on electric veh				
	15. Contemp	orary trend			nent of railway	vehicles (II c	collo	quium)	
A		AL.		ook (s)				Dener (from t.)	
Author/s	T		of publicat		ublisher is Institute for	Year		Pages (from-to)	
Pajić D.		-	oublishing a	-		1981			
.	Ra								
Dinić D.		Railway Electric Vehicles, Traffic Engineering, Belgrade 1995							
	•		Additiona		ings				
Author/s		Nam	e of public	ation,	editor	Year		Pages (from-to)	

		Assesment methods		Points	Percentage				
	Preexam	ination obligations							
		Presence during lea	10	10%					
Evaluation criteria		Seminary	2x5	10%					
Evaluation criteria		Colloc	2x25	50%					
	Final examination								
		Oral examir	nation	30	30%				
	Total			100	100%				
Web sources	http://st	.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-ciklus-20	21.pdf				
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpor	rt and T	raffic engi	neering Doboj				

Course title Department Code		S I	Study prog		ffic Engineerin	g	Solar	FUINE DAGLE	
Department	_	I		ram: Ti					
Department									
Department		Profile: Railway traffic I cycle III year of study						40EOJ	
Department		i cycle	FXPI O	ΔΤΔΤΙΟ	ON OF RAILRO	-		No. of Contraction of Contraction	
Code	Depar	rtment for Trar	ment for Transport Engineering – Faculty of Traffic Engineering Doboj						
			irse status		Semes			S credits	
САФ11СЖ07105	556,0320	m	andatory		V			6.00	
Professor/s		slav BOŠKOVIĆ,		profess	sor				
Associate/s	Vladimir N	1ALČIĆ, senior a	assistant				_		
Weel	kly hours		Individ	ual stu	dent hours (pe	er semester)		ent workload efficient S _o	
L	TE	LE	L		TE	LE		So	
3	2	0	3*15*1		2*15*1,4	0*15*1,4		1,4	
Total teacher we 3*15 + 2	*15 + 0*15	= 75 hours			Total student 3*15*1,4 + 2*	*15*1,4 + 0*1		•	
· · · ·		workload: W+1			-			· · · · ·	
Course aims and learning outcomes	needed for	ents with chara r their rational	use and m	anager	nent.				
Prerequisites	papers, ho	re obliged to a Id colloquiums	, and atter	nd cons	ultations.		e ŻRS, ma	ke seminar	
Teaching methods		auritory and co opt and classific							
Course content	 The back capac Review Codifi Indica wagor Indica wagor Indica wagor Indica wagor Regula Optim Place in the Positio of the Dimer Maint Inform 	ation in the fiel nizing the distri and role of frei transport mar on and importa structure of the nsioning and de cenance of pass nation systems nation systems	of correct lo le of shipm cords and r ay wagons. of freight load capa of freight ld of use ar bution of e ight wagon ket (II collo ance of the ne freight p evelopmen senger and for monito	bading reasons . Examp wagon: city city city city city city city city	of freight wag d vehicle insur s for the existe oles of wagons s - basic conce s - turnover of of wagons. Ag wagons e main asset o) em of planning e size and struc wagons e ight wagons - eight wagons -	ons, limitation ance for wago nce of records registrations pts, work of w wagons, indic reements RIV, f the railway o the developm cture of the pa	on shipme s and regi (I colloqu vagons, in rators of p RIC and (carrier and hent and (ark	ent ulations uium) udicators of productivity of COTIF d its position optimization	
Author/s		Name				Year	Pag	ges (from-to)	
Aleksandrov V	·	Name of publication, publisher Year Parent Railway Towed Vehicles, Želnid, Belgrade 2000							
Bošković B.		Written mater		sentati	-			-	
	I		Additiona		ngs				
Author/s		Nam	e of public		-	Year	Pag	ges (from-to)	
		Regulation 242		nainten	nance of railwa				
Evaluation criteria	I		ssesment r			F	Points	Percentage	

	pre-exam obligations						
	Presence during lectures	10	10%				
	Seminar papers	20	20%				
Colloquium 3x10							
	Final examination						
	Oral examination	40	40%				
	TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	1.pdf				
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

CY WETOWIG				UNIV	ERSITY OF E	ASTS	SARAJEVO				2005	
			I	-	-		ffic Engineerin	g		- Soles	HAJHH WART	
VINC					Study progra					Ĩ		
					Profile: Railv	way t		, al			AOE0J	
Course title		_		l cycle		500	I year of stu					
Course title		Dar	ECOLOGY IN TRAFFIC partment of Road Traffic and Transport- Faculty of Transport and Traffic Engineering									
Department		Dep	Department of Road Traffic and Transport- Faculty of Tra					or Transport	ansport and Traffic Engineering			
	Code			Course status			Seme		ECTS credits			
САФ11СЖО					andatory		V				5.00	
Professor/s					iate professo							
Associate/s	P	PhD Mila	n Mil	otić, assoc	iate professo	or						
	Weekly	y hours			Individua	al stu	dent hours (po	er semester))		ent workload efficient S _o	
L	T	E		LE	L		TE	LE			So	
2	2	2		0	2*15*1,5=	45	2*15*1,5=4 5	2*15*1,4=	0		1,5	
Total teach	ner wor	kload (h	iours,	per semes	ter)	i	Total student	workload (h	ours,	per se	emester)	
		15 + 0*1		-			2*15*1,5 + 2			-	-	
		Tot	al wo:	rkload: W+	-T=U _{opt} = 60 +	+ 90 =	150 hours pe	r semester				
		•	•		students wi							
		1. anal	lyze th	ne problem	ns of environ	ment	al pollution;					
Course aims and	Ч	-	-		normative a	and le	gal regulations	s related to e	enviro	nmer	ntal	
learning outcon	nes	protection; 3. get acquainted with the global effects of pollution;										
		-	-				f future develo	-	otor \	/ehicle	e propulsion	
			ell as	to apply th	ne acquired	know	ledge in practi	ce.				
Prerequisites		none										
Teaching metho					ses, consulta	ations	,					
		1. Biosphere and ecology 2. Broblems of environmental pollution										
		2. Problems of environmental pollution										
		 Normative and legal regulations Maximum allowable concentrations 										
		 Air pollution and protection Normative and legal regulations on air quality 										
		7. I col		-			· · · · · · · · · · · · · · · · · · ·					
Course content			-	urification								
				ects of pol								
		10. Traf	fic and	d environn	nental pollut	tion						
		-			the environr							
				-	-		xhaust gas em					
							omposition in r		es			
					e developme	ent of	motor vehicle	propulsion				
		1. 15.1	II collo	quium								
Autho	or/s			Name	Textbo of publicati			Yea	r	Pag	es (from-to)	
Đurić, S., Star		. P.,	Ek		-	-	aćajni fakultet	t		- ~6	, , , , , , , , , , , , , , , , , , , ,	
Milotić		,			Dobo			2016	5			
					Additional	•	ings					
Autho	or/s			Nam	e of publica		-	Yea	r	Pag	es (from-to)	
											· · ·	
				Δ	ssesment m	etho	ds		Poin	ts	Percentage	
Evaluation crite	ria P	Pre-exam	n oblig			20100					reneentage	
		. e exun	2 2 2 1 2	,	atte	endan	ce at lectures	/ exercises	1	10	10%	
								,		-	_0/0	

	colloquium	2x25	50%					
	term paper	10	10%					
	Final exam							
	Oral exam	30	30%					
	TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

			LINIV	ERSITY OF EAS	TSARAIEVO		000			
			-		raffic Engineerir	ng	STATAINH BAR			
D YNC				Study program		0				
)			Profile: Railway			AOEOJ			
450-30		_	l cycle		III year of st					
Course title		_			AND TEHNOLOG					
Department		Depart	ment for Trar	Traffic Engineer	ing Doboj					
	Code		Coι	urse status	Seme	ester	ECTS credits			
САФ11СЖ				andatory	V		6.00			
Professor/s			ÐURIČIĆ, full p							
Associate/s	S	anja SIMIC	2, senior assist	tant						
	Weekly	hours		Individual s	tudent hours (p	er semester)	Student workload coefficient So			
L	TI	E	LE	L	TE	LE	So			
3	2		0	3*15*1,4=63	2*15*1,4=4 2	0*15*1,4=0	1,4			
Total teac	her worl	kload (hou	ırs, per semes	ter)	Total student	workload (hou	rs, per semester)			
3*	15 + 2*1	L5 + 0*15 :	=75 hours		3*15*1,4 + 2	*15*1,4 + 0*15 [*]	*1,4 = 105 hours			
					5 = 180 hours pe	er semester				
		-	-	, students will b						
					-	-	ce of the reprocessing			
							fect links of starting			
		commodity flows in the process of reproduction and time-non-synchronized production.								
		2. They will be able to analyze the parameters that influence the overload, learn the division of mechanization assets as well as their good and bad traits								
Course aims an		3. Continuous and cyclic actuators will be able to use methods for calculating capacities and								
learning outco	mes	required power.								
		4. It will be able to demonstrate the establishment of a transhipment system with								
		transhipment effects								
		5. They manage transhipment processes, and that, after gaining practical experience in								
		logistics centers, they manage individual sectors or organizations that are responsible for								
		transhipment processes.								
Prerequisites		lone.								
Teaching meth				ses, consultatio			u d to chu o lo cu i			
				-	sic concepts of n	nechanization a	nd technology			
			•	ole of the proce trealization of	the transhipmen	t process				
				S - Belt convey	•	ic process				
				r. Transporter						
			-	langing convey	-					
						veyors (Preparat	tion for I Colloquium)			
			-	veyors (I colloq						
Course content		• •	•		MEANS - Transp		ng vehicles			
					ability, applicati					
			-	-	mining the pow					
				-	containers hand					
				-	-		oower determination			
			colloquium)		sing of the traff		ess (Preparation for			
		14. Il collo								
				lloquium) The d	losing word and	I the signature c	of the index.			
		, . <u>.</u> .,		Textbook			-			
Autho	or/s		Name	of publication,		Year	Pages (from-to)			
Đurič				-	cript,Faculty of	2006				
		I			· · ·		·			

		Transport and Traffic enginnering, Doboj							
		Mechanization of transhipment, transhipment							
Sretenović M	l .	machine and dessigne of transhipment	1996	6					
		processes, Belgrade							
		Internal transportation, Warehousing and							
Milorad V.		Transhipment, Faculty of Transport and Traffic	1						
		engineering, Belgrade							
		Additional readings							
Author/s		Name of publication, editor	Yea	r Pa	ges (from-to)				
		Assesment methods		Points	Percentage				
	Pre-exam obligation								
		Presence during le	10	10%					
		Activity during le	5	5%					
Evaluation criteria		Completed colloquium	35	35%					
		Completed colloquiums-	50	50%					
	Final exam								
		Final exam(tasks-t	heory)						
	IN TOTA	N TOTAL 100 100%							
Web sources	http://s	ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-ciklus-20	21.pdf				
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic engi	neering Doboj				

Y WETOW			UNIV	ERSITY OF	EAST S	ARAJEVO		2003			
		I	-			ffic Engineerin	g	STAPATH O ALL			
► \x\y\c				Study progr	am: Ti	raffic					
				Profile: Rail	way ti			AOEOJ			
dire at the			l cycle			III year of st					
Course title						STATIONS AN					
Department	[L	Jepartme	ent for Trai	nsport Engir	neering	g – Faculty of	Traffic Enginee	ing Doboj			
	de			Course status Semester			ster	ECTS credits			
САФ11СЖ07				andatory		VI		6.00			
Professor/s			, full profe								
Associate/s	Vladi	mir MAL	ĆIĆ, senior	assistant				Chudomt workload			
v	Veekly hou	urs		Individu	al stu	dent hours (pe	-	Student workload coefficient S _o			
L	TE		LE	L		TE	LE	So			
3	3		0	3*15*1		2*15*1	0*15*1	1			
Total teache 3*15	er workloa 5 + 3*15 + 0			ster)			workload (hou 3*15*1 + 0*15	rs, per semester) *1 =90 hours			
				-T=U _{opt} = 90	+ 90 =	180 hours pe					
				ne student w							
	1. i	dentify a	nd classific	ate railway	statio	ns: basic conte	ent and functio	nality,			
Course aims and	2. i	dentify a	nd selects	the necessa	ry faci	lities / elemen	nts in the railwa	y stations according to			
learning outcom		needs,									
		 define and size the the necessary facilities / elements in the railway stations, to participate in making project proposals and project documentation. 									
		Admission reguirements: previously attended course: Planning and design of railway tracks The conditions for passing the course are:									
		1. regular attendance (lectures and exercises),									
Prerequisites		 regular attendance (lectures and exercises), completed and defended elaborate, 									
		3. all colloquiums passed,									
		all test pa									
Teaching method	ds Lectu	res, audi	tory and co	omputationa	al exer	cises, consulta	ations				
			• •		•		•	ations and nodes			
		2. Constructive elements of railway stations and nodes									
				gs and yards		f					
				rations (1 st		f railway statio	ons				
		-	-				station facilities				
								, ion, characteristics			
		and dime		. 0				,			
	8. 1	The basic	componer	nts of passer	nger st	ations- classif	fcation, charact	eristics and			
Course content		dimensio	•								
					alling	yards– classifo	cation, characte	eristics and			
				olloquium)		a conductord	- 11 }				
						g yards (3 rd co		ling			
							and dimension nd dimensionin	-			
		 Railway port yards, terminals – task, classification and dimensioning Traffic and railway nodes: The concept, classification and characteristics 									
	14. Railway nodes: The basic elements. The conditions for rational composition of railroad nodes										
	15. F	Planning	and design				ns and nodes (4 th colloquium)			
				Textbo							
Author	/s			of publicat			Year	Pages (from-to)			
lvić M						ossings, Facult					
		of	ransport	and Trattic E	ngine	ering, Belgrad	e				

Milošević B.		Railway station facilities, Faculty of Transport and Traffic Engineering, Belgrade	1978	3.				
Milošević B.		Railway stations and nodes – Dimenzioning station facilities, Faculty of Transport and Traffic Engineering, Belgrade	1980.					
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)		
lvić M.		<i>Railway stations and nodes,</i> Lectures in the form of PP presentations						
		Assesment methods		Poi	nts	Percentage		
	Preexam	nination obligations						
		The student's activity during le		10	10%			
		Ela		20	20%			
Evaluation criteria				10	10%			
		Colloc		40	40%			
	Final exa	amination						
		Oral exami		20	20%			
	Total 100 100%							
Web sources	http://st	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	<u>ski-NPP-</u>	I-cikl	<u>us-202</u>	<u>1.pdf</u>		
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic	c engin	eering Doboj		

y WCTON			UNIV	ERSITY OF	EAST S	SARAJEVO		2005	
			Faculty of	Transport a	nd Tra	ffic Engineerin	g	STATA IN OR THE	
- vigc			2	Study progi	ram: T	raffic			
				Profile: Rail	lway t			AOEOJ	
distra 30 Ar			I cycle			III year of st			
Course title						RAIN TRACTIO		·	
Department		Departme	ent for Trai	nsport Engli	neerin	g – Faculty of ⁻ I	I raffic Enginee	ering Doboj	
c	Code		Cou	urse status		Seme	ster	ECTS credits	
САФ11СЖО				andatory		VI		6.00	
Professor/s				, associate	profes	sor			
Associate/s	Vla	dimir MALČIĆ, senior assistant							
	Weekly h	eekly hours Individual student hours (per semester)					er semester)	Student workload coefficient S _o	
L	TE		LE	L		TE	LE	So	
3	2		0	3*15*1,	.4	2*15*1,4	0*15*1,4	1,4	
Total teach				ter)				urs, per semester)	
3*1	.5 + 2*15	+ 0*15 =7		1 75 1 4 05	400			5*1,4 = 105 hours	
	1					hours per sem		alaa af tuain tuaatian and	
	1.					etermine runn		ples of train traction and	
	2.	-		-	-			ell as other parameters	
	2.						•	ds, maximal permissible	
								roblems of train traction	
Course aims and	d		nt rail unde				, ,		
learning outcon	nes 3.	Based on	the learne	d principles	s of tra	ain traction ma	anagement, at	fter graduation students	
		will be a	ble to ma	anage train	tract	ion, optimize	the work of	f locomotives, optimize	
		-			-			, they will be trained to	
			-			e of traction v			
	4.							anaegement, graduated	
	1+ 14					tical decisions		ams) from general	
Prerequisites		-				· ·		b, attendance to classes	
Trefequisites		nandatory.		, 5165, 61 gain	2011011		agement. Also		
Teaching metho			tory and n	umerical ex	ercises	s, consultation	S.		
	1.		•			motion. Move		nces.	
	2.			-				"Traction passport" and	
		•	the locom						
	3.						vehicle types.	(I colloquium).	
	4.	-		and braking			<i></i>		
	5.					nd running tim		-	
	6.		action dim tion calcula		oceau	res and metho	ues for train t	raction energy	
Course content	7.				es and	simulation of	train traction	(III colloquium).	
course content	8.			ectric train				(conoquiuni).	
	9.		-			ocomotive rolli	ng stock. (IV c	olloquium).	
	10.					f locomotive r			
	11.					olete turnover.		n).	
	12.					n turnover. Cir	cular runnings	5.	
	13.				-	colloquium).			
	14.			l. Personnel					
	15.	Maintena	nce of rail			tion costs. (VI	l colloquium).		
			News	Textb		-	Ver	Deges (from to)	
Autho Dinić		14.		of publicat		ublisher ELNID, Belgrad	Year	Pages (from-to)	
DINIC	U.	vu	.a vozova (uii), Zi	ELINID, Beigrad	e 1983		

Mandić D.		Organizacija vuče vozova (Train Traction Organization), Faculty of Traffic and Transport Engineering, Belgrade	2002	2		
Mandić D., Jovano Bugarinović N		Zbirka zadataka iz teorije vuče vozova (Workbook of Train Traction Theory), Faculty of Traffic and Transport Engineering, Belgrade	3			
Mandić D., Bugarino Jovanović P.	-	Zbirka zadataka iz organizacije vuče vozova (Workbook of Train Traction Organization), Faculty of Traffic and Transport Engineering, Belgrade	2015	5		
		Additional readings				
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)
Mandić D., Jovanc	ović P.	<i>Teorija vuče vozova – praktikum (Train Traction Theory – practicum),</i> Faculty of Traffic and Transport Engineering, Belgrade	2017	7		
		Assesment methods	•	Poi	nts	Percentage
	pre-exai	n obligations				
		attendance to lectures and ex	ercises		10	10%
Evaluation criteria		positivly evaluated project assigr		2	x10	20%
		assed all tests and passed all colloquiums (numerica	l tests)	7	′x10	70%
	final exa					
		final exam (oral / w			1001	
	TOTAL		1.1.1.0-5		100	100%
Web sources		f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle				
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engin	eering Doboj

and the second			ERSITY OF				2005 (A)INB (2)			
		Faculty of T	g	Source in the second						
82		-								
4593 30		l cycle			III year of stu		AOPO 1			
Course title							POWER PLANTS			
Department	Departm	ent for Trar	nsport Eng	ineerin	g – Faculty of T I	raffic Engineer	ing Doboj			
Code			urse status		Semes		ECTS credits			
САФ11СЖ0713			andatory		VI		6.00			
Professor/s	PhD Miroslav Vladimir MAI			ciate pr	otessor					
Associate/s		LCIC, Sellior					Student workload			
Wee	ekly hours		er semester)	coefficient S _o						
L	TE	LE	L		TE	LE	So			
3	3	0	3*15*1	.,4	2*15*1,4	0*15*1,4	1,4			
	vorkload (hours	-	ter)				rs, per semester)			
3*15+	3*15 + 0*15 =9		4.00 + 1.26	- 216			*1,4 = 126 hours			
					hours per sem be able / able to					
							nd provision of railway			
	traffic.					0	, ,			
						insurance syste				
Course aims and			-			-	y devices and means of			
learning outcomes		cation on t	he railway	, which	is the most in	nportant prere	quisite for work on the			
	railway.	world trend	s in this fie	ld and	is qualified to r	aronose annlica	ations in our country.			
							ry problems of traffic			
				-		-	on electrified railways			
	-	onal use of e		-	-	C	,			
Prerequisites	No conditions	5.								
Teaching methods					s, consultations					
					or electric tract					
	2. Contact r 3. Electric t		-	and ex	ecution, types	and equipmen	t;			
	4. Protectio			oltage i	nlants					
					nction of traffic	c intensity;				
					ement systems	-				
	9. Securing	switches ar	nd slides. T	echnica	al means for co	ontrolling the o	ccupancy of tracks and			
	switches;									
Course content			Signals and	l signali	ng technique.	Cellular signalir	ng and safety devices;			
	(I colloqu		icion of tra	offic at t	the inter-statio	n distanco:				
					road crossings;					
	13. Automat				•					
			•	-		in transmission	systems - hitchhiking			
	devices;	devices;								
		15. Automatic train guidance. Automatic train protection.								
	16. Security	analysis (II c	-	·						
Author/a		Nome		book (s)		Veer	Dagos (from to)			
Author/s			of publica		er control of	Year	Pages (from-to)			
Zoran Avramo	vić	-	alling yard	-	-	1995				
	-									
		Ze	lnid, Belgr	ade, Se	rbia					

		Additional readings			
Author/s		Name of publication, editor	Yea	r	Pages (from-to)
		Assesment methods		Points	Percentage
	pre-exa	n obligations			
		Presence during le	10	10%	
Evaluation criteria		Positively evaluated seminar	20	20%	
Evaluation criteria		Passed all colloc	2x2	0 40%	
	final exa	m			
		final exam (oral / w	ritten)	30	30%
	TOTAL			100	0 100%
Web sources	http://st	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-ciklus-	2021.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic ei	ngineering Doboj

			LININA	ERSITY OF				
			Faculty of ⁻		2005 Sankillin @gg			
-18					See In the			
- SUC 82*				Study prog Profile: Ra				
Star 10	III -		l cycle			III year of study		AOEOJ
Course title			· cycic			MODAL TRANSPOR	RT	
Department		Departm	ent for Trar	nsport Eng		g – Faculty of Traffi		g Doboj
-	01							
	Code		C οι	irse status	5	Semester		ECTS credits
САФ11СЖО				ptional 2		VI		5.00
Professor/s			n ZEČEVIĆ, f					
Associates/s	Ph	D Snežana	TADIĆ, asso	ciate prof	essor			
	14/	b		L				Student
	Weekly	nours		Indiv	vidual st	udent hours (per s	emester)	workload coefficient S _o
L	TE	:	LE			TE	LE	S _o
2	2		0	2*15*	[•] 1.4	2*15*1,4	0*15*1,4	1,4
-		load (hours	s, per seme		, ·	Total student work		,
		5 + 0*15 = (,		2*15*1,4 + 2*		
		<u>To</u> tal w	vorkload: W	/+T=U _{opt} = 6	50 + 84	= 144 hours per ser		
	1				e and pl	ace of intermodal t	ransport for	different
Course aims a	nd		nts and use					
learning	2					I system and deter		_
outcomes			-			system in a particu sport chain techno		ai transport chain;
		-				termodal transport	-	
Prerequisites		special co			n the m			
Teaching		•						
methods	leo	ctures, tuto	rials, case s	tudies, del	bate cla	sses		
	1.	Intermod	alism, defin	ition and o	delimita	tion of basic conce	pts in interm	odal transport.
			al Transpor					
						lular chain alignme		the tree of the t
						argement of interm on and codification		the transport chain.
						ransport terminals		
								ems in IT (Colloquium
		l).			, .,			
Course conten		Container	r transport s	system tec	hnologi	es.		
		Container						
			o-vehicle tra	-	-			
			ehicle road-			-		
			ehicle rail-ro	-		inologies. ir-sea transport veh	icle-vehicle	
			-			chain optimization.		
								licy and promotion
		(Colloquiu					, F-	
					tbook (s			
Auth				e of public			Year	Pages (from-to)
Zečević S.	, Tadić S	.	ntermodalr			izovana skripta	2016	
	1			Additio		-		
Auth				e of public			Year	Pages (from-to)
Lowe		D .				ort, Elsevier	2005	
Priemus H., Konin						ight Transport: dward Elgar Pub.	2008	
KUIIII	go N.	υρ	erations, D	congri allu	i oncy, E	uwaru Ligat PUD.	I	

Kim K.H., Günther H.O.		Container Terminals and Cargo Systems: Design, Operations Management, and Logistics Control Issues, Springer	007						
		Assesment methods		Points	Percentage				
	Preexami	nation obligations							
		attendance during lectures/exe	ercise	5	5%				
		activity during cl	5	5%					
Obligations			tests	20	20%				
Obligations, evaluation		colloq	20	20%					
criteria		Colloq	20	20%					
	Students who pass the colloquia are released								
		written part, final exam							
	Final exa	mination							
		Oral examin	30	30%					
	Overall			100	100%				
Web sources	http://sf.	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	<u>ki-NPP-</u>	I-ciklus-2	2021.pdf				
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	t and T	raffic en	gineering Doboj				

			Faculty of		and Tr gram: 1	traffic III year of stu		ACED			
Course title						SHIPPING					
Department		Departm	ent for Trai	nsport Eng	ineerir	ng – Faculty of 1	raffic Engin	eering Dob	ој		
(Code		Cou	urse status	5	Seme	ster	ECT	S credits		
САФ11СЖО	07204965	,0220	0	ptional 2		VI			5.00		
Professor/s			Subotic, a		rofesso	or					
Associate/s	Sin	isa Bozicko	vic, senior	assistant							
	Weekly h	y hours Individual student hours (per semester)							ent workload efficient So		
L	TE		LE	L		TE	LE		So		
2	2		0	X*15*S	So	Y*15*S₀	Z*15*S₀				
		orkload (hours, per semester)Total student workload (hours, per semester) $*15 + Z^{*}15 = W$ hours $X^{*}15^{*}S_{0} + Y^{*}15^{*}S_{0} + Z^{*}15^{*}S_{0} = T$ hours									
		Total v	vorkload: V	V+T=U _{opt} =	+	= hours per s					
Course aims an	d			·		•					
learning outcor	nes										
Prerequisites											
Teaching metho	ods										
Course content	:										
					book (s	•					
Autho	or/s		Name	of publica	ntion, p	publisher	Yea	r Pag	ges (from-to)		
				Addition							
Autho	or/s		Nam	ne of publi	cation	, editor	Yea	r Pag	ges (from-to)		
			A	ssesment	metho	ods		Points	Percentage		
									7		
Evaluation crite	eria										
									-1		
Web sources	htt	p://sf.ues.r	<u>s.ba/eng/v</u>	vp-content	t/uploa	ads/2022/05/Er	ngleski-NPP-	I-ciklus-202	21.pdf		
Applicable fron	n 11,	/15/2022 -	198 Session	n of the Co	ouncile	, Faculty of Trar	nsport and T	raffic engir	neering Doboj		

A METOWNER		UNIV	ERSITY OF E	AST S	ARAJEVO		2005			
					ffic Engineerin	g	SHARAINS ON THE			
LYÜC 82°			Study progra							
		Profile: Railway traffic I cycle III year of study								
Course title		l cycle	MAINTENA	NCE C			RE			
Department	Depa	rtment for Trar								
Code			urse status		Seme		ECTS credits			
САФ11СЖ0723			ptional 3		VI		5.00			
Professor/s Associate/s		IVIĆ, full profe /IALČIĆ, senior								
		ALCIC, SEIIO					Student workload			
Wee	ekly hours		Individua	al stu	dent hours (pe	er semester)	coefficient So			
L	TE	LE	L		TE	LE	S₀			
2	2	0	2*15*1,5	5	2*15*1,5 0*15*1,5		1,5			
Total teacher w		-	ter)				rs, per semester)			
2*15 +	2*15 + 0*15						5*1,5 =90 hours			
		workload: W+				rsemester				
		-				or regulating a	nd securing railway			
	traffic	• .								
Course aims and	2. Know	ving modern rai	l transport s	ysten	ns.					
learning outcomes	-		-				fety devices and			
				way, v	which is the mo	ost important p	precondition for			
		ation on the rai		יב בסי	nd is qualified	to propose apr	plications with us.			
							Railway stations and			
	nodes.		р <i>у</i>			· · · · · · · · ·	,			
		tions for passin								
Prerequisites	-	ar attendance (cises),					
	-	leted and defe		ate,						
	4. all tes	lloquiums passed	ea,							
Teaching methods		auditory and co	omputationa	l exer	cises, consulta	itions				
	1. Intro	-	·		· · · ·					
		ral concepts an	-			ailway infrastru	icture			
		fication of mai								
		ods for realizin tenance machi	•	ice ac	TIVITIES					
		es, equipment	•	oftra	nsport					
		urement techn								
Course content		maintenance t								
		ent maintenand		way ii	nfrastructure					
		reconstruction								
	-	neration of the nization and tee			enance activit	ies				
	-	tenance on hig			CHARLE ALLIVIL					
		raffic organizat			nance activitie	S				
		ing maintanac	e activities (2	2 nd co	lloquium)					
		_	Textbo							
Author/s			of publicatio	-		Year	Pages (from-to)			
lvić M.		-	s, Faculty of ngineering, E		port and Traffi ide	c 2005				
Milošević B		Railway track r	maintenance	, Rail	way high schoo	ol, 1980				

		Belgrade						
Tomčić M.		Railway track maintenance, Faculty of Civil Engineering, Belgrade	199	8				
		Additional readings						
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)		
lvić M.		Railway track maintenance, Lectures in the form						
		of PP presentations						
		Assesment methods		Poin	ts	Percentage		
	Preexamination obligations							
		The student's activity during le		5	5%			
		Ela	3	5	35%			
Evaluation criteria			1	.0	10%			
		Colloc	3	0	30%			
	Final examination							
		Oral exami	2	20	20%			
		10	00	100%				
Web sources	http://st	ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-ciklu	s-202	1.pdf		
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic	engin	eering Doboj		

VI WCTOW			UNIV	ERSITY OF	EAST S	ARAJEVO			12	005/	
						ffic Engineerin	g		- Solen h	AIHH ØARTAL	
				Study prog					Ĩ		
	9		l cycle	Profile: Ra	ilway ti	r affic III year of stu	ıdv			40E01	
Course title			Тсусіе	ΜΔΙΝ	ΙΤΕΝΔΝ		-	5			
Department		Depar	rtment for Trai			g – Faculty of T			g Dobo	i	
-	0 - d -							<u> </u>			
, i	Code			urse status		Semes	ster	ECTS credits			
САФ11СЖО				ptional 3		VI				5.00	
Professor/s			ĐURIČIĆ, full j								
Associate/s		VISc Vladir	mir MALČIĆ, se	enior assist	ant				Churcha	nt workload	
	Weekly	y hours	hours Individual student hours (ner semester)						efficient So		
L	Т	E	LE	L		TE	LE			So	
2	2	2	0	2*15*1	.,5	2*15*1,5	2*15*1,5	;		1,5	
		•	urs, per semes	ster)		Total student	•		•		
2*1	15 + 2*:		= 60 hours			2*15*1,5 + 2		*15*1	.,5 = 90) hours	
						150 hours per					
C					-	s, characteristi					
Course aims an learning outcor			•			d maintenance able them to a	•				
		of railway		iletiilous ai				eugei	in the i	namenance	
				ttend clas	ses, att	end practical e	xercises at t	he ŽR	S, con	duct seminar	
Prerequisites			colloquiums,						-,		
Teaching metho	ods l	_ectures, a	auditory and co	omputatio	nal exer	cises, consulta	itions.				
			-	-	-	of organization	of mainten	ance	of railv	vay vehicles	
			of maintenan		-			<i>с</i> .			
			mination of cy on of work on			s for regular m	aintenance	of rail	lway ve	ehicles	
			fications and re								
			nical document								
		7. Maint	enance works	hops (I coll	loquiun	n)					
Course content			-			ailway vehicles					
course content				-		ilway vehicles					
				-		el and electric l					
					-	enger and freig urposes - testig	-	necia	l-nurn	nse vehicles	
			ay vehicles, spe				ing whicelo, o	peela	i puip	ose venicies,	
			le procedures			cy					
		14. Mode	ern maintenand	ce of railwa	ay vehic	les					
		15. II collo	oquium								
0th			Nama		ook (s)		Vee	.	Door		
Autho Gojković, B.,		D		of publica		les, Faculty of	Year	r	Page	es (from-to)	
Malčić		,,		e oj ranwa Iffic Engine	•		2014	1	W	hole Book	
Gojković, B.,		, R.,				les - updated					
Malčić, V., Č				-		neering Doboj	2021	L	W	hole Book	
				Addition							
Autho	or/s		Nam	e of publi	cation,	editor	Year	r	Page	es (from-to)	
			A	ssesment	method	ls		Poin	nts	Percentage	
Evaluation crite	eria (Preexamin	ation obligation	ons							
						Presence durir	ng lectures	1	10	10%	

	Seminary work	10	10%
	Colloquium I and II	2x30	60%
	Final examination		
	Oral examination	20	20%
	Total	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

R Y WCTOWA		UNIV	ERSITY OF E	AST S	ARAJEVO		2005
		Faculty of Transport and Traffic Engineering					Sus haine of a
YÚC		Study program: Traffic					
		Profile: Railway traffic I cycle IV year of study					
Course title			GHT TRANSF	PORT	•	AND ORGANIZ	ATION
Department	Depart					Fraffic Engineer	
Code			urse status		Seme		ECTS credits
САФ11СЖ0710	6276,0321	m	andatory		VI		6.00
Professor/s		av BOŠKOVIĆ		or			
Associate/s	Vladimir M	ALČIĆ, senior	assistant				
Wee	ekly hours		Individua	al stu	dent hours (pe	er semester)	Student workload coefficient S ₀
L	TE	LE	L		TE	LE	So
3	2	1	3*15*1,4		2*15*1,4	1*15*1,4	1,4
Total teacher v 3*15 +	vorkload (hou 2*15 + 1*15 =	•	ter)				rs, per semester) *1,4 = 105 hours
	Total w	vorkload: W+1	Γ=U _{opt} = 75 +	· 105 :			
Course aims and learning outcomes	the transport implementation.						railway freight nology processes for wagons in the
Prerequisites	No conditio	freight trans					
Teaching methods					project work,	railway station	visit or
Teaching methods		oading termin					
Course content	 Technoo loading Industr Organiz Technoo Manago Technoo Technoo New teo Technoo Transport Moderni Train co 	 loading/unloading terminals Industrial branches: the concept, significance and structure of commodity and problems. Organization of railway work in industrial complexes and ports Technology of forming trains in marshaling yards (pick-up trains, block trains) Management of wagon streams on network Technology and models of unit trains on the network New technological concepts in the railway freight transport. Technology of intermodal transport of goods 					
			Textbo				
Author/s			of publication			Year	Pages (from-to)
Bošković B.		ritten materia PP	als and prese	entati	ons in the forr	n 2015	
Čičak M., Vesko	vić S.		nd Traffic en	ginee	c II, Faculty of ring, Belgrade	2006	Čičak M., Vesković S.
Author /a		News	Additional		-	Veer	Dagas (from to)
Author/s		inam	e of publica	tion,	eultor	Year	Pages (from-to)

	Assesment methods	Points	Percentage
	Pre-exam obligation		
	Presence during lectures	6	6%
	Positively evaluated project work	10	10%
Evaluation criteria	Solved all colloquiums (theory)	24	24%
	Solved all colloquiums (tasks)		
	Final exam		
	Final exam(verbally)	60	60%
	In total	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj

		UNI	VERSITY OF EAST	SARAJEVO		2005	
		Faculty of	Ig	Subanne warrant			
Yhc							
			Profile: Railway			AOEOJ	
		l cycle		IV year of st			
Course title Department	De		ENGER TRANSPO				
			· · ·			-	
Cod	e	Co	urse status	Seme	ster	ECTS credits	
САФ11СЖ0710			nandatory	VI	I	6.00	
Professor/s		tko ĐURIČIĆ, full					
Associate/s	Vladimi	ir MALČIĆ, senior	assistant				
We	ekly hours	5	Individual st	udent hours (pe	er semester)	Student workload coefficient So	
L	TE	LE	L	TE	LE	So	
3	1	1	3*15*1,4=63	1*15*1,4=2 1	1*15*1,4=2 1	1,4	
		hours, per seme	ster)		•	rs, per semester)	
3*15 +		15 = 75 hours				*1,4 = 105 hours	
			-T=U _{opt} = 75 + 10				
			able to understa			alitative indicators of	
			-		-	e cause-effect links	
			mance of passer				
Course aims and	2. It v	will be able to an	alyze, harmonize	and optimize th	ne operation of	individual subsystems	
learning outcomes		at are busy in pas	-				
	3. Stu					tion. It will be trained	
		o calculate the cost of the train and create a tariff for passenger transport. will be able to operate operational services for the carriage of passengers on the					
			after gaining prac				
		-	r railway organiz			, ,,	
Prerequisites	None.						
Teaching methods	Lecture	s, auditory, calcu	lus and laborato	ry exercises, cor	nsultations		
	1. Bas	sics of passenger	traffic organizat	ion			
	2. Ba	sics of passenger	transport planni	ng			
			pes and characte				
			ion characteristic				
		e of passenger ca ssenger transpor	ars in domestic a	nu international	trame (i colloq	luium)	
			s of work in passe	enger traffic			
Course content		avel flows and un	-				
			of passenger sta	ations			
			enger trains (II co				
		-	note passenger ti				
			ourban passenger				
		ality of service ir ain costs	the carriage of	Jassengers			
			transport (III co l	loquium)			
			Textbook (
Author/s		Name	e of publication,	-	Year	Pages (from-to)	
			on of Railway Tra	-	;		
Čičak M., Vesko	DVIC S.	-	nd Traffic engine		/UUb		
Čičak M., Vesko	ović S.	-	of Railway Traffi		of 1999		
		solv	ed tasks,Želnid,E	elgrade	1000		

		Additional readings			
Author/s		Name of publication, editor	Year	r Pa	iges (from-to)
		Assesment methods		Points	Percentage
	Pre-exar	n obligation			
		Presence during le	10	10%	
		Positively evaluated project	20	20%	
Evaluation criteria		Solved all colloquiums(20	20%	
		Solved all colloquiums(th	20	20%	
	Final exa	am			
		Final exam(ver	bally)	30	30%
	In total		100	100%	
Web sources	http://st	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-ciklus-20	21.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	rt and T	raffic eng	neering Doboj

		UNIV Faculty of -	-	South States				
Course title		rcycle	R		IV year of stu Y TRAFFIC TECH			
Department	Depart	ment for Trar			ng – Faculty of T		ering Doboj	
Code			urse status		Semes		ECTS credits	
САФ11СЖ0710	6676,0311	m	andatory		VII		6.00	
Professor/s		Duričić, full pr						
Associate/s	Sanja SIMIĆ	, senior assist	ant					
Wee	ekly hours		Individ	lual stu	udent hours (pe		Student workload coefficient S ₀	
L	TE	LE	L		TE	LE	So	
3	1	1	3*15*1	,14	1*15*1,14	1*15*1,14	1,14	
Total teacher v 3*15 +	1*15 + 1*15 =	75 hours				.5*1,14 + 1*1	urs, per semester) .5*1,14 = 85,5 hours	
Course aims and learning outcomes	rail tran transpo and the 2. After gr operati 3. Studen 4. After gr operati	 By mastering this course, students will understand the basic principles of organization of rail transport. Recognizing the basic quantitative and qualitative indicators of work in rail transport, they will be able to understand the cause-effect links of traffic performance and the results achieved. After graduation, students will be able to analyze, harmonize and optimize the operations of railway subsystems. Students will be trained to construct train timetable and to monitor its' performance. After graduation, students will be able to manage the work of the dispatching and operational services on the railway, as well as to manage work of certain departments or 						
Prerequisites	It is necessa courses, in p is mandator	ry for studen particular phy y.	ts to have sics, orga	exami nizatio	n of work, mana	oly passed exa agement. Also	ams) from general o, attendance to classes	
Teaching methods		-						
Course content	 Basic p Basic in colloqu Quantiti passen Standa Wagon Harmon Informa Informa Insorta Basic el 11. Timing Ensurin The cor Operat 	 Basic principles and indicators of operations in railway transport. Basic indicators of wagon flows organization, timetable and work planning. (I colloquium). Quantitative and qualitative indicators of the operation and utilization of freight and passenger wagons. Standardization of the activities. Wagon and locomotive rolling stocks. (II colloquium). Harmonization of certain indicators and railway subsystems. Information systems on railways. 						
Author /a		Nome		book (s	-	Veer	Dagas (from to)	
Author/s Eror S.		Organiza (Organizatio	on of Railw	ničkog ray Traj	<i>saobraćaja</i> <i>ffic)</i> , Faculty of ering, Belgrade	Year 1988	Pages (from-to) 	

Kovačević P.		Eksploatacija železnica knjiga I (Exploitation of Railways – book I), ŽELNID, Beograd	1988	3		
Kovačević P.		Eksploatacija železnica knjiga II (Exploitation of Railways – book I), ŽELNID, Beograd				
		Additional readings				
Author/s		Name of publication, editor	Year	r	Page	es (from-to)
Hansen I., Pach	nl J.	<i>Railway Timetable & Traffic,</i> EURailpress, Hamburg, Germany	2008	3		
Eror S.		Optimizacija razvoja kapaciteta železničkih pruga (Optimization of capacity development of the railway lines), ŽELNID, Beograd	1982			
Assesment methods						
		Assesment methods		Poi	nts	Percentage
	pre-exa	Assesment methods n obligations		Poi	nts	Percentage
	pre-exai		ercises	-	nts 10	Percentage 10%
Evolution critoria	pre-exar	n obligations				
Evaluation criteria		n obligations attendance to lectures and ex	ments		10	10%
Evaluation criteria		n obligations attendance to lectures and ex- positivly evaluated project assign assed all tests and passed all colloquiums (numerica	ments		10 15	10% 15%
Evaluation criteria	p	n obligations attendance to lectures and ex- positivly evaluated project assign assed all tests and passed all colloquiums (numerica	iments I tests)		10 15	10% 15%
Evaluation criteria	p	n obligations attendance to lectures and expositivly evaluated project assign assed all tests and passed all colloquiums (numerica m	iments I tests)	5	10 15	10% 15%
Evaluation criteria Web sources	p final exa TOTAL	n obligations attendance to lectures and expositivly evaluated project assign assed all tests and passed all colloquiums (numerica m	iments I tests) rritten)	5	10 15 x15	10% 15% 75% 100%

			ERSITY OF EAS					
		•••••		Traffic Engineeri	ng	2005) 24 haine 047		
18			116					
82			Study progran Profile: Railwo					
10 10 10 ⁵⁰		I cycle IV year of study						
Course title		-	REGULATORY	SYSTEM OF RAI	-	RT		
Department	Departm			ring – Faculty of				
Code		Course status Semester						
				Jenn	estei	ECTS credits		
САФ11СЖ0710			andatory		11	5.00		
Professor/s	PhD Branislav		-					
Associate/s	PhD Branislav	BOSKOVIC	, tull protessor					
Wee	kly hours		Individual	student hours (p	per semester)	Student workload coefficient So		
L	ТЕ	LE	L	ТЕ	LE	S _o		
2	2	0	2*15*1,5	2*15*1,5	0*15*1,5	1,5		
	 vorkload (hours,					rs, per semester)		
	2*15 + 0*15 = 6		,		•	5*1,5 = 90 hours		
	Total wo	rkload: W+	$T=U_{opt}=60+9$	0 = 150 hours p	er semester			
	Introducing th	e environn	nent and cond	itions of a rail co	mpany. Acquirir	ng the basic knowledge		
		-		of the regulatory	-			
				titutions and reg	ulations as well	as the content and		
	meaning of th		-			1 -1		
			-	course each stud		tions arrangement;		
						and bylaws) that is		
Course aims and			ailway transpo			ina bylaws) that is		
learning outcomes	-	-		ne preparation, a	adoption and am	nendment the		
		ations;						
	-		rnational and	local regulations	for particulary a	aspects of the railways;		
	- Distir	nguish inter	national inter-	governmental a	nd other organiz	zations and their		
		onsibilities;						
			ocedures for p	rocessing the rec	quest for allocati	ion of infrastructure		
	capa	-	atio avviala la atvo			iluuru eesten		
Droroquicitos		bare and di	stinguish betw	een regulatory s	systems in the ra	lliway sector.		
Prerequisites	NO	thedra ev	arcisas samin	ar that is devoted	d to analysis of l	aws and by-laws,		
Teaching methods				am presentation	-	aws and by laws,		
		-	oncepts of trar	-	-			
			sport System					
		-	ailway regulat	ory system.				
	4. Basic con	cepts of reg	gulation: laws,	by-laws and oth	er legislative an	d regulatory		
	instrumer							
		of the EU I	•					
	-	e acts of El				•••••		
Course content				ia in the railway				
				y operators and ture capacity an				
						transport operators;		
	11. The Publi							
			s of law on rai					
				ay undertakings	and rail transpo	ort customers;		
		-	organizations	;;				
	15. (II colloqu	uium).						
			Textbool					

Author/s		Name of publication, publisher	Yea	r	Pag	es (from-to)
		REGULATORY SYSTEM OF RAILWAY TRANSPORT,				
Bošković B.		Faculty of Transport and Traffic engineering, 2014				
		Belgrade, CD edition				
		Additional readings				
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)
		Assesment methods		Poi	nts	Percentage
	Pre-exa	n obligation				
		Presence during le	Presence during lectures			6%
Evaluation criteria		Positively evaluated project	t work		10	10%
Evaluation criteria		Solved all colloquiums				24%
	Final exa	am				
		Final exam(ve		60	60%	
	In total 100					
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-cikl	us-202	1.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic	c engin	eering Doboj

y WCTOWN		UNIV	ERSITY OF EA	ST SARAJEVO		2005			
		Faculty of	5	SHARAINN CARLEL					
Princ			Study program						
			Profile: Railwo			AOEOJ			
		l cycle		IV year of stu					
Course title	Day			ING IN RAILWAY T		viva Dahai			
Department	Dep	bartment for Trai	nsport Engine	ering – Faculty of T I	rame Enginee				
Code			urse status	Semes	ter	ECTS credits			
САФ11СЖ0712			andatory	VII		7.00			
Professor/s		drag JOVANOVIĆ		ofessor					
Associate/s	Vladimi	r MALČIĆ, senior	assistant						
We	ekly hours		Individual	student hours (pe	r semester)	Student workload coefficient S _o			
L	TE	LE	L	TE	LE	So			
3	3	0	3*15*1,4	3*15*1,4	0*15*1,4	1,73			
		hours, per semes	ster)		•	ırs, per semester)			
3*15 +		15 = 90 hours				*1,73 = 155,7 hours			
				5,7 = 245,7 hours p					
		-				for railway transport			
				n, technology, and					
Course aims and						solving the problems of			
learning outcomes						model. Also, student			
-		should be able to understand and use specific software applications related to operations research and statistics. The best students will be able to define a problem and solve it by							
					define a probl	em and solve it by			
Duouo auticita c	NO	porary software	tools and met	nods.					
Prerequisites		nucluos the use	of computor o	nalisations Studen	to recognize	and define the			
		Course involves the use of computer applications. Students recognize and define the problems, and solve them by selected software apps and tools. In addition to computer and							
Teaching methods		aboratory work, there is a semestral assignment where students apply selected							
		natical method or			itudents appry	Scielled			
		nerally about Mc		study					
		nerally about Pre		electing factors,					
		thods and Mode							
	4. Pha	ase in process of	prediction and	d application meth	ods and mode	els			
	5. Op	timization of Cap	acity						
	6. Me	thod "Monte Ca	rlo"						
		blems of Capacit	ty Allocation a	nd Assignment					
Course content		olloquium							
		sic in Decision Th	-						
		cision in Risk Con							
		Ilti-Criteria Decisi	• •	ICDIVI)					
		amples of MCDM thods of multicri							
				lysis in Railway Tra	nsnort				
		olloquium		19515 111 Naliway 11a	IISport				
	15.110		Textboo	k (s)					
Author/s		Name	of publication		Year	Pages (from-to)			
		Modeling in rai							
Mirko J. Čičak:		-		ulty of Transport	2003	11-28; 31-75; 463-			
-				ELNID, Belgrade		502			
ă :/ a	ala V M	Contemporary decision making - methods and 1. application (Savremeno odlučivanje – metode i 1997 1-57; 271-288							
Čupić M., Rao Tuma		application (5a)	viemeno outu	civalije metodel	primena), III edition, FON, 1997, Belgrade				
Cupic M., Rao Tuma				-					

Author/s		Name of publication, editor	Yea	r Pa	ages (from-to)	
		Assesment methods		Points	Percentage	
	Pre-exa	n obligation				
		Presence during le	ectures	10	10%	
		Positively evaluated project	t work	20	20%	
Evaluation criteria		Solved all colloquiums	20	20%		
		Solved all colloquiums(t	20	20%		
	Final exa					
		Final exam(ve	rbally)	30	30%	
	In total			100	100%	
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-ciklus-20	021.pdf	
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic eng	ineering Doboj	

			UNIV	ERSITY OF EAST	SARAJEVO		200	Elm-
		Faculty of Transport and Traffic Engineering					SPARAINA @	AGYAL
D YNC		Study program: Traffic						alt
8		Profile: Railway traffic						
13 days 30 3.5			I cycle		IV year of st	tudy	, Lono,	9
Course title				ORGANIZA	TION OF TRAFFI	C COMPANIE	S	
Department	De	epartme	ent for Trar	nsport Engineer	ing – Faculty of	Traffic Engine	ering Doboj	
Co	de		Cou	urse status	Seme	ester	ECTS cre	dits
САФ11СЖ07:	104586.032	20	m	andatory	V	11	6.00	
Professor/s				ll professor			0.00	
Associate/s			enior assist					
w	eekly hour	s		Individual st	tudent hours (p	er semester)	Student v coeffic	
L	TE		LE	L	TE	LE	S	0
3	2		0	3*15*1,4=63	2*15*1,4=4 2	0*15*1,4=0	0 1,	.4
Total teache	r workload	(hours,	per semes	ter)	Total student	workload (ho	ours, per semes	ster)
3*	15 + 2*15	+ 0*15 =	= 75		<u>3*1</u> 5*1,4	+ 2*15*1,4+	0*15*1,4 = 105	;
				T=U _{opt} = 75 + 10		er semester		
				, students will b				
				epts of organiza	ation, as well as	types and org	ganizational mo	odels of
		terprise	-					
Course aims and				ze the organiza		siness system	s, business and	
learning outcome		evelopment policy and development factors; ndependently organize and lead a meeting according to defined rules;						
		equired knowledge in practice to apply and establish their own company as well as to						
				others how to de				
Prerequisites	None.				510.			
Teaching method		s. audit	orv and co	mputational ex	ercises. consulta	ations		
			-	velopment of th				
			-	nal structure	0			
	3. 0	rganizat	ional mod	els of the comp	any			
	4. O	rganizin	g large bus	siness systems				
		-		els of transport	companies			
				pment policy				
Courses				ess factors (I co	•			
Course content			tional cultu	techniques for c	pumization			
		-		iness functions				
		-	informatio					
				l. Organizing a r	neeting			
		-		anagement of i	-			
				. Organizationa		n of the comp	any	
	15. II	colloqu	ium					
				Textbook				
Author/				of publication,	-	Year	Pages (1	from-to)
Vešović, B. V., Bo	-	_		of transport com		- /00/	.	
Knežević, L	J. N.	Tı	ransport ar	nd Traffic Engine				
	-		P.L.	Additional rea	-	N	Derrort	(none to)
Author/	5		Nam	e of publication	i, editor	Year	Pages (1	from-to)
Evaluation criteria	a ———			ssesment meth	ods		Points Pe	ercentage
	Preexa	minatio	n obligatio	ons				

	Presence during lectures	10	10%					
	Colloquium 1							
	Colloquium 2							
	20	20%						
	Final examination							
	Oral examination	10	10%					
	Total	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

MUTON		UNI	ERSITY OF	FAST S	ARAIEVO			2005	
		Faculty of Transport and Traffic Engineering						STAINE WARTE	
		Study program: Traffic							
			Profile: Rai	lway tr				AOEOJ	
4.5tm 10	_	l cycle			IV year of st	-			
Course title							1		
Department		Department of T	ransport En	igineeri	ng - Faculty o	f Transport ar	nd Traffic	Engineering	
Code			urse status		Seme		ECT	'S credits	
САФ11СЖ0710			andatory		VII	1		5.00	
Professor/s		ko ERCEG, associ	•						
Associate/s	PhD Zivi	ko ERCEG, associ	ate profess	or			Stud	ent workload	
Wee	ekly hours	1		ual stuc	lent hours (po	-		efficient S _o	
L	TE	LE	L		TE	LE		So	
2	2	0	45		45	0		1,5	
	-	hours, per semes	ster)		Total student				
2*15+.	2°15 + U*:	15 = 60 hours	ad. 60:00-	-150 ha	2*15*1,5 + 2 ours per seme:	*15*1,5 + 0*1	13.1'2 = ?	o nours	
	By mast	ering this course				3101			
		rstand the requi				d services in t	he contex	t of the needs	
		d by the modern			. p. 00000 um				
Course aims and	-	-		es, moo	dels and meth	ods of measu	rement a	nd quality	
learning outcomes		use and apply different approaches, models and methods of measurement and quality provement,							
		develop and apply specific models of quality management in real business conditions,							
		ge the resources					business	conditions,	
		ves a more succe	essful comm	nunicati	on (internal a	ind external).			
Prerequisites	Does no								
Teaching methods		s, auditory exerc							
		ry of quality man	-	-		ment system			
		 Quality and standardization. Model of quality management system Understanding quality. The term and definitions of quality 							
		tative, qualitativ				ancy			
		erstand the context of an organization. Deming's key to understanding the							
	organiza	ation	-		-		-		
		ty management	systems						
Course content	7. I collo	•	. /	\ .					
		Quality Manage	•	•	eis of excellen	ce			
		rated Manageme lity system accor			2015				
		10. Quality system according to ISO 9000: 2015 11. Process model of the organization							
		12. Risk analysis. Methods of risk assessment							
		hods and tools o							
		hods of measuri	ng custome	r satisfa	action				
	15. II co	lloquium							
				ook (s)				<i>(</i> (,)	
Author/s			of publicat			Year	Pa	ges (from-to)	
Bobrek, M., Milek		Upravljanje kvalitetom – integrisani sistemi upravljanja proma ISO 9001:2015. Eagutty of 2014				1-284			
Macanović, k	κ.	upravljanja prema ISO 9001:2015, Faculty of 2014 Transport and Traffic Engineering						1-204	
		Папар	Additiona						
Author/s		Nan	ne of public		-	Year	Pa	ges (from-to)	
		Upravljanje k	-			of			
Đorđević, D., Vasilje	vić, M.	Transp	ort and Tra	ffic Eng	ineering	2009		1-251	
Evaluation criteria Assesment methods P						Points	Percentage		

	Pre-exam obligations						
	Presence of lectures / exercises	10	10%				
	Seminary work	20	20%				
	Colloquium 2x35						
	Final exam						
	Final exam (oral / written)						
	TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>				
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

T NCTON		UNIV	ERSITY OF	EAST S	ARAJEVO		2003
		Faculty of 1	ıg	STANALINA WARTER			
			Study prog				
				AOEOJ			
9 4 5 FE 30 5		l cycle			IV year of st		
Course title					OF RAILWAY		
Department	Departm	ent for Trar T	nsport Engi	neerin	g – Faculty of	Traffic Engineer	ring Doboj
Code		Cou	urse status		Seme		ECTS credits
САФ11СЖ07105			andatory		VII	I	5.00
Professor/s	PhD Ratko ĐU						
Associate/s	Vladimir MAL	CIC, senior	assistant				
Wee	kly hours			ual stu	dent hours (pe	-	Student workload coefficient So
L	TE	LE	L		TE	LE	So
2	2	0	2*15*1	,5	2*15*1,5	0*15*1,5	1,5
Total teacher w 2*15 + 2	vorkload (hours, 2*15 + 0*15 = 6	-	ter)			•	rs, per semester) 5*1,5 =90 hours
					150 hours per		
 Course aims and learning outcomes 1. By mastering this course, students will un railway traffic. Being familiar with the prin understand causally-related links of interoper 2. It will be able to analyze parameters that affee 3. They will be qualified to use methods for ass traffic 4. It will be able to demonstrate the establis railway companies and infrastructure manage 5. They will be able to manage the safety ma practical experience on the railway, the organizations responsible for the safety of rail 					teroperability hat affect the s for assessme establishment managers. fety manager ay, they man	and safety of t safety of rail tr ent and assessr of safety ma nent system, a nage individua	he rail system. ansport ment of risks in railway nagement systems for and that, after gaining al sectors or railway
Prerequisites	Regulation in						
Teaching methods	Lectures, audi						
Course content	 Basic concepts on the safety of railway traffic, Indicators on safety of railway traffic, Criteria for determining the level of safety, Extraordinary events on the railway, The expertise of extraordinary events in railway, Examples of extraordinary events analysis, I colloquium; Transportability of a railway as a safety factor, Tehnical ability of a railway as a safety factor, The effects of the human factor on a safety of a rail traffic, The effects of the technical factor on a safety of a rail traffic, Training and health conditions that workers need to fulfill in order to increase safet Safety exploitation characteristics and the use of some devices; II colloquium. 						to increase safety,
	Textbook (s)						
Author/s		Name	of publicat	tion, p	ublisher	Year	Pages (from-to)
Đuričić R., Boškov Rosić S.	/іс В.,	Europea	n concept (od safe	ty railway	2016	220
			Additiona				
Author/s		Nam	e of public	ation,	editor	Year	Pages (from-to)

	Assesment methods	Points	Percentage					
	Pre-exam obligations							
	Presence during lectures	10	10%					
Evaluation criteria	Positively evaluated seminary work	20	20%					
Evaluation criteria	Passed all colloquiums	30	30%					
	Final exam							
	Final exam(verbally)	40	40					
		100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	L.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

5 Y WCT DYRON			UNIVERSITY				2005		
		Facı	ulty of Transpor Study pr		affic Engineering T raffic	3	Sealer The First		
82									
10 A 10 A 10		I e	Profile: I		IV year of stu		TOPO		
Course title					NG AND MARK				
Department	De	epartment f	for Transport E	ngineerin	ng – Faculty of T	raffic Engineer	ring Doboj		
Cod	e		Course stat	us	Semes	ter	ECTS credits		
САФ11СЖ072			optional 4		VIII		5.00		
Professor/s			ZIĆ, associate p						
Associate/s	PhD Sv	etlana TERZ	ZIĆ, associate p	rofessor					
	ekly hour				ident hours (pe		Student workload coefficient So		
L	TE	LE	L		TE	LE	So		
2	2	0	2*15	*1,5	2*15*1,5	0*15*1,5	1,5		
Total teacher 2*15 +		(hours, per 15 = 60 hc					rs, per semester) 5*1,5 =90 hours		
					= 150 hours per				
	conseq market 1. an	uences of c ing operati alyze the tr	current changes ons on the raily ansport service	s, and gai way. Ever es market	ining knowledge ry student shou t;	e in the field of ld be able to:			
Course aims and		2. understands the current changes in the railway transport market, and the need and							
learning outcomes		inevitability for the host railway company to adjust its business in order to (p) remain							
		competitive in the market; 3. to understand significant marketing activities and business strategies of customer							
		relationship management, in order to maintain current users of railway services and							
		influence their loyalty.							
Prerequisites	No con		i loyalty.						
Teaching methods			and computat	ional exe	rcises, consulta	tions			
U		-	eristics and spe						
	2. Cu	rrent probl	ems in railway	traffic; o	pportunities to	solve problem	s and increase the		
		share of railways in the transport market;							
		3. Defining the market of transport services. Elements of the transport services market;							
		-	railway traffic;						
			eting managem basis for marke		rketing planning ning:	5;			
			ategy in railway						
Course content		olloquium		, compar	iics,				
		-	ganization. Org	anizing co	ellular marketin	g;			
			rketing activitie	-		-			
	11. Pri	ce manage	ment and the i	mpact of	prices on the ve	olume of trans	port;		
			g in railway traf	fic;					
		•	m in Europe;						
		-	arket adaptabil	ity and p	rofitability of ra	ilways;			
	15. II c	olloquium		/	•				
Author				tbook (s	-	Voor	Pages (from-to)		
Author/s		Author	Name of publi		ect "Market and	Year	rages (nom-to)		
N. J. Bojov	ić			-	ilway", Belgrade				
		market		erbia		2000			
		#D :1							
c		"Railw	vay Marketina".	, Higher I	Railway School,	2222			
S. Vasiljev	с	"Railw		, Higher I de, Serbio	Railway School, a	2003			

Author/s		Name of publication, editor	Year		Pages (from-to)		
			Poi	nts	Percentage		
	Preexam	nination obligations					
		The student's activity during le	ctures		10	10%	
Fuelvetien eriterie	Positively evaluated seminary work					20%	
Evaluation criteria		Colloc	2	x20	40%		
	Final examination						
		Oral exami		30	30%		
	Total					100%	
Web sources	http://st	us-202:	L.pdf				
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic	c engine	eering Doboj	

					ν τ τ				100
		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering							Standing Quart
			· · · ·	Study progra			15	- 4	
• • 82•				Profile: Railw					
275 45m 10	/		I cycle			IV year of st	udy		AOEOJ
Course title			-	RING ECONO	MIC	S IN RAILWAY	•	D TRANS	SPORT
Department		Depart	ment for Trar	nsport Engine	ering	g – Faculty of ⁻	Traffic Engin	eering Do	oboj
	Code		Co			Sama	atar	-	CTS credits
L L	Lode		COL	urse status		Seme	ster	E	CTS credits
САФ11СЖС	0723468	85,0220	0	ptional 4		VII	1		5.00
Professor/s	F	PhD Živko E	RCEG, associa	ate professor					
Associate/s	F	PhD Živko E	RCEG, associa	ate professor					
	Weekly	y hours		Individua	l stu	dent hours (po	er semester)		udent workload coefficient So
L	Т	E	LE	L		TE	LE		So
2	-	2	0	2*15*1,5		2*15*1,5	0*15*1,5	5	1,5
			rs, per semes	ster)		Total student	•		,
2*1	L5 + 2*1	15 + 0*15 =				2*15*1,5 + 2		*15*1,5	=90 hours
						150 hours pe			
			-			-	ield of engin	eering eo	conomics with a
Course aims an		-	-	traffic and tra					
learning outcor	nes					t will be able t			
-		- to combine engineering knowledge with an understanding of the principles of economics in railway transport and transportation							
Prerequisites		No conditio			tatio	//1			
Teaching metho				mnutational	ever	cises, consulta	ations		
reaching metho									
		 The role of railways in economic development; Railway markets; 							
		 Economic characteristics of the railway; 							
		4. Pricing of railways;							
		5. Financial sustainability of the railway;							
		6. Creating a commercial railway structure;							
		7. Commercial management;							
Course content	:	8. I colloquium;							
		9. Commercial strategy;							
		10. Basic techniques for economic evaluation of investment alternatives;							
			t value metho	-		c .			
		12. Economic analysis - Structural analysis of alternatives;							
			al analysis;						
			ution analysis	5;					
		15. Il collo	quiuill.	Textboo	ok (c)				
Autho	or/s		Name	of publicatio			Yea	r F	ages (from-to)
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Th				heoretical and	/		
Cowie, J.				ctive. Routled			2009	9	
		[· 7	,	Additional r					
Autho	or/s							r F	ages (from-to)
Blank, L., Targui									
			Α	ssesment me	thoc	ls		Points	Percentage
	F	Preexamina	tion obligatio	ons					
Evoluation wit				The stud	dent'	's activity duri	ng lectures	10	10%
Evaluation crite	eria			Positiv	ely e	evaluated sem	inary work	20	20%
						C	olloquiums	2x20	40%
	F	inal exami	nation				-		1

	Oral examination	30	30%					
	Total	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

				ERSITY OF	FASTS				
						ffic Engineerin	ø	2	PAPAINA QARIS
				Study prog		<u> </u>	0	3	
82				Profile: Rai					
5 mm 10 10 10		I cycle IV year of study							40E0J
Course title			ANALYSIS OF EMERGENCY EVENTS ON THE RAILWAY						
Department		Departme	ent for Trar	nsport Engi	neerin	g – Faculty of T	raffic Engin	eering Do	boj
	a d a		6			Como	- 1	F	
L.	ode		Col	urse status		Semes	ster	EC	CTS credits
САФ11СЖ07234785,0220			0	ptional 5		VII	I		5.00
Professor/s		D Marko VA			or				
Associate/s	Sar	nja SIMIĆ, se	enior assist	tant					
V	Veekly h	ours		Individu	ual stu	dent hours (pe	er semester)		dent workload coefficient So
L	TE		LE	L		TE	LE		So
2	2		0	2*15*1	,5	2*15*1,5	0*15*1,5=	:0	1,5
Total teach				ster)		Total student	workload (h	ours, per	semester)
2*	*15 + 2*1	15 + 0*15 =	60 h			2*15*1,5 +	2*15*1,5 +	0*15*1,5	5 = 90 h
						nours per seme			
		•				related to rail	•		
				-		l technical mea			
_		-	-			planning, draf	-		
Course aims and		development, etc. and training students to develop expertise in the field of railway safety.							
learning outcom		During the lectures and exercises, students will be introduced to mathematical and statistical							
		models applied in research related to railway safety, preparation of temporal and spatial analysis of emergencies, analysis of emergencies at level crossings and the impact of railways							
		the enviror	-	analysis of	emerg	encies at level	crossings a	ia the im	Dact of railways
Prerequisites	No		innenit.						
Teaching metho	-	-	tory and n	umerical ex	ercises	s, consultations	s		
						, consultation.			
		 Measurement in traffic safety; Assessment of railway traffic safety; 							
		3. The influence of the human factor.							
	4.	4. Comparison of railway traffic safety levels;							
	5.	5. Mathematical-statistical models in research of safety characteristics of railway railway							
		system;							
		. Temporal-spatial analysis of extraordinary events;							
Course content						operation of	stations;		
	8.			om collisio	n theoi	ry;			
		 I colloquium; Safety at road-rail crossings; 							
		-		-	oxtraor	dinary events;			
		2. Emergend		-		and y events,			
		3. Benchmai	-		';				
			-			lway safety;			
		5. II colloqui				-			
					ook (s)				
Author			Name	of publicat	-	ublisher	Yea	r Pa	ages (from-to)
Markovi	ć M.			Railway					
				Addition					
Author	r/s			Name of publication, editor ions, instructions and valid laws and other			Yea	r Pa	ages (from-to)
		-					ner		
		(lway traffic			Dersenters
Evaluation criter	ria pro	ovam oblig		ssesment r	nethod	15		Points	Percentage
	pre	e-exam oblig	sations						

	attendance to lectures and exercises	10	10%						
	positively evaluated project assignment (seminar paper)	20	20%						
	colloquia (tests) 2x20								
	final exam								
	final exam (oral / written)	30	30%						
	TOTAL	100	100%						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2022	<u>L.pdf</u>						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj						

THE TOP OF		UNIV	ERSITY OF EAS	ST SARAJEVC)		2005	
		Faculty of Transport and Traffic Engineering					Softakaine waring	
D YNC		Study program: Traffic						
		Profile: Railway traffic					AOEOJ	
Course title		l cycle	TESTING	,	of study /S AND VEHIC	1 5 6		
Department	Dei	partment for Tra					ng Dohoi	
-					-	Billeeni		
Со	de	Co	urse status	S	emester		ECTS credits	
САФ11СЖ07			ptional 5		VIII		5.00	
Professor/s		rko VASILJEVIĆ, f						
Associate/s	Sanja Si	MIĆ, senior assis	tant				Student workload	
w	eekly hours		Individual	student hou	rs (per semest	ter)	coefficient So	
L	TE	LE	L	TE	LE		So	
2	2	0	2*15*1,5	2*15*1,			1,5	
		hours, per semes	ster)			•	s, per semester)	
2*	15 + 2*15 +				5*1,5 + 2*15*		*15*0 = 90	
		tal workload: W- ering this course			s per semeste	er		
		acquainted with			for the produ	iction o	f prototype rail	
	-	icles,	the norms and				i prototype i dii	
Course aims and		form static and o	lynamic tests o	of rail vehicle	s;			
learning outcome	s 3. calo	 calculate the braking mass and braking of the train; 						
	_	4. get acquainted with measuring cars and train for analysis of diagrams of performed						
		asuring runs;						
<u> </u>		uired knowledge	e applied in pra	ctice.				
Prerequisites	None	auditory and as	moutational a	vorsisos con	cultations			
Teaching method		, auditory and co I vehicle - divisio		xercises, con	suitations			
		tting rail vehicles						
		-						
		gulations and no			nto use;			
		tic-dynamic test						
		-	-	-	ailway vehicle	etesting	g. Braking power test.	
Course content		king mass and br Iway and its elen			accoccmont	ofvobic	los and tracks:	
course content		sessment of the t						
		easuring circuit –				., saicty		
		11. Operation and use of measuring circuits for track evaluation – description;						
		fectoscopy, cont		ion of rails, a	ixles and whee	els on r	ailways;	
		ise and vibration	-					
		nerating noise ar					al a fato in a fluore	
		imates of noise a sport (II colloqu		evels from th	e aspect of fat	ligue ar	nd safety in railway	
		isport (ii conoqu	Textbool	(5)				
Author/	s	Name	of publication		Y	'ear	Pages (from-to)	
Jovanović R., Va			ailways and ve		vof		1-90	
		Transportatio	Transportation and Traffic Engineering Doboj				1-90	
			Additional re	_				
Author/	S	Nam	ne of publication	on, editor	Y	'ear	Pages (from-to)	
Evaluation criteri	a	A	ssesment met	hods		Po	ints Percentage	

	Preexamination obligations						
	attendance to lectures and exercises	10	10%				
	positively graded seminar paper	10	10%				
	test / colloquium	2x25	50%				
	Final examination						
	Oral examination	30	30%				
	Total	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

LOGISTICS

	Y WETOWIG		UNIVERSITY OF EAST SARAJEVO						2005	
ß			Faculty of Transport and Traffic Engineer	ing				Josea	A RATE	À
See.			Study program: Traffic Profile: Logistics						AOEOJ	9
Number		Code Course title Soundition ality					s	ours emes	ter	ECTS
			III year of study			L	TE	LE		
28.	САФ11СЛ	V	3	2	0	6.00				
29.		07107256,0230	Basic forms of transport I Shipping and agency business	M		V	2	3	0	6.00
30.		07103657,0330	Intermodal transport	M		V	3	3	0	7.00
31.		07103155,0220	Ecology in traffic	M		V	2	2	0	5.00
32.		07103256,0320	Mechanization and tehnology of transhipment	М		v	3	2	0	6.00
33.	САФ11СЛ	07107365,0320	Basic types of transport II	М	28	VI	3	2	0	5.00
34.	САФ11СЛ	07107466,0311	Logistics centers	М	30	VI	3	1	1	6.00
35.	САФ11СЛ	07107565,0320	Warehouse system	М		VI	3	2	0	5.00
		07203765,0220	1. Vertical transport			VI	-	_		
36.		07234865,0220	2. Transport of dangerous goods	O2		VI	2	2	0	5.00
		07234967,0330	1. Logistics marketing			VI				
37.		07203867,0330	2. Management in Traffic	O3		VI	3	3	0	7.00
38.	САФ11СЛ	07132962,0000	Professional practice	М		VI	0	0	0	2.00
					Т	OTAL:	27	22	1	60
			IV year of study				-		-	<u> </u>
39.	САФ11СЛ	07107776,0320	Logistics controlling	М		VII	3	2	0	6.00
40.	САФ11СЛ	07107875,0220	Return logistics	М		VII	2	2	0	5.00
41.	САФ11СЛ	07107976,0320	Special areas of logistic	М		VII	3	2	0	6.00
42.	САФ11СЛ	07108076,0320	Industrial logistics	М	35	VII	3	2	0	6.00
43.	САФ11СЛ	07108177,0330	City logistics	М	34	VII	3	3	0	7.00
44.	САФ11СЛ	07104585,0220	Organization of traffic companies	М		VIII	2	2	0	5.00
45.	САФ11СЛ	07104685,0220	Quality management	М		VIII	2	2	0	5.00
46.	САФ11СЛ	07108287,0330	Information management in logistics	М		VIII	3	3	0	7.00
47.	САФ11СЛ	07208385,0220	1. Internet marketing	O4		VIII	2	2	0	5.00
77.	САФ11СЛ	07235085,0220	2. Logistics providers	04		VIII			0	5.00
48.				O 5		VIII	2	1	1	4.00
		07208684,0211	2. Design in information system							
49.	САФ11СЛ	07105284,0030	Graduate thesis	Μ		VIII	0	3	0	4.00
					Т	OTAL:	25	24	1	60.0

- L lectures
 TE theoretical exercises
 LE laboratory exercises

					- FACT						
		1				SARAJEVO affic Engineerin	σ		2005		
				Study prog			0	1 🦉	s () (1)		
82	/			Profile:							
915 4.9ca 10 55			l cycle			III year of st	udv		40E01		
Course title			-1	F	BASIC F	ORMS OF TRA					
Department		Departme	ent for Trar			g – Faculty of 1		eering Do	boi		
	-	- opartine		·		Ī					
Coo	de		C οι	irse status	5	Seme	ster	E	CTS credits		
САФ11СЛ071	.07156,	,0320	m	andatory		V			6.00		
Professor/s	PhD) Ratko Dju	ricic, full p	rofessor							
Associates/s	Svet	tko Milutin	ovic, assist	ant							
W	eekly h	ours		Individ	lual stu	ident hours (pe	er semester		udent workload coefficient S _o		
L	TE		LE	L		TE	LE		So		
3	2		0	3*15*1,4	1=63	2*15*1,4=42	0*15*1,4	4	1,4		
Total teacher	worklo	oad (hours	, per seme	ster)		Total student	workload (hours, per	r semester)		
3*15	+ 2*15	+ 0*15 = V				3*15*1,4 +			= T hours		
						5 = 180 hours p	er semeste	r			
Course aims and		iain knowle									
learning		cquire kno	-			-					
outcomes		3. Calculate the economic profitability of the use of each type and select the most favorable									
Due no multatta a		cquire kno		out transp	ort sub	osystems					
Prerequisites Teaching	INO S	No special conditions									
Teaching methods		tures, theo									
		listorical ov		-	-						
		2. The role and significant traffic in modern society 3. Freight transport market									
		3. Freight transport market 4. Market access and activity access									
		 Market access and activity access Division and basic modes of transport 									
		asic regula		les of tran	sport						
		colloquium									
Course content		haracterist		es of trans	sport						
Searce content		ransport su									
		Types and	-	stics of tra	nsport	services					
					•	d processes					
	12.	Analysis of	work and	benchmar	king						
		Transport s		s							
		Quality of									
	15.	II colloquiu	IM								
	,				tbook (
Author/				e of public		-	Yea		ages (from-to)		
Risto Peri	ISIC		Savren			transporta dings	199	9.	1-317		
Author/	/c		Name	Additio		-	Voo	ur D	ages (from-to)		
R. Božičković, M.A											
	Janovi		-	ssesment			2011	Points	Percentage		
	Pree	examinatio						1 0/11(3	reneentage		
Obligations,					ndance	e during lecture	es/exercise	10	10%		
evaluation							ninar work	20	20%		
criteria							olloquiums	70	70%		
	Fina	al examinat	ion								
				written	examii	nation/oral exa	mionation	70	70%		
						,					

	Overall	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

A MET CHILDE		-	ERSITY OF EA			2003					
		-	Fransport and Study program	Traffic Engineering n: Traffic		and the second sec					
82°			Profile: Log								
43rs 40		l cycle		III year of stud	-	AVBV2					
Course title				ING AND AGENCY B							
Department	Dep	artment for Trar	nsport Enginee	ffic Enginee	ring Doboj						
Coc			irse status	Semeste	er	ECTS credits					
САФ11СЛ071			andatory	V		6.00					
Professor/s Associates/s		odan SUBOTIĆ, a zickovic, senior a	-	essor							
	eekly hours			student hours (per	semester)	Student workload coefficient S _o					
L	TE	LE	L	TE	LE	S _o					
2	3	0	42	63	0	1,4					
	•	hours, per seme				urs, per semester)					
2*15		15 = 75 hours tal workload: W:		2*15*1,4 + 3*15*1,4 105 = 180 hours per		= 42+63+0=105 hours					
				varding and agency							
Course aims and	2 prepare the structure and elements of the supply of jobs in the freight forwarding and										
learning	agency activities										
outcomes	-	orms activities re									
	-	icipates in custo icipates in insura		ition and implement	ation of cust	coms procedures,					
Prerequisites		al conditions									
Teaching		, theoretical exe	rcises consult	ation							
methods											
			-	ment of freight forw of freight forward	-	transport agents ort agents and logistics					
		viders		5	<u></u>	0 0					
				lern logistics provide	-	tics partnerships					
				s of logistics services eight forwarding, age		istics operations					
		uments in intern			ency and log						
		loquium									
					010. Institu	tional frameworks for					
		orming freight fo	-		is of goods	Collective organization					
Course content	-	isport	mational imp	ort and export nov	is of goods.	Collective organization					
		•	sit flows of g	oods - application of	of TIR carne	t. Organization flows of					
	tem	10. Organization of transit flows of goods - application of TIR carnet. Organization flows of temporary import of goods, ATA carnet, fair affairs in freight forwarding									
		11. Customs brokerage and implementation of customs procedures, customs valuation of									
	g000		a transport In	tornational naumon							
				ternational paymen logies and electroni		n freight forwarding and					
				-		lures in European Union					
	14. New	strategies and	technologies	for performing freig	ht forwardi	ng, agency and logistics					
		ness									
	15. II CO	lloquium	Textbo	ok (s)							
Author/	s	Name	e of publicatio		Year	Pages (from-to)					
				vanje, autorizovana							
Kalibarda,	IVI.	skripta,	Saobraćajni fa	kultet Beograd	2008.	1-207					

	Additional readings									
Author/s		Name of publication, publisher	r Pag	ges (from-to)						
Zelenika, R		Temelji logističke špedicije, Sveučilište u Rijeci	2005	5.	1-672					
		Assesment methods	Points	Percentage						
	Preexam	ination obligations								
Obligations,		attendance during lectures/ex	10	10%						
evaluation		seminar	20	20%						
criteria		colloqu	2x35	30%						
	Final exa	mination								
	Overall			100	100%					
Web sources	http://sf.	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	t and T	raffic engir	eering Doboj					

				ERSITY OF EAS	Traffic Engineering	,		2005						
			-											
				Study program Profile: Log										
10 10 10 10 10 10 10 10 10 10 10 10 10 1			l cycle		III year of stu	ldv	5	AOEOJ						
Course title				IN ⁻	ERMODAL TRANS	-								
Department		Departm	ent for Trar		ring – Faculty of T		eering [Doboi						
		1			Ī									
	Code		ζοι	urse status	Semes	ter		ECTS credits						
САФ11СЛО				andatory	V			7.00						
Professor/s				ull professor										
Associates/s	Ph	D Snežana	TADIC, asso	ciate professo	r			.						
	14/	h		to alterial com	1 - 1 - 1 1 (-		>	Student						
	Weekly	nours		Individua	l student hours (p	ber semest	er)	workload coefficient So						
	L TE LE L TE LE				F	S _o								
_				4 3*15*1,33=5			5*1,33							
3	3		0	85	5		=0	1,33						
Total teac	her work	load (hour	s, per seme	ster)	Total student	workload (ł	nours, p	er semester)						
3*:	15 + 3*15	5 + 0*15 =				₀ + 3*15*S₀		*S _o = T						
					120 = 210 hours pe									
1. Recognizes and defines the role and place of intermodal transport for different														
Course aims a	nd	• •	nts and user	-				unter en en el						
learning	2.				odal system and d			-						
outcomes	2		-		he system in a par ransport chain tec		rmoual	transport chain;						
					e intermodal trans	-								
Prerequisites		special co	-											
Teaching		•												
methods	lec	tures, tuto	rials, case s	tudies, debate	classes									
					nitation of basic co	oncepts in i	ntermo	dal transport.						
			-	t (IT) system.										
					nodular chain aligi									
		•			•		nits in t	he transport chain.						
			•		ation and codification									
					operators, organi		telemat	tics systems in IT						
		olloquium		initiastracture,			terema							
Course conten		-		system techno	ogies.									
			r terminals.		-									
				ansport techno	•									
				rail transport t	-									
				bad transport 1	-									
					river-sea transport		hicle.							
					ort chain optimizat		oliov ==	d promotion of IT						
	15	. European (Colloquit		. Legislation, I	international asso	ciacions, p	oncy an	d promotion of IT						
		Conoqui	~···· ~ J·	Textboo	k (s)									
Auth	or/s		Name	e of publicatio		Ye	ear	Pages (from-to)						
				-	-		16.							
Zečević S., Tadić S. Intermodalni transport, autorizovana skripta 2016. Additional readings														
				Additional	eadings									
Auth	or/s		Name			Ye	ear	Pages (from-to)						
Auth				e of publicatio			ear 005.	Pages (from-to)						

Konings R.		Operations, Design and Policy, Edward Elgar Pub.								
Kim K.H., Günthe	er H.O.	Container Terminals and Cargo Systems: Design,								
		Operations Management, and Logistics Control	20	07.						
		Issues, Springer								
		Assesment methods		Points	5	Percentage				
	Preexamination obligations									
		attendance during lectures/exe	ercise	5		5%				
		activity during cl	asses	5		5%				
Obligations			tests	20		20%				
Obligations, evaluation		colloq	20		20%					
criteria		Colloq	20		20%					
criteria	Students who pass the colloquia are released									
	written part, final exam									
	Final examination									
		Oral examin	ation	30		30%				
	Overall		100)	100%					
Web sources	http://sf.	ues.rs.ba/eng/wp-content/uploads/2022/05/Englesk	ki-NPP-	I-ciklus-	2021	L.pdf				
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	t and T	raffic ei	ngine	eering Doboj				

ONNOTON DO			UNIV	ERSITY OF E	AST	SARAJEVO			12	005	
-18-			Faculty of Transport and Traffic Engineering						Costan	Alter OARA	
				Study progra Profile: Lo							
No. 10	III -		I cycle I year of study							40E0J	
Course title					EC	OLOGY IN TRA					
Department		Depar	epartment of Road Traffic and Transport- Faculty of Transport and Traffic Engineering								
(Code		Co	urse status		Seme	ster		ECTS	credits	
САФ11СЛО				nandatory		V			[5.00	
Professor/s			n MILOTIĆ, asso								
Associate/s	Ph	D Milan	n MILOTIĆ, asso	ociate profess	or				Churda	م الاست	
	Weekly	hours			l stu	ident hours (po	-)		ent workload efficient So	
L	TE		LE	L	_		LE			So	
2	2		0	2*15*1,5=4	45	2*15*1,5=4 5	2*15*1,4=	0		1,5	
		•	ours, per semes	ster)		Total student			-	-	
2*1	15 + 2*15		= 60 hours			2*15*1,5 + 2		`15 *:	1,5 = 90) hours	
						= 150 hours per	r semester				
			ing this course the problems								
Course aims an		•	•			al regulations r	elated to en	viro	nmenta	I protection:	
learning outcor			luainted with t		-	-		11101	interito		
0			t acquainted with the tendencies of future development of motor vehicle propulsion as								
		well as	to apply the a	cquired know	ledg	ge in practice.					
Prerequisites	-	ne									
Teaching metho			auditory exerci		tion	S					
		Biosphere and ecology Problems of environmental pollution									
		 Problems of environmental pollution Normative and legal regulations 									
		 Normative and legal regulations Maximum allowable concentrations 									
	5	-	Air pollution and protection								
	6		Normative and legal regulations on air quality								
			I colloquium								
Course content		-	Flue gas purification								
			al effects of po c and environr		~						
				•							
			 Impact of traffic on the environment Normative and legal regulations for exhaust gas emissions 								
			-	-		omposition in r		es			
	1	4. Tende	encies of futur	e developmei	nt of	f motor vehicle	propulsion				
	1	5. II collo	oquium								
		T		Textboo		-			-	10	
Autho				of publicatio			Yea	r	Page	es (from-to)	
Đurić, S., Star Milotić	-	<i>`.,</i>	Ekologija u s	aobracaju, Sa Doboj	aobi	raćajni fakultet	2010	5			
WIIOUU	.,			Additional	read	lings					
Autho	or/s		Name of publication, editor				Yea	r	Page	es (from-to)	
			Δ	ssesment me	etho	ds		Poi	nts	Percentage	
	Pr	e-exam	obligations								
Evaluation crite	eria		J	atte	ndaı	nce at lectures	/ exercises		10	10%	
							colloquium	2	2x25	50%	
							·				

	term paper	10	10%					
	Final exam							
	Oral exam	30	30%					
	TOTAL	100	100%					
Web sources								
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

y werow	<u> </u>		UNIV	ERSITY OF	EAST S	ARAJEVO		2003		
			-			ffic Engineerin	g	SUSANAINA BALLA		
- YNC				Study prog	ram: T	raffic				
)			Profile:	Logisti			AOEOJ		
14 (Sta 40 10			I cycle			III year of st				
Course title							Y OF TRANSHI			
Department		Department for Transport Engineering – Faculty of Traffic Engine						ring Doboj		
	Code			urse status	i	Seme	ster	ECTS credits		
САФ11СЛО				andatory		V		6.00		
Professor/s		D Ratko ĐU								
Associate/s	Sai	nja SIMIĆ, s	enior assis							
	Weekly hours Individual student hours (per semester					-	Student workload coefficient S _o			
L	TE		LE	L		TE	LE	So		
3	2		0	3*15*1,4		2*15*1,4=42	0*15*1,4=0	1,4		
		oad (hours,		ster)				rs, per semester) *1.4 – 105 bours		
3*:	15 + 2*15	+ 0*15 =7		T-11 - 75	± 10F	3*15*1,4 + 2* = 180 hours pe		*1,4 = 105 hours		
	By	mastering					i semester			
		-					and significan	ce of the reprocessing		
	-			-	-	•	-	fect links of starting		
								chronized production.		
	2.	2. They will be able to analyze the parameters that influence the overload, learn the								
Course aims an	Ч	division of mechanization assets as well as their good and bad traits								
learning outcor	- 3	3. Continuous and cyclic actuators will be able to use methods for calculating capacities and								
		required power.								
	4.	4. It will be able to demonstrate the establishment of a transhipment system with transhipment effects								
	E	5. They manage transhipment processes, and that, after gaining practical experience in								
		5. They manage transhipment processes, and that, after gaining practical experience in logistics centers, they manage individual sectors or organizations that are responsible for								
		-	nent proce		maivia		organizations t			
Prerequisites	No	ne.								
Teaching metho	ods Leo	ctures, audi	tory exerci	ises, consu	ltation.					
	1.	Introduct	ion to the	subject. Th	e basic	concepts of m	echanization a	ind technology		
		transhipr	nent. The r	ole of the	process	is changing				
						e transhipmen	t process			
		CONTINU			•					
		A cluster				aper.				
		Elevators				eumatic Conv	evors (Prenara	tion for I Colloquium)		
		Adders. G	•	•				tion for reolloquium)		
Course content					-		ort and handlir	ng vehicles		
			-	-		ility, applicatio		-		
	1	0. Forklift -	Transhipm	ent cycle. [Determ	ining the powe	er to move the	vehicle		
		-		-			lling. Regal lifts			
								power determination		
	1			n vehicles.	Designi	ing of the tran	shipment proc	ess (Preparation for		
	1	the II coll								
		4. II colloqu 5. (Analysis		lloquium)	The clo	sing word and	the signature of	of the index		
					ook (s)		and Signature (
Autho	or/s		Name	of publica			Year	Pages (from-to)		
				-		pt,Faculty of				
Đuriči	c R.					ering, Doboj	2006			
			•		-					

Sretenović M		Mechanization of transhipment,transhipment machine and dessigne of transhipment processes, Belgrade	1996	5						
Milorad V.		Internal transportation, Warehousing and Transhipment,Faculty of Transport and Traffic engineering, Belgrade	200:	2001						
Additional readings										
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)				
		Assesment methods	Poi	nts	Percentage					
	Pre-exa	n obligation								
		Presence during le		10	10%					
		Activity during le		5	5%					
Evaluation criteria		Completed colloquium		35	35%					
		Completed colloquiums-		50	50%					
	Final exa	Final exam								
		Final exam(tasks-t								
IN TOTA		L	1	L00	100%					
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-cikl	us-202	1.pdf				
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffio	c engin	eering Doboj				

			LINUN						
		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering						1	2005 10 10111 04 10
-18-				· · ·			,	Case -	
a 82°	i)			Study progr					
		Profile: Logistics I cycle III year of study							AOE01
Course title			TLYCIE	B/		PES OF TRANS	-		
		Donartmo	nt for Tra					ooring Dol	
Department	Departine		isport Engli	leening	g – Faculty of Ti	anic Engin	eening Doi	00]	
C		Cou	urse status		Semes	ter	EC	TS credits	
САФ11СЛ07	0320	m	andatory		VI			5.00	
Professor/s		D Zdravko N			essor	VI			5.00
Associate/s		D Zdravko N D Zdravko N							
			101110, 035					Stu	dent workload
1	Neekly h	ours		Individual student hours (per semester)					pefficient S _o
L	TE		LE	L		TE	LE		So
3	2		0	67.5		45	0		1.5
Total teach	er worklo	oad (hours.	per semes		I	Total student v	vorkload (h	ours, per s	
		15 + 0*15 =		,			+ 2*15*1.5 +		
	45 + 30 -	+ 0 = 75 hou	irs			67.5 +	- 45 + 0 = 1	12.5 hours	
		Total workl	oad: W+T=	Uopt= 75 + 2	112.5 =	= 187.5 hours p	er semeste	r	
				-		a student will b			
		-	-	-		by categories an		-	
Course aims and	2.	2. define the criteria for the selection of optimal technological solutions for the transport of							
learning outcom		goods, 3. define necessary conditions and documents required for carrying out transport,							
	3.		-					-	
		-	-			transport servio			
						ne safety of veh	icles and ca	argo in tra	nsport
Prerequisites		sic types of	-	-					
Teaching metho		tures, theo			nar pa	per			
		 Vehicles: classification Exploitation and technical characteristics of vehicles 							
		 Exploitation and technical characteristics of venicles Necessary conditions and documents for carrying out transport 							
		4. Vehicle marking							
		5. Vehicle and cargo safety							
		6. Combined transport							
		7. Colloquium I and test							
Course content		8. Control of vehicles in traffic							
	9.	9. Process of service realization							
		10. Realization of specific types of services, procedures and basic documents							
		11. International transport of goods							
		12. Transport of live animals and easily perishable foods							
		3. Work resu							
		1. Transport			t their	calculation			
	15	5. Colloquiu	m II and te						
0th			N	Textbo			No. a		
Author				of publicat			Yea		ges (from-to)
1. Nunić, Z., Miči	с, в.		Ush	ovni vidovi t Additiona			2015		1-229
Author/s Nam				e of publica		-	Yea	r Pa	ges (from-to)
			-		cultur				
Perišić, P.		Gavie				•	199		1-375
				ssessment r	netho	ds		Points	Percentage
Evaluation criter	ria Pre	e-exam oblig	gations					40	400/
						ce to lectures /		10	10%
		e.g. seminar paper/ project/ essay positively assessed						20	20%

	e.g. case study – group work	/	/					
	e.g. test / colloquium	70	70%					
	e.g. laboratory work / laboratory exercises	/	/					
	/	/						
	Final exam							
	e.g. final exam (oral /written)	70	70%					
	TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

					EACT					
		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering						2005		
		Study program: Traffic								
82				Profile:	Logist	ics				
15 dista 10 100			I cycle			III year of stu	udy		AOPO1	
Course title					LC	DGISTICS CENT	ERS			
Department	D	epartme	ent for Trar	nsport Eng	ineerin	g – Faculty of 1	raffic Engin	eerir	ng Doboj	
Cod	e		Cou	irse status	5	Seme	ster		ECTS credits	
САФ11СЛ071	,			andatory		VI			6.00	
Professor/s			SILJEVIĆ, f	•	or					
Associates/s	Sanja S	SIMIC, s	enior assist	ant					Chudout wouldood	
We	ekly hou	rs		Individ	lual stu	ident hours (pe	er semester))	Student workload coefficient S _o	
L	TE		LE	L		TE	LE		So	
3	1		1	3*15*1,4	=63	1*15*1,4=21	1*15*1,4=2		1,4	
Total teacher	workload 5 + 1*15 ·		-	ster)			-		s, per semester)	
3*1				+T=1 loct - 7	 5 + 104	2*15*1,4+ 5 = 180 hours p			5*1,4 = 105 h	
						es of logistics f			s centers:	
Course aims and		-				ervices and sub	-	-		
learning	-	-			-	ace of differen	-	-		
outcomes	4. co	4. correctly approach the sizing and technological spatial design of the logistics center.								
Prerequisites	Interm	odal tra	ansport							
Teaching methods	lecture	s, audit	ory exercis	es, labora	tory ex	ercises, consul	tations			
			and RTC loc							
		2. Types of services within logistics centers								
		 Logistics center planning and design methodology Characteristics of macro and micro distribution flows 								
		 5. Technical and technological characteristics of transport flows 								
		 Modeling and quantification of goods and transport flows 								
		7. I colloquium								
6		8. Technology of goods terminals								
Course content	9. Siz	9. Sizing the capacity of the terminal subsystem								
		10. Modeling the layout plan								
		11. Freight terminal design methodology								
		12. RTC design methodology								
		13. Economic assessment of the justification of the construction of the terminal 14. Model of interactive optimization of logistics chains in order to improve the business of the								
		14. Model of interactive optimization of logistics chains in order to improve the business of the compan								
		olloqui	um							
				Tex	tbook (s)				
Author/	s			e of public			Yea	r	Pages (from-to)	
Slobodan Ze	čević					nsportni centri,	2006	6		
			Saol	oraćajni fa				-		
Author			Nom	Additional readings ne of publication, publisher			Var	r	Pages (from to)	
Author/	>			-		center locatior	Yea		Pages (from-to)	
Ž. Stević, S. Vesk	ović. M				-	ity of Belgrade	_			
Vasiljević, G.						ffic Engineering		5	86-91	
	•				2015					
M. Vasiljević, Ž. Stević, I. Combined Fuzzy AHP and TOPSIS method for 2016										
Condined Fuzzy AHP and TOPSIS method for 2016 2016								5		

Ž. Stević		Significance logistics centers, their role and task with review situation in the Republic of Srpska" International May Conference on Strategic Management – IMKSM 2015	5	80-90				
		Assesment methods		Points	Percentage			
	Preexamination obligations							
		attendance during le	ctures	5	5%			
Obligations,		attendance during ex	5	5%				
evaluation		Seminar	10	10%				
criteria		colloq	2x25	50%				
	Final examination							
		Oral examir	nation	100	100%			
	Overall			100	100%			
Web sources	http://sf.	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	<u>ki-NPP-</u>	<u>I-ciklus-202</u>	21.pdf			
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	rt and T	raffic engir	neering Doboj			

SHICC BZ		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Logistics					200 States and a state of the s		
4.503 40		I cycle			III year of stu	udy		A REAL PROPERTY AND A REAL	
Course title					AREHOUSE SYS				
Department	Departr	nent for Trar	nsport Engi	neerin	g – Faculty of 1	Traffic Engine	ering Dobo	oj	
Code		Cou	urse status		Seme	ster	ECT	'S credits	
САФ11СЛ0710			andatory		VI			6.00	
Professor/s	PhD Željko S								
Associates/s Wee	PhD Željko S kly hours	IEVIC, assist			dent hours (pe	er semester)		ent workload efficient S₀	
L	TE	LE	L		TE	LE		So	
3	2	0	5 3*15*1,4	=63	2*15*1,4=42	0*15*1,4=	0	1,4	
Total teacher w					Total student			,	
	+ 2*15 + 0*15	-	,			2*15*1,4+(
			+T=U _{opt} = 75	5 + <u>10</u> 5	5 = 120 hours p	,	,		
Course aims and learning outcomes Prerequisites	 determine: the place, role and function of the warehouse in the logistics system; recognizes the importance of the location of the warehouse; recognizes different types of inventory and apply models for their optimization; to recognize the basic characteristics and legality related to processes that are being implemented in warehouses. Intermodal transport 							ion;	
Teaching									
methods	lectures, auc	itory exercis	ses, laborat	ory ex	ercises, consul	tations			
Course content	 The place and role of the warehouse in characteristic logistics processes Warehouse systems Identification and analysis of the basic subsystems of the warehouse and processes in them Analysis of warehouse systems performance Inventories warehouse of piece load I colloquium Warehouse of scattered load Warehouse of liquid load Dimensioning the storage system elements Information system in warehouse systems Safety in storage systems Material handling and inventory in production Warehouse location 							ocesses in	
				book (-				
Author/s			e of publica	-		Year	Pag	es (from-to)	
Ilija Ćosić, Željko Ste	evic	Skladišni sistemi, skripta Saobraćajni fakultet Doboj 2016							
			Addition						
Author/s				publication, publisher Year				es (from-to)	
Ranko Božičković i d	dr. <i>Efj</i> St	fective Produ	estnik-Journal of Mechanical					642-652	
Ranko Božičković				nulatio	on in optimal	2007	,	423-426	

Ž. Stević		program planning of individual and lean production, 11th International Research/Expert Conference "Trends in the Development of machinery and Associated technology" TMT 2007, Hammamet, Tunisia, Izbor i merenje ključnih indikatora performansi u skladišnom sistemu" XIX Internacionalni naučni skup SM 2015 Strategijski menadžment i sistemi podrške odlučivanju u strategijskom menadžmentu, Subotica-Palić	201	5	931-938				
		Assesment methods		Points	Percentage				
	Preexam	Preexamination obligations							
Obligations,		attendance during led	ctures	5	5%				
evaluation		attendance during ex	ercise	5	5%				
criteria		colloqu	uiums	2x30	60%				
	Final exa	mination			-				
		written examination (2 colloqu	iums)	60	60%				
	oral examination 30 30%								
	Overall	Overall 100 100%							
Web sources	http://sf	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-ciklus-202	1.pdf				
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	rt and T	raffic engin	eering Doboj				

SHIC	UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Logistics						and the second se	A DO S		
			l cycle			III year of st	udy		Добој	
Course title					VER	TICAL TRANSP	-			
Department	C	Departme	nt for Trar	nsport Eng	ineerin	g – Faculty of 1	Fraffic Engin	eering Do	boj	
Cod	le		Cou	ırse status	;	Seme	ster	EC	TS credits	
САФ11СЛ072			ptional 2		VI			5.00		
Professor/s		PhD Marko VASILIEVIĆ, full professor								
Associates/s	Svetk	o Milutin	ovic, assist	ant						
We	eekly ho	urs		Individ	ual stu	dent hours (pe	er semester)		lent workload Defficient So	
L	TE		LE	L		TE	LE		So	
2	2		0	2*15*1,5		2*15*1,5=45	0*15*1,5=		1,5	
Total teacher 2*1	5 + 2*15	5 + 0*15 =	60 h	·			2*15*1,5+0			
						= 150 hours pe				
Course aims and learning outcomes	2. cr 3. aj	 recognizes and defines the role and place of vertical transport in transport engineering; creates solutions for different conditions of application of vertical transport; application of certain optimization methods in vertical transport; select and improve performance in certain forms of vertical transport. 								
Prerequisites	No sp	No special conditions								
Teaching methods	Lectu	Lectures, theoretical exercises, consultation								
Course content	2. H 3. A 4. Ki 5. C 6. D 7. I C 8. G 9. G 10. Q 11. H 12. E 13. C	 Goals and tasks of vertical transport Historical development and types of vertical transport Application and importance of vertical transport Kinematic schemes of elevators. Requirements and characteristics of the lifting mechanism Cab lifting mechanisms. Construction and calculation of lifting mechanism and brakes Driving window. Machine room. Cabin - construction and basics of calculation I colloquium Guide and balance of the elevator car - counterweights and guides Grasping devices. Supports and bumpers Quality, reliability, testing and attestation of elevators Hydraulic lifts Escalators. Ski lifts Cable cars Basics of designing vertical transport systems in buildings 							and brakes	
Authory					book (s		No.		(f	
Author/ Asib Alihoo		Mar		e of public	-	•	Yea boj 2014		ges (from-to)	
	1210	ver	ukaini traf	Addition		jni fakultet Do lings	2014	+		
Author/	s		Name	e of public		-	Yea	r Pa	ges (from-to)	
Addiory				transport,	-	aćajni fakultet	200			
			A	ssesment	-	ds		Points	Percentage	
Obligations,	Preex	aminatio	n obligatio							
evaluation					ndance	e during lecture	es/exercise	10	10%	
criteria						activity dur	-	5	5%	
						Ser	ninar work	15	15%	

	colloqiums	2x25					
	Final examination						
	Oral examination	20	20%				
	Overall	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

A HETCHICA				ERSITY OF			a.		2005	
			Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Logistics							
11 ding 10 diff			I cycle			III year of st	udy		AOEOJ	
Course title				TRAN	ISPORT	OF DANGERO	OUS GOODS			
Department		Departme	ent for Trar	nsport Engi	neerin	g – Faculty of 1	Traffic Engin	eering	g Doboj	
Co	de		Coι	urse status		Seme	ster		ECTS credits	
САФ11СЛ072	0220	0	ptional 2		VI			5.00		
Professor/s										
Associates/s W	eekly h	ours		Individ	ual stu	dent hours (pe	er semester)		Student workload coefficient So	
L	TE		LE	L		TE	LE		S _o	
2	2		0	45		45	0		1,5	
Total teacher W =		oad (hours) 2*15 + 0*2	-	ster)		Total student T = 2*15*1,		-	per semester)	
		Total wo	orkload: W	+T=U _{opt} = 60	0 +90 =	150 hours per	r semester		-	
Course aims and learning outcomes	2.	 Organizes the transport of dangerous goods according to the regulations in force in the transport of dangerous goods Classifies dangerous goods, ensures the safety of all participants in transport and monitors all additional requirements for the transport of dangerous goods and equipment 							nsport and	
Prerequisites	No s	No special condition								
Teaching methods	Lect	Lectures, theoretical exercises, consultation								
Course content	2. 4 3. 6 4. 5 5. 1 6. 7 7. 1 8. 1 9. 6 10.1 11. 12.7 13.7	 Regulations on the transport of dangerous goods Exemptions in the transport of dangerous goods Classification of hazardous substances Security obligations in the transport of dangerous goods Packaging and packaging of dangerous goods Tanks for transport of dangerous goods Tolloquium Marking and marking of vehicles with dangerous goods Organization of transport of dangerous goods Loading, unloading and handling of dangerous goods Tank vehicles with modern equipment for the transport of dangerous goods Additional requirements for the transport of dangerous goods by vail Additional requirements for the transport of dangerous goods 								
Author	/s		Name	e of publica	ook (s ation, r	-	Yea		Pages (from-to)	
Sremac S, Matijev			nsport of d	angerous g nces, Novi :	oods, I		2021			
				lectures ar		cises				
				Addition	al read	lings				
Author,	's		Name	e of publica	ation, p	publisher	Yea	r	Pages (from-to)	
Pamučar, D., Sremac, S., Stević, Ž., Ćirović, G., & Tomić, D.			New multi-criteria LNN WASPAS model for evaluating the work of advisors in the transport of hazardous goods. Neural Computing and Applications, 31(9), 5045-5068.2019)		
Tanackov, I., Jank	ović, Z.,	, Risk	distributio	on of dange	erous g	oods in logistic	cs 2018	3		

Sremac, S., Miličić,	M.,	subsystems. Journal of Loss Prevention in the						
Vasiljević, M., Mihaljev-		Process Industries, 54, 373-383.						
Martinov, J., & Škilj	aica, I.							
Tepić, G., Sremac, S	S.,	Accidents in facilities for storing hazardous						
Morača, S., Lalić, B.	,	materials. Operational Research in Engineering	2019	Ð				
Kostelac, M., & Sto	jković, V.	Sciences: Theory and Applications, 2(2), 24-39.						
		Assesment methods		Points	Percentage			
	Preexamination obligations							
		attendance during led	ctures	5	5%			
Obligations,		Attendance during ex	5	5%				
evaluation		Seminar	work	10	10%			
criteria		colloc	qiums	2x25	50%			
	Final examination							
		Oral examir	nation	30	30%			
	Overall			100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	t and T	raffic engin	eering Doboj			

		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic							LOOS ALAIDE OVAL
			Profile: Logistics I cycle III year of study						AOEOJ
Course title	l cycle		106	III year of st					
Department									
•									
Code			Cou	urse status	5	Seme	ster	ECT	rs credits
САФ11СЛО)7234967	,0330	0	ptional 3		VI			7.00
Professor/s			I TERZIĆ, ass						
Associate/s	Ph	D Svetlana	I TERZIĆ, ass	ociate pro	fessor				
	Weekly I	nours		Individ	lual stu	dent hours (p	er semester		lent workload Defficient So
L	TE		LE	L		TE	LE		So
3	3		0	X*15*S	So	Y*15*S₀	Z*15*S₀		
	Total teacher workload (hours, per semester)Total student workload (hours, per semester) $X^{*15} + Y^{*15} + Z^{*15} = W$ hours $X^{*15*}S_0 + Y^{*15*}S_0 + Z^{*15*}S_0 = T$ hours								
		Total	workload: V	V+T=U _{opt} =	+ =	hours per s	semester		
Course aims an	-								
learning outco	mes								
Prerequisites									
Teaching meth									
Course content				T	/ . /				
Autho			Namo	of publica	book (s)		Yea	r Do	and (from to)
Autho	51/5		Name		nion, p	ublisher	fea	r Pa	ges (from-to)
				Addition	al read	ings			
Autho	or/s		Nam	e of publi		-	Yea	r Pa	ges (from-to)
	•			•	,				
			Α	ssesment	metho	ds		Points	Percentage
	_					-			
Evaluation crite	eria								
Web sources									
Web sources	htt	p://sf.ues	.rs.ba/eng/v	vp-content	t/uploa	ds/2022/05/Ei	ngleski-NPP-	I-ciklus-20	21.pdf
Applicable from	n 11	/15/2022 ·	198 Session	n of the Co	ouncile,	Faculty of Tra	nsport and T	raffic engi	neering Doboj

		UNIN	ERSITY OF EAS	ST SARAJEVO		2003			
		-		Traffic Engineering		STATAINA OATIAL			
			Study program: Traffic						
13 45m 30 M		I cycle	Profile: Logistics I cycle III year of study						
Course title			MA	ANAGEMENT IN TRA	AFFIC				
Department									
Cod	e	Co	urse status	Semest	er	ECTS credits			
САФ11СЛ0720)3867,033() c	ptional 3	VI		7.00			
Professor/s		ko ERCEG, associ							
Associate/s	Siniša B	OŽIČKOVIĆ, senio	or assistant						
We	ekly hours	5	Individual	student hours (per	semester)	Student workload coefficient S _o			
L	TE	LE	L	TE	LE	So			
3	3	0	60	60	0	1,33			
		hours, per seme	ster)			rs, per semester)			
3*15 +		15 = 90 hours				5*1,33 = 120 hours			
				20 = 210 hours per	semester				
		ting this course s			the sector 1.1	a and definition f			
Course aims and			ientals of man	agement as well as	the principles	s and definitions of			
learning outcomes		inagement; ndamentals of pla	opping						
learning outcomes		adership and coo	-						
			gating traffic tasks						
Prerequisites		requisites							
Teaching methods		s, auditory exerc	ises, seminar w	vork, fieldwork					
<u> </u>		ndamentals of management, definition and principles							
		Organization of the company in the traffic							
		6. Fundamentals of planning							
	7. Co	7. Communication in the traffic							
		5							
Course content		11. Concept and importance of control							
		ocess and method				alammant of two			
						elopment of transport			
		14. The basic directions of the development of traffic management							
		 The role of managers in the management of transport companies. Skills of traffic managers 							
		managers 16. Delegating tasks in traffic							
		affic management							
		olloquium							
		-	Textbool	k (s)					
Author/s		Name	of publication	n, publisher	Year	Pages (from-to)			
Vešović	, V.		gement, Facult fic Engineering	y of Transport and , Belgrade	1996				
Duranaviá	D			Ity of Transport and	2007				
Đuranović,	ש. 	Tra	ffic Engineerin	g, Doboj,	2007				
			Additional re	eadings					
Author/s		Nan	ne of publication	on, editor	Year	Pages (from-to)			
Jovičić, M.		Management -	principles and	functions	2012				
		Δ	ssesment met	hods	P	oints Percentage			
Evaluation criteria	Pre-exa	m obligations							
		0							

	Presence of lectures / exercises	10	10%					
	Seminar work	10	10%					
	Colloquium							
	Final exam							
	Final exam (oral / written)	40	40%					
	TOTAL	100	100 %					
Web sources								
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj					

No X WCTOHOL		-	ERSITY OF				2003 califin @
-18-		-	Fransport a Study prog i		ffic Engineering	g	San Contain
82			Profile:				
1500 10		l cycle			IV year of stu	ydy	4060J
Course title					TICS CONTROL		
Department	Dep	artment for Trar	nsport Engi	neerin	g – Faculty of T I	raffic Enginee	ring Doboj
Code			urse status		Semes	ster	ECTS credits
САФ11СЛ0710	-		andatory		VII		6.00
Professor/s Associates/s		ko VASILJEVIĆ, f nic, senior assist	•	or			
	ekly hours			ual stu	dent hours (pe	er semester)	Student workload coefficient S₀
L	TE	LE	L		TE	LE	S _o
3	2	0	3*15*1,4	=63	2*15*1,4=42	0*15*1,4=0	1,4
		hours, per seme	ster)		Total student v	vorkload (hou	rs, per semester)
3*15)*15 = 75 h				2*15*1,4+0*1	5*1,4 = 105 h
		al workload: W+					
		es logistical peri toring;	iormance ir	i speci	nc tasks, perfo	rms their mea	surement and
Course aims and		0,	ance indicat	tors in	individual logis	tic processes a	and supply chains;
learning		ages of logistic c			-	•	
outcomes							th benchmark values
		defines the pote	ntial directi	ions of	action for the	improvement	of the logistics
	proce						
Prerequisites Teaching	No speci	al conditions					
methods	Lectures,	, theoretical exe	rcises, cons	ultatio	on		
		concepts and m	-	logisti	ics controlling		
	-	tics performanc		rform	2000		
		suring and moni [.] tics costs	toring of pe	errorm	ance		
		of service					
		no-exploitation	performan	ce			
		y of logistics pro	-		ties		
Course content	8. I coll	•					
		ormance in logist	-	ems			
		ity of logistics se els of customer :		moss	urement		
		Performance Ind		medS	urement		
	· ·	an Resources an		e Arch	itecture		
		hmarking			-		
	15.II co	lloquium					
				ook (s	-		
Author/s	:I:X & A		e of publica	-		Year	Pages (from-to)
Radivojević, G., M Vidović, M	• • •	-	-	-	mance, Faculty ering, Belgrade	- //////	
	•	, ransport a	Additiona				
Author/s		Name	e of publica		-	Year	Pages (from-to)
Ž. Stević, G. Sto					of logistics"		
Z. Stević, G. Stoj Vasiljević, S. Ve		Internat	ional confe	rence	for regional	2015	266-271
-					Dhrid, Macedon		
Obligations,		A	ssesment n	netho	ds	P	oints Percentage

evaluation	Preexamination obligations								
criteria	attendance during lectures 5 5								
	attendance during exercise	5	5						
	Seminar work	10	10						
	colloquiums	2x25	50						
	Final examination								
	written examination (2 colloquiums)	50	50						
	oral examination	30	30						
	Overall	100	100						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj						

UNIVERSITY OF EAST SARAIVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Logistics UV year of study Course title Course title Course title Course status Semester ECTS credits Code Course status Semester ECTS credits Code Course status Semester ECTS credits Code Course status Semester ECTS credits Course status Semester ECTS credits Course status Semester Student workload coefficient S.s. L TE E Course aims and learning L T Ett L T Course aims and learning outcomes Introducing students to the basic areas of return logistics from various aspects related to distribution, production Course aims and learning outcomes L T Total workload:						EVCT				- 4	2 ⁰
Study program: Traffic Profile: Logistics I cycle IV year of study Course title Department Department for Transport Engineering – Faculty of Traffic Engineering Doboj Code Course status Semester ECTS credits CADILLON7107875,0220 mandatory VII 5.00 Professor/s PhD Radovan VIŠKOVIĆ, associate professor Student workloa Associates/s Radenka BIELOSEVIĆ, senior assistant Student workload coefficient S. L TE LE TE Student workload (hours, per semester) 2 2 0 2*15*1,5+25 2*15*1,5+245 0*15*1,45=0 1,5 Total teacher workload (hours, per semester) Total student workload (hours, per semester) 2*15*1,5+2*15*1,5+2*15*1,5+0*15*1,5=90 Total teacher workload (hours, per semester) 2*15*1,5+2*15*1,5+0*15*1,5=90 Total students workload (hours, per semester) 2*15*2*15*2*15*2*15*1,5=0*115*1,5=0*115*1,5=90 Total student workload (hours, per semester) 2*15*1,5*2*15*1,5*2*15*1,5=90 2*15*1,5*2*15*2*15*1,5=0*115*1,5=90 Total workload: W+T=Uwele 60 + 90 = 150 hours per semester 1. 2 1. Introducing students to the basic areas of r								g		-	2005
I cycle IV year of study Course title RETURN LOGISTICS Department Department for Transport Engineering – Faculty of Traffic Engineering Doboj Code Course status Semester ECTS credits CADILOD7107875,0220 mandatory VII 5.00 Professor/s PhD Radovan VIŠKOVIĆ, associate professor Rester Student workloa Associates/s Radenka BIELOSEVIC, senior assistant Student workload coefficient S. Student workload coefficient S. L TE LE L TE Student workload (hours, per semester) Student workload (hours, per semester) 2*15 + 2*15 + 0*15 - 60 2*15*1,5=45 2*15*1,5=45 0*15*1,5=5 0 1,5 Total teacher workload (hours, per semester) 2*15*1,5+2*15*1,5 + 0*15*1,5 = 90 Total workload: W+T=Uuge= 60 + 90 = 150 hours per semester 1. <td< td=""><td>- Juc</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td></td><td>3</td><th></th></td<>	- Juc							0		3	
Course title RETURN LOGISTICS Department Department for Transport Engineering – Faculty of Traffic Engineering Doboj Code Course status Semester ECTS credits CA011C/107107875,0220 mandatory VII 5.00 Professor/s PhD Radovan VISKOVIC, associate professor Student workloa Associates/s Radenka BJELOSEVIC, senior assistant Te Le Student workloa U TE LE L TE Le Student workloa 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45*3 0 1.5 Total teacher workload (hours, per semester) 2*11 s4*15*1,5*2*15*1,5*15*1,5*0*15*1,5*0 1.5 0*15*1,5*2*15*1,5*0*15*1,5*0 0*15*1,5*2*15*1,5*0*15*1,5*0*0*15*1,5*0 Course aims and learning 0 stribution, production 2 3.5 3.40ents will acquire basic knowledge of roundabout supply chain management 4 independent preparation of seminar paper Prerequisites No special conditions 1 Tracking Lectures, theoretical exercises, consultation 1. 1 Treaching <t< td=""><td>82°C</td><td>2</td><td></td><td colspan="6">Profile: Logistics</td><td></td><th></th></t<>	82°C	2		Profile: Logistics							
Department Department for Transport Engineering – Faculty of Traffic Engineering Doboj Code Course status Semester ECTS credits CA011C/007107875,0220 mandatory VII 5.00 Professor/s PhD Radovan VIŠKOVIC, associate professor Associates/s Student workloa Associates/s Radenka BJELOSEVIC, senior assistant Student workloa coefficient S L TE L TE LE Student workload (hours, per semester) 2*15*1,5+5 0*15*1,45= 1,5 Total teacher workload (hours, per semester) 2*15*1,5 + 2*15*1,5 + 0*15*1,5 = 90 Total student workload (hours, per semester) 2*15*1,5 + 2*15*1,5 + 0*15*1,5 = 90 Total workload: W+T=Uget= 60 + 90 = 150 hours per semester 1 Introducing students to the basic areas of return logistics from various aspects related to distribution, production 2 3. Students will acquire basic knowledge of roundabout supply chain management 3 Student preparation of seminar paper Prerequisites No special conditions Teaching Lectures, theoretical exercises, consultation 1 1 The concept and subject of return logistics Areas of return logistics	4543 30 33			I cycle			IV year of st	udy			TOPO1
Code Course status Semester ECTS credits CA011C/107107875,0220 mandatory VII 5.00 Professor/s PhD Radovan VIŠKOVIĆ, associate professor Associates/s Radenka BELOŠEVIĆ, senior assistant Weekly hours Individual student hours (per semester) Student workloa coefficient S. L TE LE L TE LE Student workload (hours, per semester) 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 0 1,5 Total teacher workload (hours, per semester) 2*15*1,5=*15*1,5=*01 2*15*1,5=*01 2*15*1,5=*01 2*15*1,5=*01 0 2*15*1,5=*01 1.5 Total teacher workload (hours, per semester) 2*15*1,5=*01	Course title					F	RETURN LOGIST	ICS			
CA011C/07107875,0220 mandatory VII 5.00 Professor/s PhD Radovan VIŠKOVIĆ, associate professor Students workload Associates/s Radenka BIELOŠEVIĆ, senior assistant Individual student hours (per semester) Student workload L TE LE L TE Student workload coefficient S. 2 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 0 1,5 Total teacher workload (hours, per semester) 2*15*2*15*15*15*15*10*15*15*0*15*15*5 = 90 Total student workload (hours, per semester) 2*15*15*15*10*10*15*0*15*15*5 = 90 Course aims and learning 1. Introducing students to the basic areas of return logistics from various aspects related to distribution, production 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions 2 7. Types and characteristics of waste materials and return flows S. Recycling of the role and importance of material recycling. Packing 3. Types and characteristics of waste materials and return flows (I colloquium) 8. Recycling of construction, metal and plastic materials and return flows (I colloquium) 8. Recycling	Department		Depar	rtment for Trar	nsport Engir	neeri	ng – Faculty of 1	raffic Engin	eering	Dobo	j
Professor/s PhD Radovan VIŠKOVIĆ, associate professor Associates/s Radenka BIELOŠEVIČ, senior assistant Weekly hours Individual student hours (per semester) Student workloa coefficient S. 2 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 2 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 1,5 Total teacher workload (hours, per semester) 2*15*1,5 = 0*15*1,5 = 0*15*1,5 = 90 Total student workload (hours, per semester) 2*15*1,5 + 2*15*1,5 + 0*15*1,5 = 90 Total workload: W+T=Uopt= 60 + 90 = 150 hours per semester 1. Introducing students to the basic areas of return logistics from various aspects related to distribution, production 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions Inter outcreater strices, consultation 1. The concept and subject of return logistics 3. Types and characteristics of waste materials and return flows 5. Recycling of construction, metal and plastic materials and return flows 9. Inventory management in the presence of return logistics system 10. Return of new, used and used products 11. Requirements for logistica locoperatio	(Code		Cou	ırse status		Seme	ster		ECT	S credits
Associates/s Radenka BJELOŠEVIĆ, senior assistant Studenka BJELOŠEVIĆ, senior assistant Individual student hours (per semester) Student workloa coefficient Sa LE LE LE Student workloa coefficient Sa 2 0 2*15*1,5:45 0*15*1,5:45 0*15*1,5:40*15*1,5:5:9:0 Total teacher workload (hours, per semester) 2*15*1,5:1:5:9:0 2*15*1,5:1:5:9:0 2*15*1,5:1:5:9:0 2*15*1,5:1:5:9:0 2*15*1,5:1:5:9:0 2*15*1,5:5:9:0 2*15*1,5:5:9:0 2*15*1,5:5:9:0 2*15*1,5:5:9:0 2*15*1,5:5:9:0 2*15*1,5:9:0 <td></td> <th>5.00</th>											5.00
Student workloa L TE LE L TE So 2 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 0.5 3 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 0.5 1,5 Total teacher workload (hours, per semester) 2*15*1,5+2*15*1,5+0*15*1,5 = 90 2*15*1,5+2*15*1,5+0*15*1,5 = 90 2*15*1,5+2*15*1,5+0*15*1,5 = 90 2*15*1,5+2*15*1,5+0*15*1,5 = 90 Course aims and learning 1 Introducing students to the basic areas of return logistics from various aspects related to distribution, production 3. Students will acquire basic knowledge of roundabout supply chain management 3 Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions 1. The concept and subject of return logistics 2. Areas of return logistics 3 Types and characteristics of waste materials and return flows 5. Recycling of construction, metal and plastic materials and return flows (I colloquium) 4 Recycling of construction, metal and plastic materials and return flows 10. Return of new, used and used products 5 <	-						sor				
Individual student hours (per semester) coefficient S, L TE LE L TE LE Sa 2 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 0 1,5 Total teacher workload (hours, per semester) 2*15*1,5+2*15*0*15 60 9 2*15*1,5+0*15*0*15*0*15*0*15*0*15*0*15*1,5=0 Total workload: W+T=Ugere 60 + 90 150 hours per semester Course aims and learning 1 Introducing students to the basic areas of return logistics from various aspects related to distribution, production Amatering inventory management Quere eation of seminar paper Prerequisites No special conditions Lectures, theoretical exercise, consultation 2 Areas of return logistics 3 Types and characteristics of waste material and return flows 1. The role and inportance of material recycling. Packing 6 Product recyclability analysis 7 Recycling of construction, metal and plastic materials and return flows 1. Inventory management in the presence of return logistics and return flows (1 colloquium) 8. Recycling of electrical, electronic and hazardous waste and return flows (10.0Loquium) 8. Recycling of electrical, electron	Associates/s	Ra	idenka B	JELOSEVIC, ser	nior assistar	nt				<u></u>	
2 2 0 2*15*1,5=45 2*15*1,5=45 0*15*1,45= 0*15*1,45= 1,5 Total teacher workload (hours, per semester) 2*15*2*15*0*15 5 0 2*15*1,5 1,5 Total teacher workload (hours, per semester) 2*15*2*15*0*15*0*15 5 0 2*15*1,5 2*15*1,5 1,5 Course aims and learning outcomes 1 Introducing students to the basic areas of return logistics from various aspects related to distribution, production 2 mastering inventory management 3 Students will acquire basic knowledge of roundabout supply chain management . . 4 independent preparation of seminar paper . . . Prerequisites No special conditions . . . Teaching methods Lectures, theoretical exercises, consultation . . . 1 The concept and subject of return logistics 2 Areas of return logistics 1 The concept and subject of return logistics 		Weekly	hours		Individu	ual st	udent hours (pe	er semester)			
2 0 2*15*1,5=43 2*15*1,5=43 0* 1,5 Total teacher workload (hours, per semester) 2*15*1,5=45 0* 1,5 2*15 + 2*15 + 0*15 = 60 2*15*1,5+ 2*15*1,5 + 0*15*1,5 = 90 2*15*1,5+ 2*15*1,5 + 0*15*1,5 = 90 Total workload: W+T=U _{op1} = 60 + 90 = 150 hours per semester Total workload: W+T=U _{op1} = 60 + 90 = 150 hours per semester Total workload: W+T=U _{op1} = 60 + 90 = 150 hours per semester Outcomes 3. Introducing students to the basic areas of return logistics from various aspects related to distribution, production Course aims and learning outcomes Course aims and learning inventory management 3. Students will acquire basic knowledge of roundabout supply chain management A mastering inventory management Secure as a material conditions Terequisites No special conditions Terequisites 1 The concept and subject of return logistics 2 Areas of return logistics 2 3 Types and characteristics of waste materials and return flows 5 Recycling of construction, metal and plastic materials and return fl	L	TE		LE	L		TE	LE			So
2*15 + 2*15 + 0*15 = 60 Total workload: W+T=U _{opt} = 60 + 90 = 150 hours per semester Course aims and distribution, production 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions Teaching declared colspan="2">1. The concept and subject of return logistics 8. Areas of return logistics 2. Areas of return logistics 2. Areas of return logistics 3. Types and characteristics of waste materials and returnables 4. Modeling of waste material and return flows 5. Recycling of construction, metal and plastic materials and return flows (I colloquium) 8. Recycling of construction, metal and plastic materials and return flows (I colloquium) 8. Recycling of electrical, electronic and hazardous waste and return flows 0. Recycling of electrical, electronic and hazardous waste and return flows 1. Noviora and floations in the return logistics system 13. Befining transport and locations in the return logistics system 13. Defining transport and locati	2	2		0	2*15*1,5=	=45	2*15*1,5=45		i=		1,5
Total workload: W+T=U _{opt} = 60 + 90 = 150 hours per semester Course aims and learning 1. Introducing students to the basic areas of return logistics from various aspects related to distribution, production 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions Teaching methods Lectures, theoretical exercises, consultation 1. The concept and subject of return logistics 2. Areas of return logistics 3. Types and characteristics of waste materials and returnables 4. Modeling of waste material and return flows 5. Recycling - the role and importance of material recycling. Packing 6. Product recyclability analysis 7. Recycling of electrical, electronic and hazardous waste and return flows (I colloquium) 8. Recycling of electrical, electronic and hazardous waste and return flows 9. Inventory management in the presence of return logistics system 13. Defining transport and locations in the return logistics system 13. Defining transport and locations in the return logistics development (II colloquium) 14. Structure of return logistics development (II colloquium) 14. Structure of return logistics networks - scope, characteristics, classification 15. Possible directions of return logistics development (II colloquium) 15. Possibl				-	ster)			-	-		-
Course aims and learning outcomes 1. Introducing students to the basic areas of return logistics from various aspects related to distribution, production 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites Prerequisites No special conditions Teaching methods Lectures, theoretical exercises, consultation 1. The concept and subject of return logistics 2. Areas of return logistics 3. Types and characteristics of waste materials and returnables 4. Modeling of waste material and return flows 5. Recycling - the role and importance of material recycling, Packing 6. Product recyclability analysis 7. Recycling of construction, metal and plastic materials and return flows (I colloquium) 8. Recycling of construction, metal and plastic materials and return flows (I colloquium) 8. Recycling of construction, metal and plastic materials and return flows (I colloquium) 1. Requirements for logistical cooperation of return 12. Designing an efficient return logistics system 13. Defining transport and locations in the return logistics system 13. Defining transport and locations in the return logistics system 13. Defining transport and locations in the return logistics system 14. Structure of return logistics cevelopment (II colloquium) Logistika, US Beograd 2010		2*15 + 2							+ 0*15	*1,5 :	= 90
Course aims and learning distribution, production 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper											
learning outcomes 2. mastering inventory management 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions Teaching methods Lectures, theoretical exercises, consultation 1. The concept and subject of return logistics	Courses					c are	as of return logi	stics from va	arious	aspec	ts related to
outcomes 3. Students will acquire basic knowledge of roundabout supply chain management 4. independent preparation of seminar paper Prerequisites No special conditions Teaching methods Lectures, theoretical exercises, consultation I. The concept and subject of return logistics . 3. Types and characteristics of waste materials and returnables . 4. Modeling of waste material and return flows S. Recycling - the role and importance of material recycling. Packing 6. Product recyclability analysis 7. Recycling of construction, metal and plastic materials and return flows (I colloquium) 8. Recycling of construction, metal and plastic materials and return flows 9. Inventory management in the presence of return flows 9. Inventory management in the presence of return flows 10. Return of new, used and used products 11. Requirements for logistical cooperation of return 12. Designing an efficient return logistics system 13. Defining transport and locations in the return logistics system 13. Defining transport and locations in the return logistics system 14. Structure of return logistics networks - scope, characteristics, classification 15. Possible treture logistics networks - scope, characteristics of classification 15. Designing an efficient return logistics networks - scope, characteristics of classification 15. Possiblet cortect classification <t< td=""><td></td><td></td><td></td><td></td><td></td><td>nt</td><td></td><td></td><td></td><td></td><th></th></t<>						nt					
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	Seminar work	30	30%				
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Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
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		cientific disciplines used in logistics ivision and content of logistics in the areas in which it is used							
		ecuring transport and traffic							
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Course content			gistics partnership						
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		10. Education in logistics							
	11. Pi	rocureme	ent Logistic						
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Alihodžić A., St	evic Z.		Sarajevo, I		eering	ort and Traffic	2014		
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Author/s	5		Name			publisher	Year	Pages (from-to)	
Stević Ž., Alihod	žić A. S		-		-	tics - the situation			
Knežević, Ž. Stje		In				nternational Ma		154-162	
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Sremac in logistics, 6th International Conference									

		"Economics and Management-Based on New Technologies" EMoNT- Vrnjačka Banja, Serbia						
Stević Ž., Alihodžić A., S. Knežević, Ž. Stjepanović		Management of medical logistics - the situation in Bosnia and Herzegovina, International May Conference on Strategic Management – IMKSM	201	6	154-162			
		Assesment methods		Points	Percentage			
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	Filan examination							
		written examination (2 colloqu	iums)	50	50%			
		oral examir	nation	30	30%			
	Overall			100	100%			
Web sources	http://sf.	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
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methous	1.	Character	ristics of m	anufacturir	ng nlar	ns and program	ç		
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				ssesment r				Points	Percentage
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Obligations,						Sen	ninar work	20	20%
evaluation						Со	lloquium I	10	10%
criteria						Col	loquium II	10	10%
	Fina	l exam							
					1	final exam (oral	/ written)	50	50%

	Overall	100	100%				
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Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

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	2.	. Define	es the basic gro	ups of gen	erato	rs, identifies and	d quantifies th	e parameters of		
Course aims a		logisti								
learning			Defines the basic concepts for solving the problem of city logistics; Explain the advantages and disadvantages of different logistics solutions of the city;							
outcomes			-			-	-	-		
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methods	Le	ctures, f	theoretical exe	rcises, con	sultat	ion				
	1.	. City lo	gistics - concep	ot, tasks, go	oals ai	nd constraints				
			Norld experiences - problems of logistics in cities							
			The structure of the city logistics system. Generators of city logistics flows							
						erminals in citie				
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Course conter						es (I colloquium research of city		motors		
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		10. Cooperative city logistics systems 11. The concept of concentration of information flows. The concept of flow consolidation								
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	15	5. Effect	s of consolidati			ows in the city a	rea (II colloqui	ium)		
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Zečević S	., Tadić S		City logistik			akultet Beograd	2013			
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Taniguchi E. R.º	., Thomp: G.:	son	Innovation	s in freight	trans	port, WIT Press	2003	-		
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	Assesment methods	Points	Percentage						
	Preexamination obligations								
	attendance during lectures/exercise	5	5%						
	activity during classes	5	5%						
Obligations,	tests	20	20%						
evaluation	colloqium 1	20	20%						
criteria	colloqium 2	20	20%						
	Students who pass the colloquia are releasedwritten part, final exam								
	Final examination								
	Oral examination	30	30%						
	Overall 100 100%								
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj						

INSTOUCH INSTOUCH			UNIV	ERSITY OF	EAST S	SARAJEVO			2005	
		Faculty of Transport and Traffic Engineering							Stabalter Care	
JYNC			-	Study prog		-		3		
		Profile: Logistics							40501	
19 15m 10 15		I cycle IV year of study								
Course title				ORGAN	IIZATIO	ON OF TRAFFI	C COMPANII	ES		
Department		Departme	nt for Trar	nsport Engi	neerin	g – Faculty of	Traffic Engin	eering Do	boj	
C	ode		Cou	urse status		Seme	ster	EC	CTS credits	
САФ11СЛ07				andatory		VI	I		6.00	
Professor/s) Perica GO			•					
Associate/s	San	ja SIMIĆ, se	enior assist	ant						
<u>۱</u>	Weekly h	ours		Individu	ual stu	dent hours (p	er semester)		dent workload coefficient S _o	
L	TE		LE	L		TE	LE		So	
3	2		0	3*15*1		2*15*1,4	0*15*1,4		1,4	
Total teach		oad (hours, 15 + 0*15 =	-	ter)		Total student 3*15*1,4	workload (h + 2*15*1,4+	-		
		Total wor	kload: W+	T=U _{opt} = 75	+ 105 =	= 180 hours pe	er semester			
	-	mastering t								
	1.			epts of orga	anizati	on, as well as t	types and or	ganizatio	nal models of	
		enterprise	-				_			
Course aims and			-	-		on of large bus	iness system	is, busine	ss and	
learning outcom				and develo	-					
						eeting accordi	-			
	4.	-	-	-		oly and establi	sh their own	company	y as well as to	
Duran and altera	New		ctions to c	others how	to do l	it.				
Prerequisites		None. lectures, auditory and computational exercises, consultations								
Teaching metho			-	-			itions			
	1.		-	-		organization				
		 Types of organizational structure Organizational models of the company 								
	_	4. Organizing large business systems								
		 Organizational models of transport companies 								
		 Organizational models of transport companies Business and development policy 								
		Character			-	auium)				
Course content	8.			echniques						
	9.	Organizati								
	10.	. Organizati	ion of busi	ness functi	ons					
	11.	. Business i	nformatio	n systems						
	12.	. Organizati	ion contro	I. Organizin	ig a me	eeting				
	13.	. Organizati	ion and ma	anagement	of inv	estments				
	14.	. Organizati	ion design.	. Organizati	ional ti	ransformation	of the comp	any		
	15.	. II colloqui	um							
					ook (s)					
Autho				of publicat			Yea	r Pa	ages (from-to)	
Vešović, B. V., B	-	-				anies, Faculty	- 700	7		
Knežević,	Lj. N.	Tr	ansport ar		-	ring, Belgrade				
				Additiona		-				
Autho	r/s		Nam	e of public	ation,	editor	Yea	r Pa	ages (from-to)	
				ssesment n	netho	ds		Points	Percentage	
Evaluation crite	ria Pre	examinatio	n obligatio	ons					1	
						Presence duri	ng lectures	10	10%	

	Colloquium 1	10	10%							
	40	40%								
	20	20%								
	Final examination									
	Oral examination									
	Total	100	100%							
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf									
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj							

		LINIV	ERSITY OF EAS			000				
		-		Traffic Engineering	g	STATAINS BARA				
- YNC		,								
4993 10 100		I cycle		IV year of stu		in a state of a state				
Course title		/IENT								
Department	Depar	rtment of Trans	sport Engineer	ing - Faculty of Tra	ansport and Tra	affic Engineering				
Code		Cou	ırse status	Semes	ter	ECTS credits				
САФ11СЛ0710			andatory	VIII		5.00				
Professor/s		ERCEG, associa	•							
Associate/s	PhD Živko	ERCEG, associa	ate professor							
Wee	ekly hours		Individual	student hours (pe	r semester)	Student workload coefficient So				
L	TE	LE	L	TE	LE	So				
2	2	0	45	45	0	1,5				
Total teacher v 2*15 +	vorkload (ho 2*15 + 0*15	•	ter)			rs, per semester) *1,5 = 90 hours				
) hours per semes	ter					
		ing this course								
		1. Understand the requirements of users of products and services in the context of the								
		needs imposed by the modern market,								
Course aims and		use and apply different approaches, models and methods of measurement and quality								
learning outcomes		improvement, 3. develop and apply specific models of quality management in real business conditions,								
		4. manage the resources more effectively in his / her authority in real business conditions,								
		 achieves a more successful communication (internal and external). 								
Prerequisites	Does not h				and externally.					
Teaching methods		auditory exerci	ses, seminar w	vork						
		y of quality ma								
				el of quality manag	gement system					
		3. Understanding quality. The term and definitions of quality								
	4. Qualit	4. Qualitative, qualitative and quality management								
		5. Understand the context of an organization. Deming's key to understanding the								
	-	organization								
		y managemen	t systems							
Course content	7. I collo	-								
		Quality Manag ated Managen	• •	Models of excelle	ence					
	-	ty system acco	-)00·2015						
		ss model of the	-	00.2015						
		nalysis. Metho	-	ssment						
		ods and tools o								
	14. Metho	ods of measuri	ng customer s	atisfaction						
	15. II coll o	oquium								
			Textbook							
Author/s			of publication	-	Year	Pages (from-to)				
Bobrek, M., Milek	cić, M.,			ntegrisani sistemi	2014	1 204				
Macanović,				1:2015, Faculty of	2014	1-284				
		Transpo	ort and Traffic Additional re							
Author/s		Nam	e of publicatio		Year	Pages (from-to)				
Autiol/3			e or publication	in, cuitor	Tear					
Dorđević, D., Vasiljević, M.Upravljanje kvalitetom u saobraćaju, Faculty of Transport and Traffic Engineering20091-										

	Assesment methods	Points	Percentage						
	Pre-exam obligations								
	Presence of lectures / exercises	10	10%						
Fuchastica esiteria	Seminary work	20	20%						
Evaluation criteria	Colloquium	2x35	70%						
	Final exam								
	Final exam (oral / written)								
	TOTAL	100	100%						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj						

C T MET DAGA		-	ERSITY OF				2005			
-18-		Faculty of	g	Seven A Fint						
		•								
		I cycle	Profile: Logistics IV year of study							
Course title			INFORM	ATION	•	IT IN LOGISTICS	5			
Department	-	ent for info fic Engineer		nd com	munication sys	stems in traffic,	Faculty of Transport			
Code		Cou	urse status		Seme	ster	ECTS credits			
САФ11СЛ0710	3287,0330	m	andatory		VII	1	7.00			
Professor/s	PhD Željko ST	JEPANOVIĆ	, associate	profes	sor	•				
Associate/s	PhD Željko ST	JEPANOVIĆ	, associate	profes	sor					
Wee	kly hours		Individ	ual stu	ident hours (pe	er semester)	Student workload coefficient So			
L	TE	LE	L		TE	LE	So			
3	3	0	60		60	0	1.33			
Total teacher y	vorkload (hours	. per semes	ster)				rs, per semester)			
	3*15 + 0*15 = 4			T = 3	3*15*1.33 + 3*		5*1.33 = 60 + 60 + 0 =			
				400	2421	120				
					= 210 hours pe					
	development	•		-		mpact of inform	nation technologies on			
Course aims and			-		-	: data exchange	in husiness			
learning outcomes	operations	iii be acqua		the ro	le of electronic		. 11 50311633			
icuming outcomes		ill acquire r	necessarv k	nowle	dge related to	a procurement	process			
		-			-		-			
Prerequisites		4. Students will be able to select the best supplier based on the acquired knowledge No formal prerequisites								
Teaching methods	Lectures, clas information r				tudying and inc	dividual semina	r papers related to			
	1. Informatio	-	-	CS						
	2. Informatio		-							
	3. Design of in			logisti	CS					
	4. Informatio	-								
	5. Electronic			ICS						
	6. Electronic l		-	n of do	cision-making	system develop	ment			
Course content	8. Colloquium	-		i oi ue	CISIOII-IIIdKIIIg S	system develop				
			essing in a	n infor	mation system	1				
	10. Basic logis	•	-							
	-	-		nt. ERF	system develo	opment				
	12. ERP life cy			iccepta	ance					
	13. Identificat									
			echnology.	Signifi	cance and app	lication of GPD	technology			
	15. Colloquiu	m II								
A		NI		ook (s	-	V	Deges (from to)			
Author/s Zdravko Božičković	Info		of publicat	-		Year	Pages (from-to)			
Željko Stjepanović		rmation ma ineering Do	-	iii iogi	stics, Traffic	2013	9 - 214			
			-	al read	lings	I				
Author/s		Additional readings Name of publication, editor Year Pages (from-to)								
Aution/3		Null				. cu				
		-			•		 ••• • •			
Evaluation criteria		As	ssessment	metho	as	Po	pints Percentage			

	Pre-exam obligations						
	attendance to lectures and theoretical exercises						
	15	15%					
	40	40%					
	final exam	40	40%				
	TOTAL	100	100%				
Web sources							
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj				

V WCTOWN			UNIV	ERSITY OF EA	AST S	ARAJEVO			12	005	
		Faculty of Transport and Traffic Engineering								ATHA WARY	
Y NC		Study program: TRAFFIC									
		Profile: logistics								AOEOJ	
1000			l cycle			IV year of stu			A		
Course title		INTERNET MARKETING Department for Business Informatics – Faculty of Business Ecno									
Department		Departme	ent for Bus	iness informa	atics -	- Faculty of Bu	siness Echo	mics B	ijeijina	3	
	ode			urse status		Semes	ster		ECTS	credits	
САФ11СЛ07				ptional 4		VIII			5	5.00	
Professor/s				, associate pr	ofess	or					
Associate/s	Sin	isa Bozickov	vic, senior	assistant					<u>.</u>		
۱	Neekly h	ours		Individua	l stuc	lent hours (pe	er semester)		nt workload fficient S _o	
L	TE		LE	L		TE	LE			So	
2	2		0	45		45	0			1.5	
Total teach		oad (hours, 0*15 = 30 ·	-			Total student	-	-			
vv =2°15	- 7.12 +					150 hours per		13.1'2	- 45 -	- 45 + 0 = 90	
	1 9					¹ electronic ma		hnique	s		
Course aims and										ent	
learning outcom		 Students will acquire knowledge related to Internet marketing plan development Stundets will be able to apply the acquired knowledge in their practical work in enterprises 									
		4. Students will be able to create basic elements of Internet presentations								-	
Prerequisites	No	No formal prerequisites									
Teaching metho	ac	Lectures, classroom exercises, laboratory exercises and tutorials. Studying and individual									
	sen			o Internet ma		-					
			-	ice of informa		-					
		 Internet and globalization of business processes Functions and characteristics of Internet marketing 									
		4. Development phases of Internet presence									
		5. Internet media plan									
			-	pearance on	the Ir	nternet					
		Mobile adve	-								
Course content		8. Colloquium I									
		Neb marke	-								
		E-mail mar	-	c							
			-	s of e-mail ma	arket	ing					
		 12. E-mail marketing rules 13. Other electronic marketing techniques 									
				marketing pla	-						
		Colloquiun			~ • •						
				Textboo	ok (s)						
Author	r/s		Name	of publicatio	on, pu	ıblisher	Yea	r	Page	es (from-to)	
Marko Šarac				ting to Univer	rsity S	Singidunum	201	5		1 - 197	
Aleksandar Jevre	emović	Beog	rad					-		,	
A	. / .		PI-	Additional r		-	N-	_	D	(fugue t-)	
Autho Željko Stjepanov		Name of publication, editorYearPages (from-to)Teaching materials, Traffic Engineering Doboj20131 - 71							es (from-to) 1 - 71		
		Teac	_	ssesment me	-		201.	Point	ts	Percentage	
	Pre	-exam oblig		ssesment me	linou			1 0110		. citemage	
			5	atter	ndano	ce to lectures /	/ exercises	5	5	5%	
Evaluation crite	ria					aper positively		1		15%	
					· 1º		olloquiums	4	-	40%	
							final exam	4		40%	
								I	~		

	TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	pdf				
Applicable from	Applicable from 11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

		Fa	UNIV aculty of T	,	12005					
		10	-	Study prog	ram: T	raffic	<u> </u>			
10 ASYS 40			I cycle			IV year of stu	ıdy	AOEOJ		
Course title						SISTICS PROVID				
Department	Dep	artmen	nt for Trar	nsport Engi	neerin	g – Faculty of T	raffic Engineer	ing Doboj		
Cod	e		Cou	ırse status		Semes	ter	ECTS credits		
САФ11СЛ0723	35085,0220)	0	otional 4		VIII		5.00		
Professor/s	-									
Associates/s We	ekly hours	kly hours Individual student hours (per semeste						Student workload coefficient So		
L	TE		LE	L		TE	LE	S _o		
2	2		0	45		45	0	1,5		
Total teacher	workload (hours, p	per semes	ster)	I	Total student	workload (hou	rs, per semester)		
W = 2*15 + 2					T =			1,5 = 45 + 45 + 0 = 90		
						= 150 hours pe				
								inticipate the demand		
Course aims and		-					alities of servic	e provision, establish		
learning		and develop a logistics partnership with customers								
outcomes		2. Manage logistics flows and processes, manage risk and improve standards in logistics								
Prerequisites		systems and processes. No special conditions								
Teaching	No speci									
methods	Lectures	Lectures, theoretical exercises, consultation								
Course content	 Evolutionary development of logistics providers Different strategies and models of providing logistics services Marketing research and forecasting the demand for logistics services Logistics market segmentation and selection Management of logistics flows and processes; logistics processes in import and export flows; Risk management and transport insurance of goods I Colloquium Modeling of cold chain logistics processes in the export and import of food, pharmaceutical and medical products Organization of logistic processes in the flows of import and export of live animals Design of international export flows of specific shipments (artistic values, high-value goods, oversized and special cargoes) Management of logistics processes in humanitarian and emergency logistics Design of flows of import and export of goods for the needs of organization of sports, tourist and artistic events Application and improvement of standards in logistics processes and flows. II Colloquium 									
					book (-				
Author/s	5	N 4 - 1		e of publica	-		Year	Pages (from-to)		
			rials from ted autho		exercis	es and papers b	ру			
		select	ieu autrio		alroa	dinge				
				Addition						
Author/s			Name	Addition			Vear	Pages (from-to)		
Author/s Килибарда М.		ne <i>r</i>		Addition e of publica агенцијско	ntion, p	oublisher	Year 2013	Pages (from-to)		

Burke R. (2011)		International logistics and freight forwarding manual, Burke, Russell John	1					
Sremac, S., Stević, Ž., Pamučar, D., Arsić, M., & Matić, B.		Evaluation of a third-party logistics (3PL) provider using a rough SWARA–WASPAS model based on a new rough dombi aggregator. Symmetry, 10(8), 305.	-WASPAS model based on a gregator. Symmetry, 10(8), 2018					
		Assesment methods		Points	5	Percentage		
	Preexamination obligations							
		attendance during lectures/ex	5		5%			
Obligations,		attendance during lex	5		5%			
evaluation		Seminar	work	10		10%		
criteria		collo	qiums	2x2	5	50%		
	Final examination							
		Oral examir	nation	30		30%		
	Overall					100%		
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	rt and T	raffic e	ngine	eering Doboj		

			UNIV Faculty of ⁻	Contract of the second						
15 d.See 40 30			I cycle			IV year of st	-			
Course title				PROJECT	MANAG	EMENT IN CO	MMUNICAT	IONS		
Department										
Coc	le		Cou	urse status	5	Seme	Semester		'S credits	
САФ11СЛ072	,			ptional 5		VII	I		4.00	
Professor/s		O Svetlana [·]								
Associate/s	Phl	O Svetlana [·]	TERZIĆ, ass	ociate pro	fessor					
W	eekly h	ours		Individ	lual stu	dent hours (pe	er semester)		ent workload efficient So	
L	TE		LE	L		TE	LE		So	
2	1		1	X*15*S	So	Y*15*S₀	Z*15*S₀			
		vorkload (hours, per semester)Total student workload (hours, per semester) $Y^{*15} + Z^{*15} = W$ hours $X^{*15}S_0 + Y^{*15}S_0 + Z^{*15}S_0 = T$ hours								
	Total workload: $W+T=U_{opt}=+=$ hours per semester									
Course aims and				·		•				
learning outcome	5									
Prerequisites										
Teaching methods	;									
Course content										
					book (s)					
Author/	5		Name	of publica	ition, p	ublisher	Yea	r Pa	ges (from-to)	
				Addition		-				
Author/	5		Nam	e of publi	cation,	editor	Yea	r Pa	ges (from-to)	
			Α	ssesment	method	ls		Points	Percentage	
									•	
Evaluation criteria										
									•	
Web sources	htt	<u>p://sf.ues.r</u>	s.ba/eng/v	vp-content	t/uploa	ds/2022/05/Er	ngleski-NPP-	<u>I-ciklus-202</u>	2 <u>1.pdf</u>	
Applicable from	11/	/15/2022 -	198 Sessior	n of the Co	ouncile,	Faculty of Trai	nsport and T	raffic engir	neering Doboj	

CT WCTOWIG		UNIV	ERSITY OF EAST	SARAJEVO		2005				
		Faculty of T	g	Sudahaling Over 2						
LYNC		St								
		Lavala	Profile: logis		u du	AOE0J				
Course title		l cycle		IV year of stu F INFORMATIO						
course title	Departm	ent for Com				natics, Faculty of				
Department			g East Sarajevo							
Code		Cou	irse status	Seme	ster	ECTS credits				
САФ11СЛ07208	САФ11СЛ07208584,0211 optional 5 VIII									
Professor/s	PhD Srdjan No									
Associate/s	PhD Srdjan No	ogo, associa	te professor							
Wee	kly hours		Individual st	udent hours (pe	er semester)	Student workload coefficient So				
L	TE	LE	L	TE	LE	So				
2	1	1	30	15	15	1				
	vorkload (hours,	•				rs, per semester)				
W = 2*15 + 1*	15 + 1*15 = 30					= 30 + 15 + 15 = 60				
				= 120 hours per						
		will acquir	e knowledge rel	ated to develop	ment and strue	cture of information				
	system				.					
	2. Students will be acquainted with the methodology of information system development									
Course aims and	3. Students will be able to define project requirements related to business operations in an enterprise									
learning outcomes	 Puring teaching activities, students will also be acquainted with certain examples related 									
	 During teaching activities, students will also be acquainted with certain examples related to information system design 									
		5. Students will be acquainted with the methodology of project task development related								
		-	ns in an enterpr		or project task t	development related				
Prerequisites	No formal pre			150						
		•	cises. laboratory	vexercises and t	utorials. Studvi	ing and individual				
Teaching methods			o information sy		,,					
			mation systems	-						
	2. Informati	on and bus	iness systems. T	ypes of informa	ition systems					
	3. An integr	3. An integral approach to the organization of information systems								
	4. Protection and security of data in modern business									
	6. Standardization and information systems. Personnel resources									
		es of inform	ation system de	evelopment. Ana	alysis of feasibil	ity, costs and project				
.	effects									
Course content			rmation system	development						
	9. Colloquiu									
	10. System a 11. Event and	•	ction and proce	ss modeling						
			-	ition system con	struction					
	-		l software supp	-	Istruction					
		-		f an information	system					
				guages, Colloqui	-					
			Textbook (
Author/s		Name	of publication,	-	Year	Pages (from-to)				
Rade Stankić		gn of Inforn	nation Systems,	-	2013	1-318				
	Ecor	iomics in Be	-							
A ! /		NI -	Additional rea	-	N	Denne (from to)				
Author/s			e of publication		2014	Pages (from-to)				
Željko Stjepano			ials, Traffic Engi		2014	1-145				
Evaluation criteria		AS	sessment meth	ous	P	oints Percentage				

	Pre-exam obligations						
	attendance to lectures / exercises	5	5%				
	seminar paper positively assessed	15	15%				
	40	40%					
	final exam 40 40%						
	TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

TELECOMMUNICATIONS AND POSTAL TRAFFIC

			UNIVERSITY OF EAST SARAJEVO						2005		
	18	_		South	AIHH ØAAFAICI	2					
	Study program: Traffic Profile: Telecommunications and postal traffic										
Ordinal	Code		Course title	Course status	Prerequisites	Semester		Fund classe	25	ECTS	
			III year of study				L	TE	LE	-	
28.	САФ11СТ	07108757,0321	Digital Techniques	0		V	3	2	1	7.00	
29.		07135156,0311	Planning and design of telecommunication networks and traffic in networks	0		v	3	1	1	6.00	
30.	CAΦ11CT	07108955,0211	Fundamentals of communication	0		V	2	1	1	5.00	
31.	CAΦ11CT	07121956,0311	Telematic systems	0		V	3	1	1	6.00	
32.	CAΦ11CT	07109156,0320	07109156,0320 Postal traffic O V						0	6.00	
33.	САФ11СТ	CT07115367,0321 Computer networks and internet o VI protocols O VI				VI	3	2	1	7.00	
34.	CAΦ11CT	07102565,0320	Basics of marketing	0		VI	3	2	0	5.00	
35.	САФ11СТ	07109466,0320	Exploitation in postal traffic	0		VI	3	2	0	6.00	
36.		07209565,0211	2			VI VI	2	1	1	5.00	
37.	САФ11СТ	07235265,0211	·			VI VI	2	1	1	5.00	
38.	CAΦ11CT	07132962,0000	7132962,0000 Professional practice O				0	0	0	2.00	
					Т	OTAL:	27	15	7	60	
			IV year of study				=	-		_	
39.	CAΦ11CT	07135475,0220	Financial operations	0		VII	2	2	0	5.00	
40.	CAΦ11CT	07104675,0220	Quality management	0		VII	2	2	0	5.00	
41.	CAΦ11CT	07110077,0321	Theory of automatic control	0		VII	3	2	1	7.00	
42.	CAΦ11CT	07110177,0321	Mobile communications	0		VII	3	2	1	7.00	
43.	CAΦ11CT	07135576,0311	Artificial intelligence	0		VII	3	1	1	6.00	
44.	САФ11СТ	07104585,0220	Organization of traffic companies	0		VIII	2	2	0	5.00	
45.	САФ11СТ	07109985,0311	Internet technologies	0		VIII	3	1	1	5.00	
46.	CAΦ11CT	07135686,0311				VIII	3	1	1	6.00	
47.		07210585,0211 07235785,0211	 Multimedia communications Distributed multimedia systems 	I4		VIII	2	1	1	5.00	
48.	САФ11СТ	07208685,0211	1. Design of information systems 2. Management in traffic			VIII	2	1	1	5.00	
49.						VIII	0	3	0	4.00	
	5,171101	2. 100204,0000					-		-		
					Т	OTAL:	25	18	7	60.0	

•

L - lectures TE - theoretical exercises LE - laboratory exercises •

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T WCTOWIO			UNIV	ERSITY OF	EAST S	ARAJEVO		2005	
- <u>18</u> .		Faculty of Transport and Traffic Engineering						Josephanni Can. 11	
		Study program: Traffic Profile: Telecommunications and postal traffic							
Area 10		Pr	l cycle	communica		III year of stu		AOEOJ	
Course title			Гсусіе		DIG			and Amazan Accordinate	
Department		enartme	nts for ele	ctronics an		ronic systems -		ievo	
-		cpurtific			u cicci	-			
Co				urse status		Semes	ter	ECTS credits	
САФ11СТ0710875				bligatory		V		7,00	
Professor/s				ić, associat		essor			
Associate/s	Phd G	oran Kuz	mic, assist	ante profe	ssor			Churche and some adults and	
W	eekly hou	rs		Individu	ual stu	dent hours (pe	r semester)	Student workload coefficient S _o	
L	TE		LE	L		TE	LE	So	
3	2		1	60		40	20	1,33	
Total teacher								rs, per semester)	
W = 3*15 +								3 = 60 + 40 + 20 = 120	
) = 210 hours p			
		-				cquire knowled	age in:		
Course aims and		-		and logic o networks.	peratio	ns.			
learning outcome	s .			networks.					
	-	rithmetic Circuits.							
Prerequisites		4. Programmable logic structures							
Teaching method		There is no prior conditionality Lectures, theoretical exercises, laboratory exercises							
reaching method		1. Introduction. Switching algebra							
					ations				
		 Basic logic circuits and logic operations Switch Functions and Switch Networks 							
		I. Standard combination networks: encoder, decoder, code converter							
		5. Standard combination networks: multiplexer, demultiplexer, commutator							
		Memory circuits. Flip flops (I colloquium)							
		ndard sequential networks: registers							
Course content	8. Sta	ndard sequential networks: counters							
course content	9. Arit	hmetic circuits: comparators, complementers, adder, subtractors, multiplication and							
		on circuit							
		ogrammable logic structures. Semiconductor memory							
		ROM, PROM, and RePROM memories. RAM type memories Static and dynamic RAM type memory							
			•		emory				
		Surface magnetic memories A/D and D/A conversion principles							
		colloquiu		ion principi	es				
	15.11	conoquiu	111	Toyth	ook (s)				
Author/	s		Name	of publicat			Year	Pages (from-to)	
Tešić, S		Int	egrated di	-	-	cientific book,	1990.		
, .			1	Belgra		1 1 .			
Živković, D., Popović, M. Pulse and Digital Electronics, Academic Thought, 2004.									
			aital tark	Belgra					
Bundalo,	D.					Fransport and	2015.		
						irse materials ues Auditory			
Kostadinović, M.,	Bundalo,			-	•		2012		
D.			Exercises, Faculty of Transport and Traffic 2012. Engineering Doboj						
		1							

Author/s		Name of publication, editor	Yea	r	Pages (from-to)			
		Assesment methods	-	Poir	nts	Percentage		
	Pre-exa	n obligations						
		Attending lectures / ex	ercises	5		5%		
		Positive evaluation of the seminar	paper	15		15%		
Fuelvetien eriterie		Collog	15		15%			
Evaluation criteria		Collog	15		15%			
		Laboratory ex	10		10%			
	Final exam							
		Ora	l exam	40		40%		
	TOTAL		100)	100%			
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-ciklı	us-2021	L.pdf		
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and 1	raffic	c engine	eering Doboj		

				ERSITY OF	EACT			000				
		1				ffic Engineering	Į	STATATHE OF STATE				
Jync -			-	Study prog			,					
84		Pr				and postal traf	fic					
15 ASTRO 30 54			l cycle			III year of stu	-	Hours.				
Course title		PLAN	NING AND	DESIGN O	OF TELE	COMMUNICAT	ION NETWORI	(S AND TRAFFIC IN				
Department	Department of Information - Communication Systems in Traffic, F Traffic Engineering in Doboj											
Code			Соц	urse status	;	Semes	ter	ECTS credits				
САФ11СТ07135	156,0311		0	bligatory		V		6.00				
Professor/s	PhD Mir	ko Sto	jčić, assista	ant profess	sor							
Associate/s	PhD Mir	ko Sto	jčić, assista	ant profess	sor							
Wee	kly hours			Individ	ual stu	dent hours (pe	r semester)	Student workload coefficient So				
L	TE		LE	L		TE	LE	So				
3	1		1	45		15	15	1.2				
Total teacher w			-	-				rs, per semester)				
W = 3*15 + 1*								5*So = 75 So=90				
						= 150 hours pe		rks, traffic units in				
		-			nning a	ind design of the	insport netwo	ks, traffic utilits iff				
	telecommunications 2. Methods and tools for the analysis of telecommunication traffic, Erlang's formula											
Course aims and								on and postal systems				
learning outcomes		and analysis of traffic flows										
		4. Acquiring knowledge of the basic principles of traffic planning and design in communication										
	network	ks and	postal syst	ems								
Prerequisites			pecial con									
Teaching methods						ercises and cor						
						uction of teleco	mmunications	s facilities				
	2. Choice of network technologies and protocols.											
	 Network management architecture. Redundancy of network elements and traffic restoration. 											
	4. Techno-economic aspects. Validation of the telecommunication network project.											
	5. Traffic in postal and telecommunication systems / networks											
		6. Basic characteristics of telecommunication traffic - traffic unit, notion of losses / delays,										
						k capacity, noti						
	7. Traffi	c engir	eering and	d its role in	the pr	ocess of planni	ng and designi	ng networks				
	8. Chara	cteriza	ition of tra	offic flows.	Distrib	utions of reque	st and service	flows				
Course content		9. Mathematical modeling and traffic engineering in postal and telecommunication systems										
		based on queuing theory										
		10. Characteristics and performance analysis of lossy systems. Erlang's loss formula										
		11. Serving requests from a limited traffic source. Internal traffic. Incoming traffic										
		12. Classification and performance of communication networks. Multiphase service in fault systems. Arranged service systems (I colloquium)										
							nd telecommu	nication systems.				
						g's waiting syste						
						alysis of measu		5				
						mmunication sy						
				Textb	oook (s)							
			Nama									
Author/s			Name	of publica	ition, p	ublisher	Year	Pages (from-to)				
Author/s Sučević, D.						ublisher metoda u P ⁻		Pages (from-to)				

		Teletraffic Engineering Handbook, ITU-D.	2006						
Additional readings									
Author/s		Name of publication, editor	r	es (from-to)					
		Assesment methods		Poi	nts	Percentage			
	Pre-exa	n obligations							
		e.g. attendance at lectures / ex							
		e.g. I am positively assessed. paper / project ,							
		e.g. case study - grou							
Evaluation criteria		e.g. test / collo							
		e.g. laboratory work / lab. ex							
		e.g. practica							
	Final exam								
		for example. final exam (oral / w							
	IN TOTA	L	100)	100 %				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj			

		UNIV Faculty of T S rofile: Teleo I cycle							
Course title			FUNDAMEN	III year of stud ITALS OF COMM		N			
Department		ent of Infor Igineering i		unication System	s in Traffic,	Faculty of Transport and			
Code		Cou	urse status	Semest	er	ECTS credits			
САФ11СТ07108	955,0211	r	equired	V		5.0			
Professor/s			ovic, associate pr						
Associate/s	PhD Aleksand	ar Stjepano	vic, associate pr	ofessor					
Wee	kly hours		Individual stu	udent hours (pei	r semester)	Student workload coefficient S _o			
L	TE	LE	L	TE	LE	So			
2	1	1	45	22,5	22,5	1,5			
Total teacher w W = 2*15 + 1*	15 + 1*15 = 30	+ 15 + 15 =	60	2*15*1,5 + 1*15	*1,5 + 1*15 90	ours, per semester) *1,5 = 45 + 22,5 + 22,5 =			
	Total worl	kload: W + ⁻	T = Uopt = 60 + 9	0 = 150 hours pe	er semester				
Course aims and learning outcomes1. Basic elements related to the communication process 2. Basics for efficient presentation, processing of telecommunication signals 3. Basic procedures of modulation of analog and digital signals 4. Basics of transmission and exchange of messages, networks, internet, web, email 5. Quality of service									
Prerequisites	There is no pr	ior conditio	onality						
Teaching methods	Lectures, aud	ectures, auditory exercises, laboratory exercises							
Teaching methodsLettures, additory exercises, radio addity exercises1. Phenomenological analysis of communication-concepts, codes and contexts2. Communication process and models of communication system-communication in trar3. Application of telecommunication systems in solving transport problems. Introduction to information theory and coding. Nature and classification of messages and telecommunication signals.4. Measurement units for signal transmission. Basic methods of signal analysis5. Intelligent transport systems6. Characteristics of the communication channel: bandwidth, channel capacity, transmissi media7. Influence of noise and distortion during signal transmission through telecommunication system8. The notion of modulation. Basic signal modulation techniques 9. Basic concepts of signal discretization. Analog-to-digital conversion procedures. Time a frequency multiplex 10. Influence of noise in transmission systems 11. Digital signal modulation procedures 12. Principles of digital signal transmission 13. Influence of noise and error probability in digital transmission systems 14. Hierarchies of analog and digital transmission systems 15. Quality of service									
Author/s		Nome	Textbook (s	-	Vac	Dagos (from to)			
Author/s Dukic M		ciples of	of publication, p Telecommunic		ic 2008				
Stojanovic I	Fund	damentals	ght, Belgrade amentals of Telecommunications, truction Book, Belgrade			,			
Banjanin M			n Engineering, ST	F Dobo	2007	7			
						l			

Additional readings								
Author/s		Name of publication, editor	Yea	ar Pag	ges (from-to)			
	Assesment methods							
	Pre-exa	n obligations						
	TE Atter	idance at lectures / exercises	5	5%				
	Positive	y graded seminar paper	15	15%				
Evaluation criteria	Colloqui	um 1	15	15%				
	Colloqui	um 2	15	15%				
	LE		10	10%				
	Final exa	am	40	40%				
	SUM			100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and [·]	Traffic engir	neering Doboj			

		1							
		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering							2005
-18-			-	-			5		Ser Tak
S S S S S S S S S S S S S S S S S S S				Study prog			<i>(</i> :		
		P	Profile: Telecommunications and postal traffic						LOZOY
			l cycle			III year of stu			
Course title						EMATIC SYSTE		_	1. CT
Department			ent of Infoi ngineering i		ommu	nication System	ns in Traffic,	⊦ас	ulty of Transport and
(Code		Co	urse status	;	Semes	ter		ECTS credits
САФ11СТС				required		VI			6.0
Professor/s		D Aleksand							
Associate/s	Ph	D Aleksand	lar Stjepano	ovic, associ	ate pro	ofessor			
	Weekly	hours		Individ	ual stu	dent hours (pe	er semester))	Student workload coefficient S _o
L	TE		LE	L		TE	LE		So
3	1		1	45		15	15		1,5
		load (hours		ster)					s, per semester)
W	= 3*15 +	1*15 + 1*1	l5 = 75			T = 3*15*So +	1*15*So + 1	1*15	5*So = 75 So=90
		Total wor	kload: W +	T = Uopt =	60 + 90) = 150 hours p	er semester		
			-	-		rms, European	-		
	2.	proposal of	f solution o	f distribute	d infor	mation and cor	mmunicatio	n sys	stems for transport
Course aims an	d m	monitoring							
learning outcom	mes 3.	3. ITS research and interaction with spatial information infrastructure							
	4.	ITS archited	architecture						
	5.	defining us	er requiren	nents for tl	ne purp	ose of refixing	transport p	robl	ems
Prerequisites	Th	iere is no pr	ior conditio	onality					
Teaching meth	ods Le	ctures, aud	itory exerci	ises, labora	itory ex	ercises			
Course content1. Traffic management. Traffic management strategies 2. Adaptable telematics systems. Network capabilities 3. Basic definitions of telematics. Toll collection systems 4. European projects. Definition of ITS, Standards, norms of the directive, Legal bases, project 5. ITS architecture. Theoretical foundations, Possible applications of ITS 6. Traffic management - traffic distribution and application of telematics systems 7. Technical preconditions for the application of ITS 8. Detectors and sensors. Vehicle network architecture 9. Telecommunication networks in traffic 						systems vices			
	,				ook (s)				
Autho		auta Tal		of publica	-		Year	ſ	Pages (from-to)
Stjepanovic A,			-		-	of East Sarajev	^{/0,} 2020	D	
М		Faci	lity of Iran	sport and	rattic	Ingineering			
	_					•			
	,			Addition					
Autho	or/s		Nam	ne of publi	cation,	eaitor	Year	ſ	Pages (from-to)

Assesment methods

Points

Percentage

Evaluation criteria

	Pre-exam obligations						
	TE Attendance at lectures / exercises						
	Positively graded seminar paper						
	Colloquium 1						
	Colloquium 2						
	LE	10	10%				
	Final exam	40	40%				
	SUM	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and	Traffic engin	eering Doboj				

		UNIV Faculty of T		Contraction of the second				
Course title		I cycle		III year of stuc POSTAL TRAFFIC	ly			
Department		ent of Infor gineering i	mation - Commu		s in Traffic, F	aculty of Transport and		
Code		Cou	urse status	Semest	er	ECTS credits		
САФ11СТ07109	9156,0320	0	bligatory	V		6.00		
Professor/s	PhD Dejan Ma		•					
Associate/s Wee	PhD Dejan Ma	arković, full	ŕ	dent hours (per	semester)	Student workload		
L	TE	LE	L	TE	LE	coefficient S _o		
3	2	0	63	42	0	1.4		
Total teacher w W = 3*15 + 2*15		0 + 0 = 75	hours	3*15*1,4 + 2*15	*1,4 + 0*15* hours	urs, per semester) *1,4 = 60 + 42 + 0 = 105		
Course aims and learning outcomes	1.3 Organization and functions of nostal traffic							
Prerequisites	 Conditions for taking the course are: 1. regular class attendance (lectures and exercises), 2. completed and defended project task, 3. passed all colloquia, 4. achieved a minimum number of points on the tests. 							
Teaching methods			lculation exercise	es, consultations				
Course content	Is Lectures, auditory and calculation exercises, consultations 1. Introduction. 2. Historical development of postal traffic 3. Developmental forms of postal connections 4. Functions of postal traffic 5. Basics of organization of postal traffic and communications 6. I colloquium 7. Specifics of the organization and functioning of postal traffic 8. Competition in postal traffic 9. Basics of international postal traffic 10. Congresses of the Universal Postal Union 11. Postal network 12. Classification of postal service units into classes 13. Postal address code 15. II colloquium							
			Textbook (s					
Author/s Marković, D., Grgure			•	ublisher aćajni fakulte	et 2006	Pages (from-to)		
			Additional read	-				
Author/s			e of publication,		Year	Pages (from-to)		
Grgurević, B., Marko		A	ge i mreža, Beogra ssesment metho	_	2005	Points Percentage		
	Pre-exam obli	gations						

	Attendance and activities at lectures and exercises	10	10 %
	Completed and positively evaluated project task	20	20 %
	Passed tests	10	10 %
	All colloquia passed	40	40 %
	Final exam		
	oral	20	20 %
		100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

		Faculty of T	ERSITY OF EAST Fransport and Transport and T	affic Engineerin	g	Sola	2003 MIRE CARL	
82			communications		fic			
15 1.5m 30 50 m		l cycle		III year of stu	ıdy		AOEO J	
Course title								
Department		rtment of comp st Sarajevo	outers, informati	on technologies	s and biotechr	nology, E	rF, University	
Code		Cou	Irse status	Semes	ster	ECT	S credits	
САФ11СТ07115	5367,0321	m	andatory	VI			7,00	
Professor/s		n Jauševac, assi	-					
Associate/s	PhD Gora	n Jauševac, assi	stent proffesor					
Wee	kly hours		Individual stu	udent hours (pe		ent workload efficient S _o		
L	TE	LE	L	TE	LE		So	
3	2	1	67,5	45	22,5		1,5	
	15 + 1*15 =	ours, per semes = 45 + 30 + 15 =	90	Total student v 3*15*1,5 + 2*15	5*1,5 + 1*15* 135			
			Γ = U _{opt} = 90 + 13		er semester			
Course aims and learning outcomes	1. acquire	basic knowled	the student will ge of computer r nance of compute	networks and pr		ication p	rotocols.	
Prerequisites	No	/						
Teaching methods	Lectures a	and laboratory e	exercises					
Course content	3. Definition 4. Local art 5. Stochas 6. Basics of 7. I collog 8. Networ 9. IPv4 and 10. Mobile 11. Basic at 12. Transp 13. Email st	rea networks (L stic and determ of Ethernet tech juium rk layer on the I d IPv6. e IP. algorithms and port layer on the system archited management f	and the concept ANs). inistic methods of mology. nternet. protocols of unio e Internet. cture and WWW functions and arc	of media access cast routing on t basics. hitecture.	control (MAC).		
Author/a		Nama	Textbook (s	-	Veer	Dev		
Author/s			of publication, p eže, V izdanje, M		Year	Pa	ges (from-to)	
A.Tanenbaum, D. W	etherall.	Beograd			2012			
W. Stallings	Prentice-Hall, Inc.							
S. BigelowRačunartske mreže, instaliranje, održavanje i popravljanje, Mikroknjiga, Beograd2004								
A		••	Additional read	-	V		· · · · · · · · · · · · · · · · · · ·	
Author/s		Nam	e of publication,	, editor	Year	Pa	ges (from-to)	
Evaluation criteria			ssesment metho	ds	F	Points	Percentage	
	Pre-exam	obligations						

	attendance at lectures	5	5%
	Seminary paper	15	15%
	l Colloquium	15	15%
	II Colloquium	15	15%
	laboratory exercises	10	10%
	Final exam	-	
	Writing exam	40	40%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Fraffic engine	eering Doboj

	UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering									
-18-				ram: Traffic	3	- 2	and the second second			
				ations and postal traj	fic					
And	I cycle III year of study									
Course title		Teyele	•							
Department	Der	BASICS OF MARKETING Department of Marketing and Management, Faculty of Economics in Brcko								
Code		Ου Ου	urse status	Semes	ter	E	CTS credits			
САФ11СТ07102	565,0320	ol	bligatory	IV			5.0			
Professor/s		tlana Terzić, asso		essor						
Associate/s		tlana Terzić, asso	-							
Wee	kly hours		Individ	ual student hours (pe	r semester		udent workload			
		15					coefficient So			
L	TE	LE	L	TE	LE		So 1			
3 Total taashar w	2 varklaad (l	0	45	45 Total students	0 workload (k		1.5			
	-	hours, per semes *15 = 60 hours	ier)	Total student T= 2*15*S₀ +	-					
vv=2 · 15 +			T-11 - 6	$1 = 2^{+}15^{+}5_{0} + \frac{1}{2}$ 0 + 90 = 150 hours pe			- 30 110015			
				epts in the field of ma						
Course aims and		-	-	or defining marketing	-	trategies				
learning outcomes		of marketing ma			Douis and S	a acceles				
		net marketing								
Prerequisites		-	for listenin	g and taking the cours	e.					
Teaching methods		, auditory exerci			-					
		oncept and impo								
		2. Basic principles of marketing								
	3. Devel	3. Development of the marketing concept								
	4. Marke	4. Marketing categorical system								
	5. Marke	Marketing mix								
		Iarketing information system and decision making Iarketing, market, consumer (I colloquium)								
				colloquium)						
Course content		Marketing environment								
		9. Elements of marketing research								
		10. Basics of marketing management								
		11. Basic marketing instruments								
		luct in marketing e in marketing								
		keting channels.	Promotion	in marketing						
		rnet marketing (II		-						
			•	ook (s)						
Author/s		Name		tion, publisher	Yea	r F	Pages (from-to)			
				nomski fakultet, Bar	nia					
Macura P.		Luka			2009.					
			Addition	al readings						
Author/s		Nam	e of public	cation, editor	Yea	r P	Pages (from-to)			
Milisavljević M., Mar	ičić B.			omski fakultet, Beogra	d. 2004.					
			ssesment i	methods		Points	Percentage			
	Pre-exar	n obligations				T				
		attendance at lectures and exercises					10.0/			
						2 x 5	10 %			
Evaluation criteria				positively graded sem	nar paper	10	10 %			
Evaluation criteria					nar paper					
Evaluation criteria	Final exa	am		positively graded sem	nar paper	10	10 %			
Evaluation criteria	Final exa			positively graded sem written exam (2	nar paper	10	10 %			

Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj

	P	Faculty of T Strofile: Teleo	ERSITY OF EAST Transport and Tra Study program: 1 communications	affic Engineering Traffic and postal traffi		AOEDJ		
Course title	rse title III year of study EXPLOITATION IN POSTAL TRAFFIC							
Department		ent of Infor ngineering i	mation - Commu			Faculty of Transport and		
Code			urse status	Semeste	er	ECTS credits		
САФ11СТ07109	466,0320	o	bligatory	VI		6.00		
Professor/s	PhD Dejan Ma	arković, full	professor					
Associate/s	PhD Dejan Ma	arković, full	professor					
Wee	kly hours		Individual stu	ident hours (per	semester)	Student workload coefficient So		
L	TE	LE	L	TE	LE	So		
3	2	0	63	42	0	1.4		
Total teacher w W = 3*15 + 2*15		-				ours, per semester) *1,4 = 60 + 42 + 0 = 105		
	Total work	kload: W + 1	$T = U_{opt} = 75 + 10$	5 = 180 hours per	semester			
Course aims and learning outcomes	 Technologi The role of Exploitation 	cal processe philately ar n in interna	stal traffic in the e es in postal traffic nd electronic pos tional postal traff	tage stamps	iety			
Prerequisites	 completed passed all c 	and defend colloquia,	ce (lectures and e led project task, number of points					
Teaching methods								
Course content	 The role of postal traffic in the economy and society Technological processes in shipment transfer Receipt of postal items Dispatch of postal items Transport of postal items Arrival of postal items Delivery of postal items 							
-	• • • • • •		Textbook (s)				
Author/s		Name	of publication, p	ublisher	Year	Pages (from-to)		
Dobrodolac, M.; Ma D., Blagojević, M.		oloatacija po Iltet, Beogra	oštanskog saobra ad	aćaja, Saobraćajn	i 2016			
			Additional read					
Author/s Marković, D., Grgure			•	editor praćajni fakulte	Year t 2006	Pages (from-to)		
Evaluation criteria	Pre-exam obli	A	ssesment metho	ds		Points Percentage		

	Attendance and activities at lectures and exercises	10	10 %
	Completed and positively evaluated project task	20	20 %
	Passed tests	10	10 %
	All colloquia passed	40	40 %
	Final exam		
	oral	20	20 %
	IN TOTAL	100	100 %
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

<u> </u>					F / A=					
			-	ERSITY OF				2005		
-18-			aculty of	5	See Market					
· *82*			Study program: Traffic							
	III.	Pr	Profile: Telecommunications and postal traffic							
Course title			I cycle III year of study OPTICAL COMMUNICATIONS							
course title		Denartm	ant of Infor					Faculty of Transport and		
Department			gineering i		.ommu	filcation system		Faculty of Transport and		
	Code		Co	urse status		Semes	ter	ECTS credits		
САФ11СТ(0211		elective		VI		5.0		
Professor/s		D Aleksand			ate pro			5.0		
Associate/s		D Aleksand								
100001000,0	Weekly		ar otjepane			ident hours (pe	er semester)	Student workload coefficient So		
L	ТЕ		LE	L	T	TE	LE	S _o		
2	1		1	45		22,5	22,5	1,5		
		<u> </u>						purs, per semester)		
		load (hours,	-		T = 2			*1,5 = 45 + 22,5 + 22,5 =		
W = 2*15	o + 1*15 +	+ 1*15 = 30 ·	+ 15 + 15 =	60		, _	90	. , ,-		
		Total work	load: W +	T = Uopt =	60 + 90) = 150 hours p	er semester			
	1.	Introducing	students t	o basic cor	ncepts,	photodiodes, p	ohototransist	ors.		
		-			-			lerstand the principles o		
Course aims an	sig	gnal transmi	ssion in op	tical teleco	ommun	ications systen	ns.			
learning outco	13	Know the characteristics of optical fibers and cables, the way of functioning of optical and								
	op	toelectronic components and their role in the optical communication system.								
	4.	Will be able	be able to independently design point-to-point optical connections in accordance with							
	re	commendat	ions and st	tandards.						
Prerequisites		iere is no pr	or condition	onality						
Teaching meth	ods Le	ctures, audi	tory exerci	ses, labora	atory ex	kercises				
		-				optical connec	ction			
		Basic advan								
			(velocity of propagation, refractive index, reflection and refraction, polarization)							
			cal fibers (propagation, Snel's law, total reflection, fiber types, attenuation, dispersion,							
		andards)	•							
			cal cables							
		Light source	t sources and transmitters (characteristics, LEDs and laser diodes)							
Course content	-			ivers						
		Phototransi	otodiodes and receivers							
	÷.). Optoelectronic signal conversion								
		1. Passive and active optical components								
		2. Optocoup	-	· · P						
		. Frequency Multiplex (FDM)								
			ne multiplex (TDM)							
15. Il colloquium										
Textbook (s)										
Autho				of publica	-		Year	Pages (from-to)		
Popovic M, De Vukobra	-	: M, Opti Sad	cal Teleco	mmunicati	ons Sy	stems, FTN, No	ovi 2002			
Ontical Telecommunications University of										
Marini	icic A		rad, Beogr				1997			
Karo	lj S			systems, [DMZUH	I Zagreb	2003			
	-	Colle		of tas		from opti				
Bjelica M, N	-		ommunica		Acade					
Gvozo	lic D		rado	,		0	,			

Belgrade

		Additional readings			
Author/s		Name of publication, editor	Yea	ges (from-to)	
		Assesment methods		Points	Percentage
	Pre-exa	n obligations			
	TE Atter	dance at lectures / exercises		5	5%
	Positive	y graded seminar paper		15	15%
Evaluation criteria	Colloqui	um 1		15	15%
	Colloqui	um 2		15	15%
	LE			10	10%
	Final exa	im		40	40%
	SUM			100	100%
Web sources	http://s	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP	-I-ciklus-202	1.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and [·]	Traffic engin	eering Doboj

			-					2005	
- SHE			Faculty of Transport and Traffic Engineering Study program: Traffic						
82			Profile: Tel	40501					
15 Jara 30 C			l cycle			III year of stu	-	Lono.	
Course title						MUNICATION			
Department		Dep	partment of Tel	ecommunic	ations E	TF East Sarajev	0		
	Code			ourse status	;	Semest	er	ECTS credits	
САФ11СТО	72097	-		elective		VI		5,00	
Professor/s			ko Stojčić, assis	•					
Associate/s		PhD Mir	ko Stojčić, assis	stant profess	sor				
		dy hours			ual stu	dent hours (pe		Student workload coefficient S _o	
L		TE	LE	L		TE	LE	So	
2		1	1	45		22.5	22.5	1.5	
Total teach	her wo	orkload (ł	nours, per seme	ester)				urs, per semester)	
			80 + 15 + 15 = 6		T = 2	*15*1,5 + 1*15	-	1,5 = 45 + 22,5 + 22,5 =	
		T - 1	بدياء محاداتهم وروا		50 · 00	-150	90 hours		
						=150 hours pe	semester		
			ering this cours				inciplos and	functioning of radio	
			nication system		nuersta	ind the basic pr	incipies and		
Course aims an	d		•		wave t	o effectively us	RE spectru	m as a limited resource.	
learning outcor	nes				-			unication systems in	
		-	modes of traffic	-					
				-		ring in radio coi	nmunicatior	systems	
Prerequisites			e no special co		0	0			
Teaching metho	ods				tory ex	ercises, consulta	ations		
						nternational Ra		ons. ITU-R	
			endations.				•		
		2. Divisio	on of radio freq	uency spect	rum an	d purposes of i	ndividual RF	bands.	
		3. Radio	connection mo	odel. Calcula	tion of	basic radio con	nection para	meters. Ways of	
		propaga	tion of radio w	aves: surfac	e, ionos	pheric, spatial	waves, scatte	ering.	
		4. Regul	atory aspects in	n the field of	radio d	communication	s. RF spectru	m management.	
		-	of the RF spec						
								ements and traffic	
		-		culating the	require	ed capacity in ra	dio commur	nication systems. Multi-	
Course content	:		raffic models.	ootrum	Dura	nio accore to th	o cooctri		
		7. I collo	-	Jech um use	. Dynaf	nic access to th	e spectrum.		
			communicatio	n services					
					on svste	ems in traffic an	d transport.		
		-			-	ms in traffic and	-		
			less ad-hoc net		•				
						ffic and transpo	ort.		
		13. Sate	llite radio-com	munication s	systems	in traffic and t	ransport.		
			Systems for positioning and tracking of objects in traffic and transport.						
		15. II col	loquium						
					ook (s)				
Autho	or/s			e of publica			Year	Pages (from-to)	
H.Sizun			Radio Wave F Applications,		tor Tel	ecommunicatio	ⁿ 2004.		
W. Webb			Wireless Cor Wiley & Sons	mmunicatio	ns: Th	e Future, Joh	ⁱⁿ 2007.		
				Addition	al read	ings			
						<u>J</u> -			

Author/s		Name of publication, editor	Yea	r	Pages (from-to)	
S. A. Kyriazakos, Karetsos	0.1.	Practical Radio Resource Management in Wireless Systems, Artech House				
Горан Марковић		Основи телекомуникационих система, Саобраћајни факултет Београд	2012			
		Assesment methods		Poi	nts	Percentage
	Pre-exam	obligations		-		
		attendance at lectures / exe	ercises	5		5%
		positively graded seminar	paper	15		15%
Evaluation criteria		Colloqu	uium 1	15		15%
Evaluation criteria		Colloqu	uium 2	15		15%
		lab. exe	ercises	10		10%
	Final exam	1				
			oral	40		40%
	IN TOTAL			100)	100 %
Web sources	http://sf.u	ies.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-cikl	us-2021	.pdf
Applicable from	11/15/202	22 - 198 Session of the Councile, Faculty of Transpo	rt and T	raffic	c engine	eering Doboj

Department Tra Code Tra CAФ11CT>23525,0211 PhD Ale Associate/s PhD Ale Associate/s PhD Ale Associate/s PhD Ale Code VereVision Image: Comparison of the		ty of Transport a Study prog Telecommunico	nd Traf r am: Tr	affic	ic		South Williams
Department Department Code Tra CA CA CA PhD Ale Associate/s PhD Ale Associate/s PhD Ale Associate/s PhD Ale Course I Total teacher workload (I Weekhow Weekhow I Acqui 2 Total teacher workload (I Weekhow Weekhow I Course aims and learning outcome I I acqui I I acqui <td< td=""><td></td><td>/cle</td><td></td><td>III year of stud</td><td></td><td></td><td>AOEOJ</td></td<>		/cle		III year of stud			AOEOJ
Department Tra Code Intra CAФ11CT023505001 PhD Ale Associate/s PhD Ale Associate/s PhD Ale Associate/s PhD Ale Course aims and learning outcomes 1. Acquit Prerequisites There is Teaching methods Lectures Prerequisites 1. Introd Source 1. Introd Source 1. Introd Source 1. Introd Source 1. Introd Basice 1. Introd Introd Source Introd Source A linford Source Introd			UCTIO	N TO INFORMA	-	ORY	
CAФ11CTUSUSCION PhD Ale Professor/s PhD Ale Associate/s PhD Ale Associate/s PhD Ale Course aims and learning outcomes 1. Acqui Prerequisites There is Teaching methods 1. Introo Source 1. Introo Prerequisites 1. Introo Teaching methods Lectures 1. Introo 2. Defin 3. Source 1. Introo Prerequisites 1. Introo 1. Introo 2. Defin 3. Source 1. Introo 1. Introo 2. Defin 1. Secu 1. Secu 1. Introo 1. Secu 1. Introo 1. Secu 1. Introo 1. Secu 1. Intro 1. Secu		⁻ Information - C ring in Doboj	ommur	nication System	s in Traffic	, Faculty	y of Transport and
Professor/s PhD Ale Associate/s PhD Ale Associate/s PhD Ale Associate/s PhD Ale Veekly hours PhD Ale L TE 2 1 Total teacher workload (I W = 2*15 + 1*15 + 1*15 1 Course aims and learning outcomes 1. Acqui Prerequisites There is Teaching methods Lectures Source 1. Introd Source 1. Introd Source 1. Introd Basics 1. Introd Source 1. Introd Basics 1. Introd Source 1. Introd Basics 1. Introd <td></td> <td>Course status</td> <td></td> <td>Semest</td> <td>er</td> <td> </td> <td>ECTS credits</td>		Course status		Semest	er		ECTS credits
Associate/s PhD Ale Veekly hours L TE 2 1 Total teacher workload (free teacher) Total teacher W = 2*15 + 1*15 + 1*15 1*15 + 1*15 Course aims and learning outcomes 1. Acquit Prerequisites There is Teaching methods Lectures Source 1. Introo 2. Defin 3. Source 4. Inform 5. Statis 6. The c 7. Baud 8. Shann 9. Basice 10. Data 11. Met 12. Bloc 13. Secu 14. Prob 15. Basic 15. Basic procedu		required		VI			5.0
L TE 2 1 Total teacher workload (I W = 2*15 + 1*15 + 1*15 W = 2*15 + 1*15 + 1*15 Total Course aims and learning outcome 1. Acqui Prerequisites There is Teaching methods Lectures Source 1. Introd 3. Source 4. Inford 3. Source 4. Inford 3. Source 4. Inford 4. Inford 5. Statis 6. The c 7. Baud 8. Shann 9. Basice 10. Data 11. Met 12. Bloc 13. Secu 14. Prot 15. Basic 15. Basic 15. Basic	ksandar Stje	epanovic, associ	ate pro	fessor			
L TE 2 1 Total teacher workload (free parties) Tota Tota Tota Course aims and learning outcomes 1. Acqui Course aims and learning outcomes I. Acqui Tota Teaching methods Lectures There is Teaching methods Lectures 1. Introd Source A lectures Course content Basics Basics 10. Data 11. Met 12. Bloc 13. Secu 10. Data 11. Met 12. Bloc 13. Secu 13. Secu 14. Prob 15. Basic 15. Basic 15. Basi							

	TE Attendance at lectures / exercises	5	5%			
	Positively graded seminar paper	15	15%			
	Colloquium 1	15	15%			
	Colloquium 2					
	LE					
	Final exam	40	40%			
	SUM	100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and	Traffic engin	eering Doboj			

	F	UNIV Faculty of T S Profile: Telec		AOED			
Course title		I cycle		III year of stud		NC	
Course title	Departe	ant of Infor		THEORY IN COM		NS Faculty of Transport and	
Department		ngineering i		unication system	5 III 11 dillic, 1	Faculty of Transport and	
Code			Course status Semest			ECTS credits	
САФ11СТ07235	365,0211	r	equired	V		5.0	
Professor/s	PhD Aleksan	dar Stjepano	ovic, associate p	rofessor			
Associate/s	PhD Aleksan	dar Stjepano	ovic, associate p	rofessor			
Wee	kly hours		Individual st	udent hours (pe	r semester)	Student workload coefficient So	
L	TE	LE	L	TE	LE	So	
2	1	1	45	22,5	22,5	1,5	
Total teacher w W = 2*15 + 1*						ours, per semester) *1,5 = 45 + 22,5 + 22,5 =	
	Total wor	kload: W + 1	T = Uopt = 60 + 9	90 = 150 hours pe	er semester		
Course aims and learning outcomes	signals and li 3. To provide telecommun 4. Introductio	near telecor theoretical ication syste	nmunication sys bases for solvin ems. n processes in c		ems in the fi		
Prerequisites	There is no p			••			
Teaching methods			•	exercises			
Course content	Lectures, auditory exercises, laboratory exercises1. Introduction. General model of telecommunication system2. Classification of messages and signals3. Overview of telecommunication systems4. Deterministic and stochastic approach in solving communication problems.5. Random processes.6. Review of basic concepts of probability theory and application to telecommunication signals and systems7. Spectral analysis of random processes8. Stationary and ergodic random processes9. Brief overview of spectral analysis of periodic and aperiodic signals.10. Relationship between the transmission function of a linear communication system ar the spectral characteristics of a signal.11. Detection of binary signals in the presence of noise.12. Small Range Communications. Fundamentals of radar systems13. Probability of error in digital modulation procedures14. Detection of telecommunication signals.						
			Textbook	(s)			
Author/s			of publication,	-	Year	Pages (from-to)	
Georgije L		tistical theo prmation the					
	<u>F</u>		Additional rea	dings			
Author/s		Nam	e of publication		Year	Pages (from-to)	

		Assesment methods		Points	Percentage			
	Pre-exar	n obligations						
	TE Atten	dance at lectures / exercises		5	5%			
	Positively graded seminar paper1515%							
Evaluation criteria	Colloqui	um 1		15	15%			
	Colloqui	um 2		15	15%			
	LE			10	10%			
	Final exa	m		40	40%			
	SUM			100	100%			
Web sources	http://sf	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-I	-ciklus-202	1.pdf			
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	rt and Ti	raffic engin	eering Doboj			

				ERSITY OF	EASTS			1000	
						ffic Engineering	σ	Standing Oder	
				Study prog			<u>b</u>		
82		Pr				and postal traf	fic		
100 and 10			AOEOJ						
Course title		I cycle IV year of study FINANCIAL OPERATIONS							
Department	De	epartme	ent of Acco	unting, Au	diting a	nd Business Fi	nance - FPE Bije	eljina	
6	ode		Co			[amag		ECTS credits	
CC CC		COL	urse status		Semes	ster	ECTS credits		
САФ11СТ07	135475,022	0	0	bligatory		VII		5.0	
Professor/s	PhD Sl	obodan	Subotić, a	ssociate pr	ofessor				
Associate/s	Sinisa	Bozicko	vic, senior	assistant					
v	Veekly hour	s		Individ	ual stud	dent hours (pe	er semester)	Student workload coefficient S _o	
L	TE		LE	L		TE	LE	So	
2	2		0	45		45	0	1.5	
Total teache	er workload	(hours	ner semer	ter)				rs, per semester)	
$W = 2*15 + 2^{3}$		-	-		T = 2	*15*1,5 + 2*1		1,5 = 45 + 45 + 0 = 90	
VV - 2 13 FZ							hours		
						= 150 hours p	er semester		
		-		the studer					
		-		-	-	stal companies			
		-	-				ns of the posta		
		-	-			-		s of PTT organizations;	
			-				-	tions to users, for	
Course aims and				i their own	name,	and for the acc	count and on b	enalt of other	
learning outcom			nizations.	iol in strum	onto on	d financial ma	rkat internatio	anal financial flows	
		roduction to: financial instruments and financial market, international financial flows electronic business.							
		Acquiring basic knowledge of financial flows in the fields of public, banking, monetary,							
		ernational, business finance and performing financial and monetary transactions in postal							
	traffic.	reional,	business n		periori				
Prerequisites		cial con	ditions						
Teaching method				ses, semin	ar pape	r			
			scientific						
					, bankiı	ng, public, inte	rnational and b	ousiness finance and	
		asic characteristics of monetary, banking, public, international and business finance and ir importance and impact on the operations of postal organizations							
				institution		-			
	4. Dev	elopmei	nt of banki	ng and mo	netary	affairs			
		ding rule							
		idity of postal organizations							
Course content					ial flows	s (First colloqu	ium)		
			the Centra						
							payment syste	ms	
						tal organizatio			
		1. Monetary business services for individuals and legal entities							
		Accounting and treasury operations in postal organizations Electronic business							
	14. Electronic data processing in the field of payment transactions								
			loquium			, payment tra			
	10. 500			Texth	ook (s)				
Author	/s		Name	of publica			Year	Pages (from-to)	
Šarac Dragana	-					kom saobraća			
Kovačević Ljubo	mir Vuniak			ansijama	preduzi	eća, Saobraća	jni 2009		
	, vanjak	Spid	junije ili	anonjarina	r'cuuz		2005		

Nenad		fakultet Do	boj							
			Additional	readings						
Author/s		Name of publication, editor					r	Pages (from-to)		
Mikerević Dragan		Finansijski Banja Luka	menadžment,	Ekonomski	fakultet	2005				
Plakalović Novo		Monetarna	ekonomija, Ekor	nomski fakult	et Pale	2004				
		Assesment methods						nts	Percentage	
	Pre-exam obligations									
		attendance at lectures / exercises							10%	
Evaluation criteria	positively evaluated seminar paper								10%	
Evaluation criteria	colloquium								30%	
	Final exam									
	oral								50%	
	IN TOTA	L					100)	100 %	
Web sources	http://s	f.ues.rs.ba/er	ng/wp-content/u	uploads/2022	/05/Engles	ski-NPP-	I-cik	us-202	1.pdf	
Applicable from	11/15/2	022 - 198 Ses	ssion of the Cour	ncile, Faculty	of Transpo	ort and T	raffi	c engin	eering Doboj	

A NETO		UNIV	ERSITY OF	EAST	SARAJEVO		2003		
		Faculty of ⁻		State Balles Barris					
- Yhc		5							
		-	communic	ations	and postal traff		AOEOJ		
0 erit		l cycle			IV year of stu	-			
Course title									
Department	Dep	partment of Mark	ceting and	Manag	gement, Faculty	of Economics	in Brcko		
Code			irse status	5	Semest	er	ECTS credits		
САФ11СТ0710			equired		VII		5,0		
Professor/s		o Erceg, associat							
Associate/s	PhD Zivk	o Erceg, associat	e professo	or			Churdenterrelitered		
We	ekly hours	1	Individ	lual stu	ident hours (per		Student workload coefficient S _o		
L	TE	LE	L		TE	LE	So		
2	2	0	45		45	0	1,5		
		hours, per seme	-	-			urs, per semester)		
$W = 2^{+}15 + 2$		5 = 30 + 30 + 0 =					*1,5 = 45 + 45 + 0 = 90		
		al workload: W -				ei seinester			
						ces in the cor	ntext of the needs in the		
		way market,		5 51 PI			text of the needs in the		
Course aims and		•	t approach	nes, mo	dels and metho	ds of measur	ement and quality		
learning	improve		••	,			. ,		
outcomes	3. devel	op and apply spe	cific qualit	y mana	agement models	in real terms	of business,		
	4. mana	ge the resources	more effe	ctively	in its managem	ent in real bu	siness conditions,		
	5. achiev	es a more succe	ssful comr	nunica	tion (internal an	d external).			
Prerequisites	No prere	equisites							
Teaching methods	Lectures	, auditory exerci	ses, semin	ar wor	k				
		y of developmer	-	-	-				
		y and standardiz							
		Understanding quality. The concept and definitions of quality							
		. Qualitative, qualitative and quality management							
		Understand the context of an organization. Deming's key to understanding the organization							
		Quality management systems colloquium							
Course content		Quality Manager	nent (TOM	1). Mor	lels of excellence	9			
Journe Content		ated Manageme	-	-		-			
	-	ity system accord	-		2015				
		ess model of the	-						
		analysis. Risk ass		nethod	S				
		nods and tools of							
		nods of measurir	ig custome	er satis	faction				
	15. II co	loquium	-						
A				xtbool		V	Deges (from to)		
Author/s			e of public		publisher ed management	Year	Pages (from-to)		
Bobrek, M., Mileki	ć, M.,			-	-		1-284		
Macanović, K		system according to ISO 9001: 2015), Faculty of 2014. Transport and Traffic Engineering							
Todorović, Z.		Quality Manag		_	f Economics Bar	^{nja} 2009	1-234		
		Luka	٨٩٩:+:-	natros	dings				
Author/s		Nar	Additio ne of publ		-	Year	Pages (from-to)		
Zivkovic, Z., Djordje		Quality Manag				2013.	1-471		
Evaluation			ssesment				oints Percentage		
		A	Jocoment	metho		F	i creentage		

criteria	Pre-exam obligations								
	Presence of lectures / exercises	10	10 %						
	Seminar work	20	20 %						
	Colloquium 2x35 70 %								
	Final exam								
	Final exam (oral)								
	TOTAL	100	100 %						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj						

WETDU			UNIV	ERSITY OF EA	ST SARAJEVO				2005
		I	Faculty of Transport and Traffic Engineering						AINN WAALA
	KRY +		9	Study prograi	n: Traffic			1	
		Pr	-	communicatio	ons and postal			- C	AOEOJ
Asra jo N			I cycle		IV year of				
Course title					Y OF AUTOMA				
Department		Departme	ents of Auto	omation and	Robotics - ETF E	ast Sarajevo			
	de		Course status Se			Semester			5 credits
САФ11СТ071100			Obligatory VII			VII			7,0
Professor/s		Slavko Đu							
Associate/s	PhD	Slavko Đu	rić, full pro						
v	Weekly hours			Individual	student hours	(per semest	er)		ent workload efficient So
L	TE		LE	L	TE	LE			So
3	2		1	60	40	20			1,33
Total teache W = 3*15 +		•		· ·	Total stude = 3*15*1,33 +	nt workload 2*15*1,33 + 12	1*15*	-	
					+ 120 = 210 hou				
					id knowledge in				trol theory.
Course aims and					nowledge in th	e field of sys	tems o	ontrol,	
learning outcom		-		erformance,					
				I regulators.					
Prerequisites		s not have							
Teaching method				rcises, semina					
					nation. Control	-			
			-		trol system. Co				
		 Solving differential equations. General solution, aspect of control theory Laplace transform. Laplace transform properties 							
		. Laplace transform. Laplace transform properties . Inverse Laplace transform							
		Inverse Laplace transform The transfer function of electrical networks. Graph of signal flow							
			olloquium						
Course content		les and Zeros of the transfer function. Determination of system response							
		rocess classification and system errors I							
		. Process classification and system errors I							
		Problem setting and stability condition							
		Algebraic s	-						
	13.	Frequency	stability cr	iteria					
		Regulators							
	15.	II Colloquit	um						
				Textboo					
Author	/s			of publicatio	-		ear	Pag	es (from-to)
Stojić, N	Л.	Cont	inuous Aut		ol Systems, Scie	entific 19	90.		
2003.071				Book, Belgr					
Kostadinović, M	., Đurić, S	S. Aut		-	aculty of Trans	port			
			and T	raffic Enginee					
	,			Additional r	-			-	10
Author	/s		Nam	e of publicati	on, editor	Y	ear	Pag	es (from-to)
			A	ssesment me	thods		Ро	ints	Percentage
	Due		m obligations						
Evaluation criter	a Pre-	exam oblig	gations						

	Seminar papers	20	20%					
	Colloquium 1	10	10%					
	Colloquium 2	10	10%					
Final exam								
	Final exam (oral/written)	50	50%					
	TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

		1					Г		
		.		ERSITY OF				2005 Naine 94	
•18•						ffic Engineerir	Ig	Ser. Martin	
SAC				Study prog			<i>((</i> ; -		
		Pr	-	communica	ations (and postal tra		AOEOJ	
Course stills			l cycle			IV year of st			
Course title		Deverture	at of Tolo						
Department		Departme	ent of Teleo	communica	itions E	TF East Saraje	evo		
	ode		Соц	urse status		Seme	ster	ECTS credits	
САФ11СТ07				bligatory		VI	I	7,00	
Professor/s		D Mirko Sto	-	-					
Associate/s	Ph	D Mirko Sto	jčić, assista						
v	Weekly hours Individu				ual stu	dent hours (p	er semester)	Student workload coefficient S _o	
L	TE	TE LE L TE LE		So					
3	2		1	60		40	20	1,33	
Total tacab	orworld	and (hours	porcomer	tor		Total student	workload (ho	ours, per semester)	
Total teach W = 3*15 + 2 ³		-	-	-	T = 3	*15*1,33 + 2*	15*1,33 + 1*:	15*1,33 = 60 + 40 + 20 =	
$VV = 3^{\circ}15 + 2^{\circ}$	° 15 + 1°.	15 = 45 + 30	1 + 15 = 90	nours			120 hour	S	
		Total work	load: W +	$T = U_{opt} = 9$	0+120	= 210 hours p	er semester		
	Ву	mastering t	his course	the studen	nt will b	e able to:			
	1. ι	understand	and explai	n the basic	princip	oles of functio	ning of mobil	e communication	
	sys	tems,							
Course aims and	1 2. a	2. analyzes and compares the performance of different technologies in mobile							
learning outcom	nes cor	communication systems and selects appropriate technology for specific applications in traffic,							
	3. p	3. plans and designs the necessary capacities of the mobile network,							
	4. i	4. independently proposes solutions for the application of mobile communication systems in							
		ious types o							
Prerequisites		ere are no s	pecial con	ditions					
Teaching metho						ercises, consu			
								a mobile communication	
		ystem. Cellular organization of mobile communication systems (mega, macro, micro, pico							
		and femto cells).							
		2. Cellular system capacity and ways to increase capacity.							
								ffic. Basic functional	
			-			ular systems. I		-	
								tem). Mobile ad-hoc	
						n the vehicle			
						systems with		ations.	
		l colloquiur		iu prienom	iena in	the mobile ra	ulo channel.		
Course content		-	-	incering in	mobil	e communicat	ion systems		
course content								terization of traffic	
				-				ining the period of peak	
								ming the period of peak	
		traffic load. Loss of traffic. Erlang's model. Engset's model. 10. Dimensioning of the required capacities for packet switched traffic and traffic based on							
								e and traffic based off	
		circuit switching. Network resource optimization. 11. Service quality management in mobile communication systems.							
		Tariffing of							
		Mobile ser							
					-	eration mobil	e communica	tions systems (5G).	
						reless networl			
		II colloquiu			2.00 111				
				Texth	ook (s)				
				TEALD	001 (3)				

Author/s		Name of publication, publisher	Yea	r	Page	es (from-to)			
Gospić, N., Tomić, I., Popović, D., Bogojevi		Razvoj mobilnih komunikacija: od GSM do LTE, Univerzitet u Beogradu – Saobraćajni fakultet, Beograd	2010						
M Stasiak, M. Głąbowski, A. Wiśniewski, P.Zwierzykowski		Modelling and Dimensioning of Mobile Wireless Networks: From GSM to LTE, John Wiley & Sons	2010						
		Additional readings							
Author/s		Name of publication, editor	Yea	r	Page	es (from-to)			
		Assesment methods	Poir		nts	Percentage			
	Pre-exam obligations								
		attendance at lectures / ex	5		5%				
		positively graded seminar	15		15%				
Evaluation criteria		Colloq	15		15%				
Evaluation criteria		Colloq	15		15%				
		lab. ex	10		10%				
	Final exam								
			40		40%				
	IN TOTA	L		100)	100 %			
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-cikl	us-2021	1.pdf			
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj			

L SHE		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Telecommunications and Postal Traffic							Soft Mall Congrat
	-	Pr	I cycle	communicatio	ons c	IV year of st			AOEOJ
Course title			TCYCIE	Δ	RTIF				ang dan data kabala kabala padang
Department		Departme of East Sa						nnolo	ogy, ETF, University
Co	de		Со	urse status		Seme	ster		ECTS credits
САФ11СТ07	135576,03	311	m	andatory		VII			7,00
Professor/s	PhD	Gordana J	lotanovic,	associate prof	fesso	or			
Associate/s	PhD	PhD Gordana Jotanovic, associate professor							
v	Veekly ho	urs		Individual	l stu	dent hours (pe	er semester)		Student workload coefficient S _o
L	TE		LE	L		TE	LE		So
3	1		1	45		15	15		1.2
Total teache W =	er workloa 3*15 + 1*	*15 + 1*1 <u>5</u>	5 = 75			T = 3*15*S _o +	- 1*15*S _o + 1		per semester) *S₀ = 75 S₀=90
						150 hours pe			
Course aims and learning outcom									
Prerequisites	No								
Teaching method	10	Oral presentation, illustrative-demonstrative method, analysis and synthesis, practical computer work							esis, practical
Course content1.Historical overview, basic concepts and application of artificial intelligence in engineering. 2.Course content1.Historical overview, basic concepts and application of artificial intelligence in engineering). 3.Course content2.The concept of the artificial intelligence system (with a view to the applicat traffic engineering). 3.Resolution of the knowladge transformation. State-space. 5.Search methods: breadth first search, depth first search and combined search 6.Formalization of reasoning and inference systems.7.Predicate calculus. 8.Colloquium 1 9.9.Resolution. Unification and unification algorithms. 10.10.Resolution method. 11.11.Fuzzy logic and fuzzy logic controllers. 12.13.Introduction to Artificial neural networks. 14.14.Introduction to Probabilistic computing.							to the application in semantic.		
				Textboo	ok (s)				
Author	/s			of publicatio			Year		Pages (from-to)
Petar Hoto	omski	Sad,	Technical I	Faculty "Miha	jlo P	iversity of Nov upin" Zrenjani	n 2006	;	
Ivana Berl	ovic		Sad, Techr	tificial Intellige nical Faculty "		, University of ajlo Pupin'',	2006	;	
Stuart J. Russell a Norvig	nd Peter	Artifi		gence, A Mode	ern /	Approach,	2010)	
		·		Additional r	readi	ngs	·		
Author	/s		Nam	ne of publicati	ion,	editor	Year		Pages (from-to)

	Assesment methods	Points	Percentage
	Pre-exam		
	attendance at lectures	10	10%
	practical (laboratory) exercises	10	10%
Evaluation criteria	Colloquium 1	15	15%
	Colloquium 2	15	15%
	Final exam		
	oral exam	50	50%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	-I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Fraffic engin	eering Doboj

MITTON			UNIV	ERSITY OF	EASTS	ARAJEVO		2005
	N I	I	-			ffic Engineerin	g	STADAINH OAT A
D YNC -			5	Study prog	ram: T	raffic		
	Pr	ofile: Tele	communic	ations	and postal traj	ffic	40501	
15 AStea 30			I cycle			IV year of stu	udy	
Course title				ORGA	NIZATIO	ON OF TRAFFIC	COMPANIES	5
Department	De Do		ent of Tran	sport Engi	neering	- Faculty of Tr	ansport and T	Traffic Engineering
Cod	de		Соц	urse status	;	Seme	ster	ECTS credits
САФ11СТ071	04585,0220)	0	bligatory		VII		5.00
Professor/s	PhD Per	ica Go	jković, full				·	
Associate/s	Bojana	Ristic, s	senior assis	stant				
W	eekly hours			Individ	ual stu	dent hours (pe	er semester)	Student workload coefficient So
L	TE		LE	L		TE	LE	So
2	2		0	45		45	0	1.5
Total teacher W = 2*15 + 2*	•	-		•	T = 2		•	urs, per semester) *1,5 = 45 + 45 + 0 = 90
	Tota	al work	load: W +	$T = U_{opt} = 6$	50 + 90	= 150 hours p		
			his course			· · · · · · · · · · · · · · · · · · ·		
		-					es and organ	izational models of
	enterpr		•	Ū		· · · ·	0	
Course aims and	2. will b	e able	to analyze	the organ	ization	of large busine	ess systems, b	usiness and
learning outcome	s develop	ment p	nent policy and development factors;					
						ting according		
			-			and establish	their own coi	mpany as well as to give
			others on		o it;			
Prerequisites			pecial con					
Teaching methods			tory exerci					
			ganizationa			ganization		
			nal models					
			arge busin					
	_	-	nal models			panies		
	-		d developr	-				
	7. Chara	acterist	ic busines	s factors (I	colloqu	ıium)		
Course content			ods and tec	-	or optin	nization		
	_		nal culture					
			on of busir		ons			
			formation	•				
	_		on control.	-	-	-		
	-		on and ma	-		stments Insformation o	f the compar	NV
	14. Orga 15. II co		-	Organizati	Unartic		n the compar	ıy
	15. 11 00	noquiu		Text	oook (s)			
Author/	s		Name	of publica			Year	Pages (from-to)
Vešović, B. V., Boj		Orga		-	-	zeća, Saobraća	ini	
Knežević, Lj. N.	. , ,	_	tet, Beogra	-			2007.	
			3	Addition	al read	ings		
Author/	s		Nam	e of publi	cation,	editor	Year	Pages (from-to)
			Α	ssesment	metho	ls		Points Percentage
Evaluation criteria	Pre-exa	m oblig				-		
			,					

	attendance at lectures / exercises	10	10%				
	colloquium 1						
	colloquium 2	20	20%				
	Final exam						
	oral	30	30%				
	IN TOTAL	100	100 %				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	<u>1.pdf</u>				
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

			ERSITY OF EA		-		12005 AUNALIHI GAR.	
	F	S	Study program		ic			
15 15 mg 20 50		l cycle		-	r of stud		A O E O J	
Course title			IN.	FERNET TEC				
Department	Departm of East S		outers, inform	ation techn	ologies	and biotech	nology, ETF, University	
Code	Code Course status Semes					er	ECTS credits	
САФ11СТ07109	985,0311	m	andatory		VIII		5,00	
Professor/s	PhD Dragan F	Perakovic, fu	Ill professor					
Associate/s	PhD Dragan F	erakovic, fu	Ill professor					
Wee	kly hours		Individual	student ho	urs (per	semester)	Student workload coefficient S _o	
L	TE	LE	L	TE		LE	So	
3	1	1	30	15		15	1,5	
Total teacher w W = 2*15	orkload (hours/ + 1*15 + 1*15	-	ter)			-	urs, per semester) 15*S₀ = 90 hours	
	Total wo	rkload: W +	$T = U_{opt} = 60 +$					
Course aims and learning outcomes	2. Students n 3. Students sl	eed to learn nould gain k nould learn a	about ways t about Interna nowledge abo about the use	et protocols out Internet	and ser security	vices. and data se	-	
Prerequisites	Basic knowle	dge in the fi	eld of Comput	er network	s.			
Teaching methods	Oral presenta	ition. Labora	atory exercise	s: Use of HT	ML and	CSS languag	ge.	
Course content	2. Type 3. Appl 4. TCP, 5. IPv4 6. Inter 7. Appl standard. GPI 8. 9. WEB 10. Marl 11. Scrip 12. Inter 13. Accer	s of commu ication layer / IP protoco and IPv6 (ad rnet services ication of In RS and SMS. oquium 1 application ker languages thanguages rnet security ss control. L tography. D	Is (IP, ARP, ICI dvantages and s (INTRANET). Internet and m development es (HTML, XHT	the Interne MP, UDP, TC disadvanta obile device technologi ML, XML). urity. ation. e.	CP). ages). es in the	domain of t	traffic engineering. WAP	
Author/s		Name	of publication			Year	Pages (from-to)	
Andrew S. Tanenbau	um Con Sert	nputer netw	ork, Mikro kn	-		2005	1 4863 (11011-10)	
Richard Fox and We	i Hao serv	Internet infrastructure: Networking, web services, and cloud computing. CRC Press. Boca 2018 Raton, FL, USA.						
Comer, E. D.	Inte	Internetworking with TCP/IP, Prentice Hall 2013						
			Additional re					
Author/s			e of publicati			Year	Pages (from-to)	
Terry Felke-Morris Web development and design foundations with HTML5, 8th edition. Pearson. Hoboken, USA. 2016								
Josh Hill i James A. Brannan HTML5 I CSS3: brilliant, CET 2011								

	Assesment methods	Points	Percentage
	Pre-exam		
	lectures / exercises attendance	5	5%
	project task	15	15%
Evaluation criteria	Colloquium 1	15	15%
Evaluation criteria	Colloquium 2	15	15%
	lab. exercises	10	10%
	oral exam	40	40%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj

U HOTOU		UNIV	ERSITY OF	EAST S	ARAJEVO		2005
		Faculty of	Transport a	nd Trai	fic Engineering		Safakaine Orang
Pync	Study program: Traffic						
Profile: Telecommunications and pos							AOEOJ
Course title		l cycle	DE		IV year of stud E COMPUTER S		
Course title Department	Departm	ent of Auto			ics - ETF East Sa		
-	Departit						
Code		Cou	urse status		Semest	er	ECTS credits
САФ11СТ07135			bligatory		VIII		6.00
Professor/s	Ph.D. Mirosla						
Associate/s	Ph.D. Mirosla	iv Kostadinc	ovic, associa	ate pro	essor		Student workload
Wee	kly hours		Individu	ual stud	lent hours (per	semester)	coefficient So
L	TE	LE	L		TE	LE	So
3	1	1	2		1	1	1,5
Total teacher w	•		ster)				rs, per semester)
	+ 1*15 + 1*15				-	1*15*1,5 + 1	
3	0+ 15+ 15= 60		al workload	· 60 · 0		22,5+ 22,5 =	90 N
	1 Introducio					the field of di	gital management
	systems.	g students t			a knowledge in		gitai management
Course aims and		/ill get acqu	ainted and	master	the knowledge	in the field o	f construction,
learning outcomes					ems, with the c		
	microcontrol	-					
	3. Microproc		ol systems a	and Ma	tlaba.		
Prerequisites	Does not hav		<u> </u>				
Teaching methods	Lectures, aud				r		
	1. Problems of 2. Real-time s		-	-	tions		
					n. Final state m	achine.	
		• •		-			stems on the example
			•		l the automotiv		
		-	-	al input	s / outputs. An	alog inputs / (outputs. Pulse inputs /
	outputs. Real			c)			
	6. Real-time o		•		ot-driven system	ne Multitaski	ng systems
Course content	8. (I colloquiu		i systems. n	ntenup	diven system		ng systems.
			ocesses. Co	ommun	ication betwee	n tasks. Real-	task programming
	languages. Ha	ardware and	d software i	integra	tion.		
					configuration.		
							systems as a system
					al-time systems		application
					SCADA system real-time mana		
	14. Remote c					Bennenie Syste	
	15. Il colloqui	•					
				ook (s)			
Author/s			e of publica	-		Year	Pages (from-to)
Stojic M.	Co	ontinuous au			/stems, Scientif	ic 1990	
2. Ковачевић Б	Siar	als and Svet	book, Be ems Акалем	-	сао, Београд,	2007.	
	Juli		Additiona			2007.	
Author/s		Nar	ne of public			Year	Pages (from-to)
Evaluation criteria			ssesment n			D	oints Percentage

	attendance at lectures and exercises	10	10%				
	seminar papers	20	20%				
	I colloquium	10	10%				
	II colloquium	10	10%				
	Final exam						
	final exam (oral / written)	50	50%				
	IN TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engin	eering Doboj				

				ERSITY OF	EACT			0.0	
		F				ffic Engineering		SPATIALING WARTE	2
		-	-	Study prog				e 1	
•		Pr				and postal traff	ic		H
1300 10 V			l cycle			IV year of stu		40E01	7
Course title				М	JLTIME				
Department			ent of Infor gineering i		Commu	nication System	is in Traffic,	Faculty of Transp	ort and
Co	ode			urse status	5	Semest	er	ECTS credi	ts
САФ11СТ07	210585,0	0211		elective		VIII		5.0	
Professor/s) Aleksanda	r Stjepano	ovic, associ	ate pro	ofessor			
Associate/s		Mirko Sto							
v	Veekly h	ours		Individ	lual stu	ıdent hours (pe	r semester)	Student wo coefficier	
L	TE		LE	L		TE	LE	So	
2	1		1	45		22,5	22,5	1,5	
Total teache	er worklo	ad (hours	ner seme	ter)				ours, per semeste	
W = 2*15 +					T = 2	1*15*1,5 + 1*15	*1,5 + 1*15 [:] 90	*1,5 = 45 + 22,5 +	+ 22,5 =
		Total work	load: W + [·]	T = Uopt =	60 + 9	0 = 150 hours pe	er semester		
	1. F	or collabor	ative inter	actions wi	th tech	nologies of mod	lern multim	edia communicat	ions
Course aims and		-		-	-	reation of multi	media appli	cations	
learning outcom	as 3. R		arch of multimedia data in transport						
	4.0	Quality of se							
					licatio	ns for transport	purposes		
Prerequisites		re is no pri		-					
Teaching metho		tures, audit							
		-				edia communica		sport	
				-		nd, audio, video ansportation			
		/ultimedia							
				-	ndels i	user and networ	k requireme	ents	
						ion with GIS			
					-	and video codi	ng technique	es	
Course content	8. D	Distributed	multimedi	a systems	and th	eir application in	n systems fo	r monitoring and	
Course content	con	trolling the	transport	of goods a	and pas	ssengers			
		/lultimedia							
		Multimedi							
		Networks							
			-			ation systems			
						nunications sport applicatio	nc		
		Automatic Audio and					112		
	13.			•	book (s				
Author	/s		Name	of publica	-	-	Year	Pages (fro	m-to)
		Mult	imedia	Commu					
Bojkovic Z,Milo		D				etworks, Prenti			
K.Rac)	Hall							
Jevtovic	• M	Mult	imedia	telecomm	unicati	ons, Grafo-Ži	^{g,} 2004		
Jeviovic	. 191	Belgr							
Banjanir	n M	Com	municatior			Publik, Belgrade	2008		
				Addition		-			
Author	/s		Nam	e of publi	cation,	editor	Year	Pages (fro	om-to)

		Assesment methods	F	Points	Percentage		
	Pre-exar	n obligations					
	TE Atter	dance at lectures / exercises		5	5%		
	Positively graded seminar paper 15 15%						
Evaluation criteria	Colloqui	um 1		15	15%		
	Colloqui	um 2		15	15%		
	LE			10	10%		
	Final exa	im		40	40%		
	SUM			100	100%		
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	rt and Tr	affic engin	eering Doboj		

A METCHINA		UNIV	ERSITY OF EAST	SARAJEVO			2005		
-18-				raffic Engineerir	Ig	Jose .	haina o'as a		
			Study program:		<i></i>				
		l cycle	communication	s and postal tra IV year of st			40E01		
Course title		rcycle	DISTRIBU	TED MULTIMED	-				
	Depa	rtment of Infor		unication Syster			Transport and		
Department		ic Engineering ir				•	•		
Code		Cou	ırse status	Seme	ster	ECT	S credits		
САФ11СТ07235	785,0211		elective	VI	1		5.0		
Professor/s	PhD Aleks	andar Stjepano	vic, associate p	rofessor					
Associate/s	PhD Aleks	andar Stjepano	vic, associate p	rofessor					
Wee	kly hours		Individual st	udent hours (p	er semester		ent workload efficient So		
L	TE	LE	L	ТЕ	LE		S _o		
X	Y	Z	X*15*S _o	Y*15*S₀	Z*15*So	,			
Total teacher w	orkload (ho	ours, per semes		Total student	workload (h	iours, per s	emester)		
		= W hours			Y*15*S _o + Z	-			
		tal workload: W		= hours per s	semester				
		ng basic knowle							
Course aims and		s of distributed	•						
learning outcomes		ction to distribu							
		ction to conten	-						
D · · ·		ction to conten	-	IS					
Prerequisites		o prior conditio	-						
Teaching methods		auditory exercis		exercises					
		ction to multim		ustoms					
		 Definition of distributed multimedia systems Distributed multimedia applications with application in traffic 							
		content search s			in cruine				
		edia content se	•						
	6. Interact								
		k hypermedia s	systems						
Course content	8. Multim	edia developme	ent tools						
		edia presentati							
		ling of multime							
				ation in multim	edia system	S			
		nedia systems a	-						
		n knowledge ba ntic analysis of r		als					
		nedia applicatio	•						
	13. Wultin		Textbook	-					
Author/s		Name	of publication,		Yea	r Pa	ges (from-to)		
,•			Internet,						
		https://docpla		512-Distribuiran	i-				
Others									
	D. Cvetković, D. Marković, N. Savanović,								
		Multimedija	a, Singidunum, I						
			Additional rea						
Author/s		Nam	e of publication	n, editor	Yea	r Pa	ges (from-to)		
		A	ssesment meth	ods		Points	Percentage		
Evaluation criteria									

Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

	UNIVERSITY OF EAST SARAJEV Faculty of Transport and Traffic Engi Study program: Traffic Profile: Telecommunications and pos I cycle IV yea					ffic	AOEOJ
Course title		DESIGN OF INFORMATION SYSTEMS					
Department	Departn	nent for Com					matics, Faculty of
Department	Electrica	Electrical Engineering East Sarajevo					
Cod	e	Cou	Irse status		Seme	ster	ECTS credits
САФ11СТ072			elective		VII	I	5.00
Professor/s	PhD Srdjan N	-					
Associate/s	PhD Srdjan N	logo, associa	te professor				Ctudent werklaad
We	ekly hours		Individual	stuc	dent hours (pe	er semester)	Student workload coefficient S _o
L	ТЕ	LE	L		TE	LE	S _o
2	1	1	45		22.5	22.5	1.5
	workload (hours *15 + 1*15 = 30) + 15 + 15 =	60 [°]	= 2*		5*1.5 + 1*15* 90	ours, per semester) *1.5 = 45 + 22.5 + 22.5 =
Course aims and learning outcomes	L company						iness in a transport n examples related to
Prerequisites	There are no						
Teaching methods					tions. Learnin ormation syst		ndent preparation of
Course content	traffic. 2. Traffic info 3. Character information 5 4. Domains of management 5. Traffic dec 6. Project ma traffic. 7. Participant information 5 8. Il colloquit 9. Resistance methodology 10. Methodo methodology 11. Features 12. Informati 13. Planning analysis. Exte	ormation sys and develop system of th of information tinformation tision suppor anagement. of ts in the info system deve um to informat y in transpor ology of proto y. and problem to system re the develop ernal design. and techniq	tems. Evaluat ment of comp e transport co n technology n systems. t system. Exp Characteristic rmation syste lopment proju- ion system au t companies. otype develop n of structural esearch. Prep ment of inform Internal desig	ion c pute oppa appl ert s s of f ert d ect ir utom utom l met arati mati.	of information r technology. any. lication. Trans ystems the project of evelopment p n transport co hation life cycle nt. Object-orie thodology in t ion of a feasib on systems in Aodule progra	system in tra Introduction actional data information s roject. Reaso mpanies. e methodolog ented method raffic. ility study in t transport cor mming	nd decision making in ansport companies. of computers in the processing. Traffic system development in ns for starting an gy. Data model lology. Structural transport companies. mpanies. System nsport companies.

		Textbook (s)								
Author/s		Name of publication, publisher	Yea	r	Page	es (from-to)				
Rade Stankić		Design of Information Systems, Faculty of Economics in Belgrade 201		13						
Additional readings										
Author/s		Name of publication, editor	Yea	r	Page	es (from-to)				
Dr Željko Stjepanović		Skripta, Projektovanje informacionih sistema, Saobraćajni fakultet Doboj	2014							
		Assessment methods		Poi	nts	Percentage				
	Pre-exa	n obligations								
		attendance at lectures / ex	5		5%					
		positively graded seminar	15		15%					
Frankrasten automia		Colloq	15		15%					
Evaluation criteria		Colloq	15		15%					
		lab. ex	10		10%					
	Final exa	am								
			oral	40		40%				
	IN TOTAL					100 %				
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-cikl	us-2021	L.pdf				
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj				

				ERSITY OF	EACT				0.0		
						ffic Engineerir	p		Standing Quarte		
			-	Study prog		-	.9		9° 🕥 🏦		
82.		Pr				and postal tra	ffic				
10 10 10 10 10 10 10 10 10 10 10 10 10 1			I cycle			IV year of st	udy		ROE03		
Course title		MANAGEMENT IN TRAFFIC									
Department	De	partme	ent of Mark	of Marketing and Management, Faculty of Econom					cko		
Code			Coι	Course status Semester			ster		ECTS credits		
САФ11СТ0720				electoral		VII			5.00		
Professor/s			eg, associa		or						
Associate/s	Sinisa B	Bozicko	vic, senior	assistant							
We	Weekly hours			Individual student hours (per semester			er semester)		tudent workload coefficient S _o		
L	TE		LE	L		TE	LE		So		
2	1		1	45		22.5	22.5		1.5		
Total teacher v	workload	(hours	, per seme	ster)	т о	Total student		-	-		
W = 2*15 + 1		-	-	-	1 = 2	. 12.12+1*1	.5*1.5 + 1*1 90	5.1.2 =	45 + 22.5 + 22.5 =		
	To	ntal wo	rkload · W ·	+ T = Llopt =	60 + 9	0 = 150 hours		r			
			his course								
		-				management	as areas of st	tudy,			
	2 11-	-I									
	2. UN	derstar	nds postal t	rattic man	lageme	nt,					
	3. Ide	dentify, analyze and describe the organizational structure of the post office and its									
Course aims and	bus	business functions,									
learning	4. Analyzes operational planning as a process by which goals and strategic plans are										
outcomes	4. Analyzes operational planning as a process by which goals and strategic plans are translated into directions of activity, and identifies conditions and guidelines for successful										
		planning and development of the post office,									
		5. Identifies and describes the elements and role of the economic, political and social system									
		that affects management, as well as the essential characteristics of governance and competitiveness in the international environment.									
		npetiti	veness in t	ne interna		invironment.					
Prerequisites	No pre	requisit	es								
Teaching methods	Lecture	es, audi	tory exerci	ses, labora	itory ex	ercises, consu	ltations				
	1. The	e conce	pt and dev	velopment	of orga	nization and r	nanagement				
	2. Ma	inagem	ent system	ıs							
	3. Str	ategic r	nanageme	nt							
	4. Bu	siness a	nd develo	pment pol	ісу						
Course content	5. Str	ategy o	of postal tra	affic compa	anies						
	6. Тур	pes of c	organizatio	nal structu	re						
		-		-	-	anies (I colloq	uium)				
			the organi		he com	ipany					
	9. Inf	ormatio	on manage	r needs							

	-										
	10. Defir	ning and providing relevant information by hierarchic	al leve	ls of mana	gement						
	11. Busir	ness information system									
	12. Man	agement of the postal traffic company									
	13 Orga	nization and management of investments in postal t	raffic								
		- · · ·	anne								
	14. Orga	14. Organization of postal companies									
	15. Pers	pective of the development of postal traffic (II colloq	uium)								
	•	Textbook (s)									
Author/s		Name of publication, publisher	Yea	r Pa	ges (from-to)						
Vešović, V.		Traffic Management, Faculty of Transport and Traffic Engineering, Belgrade	1996	5.	1-284						
Lončarević, R.		Management, Singidunum University, Belgrade	2007	7.	1-417						
Jovičić, M.		Management - principles and functions, Faculty of Business Economics Bijeljina	2012	2.	1-344						
Mišić, B.		Management – principles, concepts and processes, Singidunum University, Belgrade	2010).	1-569						
		Assesment methods		Points	Percentage						
	Pre-exam	obligations									
		Presence of lectures / exe		5	5%						
		Seminar		15	15%						
Evaluation		Colloqu		15	15%						
criteria		Colloqu		15	15%						
		laboratory exe	10	10%							
	Final exam										
	TOTAL	Final exam	(oral)	40	40%						
Mah samaa	TOTAL			100	100 %						
Web sources		ues.rs.ba/eng/wp-content/uploads/2022/05/Engles									
Applicable from	11/15/20	22 - 198 Session of the Councile, Faculty of Transpor	t and T	rattic engi	neering Doboj						

INFORMATICS IN TRAFFIC

	V NCTOPHOT		UNIVERSITY OF EAST SARAJEVO						AINH Ø					
G			Faculty of Transport and Traffic Engineerin Study program: Traffic Profile: Informatics in traffic	1 <u>g</u>			A0501							
Ordinal		Code	Course title	Course status	Prerequisites	Semester		Fund classe	es	ECTS				
			III yoar of study				L TE LE			-				
Ill year of study 28. CAФ11CИ07135856,0311 Computer organization and architecture O V 3 1 1 6.00														
28.			Computer organization and architecture	0		V	3	1	1	6.00				
29.	CAΦ11C/	107135956,0311	Programming languages	0		V	3	1	1	6.00				
30.	САФ11СИ	107115356,0311	Computer networks and internet protocols	0		V	3	1	1	6.00				
31.	САФ11СИ	107108757,0321	Digital Techniques	0		V	3	2	1	7.00				
32.	САФ11СИ	107114955,0311	Information systems	0		V	3	1	1	5.00				
33.	САФ11СИ	107114867,0330	Object-oriented programming	0		VI	3	3	0	7.00				
34.	САФ11СИ	107121966,0311	Telematic systems	0		VI	3	1	1	6.00				
35.	САФ11СИ	107102565,0320	Basics of marketing	0		VI	3	2	0	5.00				
		107236065,0211	1. Machine learning			VI								
36.		107236165,0211	2. Fuzzy systems	E2		VI	2	1	1	5.00				
37.		107236265,0211	1. Security and protection of information and communication systems	Ез		VI		1	1	5.00				
	САФ11СИ	107208365,0211	2. Internet marketing			VI								
38.	САФ11СИ	107132962,0000	Professional practice	0		VI	0	0	0	2.00				
					Т	OTAL:	28	14	8	60				
			IV year of study				-	-	-	-				
39.	САФ11СИ	107135577,0321	Artificial intelligence	0		VII	3	2	1	7.00				
40.	САФ11СИ	107114777,0321	Database	0		VII	3	2	1	7.00				
41.	САФ11СИ	107108675,0211	Design of information systems	0		VII	2	1	1	5.00				
42.	САФ11СИ	107115475,0220	E-business	0		VII	2	2	0	5.00				
43.	САФ11СИ	107115776,0311	Software engineering	0		VII	3	1	1	6.00				
44.	САФ11СИ	107109985,0311	Internet technologies	0		VIII	3	1	1	5.00				
45.	САФ11СИ	107135686,0311	Real-time computer systems	0		VIII	3	1	1	6.00				
46.	САФ11СИ	107104585,0220	Organization of traffic companies	0		VIII	2	2	0	5.00				
47.	САФ11СИ	107209685,0211	1. Expert systems	E4 VIII		2	1	1	5.00					
47.	САФ11СИ	107236485,0211	2. Knwoledge based systems	E4		VIII	2		Ţ	5.00				
48.		107236385,0211	1. Customer relations management	E ₅		VIII	2	1	1	5.00				
40		107215985,0211	2. Enterprise resource management			1/11/		2	^	4.00				
49.	CAΨΙΙC Ν	107105284,0030	Graduate thesis	0		VIII	0	3	0	4.00				
					Т	OTAL:	25	17	8	60				

• L - lectures

TE - theoretical exercises
LE - laboratory exercises

		Faculty of	ERSITY OF EA Transport and Study program file: Informati	Traffic Enginee n: Traffic	ring	Sumalin daring					
Contraction of the second		l cycle		Ill year of	study	AOEOJ					
Course title			COMPUTER O		AND ARCHITEC	TURE					
Department	Departm					natics ETF East Sarajevo					
Code		Cou	urse status	Sen	nester	ECTS credits					
САФ11СИ0713	5856,0311	Ma	anadatory		VI	6,00					
Professor/s	PhD Željko Sto	ojanov, asso	ociate professo	or							
Associate/s	PhD Goran Ku	zmic, assist	ant professor								
Wee	kly hours		Individual	student hours	(per semester)	Student workload coefficient So					
L	TE	LE	L	TE	LE	So					
3	1	1	45	15	15	1,2					
	vorkload (hours,	•	ter)		•	ours, per semester)					
W = 3*	<u>15 + 1*15 + 1*1</u> Tataluur		T 11			*15*So = 75 So=90					
				75 = 150 hours p		madara computar					
	systems.	oulu acqui	i e knowledge	or the layered a	incline of r	nodern computer					
Course aims and	· ·	ould acqui	re knowledge	of computer da	ta representatio	on					
learning outcomes		-	-		un a program ol						
icuming outcomes						bly instructions for a					
	selected micro	-	-								
Prerequisites	No		0,000								
Teaching methods	Lectures. Labo	oratory exe	rcises.								
	1. Introductio										
		2. Numbers and number systems. Representing numbers in a computer. Coding.									
	3. Organization of computer systems. Microprocessor.										
	4. Operating memory.										
		5. Secondary memory.									
		6. Computer buses.									
	-	7. I colloquium.									
Course content	8. Logical basi	-	uter operatior	1.							
	-	9. Level of digital logic. 10. Combination networks. Sequential networks.									
	11. Structural		-								
					4 microproces	sors.					
	13. Assembly										
	14. Linking, lo			grams.							
	15. Il colloqui	-									
			Textbool	(s)							
Author/s			of publication	-	Year	Pages (from-to)					
Andrew S. Tanenbau	Im	puter archi ;a. Belgrad.		rganization. Mil	kro 2007.						
			nization and a								
William Stallings			unction of per		2013						
The standard standards			he 9th edition	. CET. Belgrade							
	Serb										
				guage program	ning						
Željko Stojanov			-	. Practicum for	. 2016.						
,,			-	oratory. Univer	sity						
	ot N	ovi Sad, Te	cnnical Faculty	"Mihajlo Pupir	17						

		Zrenjanin. Serbia.						
		Additional readings						
Author/s		Name of publication, editor	Yea	r	Pages (from-to)			
Kip R. Irvine		Assembly language for x86 processors (8th edition). Pearson Education, Inc., Upper Saddle River, New Jersey, USA.	2019.					
		Assesment methods		Poi	nts	Percentage		
	Pre-exam obligations							
		Colloq	30		30%			
Evaluation criteria		Colloq	30		30%			
	Final exam							
		Writte	n exam	40		40%		
	TOTAL					100%		
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj		

		Faculty of	Study program:	raffic Engineering Traffic			Santa URI Ogen
		I cycle	file: Informatic	s in traffic III year of stud	1v		AOEOJ
Course title		TCycle	PROG				angele data data kakala padawa
Department	-	ent of Infor Igineering i	mation - Comm			Facult	ty of Transport and
Code		Cou	urse status	Semest	er		ECTS credits
САФ11СИ07135	956,0311		0	V			5,00
Professor/s			ciate professor				
Associate/s	PhD Goran Ku	izmic, assist	ant professor			_	
Weel	kly hours		Individual s	tudent hours (per	semester)		Student workload coefficient So
L	TE	LE	L	TE	LE		So
3	1	1	45	15	15		1,2
Total teacher w W = 3*15 + 1*15 +	+ 1*15 = 30 + 1	5 + 15 = 75	hours I ==		+ 1*15* S hours	-	ber semester) + 15 + 15 =75 S ₀ = 90
) = 150 hours per s tical knowledge a			
Course aims and learning outcomes	depending on 3. Students w how to solve 4. Students w	the proble ill be able to it in the Pyt ill be able to	m to be solved o apply the acq hon programm	uired knowledge t	plication. o clearly d	efine t	he problem and
Prerequisites	None		1 0 0				
Teaching methods	Lectures, labo	oratory exer	cises, compute	r classroom exerci	ses and co	nsulta	tions. Learning and
reaching methods	independent	developme	nt of practical t	asks.			
Image: Notivation in the programmer of program paradigms. Image: Image							
			Textbook	• •			
Author/s			of publication,		Year	r	Pages (from-to)
R. Cadenhead, L. Lerr		, SAMS, Ko 86-731036		ka, Beograd, ISBN	I: 2009		
J. Chan				an	2016		
J. ChanLearn Java, Copyright Jamie Chan2016T. Hall, J-P Stacey"Python 3 for Absolute Beginners", Copyright by Tim Hall and J-P Stacey, ISBN: 978-1-4302-1633-2009							

		Additional readings						
Author/s		Name of publication, editor	Yea	r	Pages (from-to)			
		Assesment methods		Poi	nts	Percentage		
	Pre-exa	n obligations						
		attendance at le	ctures	10		10%		
		attendance at ex	10		10%			
Evaluation criteria	Colloquium					20%		
		lab. ex	10		10%			
	Final exa	am						
			oral	50		50%		
	TOTAL					100%		
Web sources	http://s	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj		

		Faculty of T	ERSITY OF EAST Transport and Tra Study program: T file: Informatics	affic Engineering Traffic	N .	Contraction	4000		
Course title		,		ORKS AND INTER		COLS			
Department	-	rtment of com st Sarajevo	puters, informat	ion technologies	and biotech	nology,	ETF, University		
Code		Cou	irse status	Semeste	er	ECT	rs credits		
САФ11СИ07115			andatory	V			6,00		
Professor/s		n Jauševac, assi	-						
Associate/s	PhD Gora	n Jauševac, assi	stant professor						
Wee	kly hours		Individual stu	ident hours (per	semester)		lent workload Defficient So		
L	TE	LE	L	TE	LE		So		
3	1	1	67,5	22,5	22,5		1,5		
Total teacher workload (hours, per semester) $W = 3*15 + 1*15 + 1*15 = 45 + 15 + 15 = 75$ Total student workload (hours, per semester) $T = 3*15*1,5 + 1*15*1,5 = 67,5 + 22,5 + 22,5 = 112,5$									
				5 = 187,5 hours p	er semester				
Course aims and learning outcomesBy mastering this course, the student will be able to: 1. acquire basic knowledge of computer networks and protocols, 2. to analyze the performance of computer networks and telecommunication protocols.									
Prerequisites	No								
Teaching methods	Lectures a	and laboratory e	exercises						
Course content	 1. Classification of computer networks. 2. Topologies of computer networks. 3. Definition of protocols and the concept of layered structuring. 4. Local area networks (LANs). 5. Stochastic and deterministic methods of media access control (MAC). 6. Basics of Ethernet technology. 7. I colloquium 8. Network layer on the Internet. 9. IPv4 and IPv6. 10. Mobile IP. 11. Basic algorithms and protocols of unicast routing on the Internet. 12. Transport layer on the Internet. 13. Email system architecture and WWW basics. 14. SNMP management functions and architecture. 15. II colloquium 								
Author/s		Name	Textbook (s of publication, p	-	Year	Pa	ges (from-to)		
A.Tanenbaum, D. W	etherall	Rašunarske m	ireže, V izdar			Fd	5c3 (11011-10)		
W. Stallings	(Beograd Computer Netv Prentice-Hall, In		ternet Protocols	['] 2009				
S. Bigelow Računartske mreže, instaliranje, održavanje popravljanje, Mikroknjiga, Beograd									
			Additional read		-				
Author/s		Nam	e of publication,	editor	Year	Pa	ges (from-to)		
Evaluation criteria	Dre over		ssesment metho	ds	P	oints	Percentage		
	Pre-exam	obligations							

	attendance at lectures	5	5%				
	Seminary paper	15	15%				
	I Colloquium	15	15%				
	II Colloquium	15	15%				
	laboratory exercises	10	10%				
	Final exam						
	Writing exam	40	40%				
	TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

YMC -		,	•	l Traffic Engine	ering	Softakai	O A & PAL		
o o ozo s			Study progra						
	F		communicati	ons and postal		AOE	C		
Course title		l cycle		III year o	-				
Course title Department	Departm	onts for ala	ctronics and		ems - ETF East Sa	raievo			
Department	Departi					arajevo			
Code		Cou	irse status	Se	emester	ECTS c	redits		
САФ11СИ07108757,			bligatory		V	7,00			
Professor/s	PhD Miroslav								
Associate/s	PhD Goran K	uzmic, assist	ante professo	or					
Wee	kly hours		Individua	l student hour	s (per semester)		: workload icient S₀		
L	TE	LE	L	TE	LE		So		
3	2	1	60	40	20	1	.,33		
Total teacher w W = 3*15 + 2*	orkload (hours 15 + 1*15 = 45 +	· •			ent workload (h 2*15*1,33 + 1*15*				
	Total work	load: W + T	= Uopt = 90 ·	+ 120 = 210 ho	urs per semeste	r			
				uld acquire kno	owledge in:				
Course aims and	1. Basics of lo	-	• ·	rations.					
learning outcomes	2. Standard c		networks.						
Ū	3. Arithmetic								
Prerequisites	4. Programm There is no p								
Teaching methods				tory exercises					
reaching methods	1. Introductio								
	2. Basic logic			ons					
	3. Switch Functions and Switch Networks								
	4. Standard combination networks: encoder, decoder, code converter								
	5. Standard combination networks: multiplexer, demultiplexer, commutator								
		emory circuits. Flip flops (I colloquium)							
		tandard sequential networks: registers							
Course content		ndard sequential networks: counters thmetic circuits: comparators, complementers, adder, subtractors, multiplication and							
	division circu								
		ogrammable logic structures. Semiconductor memory							
	11. ROM, PR	DM, and Ref	PROM memo	ries. RAM type	memories				
	12. Static and	-		nory					
	13. Surface m	-							
	14. A/D and [ion principles						
	15. Il colloqui		Textboo	k (s)					
Author/s		Name	of publicatio		Year	Pages	(from-to)		
	lr		-	ics, Scientific b	ook				
Tešić, S.		-	Belgrade		1990	-			
Živković, D., Popov	uć M Pul	se and Digit	al Electronics	, Academic Th	ought, 2004				
			Belgrade			•			
Bundalo, D.			gital techniques, Faculty of Transport and 2015.						
				, course mater	ials				
Kostadinović, M., Bı	undalo,	Practicum for Digital Techniques Auditory Exercises, Faculty of Transport and Traffic 2012.							
D.			Engineering I		ffic 2012	•			
			Additional r						

Author/s		Name of publication, editor	Yea	r	Page	es (from-to)				
		Assesment methods		Poi	nts	Percentage				
	Pre-exa	Pre-exam obligations								
		Attending lectures / ex	ercises	5		5%				
		Positive evaluation of the seminar	paper	15		15%				
Fuelvetien eriterie		Colloq	15		15%					
Evaluation criteria	Colloquium 2					15%				
		Laboratory ex	10		10%					
	Final exam									
		Ora	l exam	40		40%				
	TOTAL					100%				
Web sources	http://s	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj				

				ERSITY OF EAS			[
					raffic Engineerin	a		PARAINA ONA	
-18-	No.		-	Study program	-	¹ δ	2		
• • 82•									
		Profile: Informatics in traffic I cycle III year of study							
Course title			reycie	INI					
course title		Denartm	ant for Com		rmation Sciences		ormatics	Faculty of	
Department		-		g East Sarajevo					
C	ode		Cou	ırse status	Seme	ster	E	CTS credits	
САФ11СИ07	/114955,0	0311	со	mpulsory	VI			6.00	
Professor/s	PhD	nD, Željko Stjepanović, associate professor							
Associate/s	PhD), Željko Stj	jepanović, a	associate profe	ssor				
١	Veekly h	ours		Individual s	tudent hours (po	er semester		udent workload coefficient So	
L	TE		LE	L	TE	LE		So	
3	1		1	63	21	21		1.4	
Total teach	er worklo	ad (hours,	per semes	ter)	Total student	workload (h	ours, pe	r semester)	
			+ 15 + 15 =		= 3*151.4 + 1*15				
		Total wo	rkload: W+	T=U _{opt} = 75 + 10	5 = 180 hours pe	er semester			
	1. S				ted to the structu		nation sy	stems	
C	2 5				ed to informatio				
Course aims and	1 2 5	tudents wi	ill acquire k	nowledge relat	ed to developme	ent of inforn	nation sy	stems	
learning outcom	es 4. S	tudents wi	ill acquire k	nowledge relat	ed to business ir	ntelligence d	evelopm	ent and expert	
	syst	ems							
Prerequisites	No	formal pre	requisites						
Teaching metho	nc	tures, class ormation sy		cises and tutor	ials. Studying and	d individual :	seminar	papers related to	
				ess systems					
				-	s of information	system			
				the Internet e					
				formation syst					
	5. C	rganizatio	n and data	management	within informatio	on systems			
	6. T	ypes and s	tructure of	databases					
	7. D	evelopme	nt of inforn	nation systems					
Course content		olloquium							
			formation						
		-		-	ation of informat	ion systems			
				ty of informati					
					on system devel	opment			
		•	informatio	•	a and day is				
			-	expert system	s and data storag	ge			
	15.	Colloquiur	n II		()				
A + L			News	Textbook		No-		Dagas (from to)	
Author							Pages (from-to)		
Željko Stjepanov	ć Information Systems, Faculty of Transport and 2020 1 - 238 Traffic Engineering Doboj						1 - 238		
		ITall	ic Engineer	Additional re	adings				
Author	·/s		Nam		-	Yea	r 1	Pages (from-to)	
Autiloi	13	s Name of publication, editor Year Pages (from-t						ages (ITOIII-LO)	
			A -	sessment met	hods		Points	Dorcontage	
	Dro	ovam obli		sessment met	nous		Points	Percentage	
Evaluation criter	ia Pre-	-exam obli	gations	attar	anco to loctures	Lovorcisos	5	E0/	
		attendance to lectures / exe						5%	
seminar paper positively assessed 15 15									

	colloquium 1	15	15%					
	colloquium 2	15	15%					
	laboratory exercises	10	10%					
	final exam	40	40%					
	TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

UNIVERSITY OF EAST SAR Faculty of Transport and Traffic						ffic Engineerir	ng		topped h	AINH QARTER
Since State))		P	Study prog rofile: Inforn					C	
15to 10 13			l cycle			III year of st	•	a	A	
Course title						IENTED PROG				
Department		-	artment of Info ic Engineering		ommur	nication Syster	ms in Traffic,	Faculty	of T	ransport and
c	ode		C	ourse status		Seme	ster	E	CTS	credits
САФ11СИО	7114867,	0330		obligatory		VI			7	7.00
Professor/s		-	ša Preradović	•						
Associate/s	Ph) Ljubi	ša Preradović	full profess	or					
,	Weekly h	ours		Individ	ual stu	dent hours (p	er semester)) St		nt workload efficient So
L	TE		LE	L		TE	LE			So
3	3		0	60		60	0			1.33
			ours, per seme	ester)		Total student	-	-		-
3	8*15 + 3*					*1,33 + 3*15*			50 +	60 + 0 = 120
			vorkload: W+				-			
		-				tudent should	d possess th	eoretica	al kr	nowledge and
			skills in object		, ,					
Course aims and			tical knowled							
learning outcom			ing theoretica	il and practio	cal know	wiedge in the	design and i	mpleme	ntat	ion of models
		raffic	bla tha studar	t to croato a	projoc	+ tock				
Prerequisites			ble the studer		i projec	l ldSK				
Teaching metho			o prior condit auditory exer		orator	vercises				
Teaching metho			iction to obje							
			oncepts, meth				s notations			
			modeling lan	-			0)			
			cture, concep			ls, tools.				
			oriented mod	-						
	6.0) Dbject-	oriented anal	ysis						
	7.0	Object-	oriented desi	gn of system	is appli	ed in traffic.				
Course content	8.1	colloq	uium							
		-	design. Patte							
			ace specificati			•				
		-	n of specialize		-	(real-time, cli	ient-server, o	distribut	ed,	web-based).
			l driven softw	-						
		-	n of system m	odels in traf	ric. Imp	lementation i	n traffic.			
		-	cted task oquium							
	15.	II COIIC	Squium	Toyth	ook (s)					
Autho	r/s	Textbook (s) Name of publication, publisher Year Pages (from-to)								
		Object-Oriented Software Engineering Using								
Bruegge B., D	utoit A. H	t A. H. UML, Patterns and Java, Prentice Hall 2004.								
		Additional readings								
Autho	r/s	Name of publication, editor Year Pages (from-to)								
		Assesment methods Points Percenta							Percentage	
	Pre	-exam	obligations							
Evaluation crite				at	tendan	ce at lectures	/ exercises	5		5%
				pos	itively	evaluated sem	ninar paper	15		15%
		positively evaluated seminar paper 15 15% I colloquium 15 15%							15%	

	II colloquium	15	15%
	Final exam		
	oral	50	50%
	Total	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

SHEE		UNIV Faculty of	g	2 00 S			
		 I cycle	file: : Informatic	s in traffic III year of stu	ıdv	AOEOJ	
Course title		reycle	т				
Department		artment of Info fic Engineering		unication Syster	ms in Traffic,	Faculty of Transport and	
Code		Co	urse status	Semes	ster	ECTS credits	
САФ11СИ07121	966,0311		required	VI		6.0	
Professor/s	PhD Alek	sandar Stjepan	ovic, Associate P	rofessor			
Associate/s	PhD Alek	sandar Stjepan	ovic, Associate P	rofessor			
Wee	kly hours		Individual st	udent hours (pe	er semester)	Student workload coefficient So	
L	TE	LE	L	TE	LE	So	
3	1	1	45	15	15	1.5	
Total teacher w			ster)			ours, per semester)	
V = 3*1		+ 1*15 = 75				*15*So = 75 So=90	
			T = Uopt = 60 + 9 egulations and n	•		related to ITS	
		-	-		-	n systems for transport	
Course aims and	monitori					systems for transport	
learning outcomes		-	action with spat	ial information in	nfrastructure	2	
-		chitecture					
	5. definir	ng user requirer	ments for the pu	rpose of refixing	transport pr	oblems	
Prerequisites	There is I	no prior conditi	onality				
Teaching methods		-	ises, laboratory				
Course content Author/s Stjepanovic A, Kosta	 Traffic management. Traffic management strategies Adaptable telematics systems. Network capabilities Basic definitions of telematics. Toll collection systems European projects. Definition of ITS, Standards, norms of the directive, Legal bases, FRAM project ITS architecture. Theoretical foundations, Possible applications of ITS Traffic management - traffic distribution and application of telematics systems Technical preconditions for the application of ITS Detectors and sensors. Vehicle network architecture Telecommunication networks in traffic Spatial infrastructure of GIS and ITS. ITS and GPS. Location-based services Variable signaling, standards. Radio data systems Congestion management and application of ITS in congestion management Informing traffic participants, Human factor, QoE, QoS Internet and ITS. Textbook (s) Textbook (s)						
Stjepanović A, Kosta M		,	sport and Traffic		^{VO,} 2020		
				, Engineering			
			Additional	dinge			
Author/s		Nan	Additional rea ne of publication		Year	Pages (from-to)	
Autio//3		1101			Ical		
Evaluation criteria		A	ssesment metho	ods		Points Percentage	

	Pre-exam obligations								
	TE Attendance at lectures / exercises	5	5%						
	Positively graded seminar paper	15	15%						
	Colloquium 1	15	15%						
	Colloquium 2	Colloquium 2 15 15%							
	LE	10	10%						
	Final exam	40	40%						
	SUM	100	100%						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP	-I-ciklus-202	1.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and	Traffic engin	eering Doboj						

T V MCTOPIQ		UNIV	ERSITY OF	EAST SA	ARAJEVO			2	005		
-18.		Faculty of Transport and Traffic Engineering						A OSPA A	All OAS ART		
- YIIC		Study program: Traffic									
And the second		l cycle	jile: Injorn	e: Informatics in traffic					AOEOJ		
Course title		BASICS OF MARKETING									
Department	Dep	partment of Mark	keting and				ics ir	Brcko			
-		Department of Marketing and Management, Faculty of Economics in Brcko									
Code		Col	urse status		Semes	ster		ECIS	credits		
САФ11СИ07102	2565,0320) ol	bligatory		IV				5.0		
Professor/s		etlana Terzić, Ass									
Associate/s	PhD Svje	D Svjetlana Terzić, Associate Professor									
Wee	kly hours	1	Individ	ual stud	ent hours (pe	er semester)		nt workload efficient S _o		
L	TE	LE	L		TE	LE			So		
3	2	0	45		45	0			1.5		
		hours, per semes	ter)		Total student	-		-	-		
W=2*15 +		*15 = 60 hours	T-11 - 6		$T= 2*15*S_0 +$			°S₀ = 90	nours		
		al workload: W + ducing students to									
Course aims and		ssary knowledge	-	-		-	trate	gies			
learning outcomes		s of marketing ma						0.00.			
		net marketing									
Prerequisites		re no conditions f	for listenin	g and ta	king the cours	se.					
Teaching methods	Lectures	s, auditory exerci	ses, semina	ar paper	-						
		oncept and impo		narketin	g						
	2. Basic principles of marketing										
	3. Development of the marketing concept										
	 Marketing categorical system Marketing mix 										
		6. Marketing information system and decision making									
		7. Marketing, market, consumer (I colloquium)									
Course content		arketing environment									
		9. Elements of marketing research									
	10. Basi	10. Basics of marketing management									
		11. Basic marketing instruments									
		12. Product in marketing									
		e in marketing	D								
		keting channels. rnet marketing (II			eting						
	15. Inter	inet marketing (ii	-	ook (s)							
Author/s		Name	of publica		blisher	Yea	r	Page	es (from-to)		
		Marketing – o	-	-		nia	-				
Macura P.	Luka										
		•	Addition	al readin	ngs						
Author/s			e of public			Yea	r	Page	es (from-to)		
Milisavljević M., Mar	avljević M., Maričić B. Osnovi marketinga, Ekonomski fakultet, Beograd. 2004.										
									Percentage		
	Pre-exa	exam obligations attendance at lectures and exercises							40.0/		
							2	2 x 5	10 %		
Evaluation criteria					y graded sem		<u> </u>	10	10 %		
	Ele - l			wr	itten exam (2	colloquia)		50	50 %		
	Final exa	am				oral over	1	20	20.0/		
		oral exam						30	30 %		
IN TOTAL 100 100 %								100 %			

Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj

C T WCTOWIG		UNIV	ERSITY OF EAST	SARAJEVO		2005			
		Faculty of T	g	Sarahalin Qaria					
YÜC			Study program:						
			file: Informatics			AOE01			
Course title		I cycle	N	III year of sto ACHINE LEARN					
course title	Departm	ent of Infor				Faculty of Transport and			
Department		igineering ii		sincation system		ractive or transport and			
Code			Irse status	Seme	ster	ECTS credits			
САФ11СИ07236	065 0211		E	VI		5,00			
Professor/s		Brtka, asso	ciate professor			3,00			
Associate/s			ciate professor						
	kly hours			udent hours (pe	er semester)	Student workload			
L	TE	LE	L	TE	LE	coefficient So			
2	1	1	30	15	15	S₀ 1,2			
Total teacher w	-	-			_				
W = 2*15 + 1*1		-				$= 45 S_0 + 15 S_0 + 15 S_0 = 90$			
			-T=U _{opt} = 60 + 90						
						work in the field of			
	machine learr			-					
	2. Students w	ill be able to	o identify areas o	of application of	f machine lea	arning and select suitable			
Course aims and	machine learr								
learning outcomes	3. Students will be able to apply the acquired knowledge to clearly define the problem and								
	how to solve it using existing software tools and modules.								
	4. Students will be able to apply their professional knowledge through the development of machine learning applications.								
Prerequisites	None	ning applica	tions.						
Prerequisites		vratory ever	rises computer	classroom ever	cises and cou	nsultations. Learning and			
Teaching methods		-	nt of practical ta			isuitations. Learning and			
	-	-	on and terminol						
			ossibilities and t		e learning alg	gorithms.			
	3. Linear regr	ession.							
	4. Logistic reg								
			ial neural netwo	rks, Rosenblat's	Perceptron.				
	6. Perceptron								
Course content			eural networks.						
Course content	8. Colloquium		single-laver artif	icial neural net	works and its	nronerties			
	•	 Algorithm for training single-layer artificial neural networks and its properties. Multilayer artificial neural networks. 							
		11. Algorithm for training multilayer artificial neural networks - Backpropagation.							
	-	12. Implementation of single-layer artificial neural networks.							
			ultilayer neural						
	14. Convoluti	Convolutional artificial neural networks.							
	15. Practical a	pplications			l networks,	Tensorflow-Keras-Python			
Textbook (s) Author/s Name of publication, publisher Year Pages (from-to)									
Author/s	N.4		-		Year	Pages (from-to)			
Vladimir Brtka	Machine learning, University of Novi Sad, Technical Faculty "Mihajlo Pupin", Zrenjanin.								
			, University of N		cal				
Vladimir Brtka			o Pupin", Zrenjar		2013				
	1		Additional read						
Author/s		Nam	e of publication	, editor	Year	Pages (from-to)			
	I								

	Assesment methods	Points	Percentage					
	Pre-exam obligations							
	attendance at lectures	10	10%					
	attendance at exercises	10	10%					
Evaluation criteria	Colloquium	20	20%					
	lab. exercises	10	10%					
	Final exam							
	oral	50	50%					
	TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engin	eering Doboj					

Department Traffic Engineering in Doboj Code Course status Semester ECTS credits CA011CM07286165,022.1 E Vi 5.00 Professor/s PhD Vladimir Brtka, associate professor Student workload Associate/s PhD Vladimir Brtka, associate professor Student workload L TE LE Y Student workload 2 1 1 45 22.5 1.5 Total teacher workload (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) W = 2*15 + 1*15 + 1*15 + 1*15 = 30 + 15 + 15 = 60 hours Total workload: W+T=U _{per} = 60 + 90 = 150 hours per semester T Course aims and learning outcomes 1. Students will be able to recognice situations when it is convenient to apply fuzzy system: 2. Students will be trained to use existing tools to develop a fuzzy system. 2. Students will be trained to use existing tools to develop a fuzzy system. 3. Students will be trained to use existing tools to develop a fuzzy system. 3. Students will be trained to use existing tools to develop a fuzzy system. 3. Hourget apresize and within various real-life systems. Prerequis	Study program: Traffic Profile: Informatics in traffic I cycle III year of study ourse tille Department of Information - Communication Systems in Traffic, Faculty of Transport ar Traffic Engineering in Doboj code Course status Semester ECTS credits CA011CH072236165,0211 E VI 5.00 rofessor/s PhD Vladimir Brtka, associate professor Sociate/s Sociate/s Sociate/s PhD Vladimir Brtka, associate professor Student workload sociate/s PhD Vladimir Brtka, associate professor Student workload V= 2*15 + 1*15 + 1*15 = 30 + 15 + 10 + 5 + 60 hours Total student workload (hours, per semester) Total student workload (hours, per semester) Total teacher workload (hours, per semester) Total workload: W+T=Ugee 60 + 90 = 150 hours per semester Total workload: W+T=Ugee 60 + 90 = 150 hours per semester Total workload: W+T=Ugee 60 + 90 = 150 hours per semester 2. Students will be able to recognize situations when it is convenient to apply fuzzy systems. application of the fuzzy system. 3. Students will be trained to use existing tools to develop a fuzzy system. 3. Students will be trained to use existing tools to develop a fuzzy system. 4. Acquire profession knowledge will enable students to implement fuzzy controllers for various purposes and within various	ST VICTORING			-			SARAJEVO			2005	
Profile: informatics in traffic Course title FUZZY SYSTEMS Department Department of Information - Communication Systems in Traffic, Faculty of Transport a Traffic Engineering in Doboj Code Course status Semester ECTS credits CA011CK07236165.0211 E VI 5.00 Professor/s PhD Vladimir Brtka, associate professor Student workloa coefficient S, 22.5 Student workloa (hours, per semester) Student workloa (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) Total workload: W=T=Uage=60 + 90 = 150 hours per semester Total workload: W=T=Uage=60 + 90 = 150 hours per semester T=2*15*Sn + 1*15* Sn + 1*15* Sn = 30 Sn + 15 Sn + 15 Sn = 30 Sn + 15 Sn + 15 Sn = 30 Sn + 15 Sn + 15 Sn = 30 Sn + 15 Sn = 30 Sn + 15 Sn +	Profile: Informatics in traffic Profile: Informatics in traffic ourse title It year of study bepartment Department of Information - Communication Systems in Traffic, Faculty of Transport ar Traffic Engineering in Doboj Code Course status Semester ECTS credits CA011CM07236165,0211 E VI 5.00 Sociate/S PhD Vladimir Brtka, associate professor Student workloa coefficient S. Student workloa coefficient S. L TE L TE L Coefficient S. Z 1 1 45 22.5 1.5 Total teacher workload (hours, per semester) Total student workload (hours, per semester) Total workload: W+T=Ugr= 60 + 90 = 150 hours per semester Total workload: W+T=Ugr= 60 + 90 = 150 hours per semester 1.5 Students acquire theoretical and practical knowledge and skills for work in the field of application of the fuzzy system. 2. Students will be able to recognize situations when it is convenient to apply fuzzy systems. 3. Students will be able to recognize situations when it is convenient to apply fuzzy system. 3. Students will be able to recognize situations when it is convenient to apply fuzzy system. 3. Operations on fuzzy system. 4. Acquire professional howledge will	18.0							ß		Joseph and	
Icycle III year of study Course title FUZ2Y SYSTEMS Department Department of Information - Communication Systems in Traffic, Faculty of Transport a Traffic Engineering in Doboj Code Course status Semester ECTS credits CAPD1CM07236165,0211 E VI 5.00 Professor/S PhD Vladimir Brtka, associate professor Student workloat coefficient S., L TE LE L TE Student workloat coefficient S., L TE LE L Te LE Student workloat (hours, per semester) Traffic Shot 115 So a 05 + 15 So a 05 + 15 So a 05 + 15 So a 06 a 00 a 00 so 15 Coefficient S., W = 2*15 + 1*15 + 1*15 = 30 + 15 + 56 a 0 hours Total student workload (hours, per semester) Te2*15*50 + 1*15* 50 + 1*15* 50 a 00 + 15 So a 0	I cycle III year of study ourse title FUZ2Y SYSTEMS Department of information - Communication Systems in Traffic, Faculty of Transport ar Traffic Engineering in Doboj Code Course status Semester ECTS credits CA011CM07236165,0211 E VI 5.00 ordessor/s PhD Vladimir Brtka, associate professor Student workloa coefficient S. Student workloa coefficient S. L TE LE L TE LS S. Total teacher workload (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) T=215'So + 11'15'So + 1'15'So + 1'1	- SUC - 82-										
Course title FUZ2Y SYSTEMS Department Department of Information - Communication Systems in Traffic, Faculty of Transport a Traffic Engineering in Ooboj Code Course status Semester ECTS credits CA011CU07236165.0211 E VI 5.00 Professor/s PhD Vladimir Brtka, associate professor Student workload coefficient S. L TE LE VI 5.00 Veekly hours Individual student hours (per semester) Student workload coefficient S. Student workload (hours, per semester) Student workload (hours, per semester) Total workload (hours, per semester) Students will be able to recognize situations when it is convenient to apply fuzzy system. 3 Students will be able to recognize situations when it is convenient fuzzy controllers for various purposes and within various real-life systems. Students will be able to recognize situations when it is convenient fuzzy controllers for various purposes and within various real-life system. 6 None Eetures, laboratory exercise, computer classroom exercises and consultations. Learning a independent development of practical tasks. 1 Notivation, introduction and terminolog	PUZ2Y SYSTEMS Department FUZZY SYSTEMS Department of Information - Communication Systems in Traffic, Faculty of Transport ar Traffic Engineering in Doboj Code Course status Semester ECTS credits CAD11CW07236165,0211 E VI 5.00 Stockets PhD Vladimir Brtka, associate professor Student workloa (coefficient S. 2 Student workloa (coefficient S. 2 L TE LE TE LE Student workloa (coefficient S. 2 V = 2*15 + 1*15 + 1*15 = 30 + 15 + 15 = 60 hours Total student workload (hours, per semester) Total workload (hours, per semester) T=2*15''S = 1*15''S = 30 S = 15 S = 15 S = 0'S = 0'S = 150 hours per semester Ourse aims and aarning outcomes Students acquire theoretical and practical knowledge and skills for work in the field of application of the fuzzy system. Students will be able to recognize situations when it is convenient to apply fuzzy systems. Students will be able to recognize situations when it is convenient to apply fuzzy system. Students will be able to recognize situations when it is convenient to apply fuzzy system. Ourse aims and asrning outcomes I. Students will be able to recognize situations when it is convenient to apply fuzzy systems. Stuczy propositions, Inguistic variables and their values. Course situatis submet to apply fuzzy s	Area 10				jiie. iiijoii			ldv		AOEOJ	
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Course conten	t	3.Working fra security accor 4.Review of communicatio 5.Cyber secur the methods 6.Concepts o network proto 7.Security Sig 8.Security Sig 9.Safety signif 10.Security fe 11.Cryptology in the commu 12.Cyber secu	nsport. amework of ding to fun basic conc on. ity trends i and tools us f network ocols. nificance ard ns and Netw ficance and atures and <i>x</i> , crypto sy inication sy unication sy	f cyber secu ctional grou epts and g n the EU and sed to imple communica nd Security E work Layer S safety layer application stems, crypt stem. nges in cloud	urity a ups. goals of d globe ement ation of Design Gecurit desig layers to algo	on and comm nd defining b of communica bally, analysis them. overview of a of the Physica y Design. n. security design prithms and c	ns in traffic. nunication e asic security ation securit of the freque architecture, al Layer and I n. ompression ments and th	cosystem in the field of terminology, division of ty; privacy and trust in ency of cyber-attacks and types of networks and Data Layer. algorithms and their role he Internet of Things.		
Course conten	t	3.Working fra security accor 4.Review of communicatio 5.Cyber secur the methods 6.Concepts o network proto 7.Security Sig 8.Security Sig 9.Safety signif 10.Security fe 11.Cryptology in the commu 12.Cyber secu 13.Security th	nsport. amework of ding to fun basic conc on. ity trends i and tools us f network ocols. nificance ard ns and Netw ficance and atures and v, crypto sy inication sy unication sy unication sy unication sy	f cyber secu ctional grou cepts and g n the EU and sed to imple communica nd Security E work Layer S safety layer application stems, crypt stem. nges in cloud rulnerabilitie	urity a urity a ups. goals o d glob ement ation o Design Gecurit desig layers to algo to algo d comp es of ci	on and comm nd defining b of communica bally, analysis them. overview of a of the Physica y Design. n. security design prithms and co puting environ ritical infrastru	ns in traffic. nunication e asic security ation securit of the freque architecture, al Layer and I n. ompression ments and th ucture comm	cosystem in the field of terminology, division of ty; privacy and trust in ency of cyber-attacks and types of networks and Data Layer.		
Course conten	t	3.Working fra security accor 4.Review of communicatio 5.Cyber secur the methods 6.Concepts o network proto 7.Security Sig 8.Security Sig 9.Safety signif 10.Security fe 11.Cryptology in the commu 12.Cyber secu 13.Security th	nsport. amework of ding to fun basic conc on. ity trends i and tools us f network ocols. nificance ard ns and Netw ficance and atures and v, crypto sy inication sy unication sy unication sy unication sy	f cyber secu ctional grou cepts and g n the EU and sed to imple communica nd Security E work Layer S safety layer application stems, crypt stem. nges in cloud rulnerabilitie	urity a urity a ups. goals o d glob ement ation o Design Gecurit desig layers to algo to algo d comp es of ci	on and comm nd defining b of communica bally, analysis them. overview of a of the Physica y Design. n. security design prithms and co puting environ ritical infrastru	ns in traffic. nunication e asic security ation securit of the freque architecture, al Layer and I n. ompression ments and th ucture comm	cosystem in the field of terminology, division of ty; privacy and trust in ency of cyber-attacks and types of networks and Data Layer. algorithms and their role he Internet of Things. unication systems.		
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		Textbook (s)					
Author/s		Name of publication, publisher	Yea	r	Page	es (from-to)	
Jacobs, S.		Engineering Information Security: The Application of Systems Engineering Concepts to Achieve Information Assurance (2nd Edition), Wiley-IEEE Press, New Yersey, USA.	2010	6			
Macaulay, T.: R.		IoT Control: Understanding and Managing Risks and the Internet of Things (1st Edition), Moragan Kaufmann, Cambridge, USA.	2010	6			
Peraković, D.		Sigurnost i zaštita informacijsko komunikacijskog sustava, Fakultet prometnih znanosti, Zagreb, 2021., nastavni tekst, publicirano u digitalnom obliku na Internet poslužitelju na adresi sustava eučenja	202:	1			
Gupta, B. B., Chaudhary, P., Peraković, D., Psannis, K.		Privacy Concerns and Trust Issues // Managing IoT and Mobile Technologies with Innovation, Trust, and Sustainable Computing / Law, Kris MY ; WH Ip, Andrew ; Gupta, Brij B . ; Geng, Shuang (ur.)., CRC Press, Boca Raton.	ration, s MY ; 2021				
		Additional readings					
Author/s		Name of publication, editor	Yea	r	Page	es (from-to)	
François Chollet		Deep Learning with Python, Manning Publications Co. ISBN 9781617294433.	2018	8			
		Assesment methods		Poi	nts	Percentage	
_	Pre-exar	n lectures atten exercises atten		5		5% 5%	
Evaluation criteria						30%	
	Colloquium 1					10%	
-	Lab. exercises					10/0	
			exam	50		50%	
-	TOTAL						
Web sources	http://sf	ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-cikl	us-2021	L.pdf	
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	rt and T	raffi	c engine	eering Doboj	

T WETODA			UNIV	ERSITY OF	EASTS	SARAJEVO			2005
			Faculty of T	Fransport a	and Tra	ffic Engineerin	g	a start and a start a st	A PUT A PO BHINA O
- Xigc	Ē		9	Study prog	ram: T	raffic		1	
]]			file: Inforn	natics i	in traffic			AOEOJ
3 450rs 30 53			l cycle						
Course title						RNET MARKE			
Department			rtment of Infor c Engineering i		ommu	nication Syster	ns in Traffic,	Faculty of	Transport and
(Code		Cou	ırse status		Seme	ster	EC	TS credits
САФ11СИС	072083	65,0211	6	elective		VI			5.00
Professor/s			panović, PhD, a		orofesso	or			
Associate/s		Sinisa Bozi	ickovic, senior a	assistant					
	Week	ly hours		Individ	ual stu	dent hours (pe	er semester)		lent workload pefficient S _o
L	1	TE	LE	L		TE	LE		So
2		1	1	45		22.5	22.5		1.5
Total teacl	her wo	rkload (ho	ours, per semes	ter)		Total student			
			30 + 15 + 15 =	-	T = 2	2*15*1,5 + 1*1		5*1,5 = 45	+ 22,5 + 22,5 =
						450 1	90		
			workload: W +	•					
			s will possess b		-		-	-	
Course aims an			s will have kno						
learning outcor	mes	3. Students will be able to apply the acquired knowledge during practical work in transport							
U		companies	ompanies . Students will be able to create basic elements of internet presentations						
				o create ba	asic ele	ments of inter	net presenta	ations	
Prerequisites			prerequisites						
Teaching meth	nns		classroom exer						eparation of
			apers related to				t companie	5	
			t marketing in o oment of intern		-				
		•	ities and preco		-		on of intern	at markati	og in traffic
			-		i succe				
		4. E-marketing in traffic 5. E-sales							
		6. Internet marketing techniques							
			h of competitio		c (I coll	oguium)			
Course content			oment of Intern		-	-	companies		
		-	g an Internet pl		01		•		
			al brand promo		ffic				
		11. Interne	et technologies	;					
		12. Web p	resentations in	traffic					
		-	pts of internet						
		14. Object	ives of internet	t presence	in traf	fic			
		15. Interne	et promotion ir	n traffic (II	colloqu	uium)			
					ook (s)	·			
Autho	or/s			of publica	tion, p	ublisher	Yea	r Pa	ges (from-to)
Šapić, D.		N	Marketing na In				2002		
				Addition		-			
Autho	or/s		Nam	e of public	cation,	editor	Yea	r Pa	ges (from-to)
	_			ssesment i	metho	ds		Points	Percentage
		Pre-exam	obligations						
Evaluation crite	eria					ice at lectures		5	5%
				I	positive	ely graded sem	inar paper	15	15%

	Colloquium 1	40	40%
	Colloquium 2	40	40%
	lab. exercises		
	Final exam		
	oral		
	IN TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Informatics in traffic				AGED S
Course title		I cycle		VI year of st FIFICIAL INTELLIO	-	And the second states
course title	Den	artment of com				nology, ETF, University
Department		ast Sarajevo				niology, Err, oniversity
Co	de	Cou	Irse status	Seme	ster	ECTS credits
САФ11СИ071	.35577,0321	m	andatory	VI	I	7,00
Professor/s		rdana Jotanovic,				
Associate/s	Ph.D. Go	rdana Jotanovic,	associate prof	essor		
w	eekly hours		Individual s	tudent hours (p	er semester)	Student workload coefficient So
L	TE	LE	L	TE	LE	So
3	1	1	30	15	15	1.5
		ours, per semes *15 = 60 hours	ter)			ours, per semester) *15*S₀ = 90 hours
	Total	workload: W + 1	Г = Uopt = 60 +	90 = 150 hours p		
Course aims and learning outcome	2. Knowla s 3. Declar	-	their applicatio g knowladge.	e of intelligent s n in traffic engin plications.	•	
Prerequisites	No					
Teaching method	s Oral pres		ative-demonstr	ative method, a	nalysis and sy	nthesis, practical
Image: Course content1.Historical overview, basic concepts and application of artificial i engineering. 2.Course content1.Historical overview, basic concepts and application of artificial i engineering). 3.Course content3.Knowledge representation methods: declarative, procedural and 4.Course content5.Search methods: breadth first search, depth first search and com 6.Formalization of reasoning and inference systems.7.Predicate calculus.8.Colloquium 19.Resolution. Unification and unification algorithms. 10.10.Resolution method. 11.11.Fuzzy logic and fuzzy logic controllers. 12.13.Introduction to Artificial neural networks. 14.						ew to the application in and semantic.
			Textbook			
Author/	s		of publication,	-	Year	Pages (from-to)
Petar Hoto	mski	-	-	University of No Pupin" Zrenjan	11116	
Ivana Berk	ovic	Elements of Art Novi Sad, Techr Zrenjanin	-	ice, University of lihajlo Pupin",	2006	
Stuart J. Russell an Norvig	nd Peter	Artificial Intellig Prentice Hall	ence, A Moder	n Approach,	2010	
			Additional rea	adings		
Author/	s	Nam	e of publicatio		Year	Pages (from-to)

	Assesment methods	Points	Percentage
	Pre-exam		
	attendance at lectures	10	10%
	practical (laboratory) exercises	10	10%
Evaluation criteria	Colloquium 1	15	15%
	Colloquium 2	15	15%
	Final exam		
	oral exam	50	50%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engin	eering Doboj

			ERSITY OF EAST	SARAJEVO		Statian Garia
		Pro				
12 Lars 10 100		l cycle		IV year of stu	dy	
Course title		-		DATABASE		
Department	Departn of East S		outers, informat	ion technologies	and biotechr	hology, ETF, University
Code	9	Cou	Irse status	Semest	er	ECTS credits
САФ11СИ0711	4777,0321	m	andatory	VII		7.00
Professor/s			, associate profe	ssor		
Associate/s	PhD Goran K	uzmic, assist	ant professor			
Wee	ekly hours		Individual st	udent hours (per	semester)	Student workload coefficient S _o
L	TE	LE	L	TE	LE	So
2	1	1	45	22.5	22.5	1.5
Total teacher v W = 2*15 + 1*15						ırs, per semester) 1.5 = 45 + 22.5 + 22.5 =
	Total wo	rkload: W +	$T = U_{opt} = 60 + 9$	0 = 150 hours pe	r semester	
Course aims and learning outcomes	 Students v Students v Students v Profession applications. 	vill be traine vill create a al knowledg	d to manage dat user interface w	ith the help of da	tabase mana	gement tools. and various smaller
Prerequisites	No					
Teaching methods	Oral present	ation. Labora	atory exercises.			
Course content	8. Colloquiur 9. Relational 10. Normaliz 11. Language 12. SQL langu	lifecycle. architecture. of physical st ey based acco eling. of Entities ar n 1 Model. ation of the es for Relatic uage. ntation of re grity and sec	tructure. ess. nd Relationships Relational Scher onal Databases. lational operatio	ne. ons.		
Author/s		Name	of publication,	•	Year	Pages (from-to)
G Jotanovic G., Jaus	evac G. Eas	ormation sys t Sarajevo,	stems and Data	base, University on the second s	of	<u> </u>
Engineering Lazarevic B., Marjanovic Z., Databases, Faculty of Organizational Scie Anicic N., Babarogic S. Belgrade					2003	
Mogin P., Lukovic I.		nciples of ences, Novi S	Sad	ulty of Technic	al 1995	
			Additional rea	-		
Author/s			e of publication		Year	Pages (from-to)
Elmasri R., Navathe	N K	ndamentals dison-Wesley		stems"5th Edition	n, 2006	

	Assesment methods	Points	Percentage
	Pre-exam		
	lectures / exercises attendance	10	10%
	project task	10	10%
Evelopetic subscript	Colloquium 1	15	15%
Evaluation criteria	Colloquium 2	15	15%
	lab. exercises	10	10%
	Final exam		
	oral exam	40	40%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engin	eering Doboj

				UNIV	ERSITY OF	FAST			15 0 0 c/b
			F	aculty of	g	STREAMER ON THE			
- YUC					Study prog		<u> </u>	-	
82°C			Profile: Informatics in traffic						
10 K				l cycle			IV year of st	udy	TOPO1
Course title					DES	IGN OF	INFORMATIO	N SYSTEMS	
Department		Dep	bartme	nt of Com	puter and	Inform	ation Science a	and Bioinform	natics ETF East Sarajevo
	Code			Course status			Semester		ECTS credits
САФ11СИО		0	bligatory		VI		5.00		
Professor/s		PhD Srdj	jan No	go, associa	ate profess	or			
Associate/s		PhD Srdj	jan No	go, associa	ate profess	or			
	Weekl	y hours			Individ	ual stu	dent hours (po	er semester)	Student workload coefficient S _o
L	Т	E		LE	L		TE	LE	So
2		1		1	60		40	20	1.33
Total teach	her wo	kload (ł	nours	ner semes	ter)			•	ours, per semester)
W = 3*15 + 2						T = 3	*15*1,33 + 2*		15*1,33 = 60 + 40 + 20 =
						• • -		120 hours	S
							= 210 hours p		stung af the 1 f and
					wiedge re	lated to	the developh	nent and strue	cture of the information
		system i			lucad to th	o moth	adalagy of inf	ormation cycl	tems development
								-	iness in a transport
Course aims an	a	company			o define p	ojecti	equilements		
learning outcor	mes	4. During the teaching activities, students will be introduced to certain examples related to							
		the design of information systems							
	:	1. Students will get acquainted with the methodology of development of project tasks related							
					sport comp	bany			
Prerequisites				ormal cond					
Teaching metho	ons								ndent preparation of
							formation syst		nd decision making in
		raffic.		Simations	System. Da			normation a	
			: infor	mation sys	tems. Eval	uation	of information	system in tra	ansport companies.
									of computers in the
	i	nformat	tion sy	stem of th	e transpor	t comp	any.		
							lication. Trans	actional data	processing. Traffic
		-			n systems.				
					rt system.	-	-	information .	avatana davalanna antin
		-	t man	agement.	Characteri	STICS OF	the project of	Information	system development in
		traffic. 7. Participants in the information system development project. Reasons for starting an							
Course content			-			-		-	
		information system development project in transport companies. 8. Il colloguium							
	9	9. Resist	ance t	o informat	tion systen	n auton	nation life cycl	e methodolog	gy. Data model
				-	rt compani				
				gy of prot	otype deve	elopme	nt. Object-orie	ented method	lology. Structural
		nethod			• • f - t . •		*h = d = l =		
							thodology in t		transport companies
									transport companies. mpanies. System
							Module progra		mpanies. system
									nsport companies.
		L5. II col			,	- ·o· ···6		,	
					Text	ook (s			
					- CALL	55 N (5)			

Author/s		Name of publication, publisher	Yea	Year Pag		es (from-to)
Dr Rade Stankić		Projektovanje informacionih sistema, Ekonomski fakultet Beograd	2013			
		Additional readings				
Author/s		Name of publication, editor	Yea	r	Pag	es (from-to)
Dr Željko Stjepanović	5	Skripta, Projektovanje informacionih sistema	2014			
		Assesment methods		Poi	nts	Percentage
	Pre-exa	n obligations				
		attendance at lectures / ex	5		5%	
		positively graded seminar	15		15%	
Evaluation criteria		Colloqu	15		15%	
Evaluation criteria	Colloquium 2					15%
		lab. ex	10		10%	
	Final exa	am				
	oral					40%
	TOTAL					100 %
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-cikl	us-202	1.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engin	eering Doboj

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			ransport and Tra				A STRAK	AINA WART TIN
L YNC			Study program: T	••			Ĩ	
			file: Informatics					AOEOJ
Course title		l cycle		IV year of stud E-BUSINESS	У		A	
Course title	Dona	rtmont of Infor	mation Commu	nication Systems	in Traffic	Fac		ransport and
Department	-	c Engineering i		incation systems	iii iiaiiic,	, raci	uity of 1	ransport and
			-					
Code		Cou	irse status	Semeste	r		ECTS	credits
САФ11СИ07115			mpulsory	VII			5	5.00
Professor/s			associate profess	or				
Associate/s	Sinisa Boz	ickovic, senior a	assistant					
Wee	kly hours		Individual stu	dent hours (per s	semester)		nt workload fficient S₀
L	TE	LE	L	TE	LE		LUE	S _o
2	2	0	45	45	0			1.5
Total teacher w	orkload (ho	urs, per semes	-	Total student wo	orkload (h	ours	, per sei	
	•	= 30 + 30 + 0 = 6		2*15*1.5 + 3*15*				
				= 150 hours per				
				e-business model				
Course aims and				ctronic payment r				
learning outcomes			-	nic banking appli				
			ecessary knowle	dge related to ris	ks and da	ta sa	fety in e	e-business
Prerequisites		prerequisites			ا من امن ا			a va valata d ta
Teaching methods	e-business		cises and tutorial	s. Studying and ir	idividual s	semi	nar pap	ers related to
			ion of husiness n	rocesses				
	 Internet and globalization of business processes Basic components of e-business 							
	3. E-business infrastructure							
		4. Electronic banking						
		n forms of elect	ronic banking					
	6. Electror	nic payment sys	stems					
	7. Advanta	vantages and disadvantages of electronic banking						
Course content	8. Colloqu							
		-	nd expert system					
	-		ps with customer	s in modern busi	ness			
		onic commerce	luantagas of a					
		of e-commerce	lvantages of e-co	minerce				
				arketing in mode	rn husine	222		
	15. Collog	-						
	4		Textbook (s					
Author/s		Name	of publication, p	ublisher	Yea	r	Page	es (from-to)
Rade Stankić	E	Electronic Comr	merce, Faculty of	Foreign Trade in	200	7	1 - 193	
Branko Krsmanović	E	Bijeljina		•	200		- 175	
Authori		Nie	Additional read		Ver		Dee	(from to)
Author/s Željko Stjepanović			e of publication,		201		Page	es (from-to) 1 - 159
			ials, Traffic Engin sessment metho		201	1	ints	Percentage
	Pre-exam	obligations	sessment metho	MJ			1113	rercentage
		5516410115	attendar	ice to lectures / e	xercises		5	5%
Evaluation criteria				paper positively a			15	15%
			Jernindi		quium 1	-	20	20%
					-	-		-
	colloquium 2 20 20%							2070

	final exam	40	40%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

CAФ11CИ07115776,0311 Manadatory VII Professor/s PhD Gordana Jotanović, associate professor Associate/s PhD Goran Kuzmic, assistant professor Weekly hours Individual student hours (per semester) Student for semester L TE LE L TE LE 3 1 1 45 15 15 Total teacher workload (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) W = 3*15 + 1*15 + 1*15 = 75 T = 3*15*So + 1*15*So + 1*15*So = 150 15 15 Total workload: W+T=U _{opt} = 75 + 75 = 150 hours per semester 1. students should acquire knowledge about the application of methods and to designing software systems.	ECTS credits 6,00 cudent workload coefficient So So 1,2 er semester) 0 = 75 So=90 tools for
$\begin {tabular}{ c c c c c c } \hline Profile: Informatics in traffic \\ \hline I cycle & IV year of study \\ \hline Course title & SOFTWARE ENGINEERING \\ \hline Department & Department of Computer and Information Science and Bioinformatics ET \\ \hline Code & Course status & Semester & Ed \\ \hline CA$\Phi1CH07115776,0311 & Manadatory & VII & Professor/s & PhD Gordana Jotanović, associate professor \\ \hline Associate/s & PhD Goran Kuzmic, assistant professor & \\ \hline Weekly hours & Individual student hours (per semester) & \\ \hline L & TE & LE & L & TE & LE \\ \hline 3 & 1 & 1 & 45 & 15 & 15 \\ \hline Total teacher workload (hours, per semester) & \\ \hline W = 3*15 + 1*15 + 1*15 = 75 & T = 3*15*So + 1*15*So + 1*15*So \\ \hline Total workload: W+T=U_{opt}= 75 + 75 = 150 & hours per semester \\ \hline 1. students should acquire knowledge about the application of methods and formation and the signing software systems. & \\ \hline \end{tabular}$	ECTS credits 6,00 cudent workload coefficient So So 1,2 er semester) 0 = 75 So=90 tools for
I cycle IV year of study Course title SOFTWARE ENGINEERING Department Department of Computer and Information Science and Bioinformatics ET Code Course status Semester Ed CAФ11CH07115776,0311 Manadatory VII Professor/s PhD Gordana Jotanović, associate professor Semester Ed Associate/s PhD Goran Kuzmic, assistant professor Individual student hours (per semester) Students L TE LE L TE LE A 3 1 1 45 15 15 Total teacher workload (hours, per semester) Total student workload (hours, per semester) Total student workload (hours, per semester) Weakly outload: W+T=Uopt= 75 + 75 15 15	ECTS credits 6,00 Eudent workload coefficient So So 1,2 er semester) 0 = 75 So=90 tools for
Course titleSOFTWARE ENGINEERINGDepartmentDepartment of Computer and Information Science and Bioinformatics ETCodeCourse statusSemesterCAΦ11CИ07115776,0311ManadatoryVIIProfessor/sPhD Gordana Jotanović, associate professorFreesorAssociate/sPhD Goran Kuzmic, assistant professorStudent hours (per semester)LTELELTE3114515Total teacher workload (hours, per semester)Total student workload (hours, per semester)Total student workload (hours, per semester)W = 3*15 + 1*15 + 1*15 = 75Total student workload (hours, per semester)Total student workload (hours, per semester)W = 3*15 + 1*15 + 1*15 = 75Total student workload (hours, per semester)Total workload: W+T=Uopt= 75 + 75 = 150hours per semester1. students should acquire knowledge about the application of methods and the designing software systems.	ECTS credits 6,00 Eudent workload coefficient So So 1,2 er semester) 0 = 75 So=90 tools for
CodeCourse statusSemesterEndCAФ11CИ07115776,0311ManadatoryVIIProfessor/sPhD Gordana Jotanović, associate professorAssociate/sPhD Goran Kuzmic, assistant professorWeekly hoursIndividual student hours (per semester)LTELE311451515Total teacher workload (hours, per semester)Total student workload (hours, per semester)W = 3*15 + 1*15 + 1*15 = 75T = 3*15*So + 1*15*So + 1*15*So = 150Total workload: W+T=Uopt=75 + 75 = 1501. students should acquire knowledge about the application of methods and to designing software systems.	ECTS credits 6,00 cudent workload coefficient So So 1,2 er semester) 0 = 75 So=90 tools for
CAФ11CИ07115776,0311ManadatoryVIIProfessor/sPhD Gordana Jotanović, associate professorAssociate/sPhD Goran Kuzmic, assistant professorWeekly hoursIndividual student hours (per semester)StuLTELELTELE311451515Total teacher workload (hours, per semester)Total student workload (hours, per semester)Total student workload (hours, per semester)W = 3*15 + 1*15 + 1*15 = 75T = 3*15*So + 1*15*So + 1*15*So = 150Nours per semesterTotal workload: W+T=Uopt=75 + 75 = 150hours per semesterI. students should acquire knowledge about the application of methods and to designing software systems.Individual student workload in the student workload in the student workload in the systems.	6,00 cudent workload coefficient So So 1,2 er semester) o = 75 So=90 tools for
Professor/sPhD Gordana Jotanović, associate professorAssociate/sPhD Goran Kuzmic, assistant professorWeekly hoursIndividual student hours (per semester)LTELE311451515Total teacher workload (hours, per semester)Total student workload (hours, per semester)W = 3*15 + 1*15 + 1*15 = 75T = 3*15*So + 1*15*So + 1*15*So = 150Total workload: W+T=Uopt=75 + 75 = 1501. students should acquire knowledge about the application of methods and the designing software systems.	So 1,2 r semester) = 75 So=90 tools for
Associate/sPhD Goran Kuzmic, assistant professorWeekly hoursIndividual student hours (per semester)LTELE311451515Total teacher workload (hours, per semester)Total student workload (hours, per semester)W = 3*15 + 1*15 + 1*15 = 75T = 3*15*So + 1*15*So + 1*15*So = 150Total workload: W+T=U _{opt} = 75 + 75 = 150hours per semester1. students should acquire knowledge about the application of methods and to designing software systems.	So 1,2 er semester) = 75 So=90 tools for
Weekly hoursIndividual student hours (per semester)StuLTELELTELE311451515Total teacher workload (hours, per semester) W = $3*15 + 1*15 + 1*15 = 75$ Total student workload (hours, per T = $3*15*So + 1*15*So + 1*1$	coefficient S _o S _o 1,2 er semester) = 75 So=90 tools for
Individual student hours (per semester)LTELELE311451515Total teacher workload (hours, per semester) W = $3*15 + 1*15 + 1*15 = 75$ Total student workload (hours, per T = $3*15*So + 1*15*So + 1*15*So = 150$ Total workload: W+T=U _{opt} = 75 + 75 = 150 designing software systems.	coefficient S _o S _o 1,2 er semester) = 75 So=90 tools for
31451515Total teacher workload (hours, per semester)W = $3*15 + 1*15 + 1*15 = 75$ Total student workload (hours, per semester)Total workload: W+T=U _{opt} = 75 + 75 = 150 hours per semester1. students should acquire knowledge about the application of methods and the designing software systems.	1,2 er semester) o = 75 So=90 tools for
Total teacher workload (hours, per semester)Total student workload (hours, perW = 3*15 + 1*15 + 1*15 = 75T = 3*15*So + 1*15*So + 1*15*SoTotal workload: W+T=U _{opt} = 75 + 75 = 150hours per semester1. students should acquire knowledge about the application of methods and todesigning software systems.	r semester) = 75 So=90 tools for
W = $3*15 + 1*15 + 1*15 = 75$ T = $3*15*So + 1*15*So + 1*15*So = 150$ Total workload: W+T=U _{opt} = 75 + 75 = 150 hours per semester1. students should acquire knowledge about the application of methods and the designing software systems.	= 75 So=90 tools for
Total workload: W+T=U _{opt} = 75 + 75 = 150 hours per semester 1. students should acquire knowledge about the application of methods and to designing software systems.	tools for
1. students should acquire knowledge about the application of methods and t designing software systems.	
designing software systems.	
	adels
Course aims and 2. students should acquire knowledge of software lifecycle processes and mo	Jueis
learning outcomes 3. students should acquire knowledge that enables them to design software s	systems
independently or within a team	
4. students should acquire knowledge about the application of methods and t	tools of software
engineering in technical systems in traffic	
Prerequisites No Teaching methods Lectures. Laboratory exercises.	
Teaching methods Lectures. Laboratory exercises. 1. Software as a product. Features and quality of software products. Application	tion of software
in traffic.	Jon of software
2. Principles of software engineering.	
3. Software life cycle models.	
4. Agile methods.	
5. Software requirements. Software requirements process.	
6. Software requirements modelling. Prototyping.	
Course content 7. I Colloquium	
8. Software design. Conceptual and technical design.	
 9. Architectural styles. Modularity. 10. User interface design. 	
11. Characteristics of good design. Component independence.	
12. Object Oriented Software Design. UML.	
13. Programming standards and procedures. Preparation of documentation.	
14. Design of software systems for application in traffic.	
15. Il Colloquium	
Textbook (s)	
Author/s Name of publication, publisher Year P Sheri Learning Software engineering: Theory and practice. Year P	Pages (from-to)
Shari Lawrence Pfleeger and Joanne M. AtleeSoftware engineering. Theory and practice.2006Serbia.Serbia.	
Software life cycle. University of Novi Sad,	
Željko Stojanov Technical Faculty "Mihajlo Pupin" Zrenjanin. 2021	
Serbia.	
Pierre Bourque and Richard Guide to the Software Engineering Body of 2014.	
E. Fairley (Editors) Knowledge, Version 3.0, SWEBOK. IEEE.	
Additional readings	
Author/s Name of publication, editor Year P	Pages (from-to)

lan Sommerville		SoftwareEngineering, 9th edition. Addison- Wesley, Boston, MA, USA.	2011			
		Assesment methods		Poi	ints	Percentage
	Pre-exa	n obligations				
		Collo	quium 1	30		30%
Evaluation criteria		Collo	quium 2	30		30%
	Final exa	am				
		Writt	en exam	40		40%
	TOTAL			100)	100%
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engl	eski-NPP-	l-cik	us-2021	L.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Trans	ort and 1	raffi	c engine	eering Doboj

INCTO:		UNIV	ERSITY OF EAST	SARAJEVO		2005			
		Faculty of	5	STARALING WAR					
- xinc		2	Study program:	Traffic					
			file: Informatics			AOEOJ			
14875 10 50		I cycle		IV year of stu					
Course title	title INTERNET TECHNOLOGIES Department of computers, information technologies and biotect								
Department	of East S		puters, informat	ion technologies	and biotechr	hology, ETF, University			
Code		Cou	urse status	Semest	ter	ECTS credits			
САФ11СИ07109	985,0311	m	andatory	VIII		5,00			
Professor/s	Ph.D. Dragar	Peraković,	Full Professor		•				
Associate/s	Ph.D. Dragar	Peraković,	Full Professor						
Wee	kly hours		Individual st	udent hours (pe	r semester)	Student workload coefficient So			
L	TE	LE	L	TE	LE	So			
3	1	1	30	15	15	1,5			
Total teacher w			ster)		•	urs, per semester)			
W = 2*15 +	+ 1*15 + 1*15					15*S₀ = 90 hours			
				0 = 150 hours pe					
			•	communicate usi	-	echnologies.			
Course aims and				protocols and se					
learning outcomes		-	-	Internet securit	-	-			
			about the use of	the Internet and	d mobile devi	ces in the traffic			
Dronoguisitos	engineerin Dasia knowla	-	ald of Computer	notworks					
Prerequisites Teaching methods			eld of Computer	Use of HTML and					
Teaching methods	-		Internet Technol		i CSS laliguag	с.			
			unication using the						
		lication laye		ie meenee.					
			ols (IP, ARP, ICMF	, UDP. TCP).					
		· ·	dvantages and d						
			s (INTRANET).						
				ile devices in the	e domain of t	raffic engineering. WAP			
Course content	standard. GP	Application of Internet and mobile devices in the domain of traffic engineering. WAP d. GPRS and SMS.							
Course content	8. Coll	Colloquium 1							
			n development te	-					
			es (HTML, XHTM	L, XML).					
		ot languages							
			y and data securi						
			User authenticat	ion.					
	14. Cryp 15. Colloqui i		igital signature.						
			Textbook (5)					
Author/s		Name	of publication,	-	Year	Pages (from-to)			
Andrew S. Tanenbau	m Cor Ser	nputer netw	vork, Mikro knjig		2005				
			ructure: Networ	king weh					
Richard Fox and Wei HaoInternet infrastructure: Networking, webRichard Fox and Wei Haoservices, and cloud computing. CRC Press. Boca2018									
	Raton, FL, USA.								
Comer, E. D.			g with TCP/IP, Pr	entice Hall	2013				
,	1		Additional rea						
Author/s		Nam	e of publication		Year	Pages (from-to)			
	We		-	foundations wit	th				
Terry Felke-Morris			tion. Pearson. H		2016				

Josh Hill i James A. B	rannan	HTML5 I CSS3: brilliant, CET	201	1		
		Assesment methods		Poi	ints	Percentage
	Pre-exa	n				
		lectures / exercises atter	ndance	5		5%
		proje	ct task	15		15%
Evaluation criteria		Colloq	uium 1	15		15%
Evaluation criteria		Collog	uium 2	15		15%
		lab. ex	ercises	10		10%
	Final exa	am				
		ora	l exam	40		40%
	TOTAL			100)	100%
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ski-NPP-	I-cikl	lus-202	1.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engin	eering Doboj

WEY DIM		UNIV	ERSITY OF	EAST S	ARAJEVO			2003
		-	-		ffic Engineering			Superfailing & day and
			Study prog					
		l cycle	file: Inform	natics i	I year of stud	V		AOEOJ
Course title		Тсусіе	y YSTEMS					
Department	Dep	artment of Auto			tics - ETF East Sa			
· ·								5070 I'i
Cod	9	Col	urse status		Semest	er		ECTS credits
САФ11СИ0713	,				VIII			6.00
Professor/s		slav Kostadinov		•				
Associate/s	PhD Mirc	oslav Kostadinov	lic, associat	te profe	essor			Student workload
We	ekly hours		Individ	ual stu	dent hours (per	semester)		coefficient So
L	TE	LE	L		TE	LE		So
3	1	1	2		1	1		1,5
	workload (h 5 + 1*15 + 1	ours, per semes	ster)		Total student w	•	-	• •
-	5 + 1*15 + 1 30+ 15+ 15=	-				1*15*1,5 + ·22,5+ 22,5		
	JUT 13+ 13-		al workload	· 60 + 9		22,37 22,5	- 90	11
	1. Introd					the field of	digit	al management
	systems.			-1				
Course aims and	2. Studer	nts will get acqu	ainted and	master	the knowledge	in the field	lofco	onstruction,
learning outcomes				trol sys [.]	tems, with the c	haracterist	ics of	the
		troller platform						
Duous autisitas		processor contro	ol systems a	and Ma	tlaba.			
Prerequisites Teaching methods	Does not	auditory exerci	sos somin	or nono	r			
reaching methous		ms of real-time			1			
		me system class	-	-	tions.			
					gn. Final state m	achine.		
			•	•			syste	ms on the example
					d the automotiv			,
		-	-	al inpu	ts / outputs. And	alog inputs	/ out	puts. Pulse inputs /
		Real time clock. me operating sy		5)				
			-	-	ot-driven system	ns. Multitas	king	systems.
Course content	8. (I collo				·····			-,
	9. Mutua	I exclusion of pr	ocesses. C	ommur	nication between	n tasks. Rea	al-tas	k programming
		s. Hardware and		•				
		m management		•	-	(
					ns and architect eal-time systems		DA sy	stems as a system
					f SCADA system		ofan	nlication
					real-time mana	-	-	
		ote control syste				0 /		
	15. II coll	oquium						
				ook (s)				
Author/s			e of publica	-		Yea	r	Pages (from-to)
Stojic M.		Continuous au			ystems, Scientifi	ic 1990	0	
2. Ковачевић Б		Signals and Syst	book, B ems Акале	_		2007.		
2. NUBAYEBNII D		oignais and oyst	Addition			2007.		
Author/s		Nar	ne of publi			Yea	r	Pages (from-to)
Evaluation criteria			ssesment				Poin	

	attendance at lectures and exercises	10	10%
	seminar papers	20	20%
	I colloquium	10	10%
	II colloquium	10	10%
	Final exam		
	final exam (oral / written)	50	50%
	IN TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

T WATCHED			UNIV	ERSITY OF	EAST S	ARAJEVO		2005	
		Faculty of Transport and Traffic Engineering						Standing Barries	
D YNC				Study prog					
		Profile: Informatics in traffic						AOEOJ	
			l cycle	0000		IV year of st			
Course title			. (ON OF TRAFFIC			
Department	De Do		nt of Trans	sport Engi	neering	- Faculty of Tr	ansport and 1	Traffic Engineering	
Cod	de		Coι	urse status	;	Seme	ster	ECTS credits	
САФ11СИ071	.04585,0220)	o	bligatory		VII		5.50	
Professor/s	PhD Per	ica Goj	ković, full	professor					
Associate/s	Bojana	Ristic, s	enior assis	stant					
w	eekly hours			Individ	ual stu	dent hours (pe	er semester)	Student workload coefficient So	
L	TE		LE	L		TE	LE	So	
2	2		0	45		45	0	1.5	
Total teacher W = 2*15 + 2*	-		-	-				urs, per semester) *1,5 = 45 + 45 + 0 = 90	
	Tota	al work	load: W +	$T = U_{opt} = 6$	50 + 90	= 150 hours p	er semester		
			his course						
	1. learn	the bas	sic concep	ts of orgar	nization	, as well as typ	es and organi	izational models of	
	enterpr	-							
Course aims and		will be able to analyze the organization of large business systems, business and							
learning outcome		ment policy and development factors;							
	-	endently organize and lead a meeting according to defined rules; red knowledge in practice to apply and establish their own company as well as to give							
			-	-		and establish	their own cor	mpany as well as to give	
Duranteiter			others on) it;				
Prerequisites Teaching methods			pecial cond		Itations				
reaching methods			ory exerci			ganization			
		-	anizationa	-		gamzation			
			nal models						
			arge busin						
	_	-	nal models	-		panies			
	_		d developn	-					
			ic business	•	•	•			
Course content			ds and tec		or optin	nization			
	-		nal culture						
			on of busin		ons				
			formation	-					
	-		on control.	-	-	-			
	-		on and mai	-			f the company	N/	
	14. Orga 15. II co			organizati		ansformation o	n the compan	ı y	
	15.1100	noquiu		Text	oook (s)				
Author/	s		Name	of publica			Year	Pages (from-to)	
Vešović, B. V., Boj		Organ				zeća, Saobraća	ini		
Knežević, Lj. N.	· · · · · · · · · · · · · · · · · · ·	_	tet, Beogra	-	1. 20.01	,	2007.		
				Addition	al read	ings			
Author/	s		Nam	e of publi		-	Year	Pages (from-to)	
		I	Δ	ssesment	methor	ls		Points Percentage	
Evaluation criteria	Pre-exa	m ohliø						i ci ci i ci i ci i ci i ci i ci i ci	
			,						

	attendance at lectures / exercises	10	10%
	colloquium 1	40	40%
	colloquium 2	20	20%
	Final exam		
	oral	30	30%
	IN TOTAL	100	100 %
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2021	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

ST WETTY HEL				ERSITY OF					2005		
		Faculty of Transport and Traffic Engineering Study program: Traffic							Joseph		
-82				stuay prog file: Inform							
I cycle IV year of study									A O E O J		
Course title											
Department Department of Computer and Information Science and Bioinformatics ETF East Sarajev											
c	ode		Cou	urse status	5	Seme	ster		ECTS credits		
САФ11СИО				E		VII			5,00		
Professor/s			Brtka, asso	-							
Associate/s	Phi	O Mirko Sto	ojcic, assista	ant profea: I	ssor				Charlen to a subject		
	Weekly h	ours			ual stu	dent hours (po		r)	Student workload coefficient S _o		
L	TE		LE	L		TE	LE		So		
2	1		1	30		15	15		1,5		
Total teach			-	ster)			•		, per semester)		
vv = 2	.12 + 1 .	L5 + 1*15 =		T-II 60	- 00 – ר	$1 = 2^{1} 15^{1} 5_{0}^{1}$		1.12	*S _o = 90 hours		
	1 9							isms i	n expert systems.		
			-			-	-		stems and their		
	anr		the field of		-			,			
Course aims and				•		the basic comp	ponents of e	exper	t systems and their		
learning outcom	pui	pose.									
	4. (One of the	e of the learning outcomes should be traffic planning and optimization with the help of								
		ert system	S.								
Prerequisites	No	-									
			-						chanism (C # or		
Teaching metho		-		knowledge	e (XIVIL,	JSON). Develo	pment of e	xpert	system components		
		l simple ap ntroductio	•								
			s of expert	systems							
		-	-	-	in expe	rt systems.					
			knowledge			,					
	5. F	ormalizati	on of know	ledge.							
	6. E	xpert and	his role.								
		colloquiun									
Course content		-	based syst			-					
			s of expert	-	n traffic						
			tem as a co		in tha	field of traffic					
		Traffic flov		g uccisions	sintine						
			nning and o	optimizatio	n						
			•	•		ic and recomn	nendations	for po	ossible action.		
		II colloqui	-								
				Textb	book (s						
Autho	r/s			of publica	-		Yea	ar	Pages (from-to)		
Vladimir Brtka		Machine Learning, University of Novi Sad, Technical Faculty "Mihajlo Pupin", Zrenjanin									
Vladimir Brtka			Computing Ity "Mihajl			ovi Sad, Techni in	ical 201	.3.			
				Addition	al read	ings					
Autho	r/s		Nam	e of public		-	Yea	ar	Pages (from-to)		
J. Chan	•	Lear	n Java, Cop				2016				
			; F								

	Assesment methods	Points	Percentage
	Pre-exam obligations		
	attendance at lectures / exercises	5	5%
	positively rated seminar paper	15	15%
Evaluation criteria	Colloquium 1	15	15%
Evaluation criteria	Colloquium 2	15	15%
	lab. exercises	10	10%
	Final exam		
	oral	40	40%
	TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Fraffic engin	eering Doboj

A CONTRACTOR OF A CONTRACTOR A		-	ARAJEVO			2005			
			Fransport and Study program		ffic Engineering raffic			Ser. N. Tak	
82		Profile: Informatics in traffic						AOEOJ	
	_	I cycle			III year of stud				
Course title	Doparte	mont of Infor			EDGE BASED SY		Facul	ty of Transport and	
Department		Engineering i		mui	illation system		racui	ty of fransport and	
Code			urse status		Semest	er	ECTS credits		
САФ11СИ07236	5485,0211		0		V			5,00	
Professor/s			ciate professo						
Associate/s	PhD Vladimi	ir Brtka, asso	ciate professo	or					
Wee	kly hours		Individual	l stud	dent hours (per	semester)		Student workload coefficient So	
L	TE	LE	L		TE	LE		S _o	
2	1	1	30		15	15		1,5	
Total teacher w W = 2*15 + 1*15					Total student w 15*S ₀ + 1*15* S		-	per semester) + 15 + 15=60 S ₀ = 90	
	Total v	workload: W+	-T=U _{opt} = 60 +	90 =	150 hours per s	semester			
Course aims and learning outcomes	knowledge- 2. Students systems and 3. Students formalizatio systems. 4. Students	based system will be able to I to notice the will be able to n and to use	ns. o identify situ e difference in o apply the ad existing softw o apply their	iatioi n situ cquir vare	uations of applie ed knowledge i solutions for th	he applicati cation of ex n the field c e applicatio	on of pert s of knc on of l	f knowledge-based systems.	
Prerequisites	None								
Teaching methods	Lectures, lab		cises, compu nt of practica			ses and cor	nsulta	ations. Learning and	
Course content	 Motivation, introduction and terminology. Areas and examples of application of knowledge-based systems. Forms of knowledge representation. Components of knowledge-based systems. Sources and methods of data collection for the purpose of knowledge extraction. Machine learning module and its role. Preparation of data for knowledge extraction. 						based systems.		
			Textboo						
Author/s		Name	of publicatio		ublisher	Year		Pages (from-to)	
Vladimir Brtk	a I	achine Lear	ning, Univer	rsity	of Novi Sa	¹ , 2019			
P. Hotomski	Sy: No	stems of Ar	chnical Facul	genc ty "	e, University o Mihajlo Pupin				
			Additional r	eadi	ngs				

Author/s		Name of publication, editor	Yea	r	Pages (from-to)				
		Assesment methods		Points		Percentage			
	Pre-exam obligations								
		attendance at le	ctures	10		10%			
		attendance at exe	10		10%				
Evaluation criteria		Collo	20		20%				
		lab. ex	10		10%				
	Final exa	am							
			oral	50		50%			
	TOTAL		100)	100%				
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	<u>ski-NPP-</u>	I-cikl	us-2021	<u>1.pdf</u>			
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic	c engine	eering Doboj			

K		UNIVERSI Faculty of Trans Study Profile:	Southallin Quanta				
15 15 10 10 10 10 10 10 10 10 10 10 10 10 10		I cycle		IV year of stud	dy	Δοδοι	
Course title			CUSTOMER				
Department		ent of Informati ic Engineering ir		munication Syste	ems in Traff	ic, Faculty of Transport	
Code		Courses	status	Semest	er	ECTS credits	
САФ11СИ0723	6385,0211	Elect	ive	VIII		5,00	
Professor/s	Ph.D. Amel Ko	sovac, Associat	e Professor				
Associate/s	Ph.D. Amel Ko	osovac, Associat	e Professor				
Wee	ekly hours	Ir	ndividual stu	dent hours (per	semester)	Student workload coefficient So	
L	TE	LE	L	TE	LE	So	
2	1	1	30	15	15	1.5	
Total teacher v W = 2*15 + 1*15		5 + 15 = 60 hour	ſS	*15*S ₀ + 1*15*	S ₀ + 1*15* 60S ₀ =90 hc	ours, per semester) So =30So + 15So + 15So = ours	
	1		•	= 150 hours per			
Course aims and learning outcomes	2. Master the 3. Master tech	basic approach nniques for prec	es in custom licting user b	relationship mai er satisfaction re ehavior. ationship manag	esearch.	CRM).	
Prerequisites	No						
Teaching methods	Oral presenta	tion, illustrative	-demonstrat	ive method, ana	lysis and sy	nthesis.	
Course content1 Introduction to Customer Relationship Management (CRM): The concept and definition of CRM. Need for CRM. 2. Evolutionary development of marketing management. 3. Approaches to customer satisfaction research. 4. Customer relationship management as a business process. 5. Predicting client behaviour. Customer segmentation. Customer profitability. 6. Customer Relationship Policy. Analytical CRM. 7. Colloquium 1 8. Customer Relationship Management Tools. 9. Technological basis of customer relationship management. 10. Electronic business and customer relationship management via the Internet. 11. CRM system life cycle. 12. CRM system reengineering. 13. Implementation of CRM solutions in telecommunications companies. 14. Operational CRM. CRM in practice, the situation in the surrounding countries.							
Author/s			Textbook (s) ublication, p		Year	Pages (from-to)	
Dyche, J., Diche, J.		CRM handbo omer relations	ook: A bus	siness guide t ement. Addisor	0		
Macaulay, T., R.	loT and	Control: Unders	Inderstanding and Managing Risks net of Things (1st Edition), Moragan mbridge, USA.				
Greenberg, P. CRM at the speed of light: Capturing and keeping customers in Internet real time. Osborne 2002 McGraw-Hill.							
Peelen, E.		omer Relation cation Limited, E		ement, Pearso	n 2005		

	Additional readings										
Author/s		Name of publication, editor	Yea	r Page		es (from-to)					
Buttle, F.		Customer Relationship Management. 2nd ed., Butterworth-Heinmann, Amsterdam, London	2009	9							
		Assesment methods		Poi	nts	Percentage					
	Pre-exa	n									
		lecture atter	idance	5		5%					
		participation in exe	5		5%						
Evaluation criteria		Collo	30		30%						
	lab. exercises					10%					
	Final exam										
		ora	l exam	50		50%					
	Total		100)	100%						
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	ki-NPP-	I-cikl	us-202	L.pdf					
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	rt and T	raffi	c engine	eering Doboj					

ST VINCTONOL		UNIV	ERSITY OF	EAST S	ARAJEVO			2005			
- <u>18</u> .					fic Engineerin	g		Joseph and the second			
SHOCE SALES			Study prog								
			file: Inforn	natics in				AOE01			
		l cycle			IV year of stu		-				
Course title	Der	- utur - ut - f Marul			RESOURCE MA						
Department	Dep	artment of Mark	ceting and	Manage	ement, Faculty	/ of Econom	ICS IN B	rcko			
Code			ırse status		Semes	ster		ECTS credits			
САФ11СИ07215			lectoral		VII			5,00			
Professor/s		o Erceg, Associa									
Associate/s	PhD Zivk	o Erceg, Associa	te Professo	or							
Wee	kly hours		Individ	ual stud	lent hours (pe	er semester)	S	tudent workload coefficient S₀			
L	TE	LE	L		TE	LE		So			
2	1	1	45		22,5	22,5		1,5			
Total teacher w	orkload (h	ours, per semes	ter)		Total student						
		+ 1*15 = 60		T = 2*	°15*1,5 + 1*15		5*1,5 =	45 + 22,5 + 22,5 =			
						90					
Total workload: W + T = Uopt = 60 + 90 = 150 hours per semester1. Acquisition of theoretical and practical knowledge and skills											
	-		retical and	d practi	cal knowledge	e and skills	in the	field of company			
		nagement.					.				
C	-	2. Acquiring knowledge in the field of selection and assessment of those resources that are justified from the aspect of social and economic point of view.									
Course aims and	-				-		trancn	ort justification of			
learning outcomes	-	3. Acquiring knowledge about the importance of investments in transport, justification of investments and indicators of justification of investments.									
		Acquiring knowledge about software solutions in the field of enterprise resource									
		lagement.	se about	SUILWAI		ii the held		iterprise resource			
Prerequisites	No prere	-									
Teaching methods		, auditory exerci	ses. labora	tory exe	ercises, consul	tations					
	 The concept of enterprise resources Enterprise resource characteristics 										
	4. Obje										
	5. Mar										
		nagement of fina			• •						
		nagement of mat	erial resou	urces of	the company						
Course content		loquium									
		nagement	of		total	enterp	rise	resources			
		ource Managem		-		aant					
		ware solutions f -planning of bus	-		-	iiciii					
		es of ERP impler		II CC3 III	the company						
		most common r		an ERP	system						
		lloquium			-,						
			Textb	ook (s)							
Author/s		Name	of publica		ıblisher	Yea	r	Pages (from-to)			
Vesovic, Б. V., Bojov	ic, J. N.,						,	•			
Knezevic, Lj. N		-	nsportatio	-		2007	•				
			Addition	al readi	ngs						
Author/s		Nam	e of public	cation, e	editor	Yea	r	Pages (from-to)			
							T				
		Α	ssesment i	method	s		Points	s Percentage			
Evaluation criteria	Pre-exan	n obligations			-						
				Presen	ce of lectures	/ exercises	10	10%			
	1						l	I			

	Colloquium 1	20	20%				
	Colloquium 2	20	20%				
	laboratory exercises	10	10%				
Final exam							
	Final exam (oral)	40	40%				
	TOTAL	100	100 %				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>				
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj				

Motor Vehicles

	18		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineerin	ng				South	AJHH ØASTAT	4		
	SUIC SUIC		Study program: Traffic Profile: Motor Vehicles						AOEOJ	9		
Ordinal		Code Course title		Course status Prerequisites		Semester		Fund classe		ECTS		
				Ŭ	Ы		L	TE	LE			
III year of study												
28.	CAΦ11CN	107116057,0330	Fundamentals of thermodynamics	0 V			3	3	0	7.00		
29.	CAΦ11CN	107116157,0330	Fundamentals of fluid mechanics	0		V	3	3	0	7.00		
30.	CAΦ11CN	107116254,0210	Fuel and lubricant technology	0		V	2	1	0	4.00		
31.	CAΦ11CN	107136555,0211	Automatic control in vehicles	0		V	2	1	1	5.00		
32.	CAΦ11CN	107106857,0330	Motor vehicles	0		V	3	3	0	7.00		
33.	CAΦ11CN	/07116466,0330	Fundamentals of vehicle dynamics	0		VI	3	3	0	6.00		
34.	CAΦ11CN	/07103966,0330	SUS engines	0		VI	3	3	0	6.00		
35.	CAΦ11CN	107116565,0220	Fuel supply systems	0		VI	2	2	0	5.00		
20	CAΦ11CN	107216666,0311	1. Alternative fuels and unconventional vehicle drives			VI		1	1	C 00		
36.	CAΦ11CN	107216766,0311	2. Mechatronic systems for engines and vehicles	l ₂				1	1	6.00		
37.		M07216965,02201. Materials of road vehiclesM07217965,02202. Accounting and finance for managers		- I ₃		VI	2	2	0	5.00		
38.	CAΦ11CV	107132962,0000 Professional practice 0		0		VI	0	0	0	2.00		
				<u>.</u>	Т	OTAL:	26	22	2	60		
			IV year of study							<u> </u>		
39.	CAΦ11CN	/07117077,0330	SUS engine design	0		VII	3	3	0	7.00		
40.	CAΦ11CN	/07117176,0320	SUS engine equipment	0		VII	3	2	0	6.00		
41.	CAΦ11CN	107117277,0330	Vehicle design and calculation	0		VII	3	3	0	7.00		
42.	CAΦ11CN	107103475,0220	Operation and maintenance of vehicles	0		VII	2	2	0	5.00		
43.	CAΦ11CN	/07117375,0220	Engine diagnostics and maintenance	0		VII	2	2	0	5.00		
44.	CAФ11CN	107117486,0320	Design and organization of vehicle maintenance systems	0		VIII	3	2	0	6.00		
45.	CAΦ11CN	107117585,0220	Environmental protection and waste management	0		VIII	2	2	0	5.00		
46.	CAΦ11CN	107104585,0220	Organization of transport companies	0		VIII	2	2	0	5.00		
47.	CAФ11CN	107217785,0220	1. Technical inspection and homologation of vehicles	I 4		VIII	2	2	0	5.00		
	CAΦ11CN	107204785,0220	2. Traffic safety									
	CAΦ11CN	107236685,0220	1. Compressors, pumps and fans									
48.	CAΦ11CN	107217885,0220	 Human resources, knowledge and project management 	I ₅		VIII	2	2	0	5.00		
49.	CAΦ11CV	107105284,0030	Graduate thesis	0		VIII	0	3	0	4.00		
					Т	OTAL:	24	25	0	60		

• L - lectures

• TE - theoretical exercises

• LE - laboratory exercises

					-						
		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering							DARY		
-18.				Study prog		v	<u>Б</u>	. See	7 Pet		
•				Profile: Mo							
			l cycle	Tojlie. Wic		l year of stu	ıdv	4050	LI L		
Course title			TCYCIE	ELIND		ALS OF THERN					
Department	De	nartme	ent of Moto			ation, Mainten			hicles		
Department		parente		or verneres							
Coo			C οι	irse status	i	Seme	ster	ECTS cr			
САФ115М071				0		V		7.0	0		
Professor/s			otić, associ	-							
Associate/s	PhD Mi	lan Mil	otić, associ	ate profes	sor						
W	eekly hours	5		Individ	ual stu	dent hours (pe	er semester)		workload cient S _o		
L	TE		LE	L		TE	LE		So		
3	3		0	3		3	0	1,	,33		
Total teacher	workload (hours,	per semes	ter)		Total student	workload (ho	urs, per seme	ester)		
3*	15 + 3*15 +	0*15	= W			3*15*1,33	+ 3*15*1,33	+ 0*15*1,33 =	= T		
	45+ 45+ 0)= 90 h					60+ 60 + 0 = 3	L20 h			
						= 210 h= U _{opt}					
		-	his course								
Course aims and						ibstances and					
learning outcome					c laws c	of heat exchan	ge and their a	application. In	troduction		
			ws of comb	oustion							
Prerequisites	Does no										
Teaching methods			ory exercis								
		-				ize, system, er	hergy, equilib	rium and non-	-		
		equilibrium processes, types of substances									
		2. The first principle of thermodynamics for closed and open systems									
		3. Ideal gases and ideally incompressible substances - properties. Mixtures of ideal gases - properties									
		properties 4. Equilibrium changes in the state of ideal gases in a closed system - application in									
	-	engineering									
	_	5. Equilibrium changes in the state of ideal gases in an open system - application in									
	enginee		0.101.000		0	84000 4 01					
	-	-	cesses with	n ideal gas	es as a	working substa	ance. Right-h	anded and lef	t-handed		
Course content	process	ies									
course content	7. I colle	oquium	1								
					-	s. Irreversible		-	-		
			nces - prop	erties. Eva	poratio	on and liquefac	tion. Typical	processes in c	closed and		
	open sy							1 10			
		•				s - energy stea		•.			
			-			iction, convect					
	enginee		inge by cor	ivection -	sinniari	ty theorem - b	asic models -	application	I		
	_	-	inge hv rad	liation - ba	sic mo	dels - annlicati	on in enginee	ring			
	13. Heat exchange by radiation - basic models - application in engineering14. Heat exchangers - types of exchangers, calculation of basic types of exchangers										
	15. II co					, salealation of	Secto types	. e.e.iaiiBeig			
				Required	l literat	ure					
Author/	s		Name	of publica			Year	Pages	(from-to)		
A. Ga				Термоди	-			2002 1-31			
				Addition		readings					
Author/	s		Nam	e of publi		-	Year	Pages	(from-to)		

A. Galovic	The science of heat	1997		1-135					
	Assesment methods		Poi	nts	Percentage				
					-				
	attendance at lectures and exe	ercises	10		10%				
	seminar	papers	20		20%				
Evaluation criteria	I collo	quium	10		10%				
	II collo	10		10%					
	Final exam								
	final exam (oral / w	50		50%					
	IN TOTAL		100)	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj				

J. HET OUT		UNIV	ERSITY OF	EAST S	ARAJEVO			2005			
		Faculty of Transport and Traffic Engineering						STANAINH OUR I			
			Study prog								
			Profile: Mo	tor Veh				AOEOJ			
time to be		I cycle			I year of stu	-					
Course title	Dement	FUNDAMENTALS OF FLUID MECHANICS partment of Motor Vehicles, Operation, Maintenance and Diagnostics of Vehicles									
Department	Depart	ment of Moto	gnosti	cs of vehicles							
Code		Cou	urse status		Semes	ter		ECTS credits			
САФ115М07116	5157,0330		0		V			7.00			
Professor/s		Gojković, full	professor								
Associate/s	Milan Eremi	ija, assistant									
Wee	kly hours		Individu	ual stud	lent hours (pe	r semester)	9	Student workload coefficient S _o			
L	TE	LE	L		TE	LE		S₀			
3	3	0	3		3	0		1,33			
Total teacher w			ter)	-	Total student v	•		•			
	+ 3*15 + 0*1	-				+ 3*15*1,33		5*1,33 = T			
4	45+ 45+ 0= 90		kload: W :	T - 00	e + 120 = 210 h	50+60+0=	120 h				
	By masterin	g this course									
Course aims and	-	-				hasic laws o	of fluic	flow to solve			
learning outcomes	technical pr			, integr			ormane				
Duouonuisitee	· · · ·										
Prerequisites	Does not ha	Does not have									
Teaching methods		ectures, auditory exercises, seminar paper									
					on of basic con	cepts in mat	thema	tics			
	 Physical basics. Basic properties of fluids Forces in a fluid. Equation of motion of a fluid particle 										
	4. Fluid statics in the gravitational field. Pascal's law. Manometers										
	5. Determination of pressure force on flat and curved surfaces										
	6. Hydrostatic buoyancy. Swimming conditions. Density measurement										
		7. I colloquium									
	8. Fluid kine	8. Fluid kinematics Euler's and Lagrange's description of flow. Material derivation. Trajectories									
		and streams. Bernoulli's equation									
Course content	-	namics. Integral forms of the law of conservation of mass, momentum, momentum									
		mechanical e		low M	odified Bernou	Illi equation	Gran	hical			
					oulli equation		. Grap	incar			
					-	nce coefficie	ents				
		 Dimensional analysis of body circulation. Body resistance coefficients Dimensional analysis of flow in pipes 									
		13. Hydraulic calculation of pipelines: Line losses. Local losses. Energy characteristics of									
	hydraulic m										
		•	re drop, flo	w and p	oipeline diame	eter. Calculat	ion of	non-circular cross-			
	section pipe										
	15. Il colloqu	ululli	Toyth	ook (s)							
Author/s		Name	of publicat		blisher	Year		Pages (from-to)			
	Flu				s, examples ar	nd					
Virag Z.	tasks, FSB Zagreb							1-300			
			Additiona		-						
Author/s			e of public			Year		Pages (from-to)			
		undamontale		achania		0 1	1				
Munson, B. R.	F	unuamentais	of Fluid IVIE Son		s, John Wiley a	^{&} 1990	1	-400			

	attendance at lectures and exercises	10	10%					
	seminar papers	20	20%					
	I colloquium	10	10%					
	II colloquium	10	10%					
	Final exam							
	final exam (oral / written)	50	50%					
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	1.pdf					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

CT UCTOWED		UNIV	ERSITY OF	EAST S	ARAJEVO		2005				
- <u>18</u> -			•		ffic Engineerin	g	South and the state				
			Study prog Profile: Mo								
100 100 100 M		l cycle	-Tojlie. Nio		l year of stu	dv	AOEOJ				
Course title		i cycle	FUEL		UBRICANTS TE						
Department	De	partment of Motor Vehicles, Operation, Maintenance and Diagnostics of Vehicles									
Code	9	Cou	Course status Semester				ECTS credits				
САФ115М0711	6254 021	0	0 V				4.00				
Professor/s		ro Dugić, full prof			v		4.00				
Associate/s		ro Dugić, full prof									
We	ekly hours	5	Individ	ual stu	dent hours (pe	er semester)	Student workload coefficient So				
L	TE	LE	L		TE	LE	So				
2	1	0	2		1		1,6				
		hours, per semes	ter)				urs, per semester)				
2*1		0*15 = W				+ 1*15*1,6 +					
	30+ 15+ 0	-	l workload	. / 5 . 7		50+ 25 + 0 = 7	5 []				
	Bymas	tering this course				0.					
							iring knowledge about				
Course aims and		With the physico-chemical characteristics of fuels and lubricants, acquiring knowledge about fuel and lubricants as indispensable media of thermal energy systems. Understanding the									
learning outcomes	process	rocesses of combustion and energy conversion in internal combustion engines and catalytic									
	exhaus	t treatment.									
Prerequisites	Does no	at have									
Teaching methods		s, auditory exerci	ses semina	ar nane	r						
						ntal fuel comp	osition. Stoichiometric				
		1. Definition of technical fuels. Fuel classification. Elemental fuel composition. Stoichiometric relations in fuel combustion processes, theoretical oxygen demand.									
		2. Basic properties of solid, liquid and gaseous fuels. Technological processing of petroleum									
		3. Chemical structure of liquid fuels: aliphatic, cyclic hydrocarbons, alcohols, ethers, ketones									
		4. Division and characteristics of liquid fuels by purpose: gasoline, gas oils, jet fuels, alcohols,									
	-	gaseous fuels 5. Fuel-to-engine ratio. Combustion processes. Exhaust gases									
		Detonation combustion in Otto engine Alloy fuels. Octane value of fuel.									
	7. I coll			•	·						
Course content				-			tane value of fuel				
		the cold engine.			-	ccording to Re	eid				
		l stability. Fuel ag			-						
		 Fuel additives, oxygenated and reformulated fuels Specification of motor fuels and stability. Fuel quality requirements. Impact on the 									
	enviror				,						
	13. Flue	e gas treatment of	f internal c	ombust	tion engines - c	atalytic conve	erters: Otto engines,				
		engines, gas and t		-							
			• •				l characteristics of				
		bricants. Classification of lubricating oils. Lubricating oils for internal combustion engines 5. II colloquium									
	1 13. 11 00		Texth	ook (s)							
Author/s		Name	of publica			Year	Pages (from-to)				
Speight, J.G			-	-	of petroleum,	1991	1-418				
Speight, J.G	•	Ma	rcel Dekke			1991	1-410				
			Addition								
Author/s Fuller, D.			e of public			Year	Pages (from-to)				
			otion of the	nin-+!-	n for engineers	5, 1956	1-200				

		John Wiley&Sons, New York						
		Assesment methods		Poi	ints	Percentage		
		attendance at lectures and ex	ercises	10		10%		
		seminar	papers	20		20%		
Evaluation criteria		I colle	10		10%			
		II colle	10		10%			
	Final exam							
		final exam (oral / w	ritten)	50		50%		
	IN TOTA	L	100)	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffi	c engine	eering Doboj		

a y WCTO Was		UNIV	ERSITY OF	EAST S	ARAJEVO			2005		
		Faculty of	Transport a	and Tra	ffic Engineerin	g		State of the state		
DANCE			Study prog							
		Profile: Motor Vehicles						AOEOJ		
	_	l cycle I year of study								
Course title	De	AUTOMATIC CONTROL IN VEHICLES Department of Automation and Robotics - ETF East Sarajevo								
Department	De	partment of Auto	mation an	а коро	tics - ETF East S	Sarajevo				
Code			urse status		Semes	ster		ECTS credits		
САФ115М0713			0		V			5.00		
Professor/s		vko Djuric, full pr								
Associate/s	Svetko I	Vilutinovic, assis	tant							
Wee	kly hours		Individ	ual stu	dent hours (pe	er semest	er)	Student workload coefficient S _o		
L	TE	LE	L		TE	LE		So		
2	1	1	2		1	1		1,5		
		hours, per semes	ster)				-	s, per semester)		
-	-	1*15 = W						15*1,5 = T		
3	0+ 15+ 15					5+22,5+ 2	2,5 = 9	90 h		
			al workload							
		ducing students t or of vehicles as a		agemer	it of automotiv	ve subsys	tems t	nat affect the		
Course aims and				o and c	olvo managom	ont roqui	iromor	nts related to the		
learning outcomes					-			automatic control.		
icaning outcomes		n of control syste		-		-				
	-	g systems and pro			subsystems s		uning.	system, venicie		
Prerequisites	Does no									
Teaching methods		s, auditory exerci	ses, semina	ar pape	er					
		ept and definition								
	2. Laws	of governance			-					
	3. Math	ematical models	of automa	tic cont	trol systems an	nd transm	ission	functions		
		ce transform.								
		ency analysis of			systems					
		ity of automatic	control sys	tem						
.	7. I collo	•								
Course content		igent manageme	-	-	_					
	-	ls, sensors and a trol devices and o				iclos				
		trol systems	Jonnunica	nuon pr		10103				
		icle braking syste	ms							
		icle speed contro								
		ection and diagno	•	rs						
		lloquium	-							
			Textb	ook (s)						
Author/s			of publica				ear	Pages (from-to)		
Stojic M.		Continuous au	utomatic co book, B		ystems, Scient	ific 1	1990			
Uwe Kiencke, Lars N	ialson	"Automotive Co	ontrol Syste	ems: Fo	or Engine,		005.			
OWE NETICKE, Lais N		Driveline, and \					.005.			
Стјепановић А.,	Telematics systems, University of East Sarajevo, 2020.									
Костадиновић М.		Faculty of Trans				boj 2				
			Addition		-					
Author/s			e of public			Y	ear	Pages (from-to)		
Evaluation criteria		A	ssesment	method	ls		Po	ints Percentage		

	attendance at lectures and exercises	10	10%			
	seminar papers	20	20%			
I colloquium 10						
	II colloquium	10	10%			
	Final exam					
	final exam (oral / written)	50	50%			
	IN TOTAL	100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2022	L.pdf			
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj			

THE WETCHING		UNI	/ERSITY OF EA	ST SARAJEVO			2005		
		Faculty of	Jose	ANALINA O MALAN					
			Study prograı Profile: Motoı						
		l cycle		l year of stud	dv		40E01		
Course title		i oyole		MOTOR VEHICLE					
Department	De	partment of Mot	or Vehicles, O	peration, Maintena	nce and Dia	agnostics o	f Vehicles		
Cod	е	Co	urse status	Semes	ter	ECTS credits			
САФ115М071			0	V			7.00		
Professor/s		sud Ajanović, as		sor					
Associate/s	wirosia	v Pavlovic, assist	ant			Stud	ent workload		
We	ekly hours		Individual	student hours (pe	r semester)		efficient So		
L	TE	TE LE L TE LE					So		
3	3	0	3	3	0		1,33		
		hours, per seme	ster)	Total student v					
3*2	.5 + 3*15 + 45+ 45+ 0			3*15*1,33 + 6	+ 3*15*1,33 60+ 60 + 0 =		33 = 1		
	43+ 43+ 0		l workload: 90) + 120 = 210 h	10+00+0-	12011			
	By mast			icquires knowledge	:				
Course aims and	From th	-		of motor vehicles ar		cquainted	with the		
learning outcomes	design s	olutions of indiv	idual assembli	ies					
Prerequisites	Does no	t have							
Teaching methods		s, auditory exerc							
				e development. Pro			tor vehicles		
		-		ving resistances, tra		S			
		al guidance force	-	to available friction	n force				
		-		ig resistance. Powe	r balance				
				forces and energy		ing			
	7. I collo	quium	-		-	-			
Course content				king factor, braking	distance an	d time. Sto	p the road		
				ansverse stability					
		10. Vehicle handling. Vehicle comfort 11 Main assemblies of motor vehicles							
		els and tires							
		ort system							
		agement system	n. Braking syste	em					
	15. II co	lloquium							
			Textboo	k (s)					
Author/s	;	Name	of publicatio		Year	· Pa	ges (from-to)		
Krnan D		Motor vehicle		University of Zagreb), 1997		1-260		
	Zagreb								
		•	Additional r						
Author/s		Nan	ne of publicati	ion, editor	Year	Pa	ges (from-to)		
		Δ	ssesment me	thods		Points	Percentage		
		,							
Evaluation criteria	Pre-exa	m obligations							
			attenda	nce at lectures and		10	10%		
			semir	nar papers	20	20%			

	I colloquium	10	10%						
	II colloquium								
	Final exam								
	final exam (oral / written)	50	50%						
	IN TOTAL	100	100%						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj						

			ERSITY OF EA	ST S	ΔRΔΙΕνΟ			2005	
		Faculty of Transport and Traffic Engineering						STRATALINE QUARTE	
N NC			Study program						
		Profile: Motor Vehicles							
-45m 30 M		I cycle I year of study FUNDAMENTALS OF VEHICLE DYNAMICS							
								ofVahiclos	
Department	Грера		or venicies, O	pera	tion, Maintena		agnostics	or venicles	
Code	!	Со	urse status		Semes	ter	E	CTS credits	
CAФ11SM0711	64660330		0		VI			6.00	
Professor/s		PhD Mesud Ajanović, associate professor							
Associate/s	Miroslav	Pavlovic, assista	ant						
Wee	ekly hours		Individual	stuc	dent hours (pe	r semester)		udent workload coefficient S _o	
L	TE	LE	L		TE	LE		So	
3	3	0	3		3	0		1	
		ours, per semes	ster)		Total student v				
	5 + 3*15 + 0 45+ 45+ 0=	-				. + 3*15*1 + 45+ 45 + 0 =		= 1	
	45+ 45+ 0-		l workload: 90	0 + 9		45+ 45 + 0 -	9011		
	By maste	ring this course				:			
							al, transv	erse and vertical	
Course aims and	forces ac	ting on the vehi	cle during its	move	ement. Acquiri	ng the know	vledge n	eeded to assess	
learning outcomes		he characteristics of motor vehicles and formulate requirements that are based on the							
		alysis of dynamics in the design and construction of motor vehicles and their systems and							
	units.								
Prerequisites	Does not	have							
Teaching methods		auditory exerci	ses. seminar r	pape	r				
<u> </u>		oncepts of mot							
		oncepts of mot		amio	cs				
		nechanics							
		e aerodynamics							
		ance to moveme	-	ا- مار ر	م م م م م				
	6. Transm 7. I colloc	nission of forces	between gro	una	and wheels				
Course content		on of drive mot	or						
		characteristic c							
	10. Depa	rture of the veh	icle from the	place	2				
		inear movemen	t of vehicles						
		le braking							
		e performance		مدا		C-11: 1			
	14. Trans	verse vehicle dy	mamics. Verti	carv	enicie dynamic	LS. COIIISION	mechan		
	15. 11 COII		Textboo	k (s)					
Author/s		Name	of publicatio		ıblisher	Year	r F	Pages (from-to)	
Dynamics of motor vehicles. Faculty of									
Knor P.		Mechanical	Engineering S			2006		1-328	
			Additional r		-				
Author/s			e of publicati			Year	r F	Pages (from-to)	
Jankovic D., Todo	rovial	Theory of moto Mechanical Eng				1991	1-2	25	
		А	ssesment me	thod	s		Points	Percentage	
Evaluation criteria									

	Pre-exam obligations							
	attendance at lectures and exercises	10	10%					
	seminar papers	20	20%					
	I colloquium	10	10%					
	II colloquium	10	10%					
	Final exam							
	final exam (oral / written)	50	50%					
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>					
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj					

S & MCTOMMAN			UNIV	ERSITY OF E	AST S	ARAJEVO		2005		
18.0				Transport ar Study progr		fic Engineering	3	Sura war a sa ti		
·82*			Ì							
1545 30 V			l cycle			I year of stud	dy	COE01		
Course title		Departme	nt of Mot	or Vahielas		MOTORS SUS	nee and Diagn	action of Vahielas		
Department					Opera			ostics of Vehicles		
C	ode		Со	urse status		Semes	ter	ECTS credits		
CAΦ11SM0				0		VI		6.00		
Professor/s Associate/s		D Zoran Risi lan Eremija,		ant professo	or					
-			a3313tarrt					Student workload		
· · · · · ·	Weekly h	nours		Individu	al stud	dent hours (pe	r semester)	coefficient S _o		
L	TE		LE	L		TE	LE	So		
3 Total teach	3 or workl	and (hours	0	3		3 Total student v	0 workload (bour	1		
		15 + 0*15	•	ster)			3*15*1,33 + 0	s, per semester) *15*1,33 = 90		
				l workload:	90 + 9		,			
		-		the student						
					-		teristics and ba	-		
Course aims and	1	gines;	ainted with	i the princip	les of	operation of tv	vo-stroke and t	our-stroke SUS		
learning outcom	1ec	-	he basic sy	stems of SU	S engi	nes as well as t	the processes in	n SUS and other		
		gines;	;							
	4. 6	acquired kn	owledge a	pplied in pra	actice.					
Prerequisites	Do	es not have								
Teaching metho	-			ses, semina	r pape	r				
		-		ory of SUS e	ngine	development				
		SUS engine				De sie element				
		gines	barameters	s of the SUS	engine	e. Basic elemer	its, mechanism	is and systems of SUS		
		-	operation	of four-strol	ke and	two-stroke SL	JS engines			
	5.	Piston mech	anism							
		Crankshaft a	-	-		//				
Course content		viechanism Basic SUS er	•	•	ing ma	aterial (I colloq	ulum)			
		Theoretical								
				•	fuels, r	mixtures and co	ombustion pro	ducts		
		Actual SUS								
			-	-	-	stance in SUS e on and expansi	engines on in oto engin	ies		
			-			on process in d	-			
	15	Indicator a	nd effectiv			S engines (II co	olloquium)			
0			NI	Textbo			No or	Decree (from to)		
Autho				of publicati	-	s, Faculty of	Year	Pages (from-to)		
Todorovic, T.,	Antonic	Z.		Sciences No	-	-	1997			
Klinar,	Klinar, I. SUS engines, auxiliary textbook, FTN, Novi Sad, 2008									
	,			Additional		-		D (1)		
Author	r/s	Pacie		ne of publica		e ditor Transportation	Year	Pages (from-to)		
Todorovic, T.,	Antonic	Z. Dobo		ngines, racu	ity of	πατιγροπατιοή	2009			

Tomic, M., Petrovic, S.		Internal combustion engines, Faculty of Mechanical Engineering, Belgrade	2000								
	Assesment methods										
	Pre-exam obligations										
		attendance at lectures / exe	ercises	10	10%						
		I am positively assessed. paper / project /	10	10%							
Evaluation criteria	case stu	dy - group work									
		test / collo	quium	2x10	20%						
	Final exam										
			oral	60	60%						
		100	100%								
Web sources	http://st	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engles	<u>ski-NPP-</u>	I-ciklus-20	21.pdf						
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffic engi	neering Doboj						

NCTONNE		UNIV	ERSITY OF E	AST S	ARAJEVO		2005		
					fic Engineerin	g	Supanaline one		
YÚC -82°			Study progra Profile: Mot						
And A Step 40		l cycle	Projile: Wot	or ver	l year of stu	dv	AOEOJ		
Course title		FUEL SUPPLY SYSTEMS							
Department	Dep	artment of Mot	or Vehicles,	Opera	tion, Mainten	ance and Diag	nostics of Vehicles		
Code	e	Co	urse status		Seme	ster	ECTS credits		
CAФ11SM0711			0		VI		5.00		
Professor/s		vko Nunić, asso	-						
Associate/s	PhD Zdra	ivko Nunić, asso	ciate profes	sor			Student workload		
We	ekly hours		Individu	al stu	dent hours (pe	er semester)	coefficient So		
L	TE	LE	L		TE	LE	So		
2	2	0	2		2	0	1,5		
	workload (h 5 + 2*15 + (ours, per semes	ster)				urs, per semester)		
2*1	5 + 2*15 + 0 30+ 30+ 0=					+ 2*15*1,5 + 45+ 45 + 0 = 9			
	501 501 0-		l workload:	60 + 9		+5++5+0=5	011		
	By maste	ering this course				2:			
Course aims and	With the	methods of fue	l supply to t	he eng	gine sus, the p	rinciples of op	eration of individual		
learning outcomes		fuel supply systems, trends in their development, as well as introduction to the methods of							
	regulatio	on of fuel supply	in different	mode	s of engine op	eration.			
Prerequisites	Does not								
Teaching methods		, auditory exerci							
					eristics of fuel	supply in oto a	and diesel engines		
		divisions of the f dynamic proces		-	ol cupply cyct	m			
							, jet parameters,		
		characteristics a	-				, jet parameters,		
	-	al fuel injection	-						
	6. The ro	le and tasks of t	he regulato	r in die	esel engines				
	7. I collo	•							
Course content		8. Types of regulators according to construction and method of regulation							
		as an object of	-	equili	hrium				
		 Conditions of static and dynamic equilibrium Engine-to-fuel system stability parameters for diesel engines 							
	-	12. How to supply fuel and create a mixture with the engine							
		of fuel supply s			-)		
		-	electronic r	egulat	ion in oto eng	ines. Developr	ment trends, with basic		
	characte								
	15. II coll	oquium	Taute	al (-)					
Author/s		Namo	Textbo of publicati		ıhlisher	Year	Pages (from-to)		
Filipovic Iva	n		a motora su	-		1994	1-188		
		- prem	Additional		-				
Author/s		Name of publication, editor Year Pages (from-to							
Cernej A., Dobov	visek Z.	Fuel supply			gines, IGKRO	1980	1-205		
		Λ	Svjetlost, Sa ssesment m	-			Points Percentage		
Evaluation criteria		A	SSESTIETT III	enou		F	reiteinage		
	Pre-exan	n obligations							

	attendance at lectures and exercises	10	10%
	seminar papers	20	20%
	10	10%	
	II colloquium	10	10%
	Final exam		
	final exam (oral / written)	50	50%
	IN TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2022	1.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

				ERSITY OF EA					A DE	005 AIRE @48
-18-		Faculty of Transport and Traffic Engineering Study program: Traffic							Beat	
				Profile: Motor						
									~	AOEOJ
Course title			I cycle I year of study ALTERNATIVE FUELS AND UNCONVENTIONAL VEHICLE DRIVES							s
	Department Department of Motor Vehicles, Operation, Maintenance and Dia									
Department		Departme				wantenan			.103 01	Venicies
Co	de		Cou	urse status		Semeste	er		ECTS	credits
CAФ11SM07	216666.03	311		1		VI				5.00
Professor/s			ć, full profe	essor						
Associate/s			ć, full profe							
W	Weekly hours Individual student hours (per se						semester))		ent workload efficient So
L	TE		LE	L		TE	LE			So
3	1		1	63		21	21			1,4
Total teache	r workloa	d (hours,	per semes	ter)	Tota	l student wo	orkload (h	ours, p	oer se	,
	°15 + 1*15	•	•			2*15*1,5 +				
	45+ 15+	· 15= 75 h					+ 45 + 0 =	= 90 h		
				workload: 75						
Course aims and		-		the student a	-	-				_
learning outcome	20			fuels and thei	r advanta	ages and dis	advantage	es in re	elatio	n to fossil
0	fuels	in SUS en	ngines							
Prerequisites	Does	not have								
Teaching method				ses, seminar p						
			-	trends in fuel	consump	otion and ve	hicle grov	vth, as	well	as fuel
		reserves for motor vehicle propulsion 2. Pollutants in the exhaust gases from the SUS engine								
				-		engine				
				missions of po	ollutants					
			energy sou ernative fu							
		-		ind storage of	alternati	ive fuels				
		olloquium	-		arcernati					
.		-		ve fuels and t	heir com	oarison with	conventi	ional fi	uels fo	or motor
Course content		le propul								
				and the poss	-	-	issions of	[:] pollut	ants	
				its mixtures ir	-	ines				
				ne SUS engine						
				he SUS engine						
		-	-	rive the SUS e	-	riofournia	w of othe		c of o	tornativo
			propulsion	ive the SUS e	ngine. A t		w or othe	er type	S OI d	lemative
		colloquiu								
	13.11	sonoquio		Textboo	k (s)					
Author	/s		Name	of publicatio		her	Yea	r	Pag	es (from-to)
	Motor Vehicle Pollution – Reduction strategies									
OECD				ond 2010, OE			199	5		1-378
		·	•	Additional r			·			
Author	/s		Nam	e of publicati	ion, edito	or	Yea	r	Pag	es (from-to)
Corne: A Dak	ovicol: 7			-	-	oters in motoring,			1 305	
Cernej A., Dob	UVISEK Z.	Fa	culty of M	echanical Eng	ineering,	Sarajevo	1980		1-285	
			Δ		th a da			Daim	ta	
Evaluation criteri	-		7.	ssesment me	thoas			Point	is	Percentage

	Pre-exam obligations							
	attendance at lectures and exercises	10	10%					
	seminar papers	20	20%					
	I colloquium	10	10%					
	II colloquium	10	10%					
	Final exam							
	final exam (oral / written)	50	50%					
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

ST WCTOWIGS		UNIV	ERSITY OF	EAST S	ARAJEVO			2005		
18.			•		ffic Engineerin	g	Beat	PUINS ON STATE		
L YUC -82			Study prog Profile: Mo							
		l cycle	ıdy		AOEOJ					
Course title			ECHATRO	NIC SYS	TEMS IN ENG	-	ICLES			
Department	Dep	partment of Moto	or Vehicles	, Opera	tion, Mainten	ance and Diag	gnostics o	f Vehicles		
Code	9	Cou	urse status Semester			ster	ECT	S credits		
САФ115М0721			I		VI			6.00		
Professor/s		oodan Lubura, fu	-	r						
Associate/s	Svetko N	Ailutinovic, assist	tant							
	ekly hours			ual stu	dent hours (pe	-		ent workload efficient So		
L	TE	LE	L		TE	LE		So		
3	1	1	63		21 Tatal student	21		1,4		
	vorkload (I 5 + 1*15 +	hours, per semes	iter)		Total student	workload (ho + 1*15*1,4 +				
	15+1 ⁻ 15+ 15+15+15					3 + 21 + 21 =				
	, , , , , , , , , , , , , , , , , , ,		workload	75 + 10		<u>, , , , , , , , , , , , , , , , , , , </u>	103 11			
Course aims and	By mast	ering this course				e and acquain	tance wit	h		
learning outcomes		With electronic motor vehicle systems and the basics of automotive mechatronics								
Prerequisites	Does no	Does not have								
Teaching methods	Lectures	Lectures, auditory exercises, seminar paper								
Course content	 1. Introduction, historical overview, basics of electronics applied in motor vehicles 2. Accumulators and machines for generating electricity. Dynamo machines. Altern Lights 3. Electrical starting devices for internal combustion engines. Sensors. Actuators 4. Electrical equipment for Otto engine operation 5. Electronic equipment for Otto engine operation. Computer-controlled injection i engines 6. Computer-controlled injection in Diesel engines 7. I colloquium 8. Dynamic model of automobile drive 9. Dynamic model of Otto engine 10. Automatic transmission modeling 11. Car tire models 12. Vehicle dynamics models 13. Suspension models 14. TCS traction control. Anti-lock braking systems ABS. Equipment to increase driv passenger comfort. Air conditioning devices Navigation devices. Devices for display and parameters in the driver 's field of vision and control instruments 						ernators. s on in Otto driver and			
				ook (s)						
Author/s			of publica			Year	Pag	ges (from-to)		
Ribbens		Autor	motive Har			2000		1-330		
Authorit.		Ne	Addition			Veer	De	inc (from to)		
Author/s BOSCH Springer	/erlag,		e of publi hrtechnisch			Year 1999	1-385	ges (from-to)		
Berlin		^	ssesment	methor	lc .		Points	Percentage		
Evaluation criteria	Pre-exar	n obligations								
			atter	ndance	at lectures and	d exercises	10	10%		

	seminar papers	20	20%					
	I colloquium							
	10	10%						
Final exam								
	final exam (oral / written)	50	50%					
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj					

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		Faculty of Transport and Traffic Engineering						a de la companya de la	A FAILER & BAILANA	
D XNC			Study program: Traffic							
				Profile: Moto	or Vel		al		AOEOJ	
Course title	-		I cycle I year of study ROAD VEHICLE MATERIALS							
Department		Departm	ent of Mot			tion, Maintena		phostics of	of Vehicles	
•		Depurin			opera			-		
C	ode		Co	ourse status Semester			ter	EC	TS credits	
CAΦ11SM0	7216965	,0220		I VI					5.00	
Professor/s		-		ate professor						
Associate/s	Mi	lan Eremija	a, assistant							
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2		30+ 0= 60 ł					+ 2*15*1,5 + 15 + 45 + 0 =		ו – נ	
		20:0-001		al workload: (60 + 9					
Course aims and	Ву	mastering				res knowledge	and acquain	itance wi	th	
learning outcom	Wi					of materials for		e constru	ctions - high	
	an	and high strength steels, light metals, composite materials and wood								
Prerequisites	Do	Does not have								
Teaching metho	ds Le	Lectures, auditory exercises, seminar paper								
1. Material requirements for materials for use in road vehicles						nicles				
				ial hardening		hiah atususth a	taala			
		-		-		high strength s steels and cast		ated and	high	
		Structure, properties and application of steels and castings for elevated and high temperatures								
		5. Structure, properties and application of Ni and Co alloys								
		6. Structure, properties and application of ceramics and intermetallic compounds								
Course content		7. I colloquium								
		8. Structure and properties of aluminum alloys								
		9. Types and applications of aluminum alloys in road vehicles								
		 Structure, properties and application of cellular materials Application of cellular materials in road vehicles 								
		12. Structure and properties of composite materials								
	13	13. Application of composite materials in road vehicles								
		14. Structure and properties of wood. Application of wood in road vehicles								
	15	. II colloqui	um							
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Author	/5			of publications Science and			Year	Ра	ges (from-to)	
Calister,	W.D.			ey&Sons, Inc			2000		1-218	
			VVII	Additional						
Author	r/s		Nam	Name of publication, editor			Year	Pa	ges (from-to)	
Filetin, T; Kov	acicek, F	=; F		-	on of I	materials, FSB	2002	1-18		
Indof,	, J					la		Deint		
			A	ssesment m	etnoc	15		Points	Percentage	
Evaluation crite	ria Pro	e-exam obl	igations							
			Darions	attend	ance	at lectures and	exercises	10	10%	
				attenu	2.100		5			

	seminar papers	20	20%						
	I colloquium	10	10%						
	10	10%							
Final exam									
	final exam (oral / written)	50	50%						
	IN TOTAL	100	100%						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj						

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		I	A OEDI						
19 19 10 M		l cycle			I year of stu				
Course title					ND FINANCE F				
Department	Dep	partment of Acco	unting, Au	diting a	and Business Fi	inance - FPE I	Bijeljina		
Code	2	Cou	urse status		Seme	ster	ECTS credits		
САФ115М0721			I		VI		5.00		
Professor/s		oodan Subotić, a		ofesso	-				
Associate/s	Sinisa Bo	ozickovic, senior	assistant						
We	ekly hours		Individ	ual stu	dent hours (pe	er semester)	Student workload coefficient S _o		
L	TE	LE	L		TE	LE	So		
Total teacher workload (hours, per semester) Total student workload 2*15 + 2*15 + 0*15 = W 2*15*1,5 + 2*15* 30+ 30+ 0= 75 h 45 + 45 +							+ 0*15*1,5 = T		
		Tota	l workload	: 60 + 9	90 = 150 h				
By mastering this course, students will be able to master the basic concepts and problems accounting and finance in order to prepare for making the best possible business decision Understanding the field of finance and accounting is key to the rational action of each manager to assess the financial situation in the company, compare the financial position of the company with other companies, determine sources of funding and opportunities to obtain the necessary funds for smooth operation, growth and development.							ble business decisions. Tal action of each The financial position of d opportunities to		
Prerequisites		Does not have							
Teaching methods		Lectures, auditory exercises, seminar paper							
Course content	2. Accou 3. Accou 4. Analy 5. Mana 6. Cost r 7. First c 8. Busine 9. Enter 10. Capi 11. Fina 12. Bond 13. Ordi 14. Mak	 Introduction (need for basic knowledge in the field of accounting and finance). Accounting, Accounting Law, International Accounting Standards Accounting and financial reports Analysis of accounting reports Management Accounting Cost management First colloquium Business plan. Financial business plan Enterprise financing. Cash flows. The time value of money. Financial leverage. Capital markets. Company financing. Problems of financing Financing by issuing securities Bonds Ordinary and preferential actions. Other securities Making investment decisions. Evaluation of the financial efficiency of the project Second colloquium 							
				ook (s					
Author/s			of publica			Year	Pages (from-to)		
 Stevanovic N Petrovic Teod 	lor	Ec	onomics B	rčko, B		2010			
 Kovacevic Lju Vunjak Nena 	d	Finance, Facul	orate Finance Management - Business Faculty of Transportation Doboj, Doboj						
3. Subotic Slobodar Goran	, Mirovic		inancial markets, institutions and 202 instruments, VŠTH Trebinje						
			Addition		-	Year			
Author/s			Name of publication, editor				Pages (from-to)		
Vunjak Nenad,	Vitez	Corporate cap	ital market	mana	gement, ANU F	RS 2018			

Miroslav, Radovic	Milan	Banja Luka, VŠMB Belgrade								
		Assesment methods	Po	oints	Percentage					
	Pre-exam obligations									
	Attenda	nce at lectures / exercises	5		5%					
	Seminar	y work	5		5%					
Evaluation criteria	The first	colloquium	20)	20%					
	Second	Colloquium	20)	20%					
	Final exam									
	Oral		50)	50%					
	IN TOTA	L	10	00	100%					
Web sources	http://s	f.ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	eski-NPP-I-cil	<u>klus-202</u>	<u>1.pdf</u>					
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transp	ort and Traf	fic engin	eering Doboj					

Faculty of Transport and Traffic Engineering Study program: Traffic Profession Course title Course it devices Department of Motor Vehicles, Operation, Maintenance and Diagnostics of Vehicles Code Course status Semester ECTS credits Course status Semester ECTS credits Code Course status Semester Student workload Code Course status Semester Student workload Code Course status Semester Student workload Code Course status Student workload Code	ST WETCHIO				ERSITY OF					12	005		
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Course title ENGINE CONSTRUCTION SUS Department Department of Motor Vehicles, Operation, Maintenance and Diagnostics of Vehicles Code Course status Semester ECTS credits CAΦ115M07117077,0330 O VII 7.00 Professor/s PhD Sněžana Petković, full professor Student worklo Associate/s Milan Eremija, assistant Student workload (hours, per semester) Student workload (hours, per semester) L TE LE L TE LE Student workload (hours, per semester) 3*15 + 3*15 + 0*15 = W 3*15*1,33 + 3*15*1,33 + 0*15*1,33 = T 60 + 60 + 0 = 120 h 60 + 60 + 0 = 120 h Course aims and learning outcomes By mastering this course the student acquires knowledge and acquaintance with Comprehensive usight into theoretical and practical knowledge of engine dynamics and construction of basic elements of engines and engine systems Prerequisites Does not have 1. Constructive concepts, types and divisions of engines 2. Construction of fixed engine parts 3. Kinematics and dynamics of the motor mechanism 4. Uneven torque and angular velocity of the crankshaft 5. Engine piston group construction 0. Construction of engine distribution system 1. Construction of engine di											AOEOJ		
Department Department of Motor Vehicles, Operation, Maintenance and Diagnostics of Vehicles Code Course status Semester ECTS credits CAФ115M07117077,0330 0 VII 7.00 Professor/s PhD Snežana Petković, full professor Semester ECTS credits Associate/s Milan Eremija, assistant Individual student hours (per semester) Student worklo coefficient S L TE LE L TE LE So 3 3 0 2 2 0 1,33 Total teacher workload (hours, per semester) 3*15 + 3*15 + 0*15 = W 3*15*1,33 + 3*15*1,33 + 0*15*1,33 = T 50 + 60 + 0 = 120 h Course aims and learning outcomes By mastering this course the student acquires knowledge and acquaintance with Comprehensive insight into theoretical and practical knowledge of engine dynamics and construction of basic elements of engines and engine systems Prerequisites Does not have 1 1 Construction of fixed engine parts 3. Kinematics and dynamics of the motor mechanism 4. Uneven torque and angular velocity of the crankshaft 5. Engine balancing 6. Engine piston group construction 7. I colloquium 8. Conn	4.45m 30 M			I cycle			•	-					
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seminar papers 20 20%	Evaluation crite		-exam o		atter	ndance a	at lectures and	d exercises	10		10%		
I colloquium 10 10%	Evaluation crite		e-exam (atter	ndance a							
Il colloquium 10 10%	Evaluation crite		exam (atter	ndance a	semi	nar papers	20		20%		

	Final exam							
	final exam (oral / written)	50	50%					
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

				ERSITY OF					2	005
	a lar		-	Transport a Study prog		ffic Engineering r affic	g		Constru-	
82			Profile: Motor Vehicles							
			I cycle I year of study							0
Course title Department		Dopartm	ont of Mot	or Vohiclor		NE EQUIPMEN ition, Maintena		anno	tics of	Vahiclos
		Departin		or venicles	, opera		ance and Di	agnos		venicies
Co	ode		Cou	urse status	;	Semes	ster		ECTS	credits
САФ11SM07				0	6	VII			6	5.00
Professor/s Associate/s			Mesud Ajanović, associate professor							
			5410, 0351510						Stude	nt workload
V	ours		Individ	ual stu	dent hours (pe	er semester))	coe	fficient S _o	
L	TE		LE	L		TE	LE			So
3	2		0	63		42	0			1,4
Total teache				ster)		Total student				
3		L5 + 0*15)+ 0= 75 h				-	1+ 3*15*1,4 53 + 42 + 0 =			I
	45+30	J+ U= 75 II		workload	75 + 1		13 + 42 + 0 -	105	11	
Courses	By r	nastering				ires knowledge	e and acquai	intan	ce with	
Course aims and learning outcome	Con	nprehensi	ve insight ir	nto theore	tical and	d practical know	wledge of e			
	con	nprehensive insight into theoretical and practical knowledge of engine dynamics and struction of basic elements of engines and engine systems								
Prerequisites	Doe	Does not have								
Teaching method		Lectures, auditory exercises, seminar paper								
			•			nation of the m				
				-	line eng	gine using a car	rburetor			
		 Gasoline fuel injection systems Comparison of system and carburetor system 								
		5. Electronically controlled fuel injection systems								
		6. Basic hydraulic elements of the system								
	7.1	7. I colloquium								
Course content		8. Diesel mixture formation systems								
		9. high pressure pumps								
		10. Injectors								
		 Diesel fuel injection systems with electronic regulation Pump-injector system with electronic regulation 								
		13. Common Rail Engine Cooling and Exhaust Systems								
	14.	14. Ignition systems for oto engines - conventional and electronically controlled.								
	15.	II colloqui	um							
Author	10		News		ook (s)		Yea		Dece	(from to)
Author	/5		Name	of publica	tion, p	ublisher	fea	ſ	Page	es (from-to)
				Addition	al read	ings		I		
Author	/s		Nam	ne of publi		-	Yea	r	Page	es (from-to)
						T				
			Α	ssesment	method	ls		Poir	nts	Percentage
		-								
		exam obli	gations			-+ !		40		100/
Evaluation criter	ia			atter	ndance	at lectures and		10		10%
							nar papers	20		20%
							olloquium	10		10%
						11 C	olloquium	10		10%

	Final exam							
	final exam (oral / written)	50	50%					
	IN TOTAL	100	100%					
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf							
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj							

T WETCHNOT		UNIV	ERSITY OF EA	AST S	ARAJEVO			2	005	
-18°		-	-		fic Engineering	g		-Solfa ha	100 \$ 48.74 7.77	
- SUC - 82*		Study program: Traffic Profile: Motor Vehicles								
		l cycle			l year of stu	dy			OE01	
Course title		•	VEH	IICLE	DESIGN AND	-				
Department	Depar	tment of Moto	or Vehicles, C	Dpera	tion, Maintena	ance and Dia	agnost	tics of v	/ehicles	
Cod	e	Cou	Course status Semester			ster		ECTS	credits	
САФ11SM071			O VII					7	.00	
Professor/s Associate/s		Ristikić, assist utinovic, assist	· ·	r						
								Stude	nt workload	
We	ekly hours		Individua	l stud	dent hours (pe	er semester)			fficient S _o	
L	TE	LE	L		TE	LE			So	
3	3	0	3		2	0			1,33	
Total teacher			ter)		Total student					
3*1	5 + 3*15 + 0*1	-			-	+ 3*15*1,33			3 = T	
	45+ 45+ 0= 90	-	workload: 90	0 + 13		60 + 60 + 0 =	120 N	l		
Course aims and	By masteri					and acquai	ntanco	e with		
learning outcomes		y mastering this course the student acquires knowledge and acquaintance with onstruction of motor vehicles and trailers. Basic concepts of vehicle construction								
Prerequisites	Does not h	Does not have								
Teaching methods	Lectures, a	ectures, auditory exercises, seminar paper								
		1. General information on the construction of motor vehicles and trailers								
2. Tasks, types, characteristics and selection of specific equipment of powertrains. Ta								s. Tasks,		
					hanical power			fte and	l boorings	
		 Calculation of mechanical power transmissions. Calculation of gears, shafts and bearings Tasks, types, characteristics and selection of locomotor systems 								
		5. Calculation of planetary gears. Calculation of main and differential gears. Budget of drive								
	bridges	bridges								
	6. Tasks, ty	6. Tasks, types, characteristics and selection of control and support systems								
		7. I colloquium								
Course combonst		8. Support system calculation. Calculation of the wheel guidance mechanism. Management								
Course content	-	system budget 9. Tasks, types, characteristics and selection of braking systems								
		10. Calculation of friction systems. Transmission and command mechanism calculation.								
		Calculation of transmission mechanisms of brake systems								
		11. Calculation of articulated gears (couplings and shafts). Calculation of the front axle								
		(dependent support)								
		 Tasks, types, characteristics and selection of special superstructures on vehicles Basic approaches to the calculation of load-bearing structures, loads 								
					oad-bearing st of passenger ve	-		Calcul	ation of	
		ng structures c			n passenger w		Juses.	culcul		
	15. Il colloc	•								
			Textboo	ok (s)						
Author/s		Name				Year	•	Pages (from-to)		
·			ا مر با الم ا		-					
Author/o		Additional readings Name of publication, editor Year					r Pages (from-to)			
Author/s		INdff				Year		гаде	5 (110111-10)	
		•		* 6 0 -	h		Deire	F a [Dorcontogo	
Evaluation criteria		A	ssesment me	:100	15		Point	15	Percentage	

	Pre-exam obligations		
	attendance at lectures and exercises	10	10%
	seminar papers	20	20%
	I colloquium	10	10% 10%
	10	10%	
	Final exam		
	final exam (oral / written)	50	50%
	IN TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj

AND			-	ERSITY OF						005
YHC -		F	5	Study prog	ram: Tı				Posta	
		Profile: Motor Vehicles							AOEOJ	
l cycle						I year of stud	-	CF		
Course title Department	D	nartme	nt of Mot			ATION AND MA			tics of	Vehicles
Department	De	epartine		or venicles,	, Opera			agnos		venicies
Со			Cou	urse status		Semest	er			credits
САФ11SM07			• /	0	-	VII				5.00
Professor/s Associate/s			anovic, ass ovic, assist	sociate prof	ressor					
	eekly hour				ual stu	dent hours (per	semester))		nt workload fficient So
L	TE		LE	L		TE	LE		LUE	So
2	2		0	2		2	0			1,5
Total teache		(hours.				Total student w		ours.	per se	
	15 + 2*15 ·			,		2*15*1,5 +				
	30+ 30+	0= 60 h					ý 5 + 45 + 0 =			
				l workload						
Course aims and		•		the studen						
learning outcome					-	peration and m	aintenance	e of v	ehicles	, with the
	establi	stablishment of failure diagnostics								
Prerequisites	Does n	Does not have								
Teaching method	s Lecture	es, audit	ory exerci	ses, semina	ar pape	r				
		-				rocess approach	n to mainte	enanc	e	
		 Basic ways of realization of maintenance Determining the condition of the vehicle - diagnostics 								
		 Determining the condition of the vehicle - diagnostics Set a maintenance goal 								
		5. Vehicle performance								
		6. Measurement of performance characteristics								
		7. I colloquium								
Course content		8. Conditions for realization of maintenance								
	9. Plan	t mainte	enance sup	oport funct	ions					
	10. Red	quireme	nts in rela	tion to the	protec	tion of humans	and the en	viron	ment	
		•	maintenan							
				-		n of their requir				
		-	•		liers an	d subcontractor	ſS			
		olloquiu	maintenar m	ice						
	15.110	onoquiu	111	Tovth	ook (s)					
Author	's		Name	of publicat			Yea	r I	Page	es (from-to)
Ranko Bozio				-		e of vehicles	201		- "9	1-317
				Additiona						-
Author/	's		Nam	ne of public		-	Yea	r	Page	es (from-to)
				tasks from the reliability of technical systems			al 2009	9		1-135
			^			ls		Poir	nts	Percentage
		Assesment methods					POIL	113	reitentage	
		Pre-exam obligations								
	Pre-ex	am oblig	ations							
Evaluation criteri	a Pre-ex	am oblig	-	example. at	tendan	ce at lectures /	exercises	10		10%
Evaluation criteri	a		for e	-		ce at lectures / d. paper / projec		10 20		10% 20%

	for example. test / colloquium	70	70%				
	for example. laboratory work / lab. exercises	/	/				
	/	/					
Final exam							
	for example. final exam (oral / written)	70	70%				
	IN TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>				
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj				

ST NCTOWNOUS			IVERSITY OF					2005
		Faculty o	of Transport Study prog		ffic Engineerin raffic	g	l l	Sere A State
82°		Profile: Motor Vehicles						4050
		l cycle			I year of stu	-		
Course title Department	De	partment of M			NOSIS AND M			rs of Vehicles
-		-		· · ·				
Coo			ourse status	S	Semes	ster		ECTS credits
САФ11SM071	-	2375,0220 O VII PhD Božidar Krstić, full professor						5.00
Professor/s Associate/s		remija, assistar						
	eekly hours				er semester	S	tudent workload coefficient S₀	
L	TE	LE	L		TE	LE		So
2	2	0	2		2	0		1,5
	[·] workload (15 + 2*15 +	(hours, per sem - 0*15 – W	ester)		Total student	workload (h + 2*15*1,5		
Z	30+ 30+ C					45 + 45 + 0 =		<u>_,</u>
		Тс	tal workload	d: 60 + 9	90 = 150 h			
		tering this cour						<i>.</i>
Course aims and learning outcome		al application of failures. Introdu			-	•	•	
learning outcome	vehicles			Dasies		ulagnostics	on mou	
Prerequisites								
	Does no		<u> </u>					
Teaching method		es, auditory exe ductory conside		iar pape	er			
		ity of engine op		rationa	l safety of the	engine		
		ne reliability in o				-		
	-	 Engine operating modes Fuel consumption in engine operation 						
		r of engines and	• .		eral characteris	stics		
		oquium	. engine par					
Course content		nods of determi	-					
		r of the most in damentals of th				he engine		
		thods and mear			-	neters		
	12. On-	Board diagnost	ics (OBD) of	-	•			
		future of OBD	-			4 -		
		erhaul and over olloquium	naul of engir	ies. Eng	ine overnaul c	OSTS		
	1011100	lioquium	Text	book (s)				
Author/	s	Nan	ne of publica	ation, p	ublisher	Yea	r	Pages (from-to)
Author/	\$	Na	Addition ame of publi			Yea	r	Pages (from-to)
Addioly						100		
			Assesment	method	ds		Points	Percentage
Evaluation criteria	Pre-exa	m obligations				,		
_ valuation entend			-		ce at lectures ,		10	10%
		or example. I ar					20	20%
			ior e	vainhie	. case study - g		/	/

	for example. test / colloquium	70	70%				
	for example. laboratory work / lab. exercises	/	/				
	/	/					
Final exam							
	for example. final exam (oral / written)	70	70%				
	IN TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	<u>1.pdf</u>				
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Traffic engine	eering Doboj				

NET CHAR			UNIV	ERSITY OF	EAST S	ARAJEVO		2005	
						ffic Engineerin	ng	STANAIN ONE .	
- YNC			-	Study prog		-			
		Profile: Motor Vehicles						AOEOJ	
45:3.49			I cycle			The second se			
Course title							E MAINTENAN		
Department	De	epartme	ent of Mot	or Vehicles	, Opera	ition, Mainten	ance and Diagn	nostics of Vehicles	
Co			Cou	urse status	;	Seme	ster	ECTS credits	
САФ115М072								6.00	
Professor/s			rstić, full p	rofessor					
Associate/s	Milan	remija,	assistant					Church and a share of	
w	eekly hour	s		Individ	ual stu	dent hours (p	-	Student workload coefficient So	
L	TE		LE	L		TE	LE	So	
3	2		0	3		2	0	1,4	
Total teacher	⁻ workload 15 + 2*15 +			ster)			•	rs, per semester)	
ן 3 [≁]	15 + 2*15 - 45+ 30+ (– vv				+ 2*15*1,4 + 0 63 + 42 + 0 = 10		
	43+ 30+ ()- / J II	Total	workload	75 + 1		03 + 42 + 0 = 10		
	By mas	tering t	his course						
		-					for the design a	nd organization of the	
Course aims and									
learning outcome		so-called. open systems, small and authorized vehicle maintenance services. They are easier to adapt to changes in technique and technology and easier to integrate into larger systems.							
	Since t	oday ve	hicles are	built on th	e princi	ples of modula	ar construction,	, then the same	
	princip	les mus	t be respe	cted in veh	nicle ma	intenance			
Prerequisites	Does n	ot have							
Teaching method	s Lecture	es, audi	tory exerci	ses, semin	ar pape	r			
	1. Intro	ductor	y considera	ations					
			e and logis		eering				
		•	maintenan						
		4. Maintenance organization							
		 Basics of maintenance system design. Vehicle maintenance facilities Construction of facilities for vehicle maintenance. Projected task 							
				es for veni	cie mai	ntenance. Pro	јестео таѕк		
		loquium stical support for maintenance							
Course content	-					ation of maint	enance system	capacity	
	10. Qu								
		11. Technological process. Types of technological process							
	12. Wo	12. Workplace (r / m) for maintenance of vehicles and assemblies							
			l maintena						
		-		-			•	Mercedes / Daimler	
			•	a. After sal	es servi	ce activities -	Atter sales		
	15. II c	Jiloquit	111)	Taut					
Author/	c		Namo	of publica	book (s)		Year	Pages (from-to)	
Authory	3		warne	or publica	non, p	UNII SI LEI	rear	rages (nom-to)	
•				Addition	al readi	ings			
Author/	s		Nam	e of public		-	Year	Pages (from-to)	
	-								
			^	ccocmont	mother	le .		oints Percentage	
Evaluation criteria	. —		A	ssesment	metho	12	P	oints Percentage	
Evaluation criteria	Pre-exa	am ohli	pations						
	110 04								

	for example. attendance at lectures and exercises	10	10%			
	seminar papers	20	20%			
	10	10%				
	10	10%				
	Final exam					
	final exam (oral / written)	50	50%			
	IN TOTAL	100	100%			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-2022	L.pdf			
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj			

		_	/ERSITY OF EA	ST SARAJEVO Traffic Engineering			2005 MAJHH BAR	
			de la					
10 10 10 10 10 10 10 10 10 10 10 10 10 1		l cycle	Profile: Motor	I year of stud	ly		AOEO1	
Course title		ENVIE	RONMENTAL F	PROTECTION AND V	VASTE MAN	NAGEMEN	ſ	
Department	De	partment of Trar	isport Enginee	ring - Faculty of Tra	nsportatior	n Doboj		
Cod			urse status	Semest	er:	ECT	S credits	
САФ115М071			0	VIII			5.00	
Professor/s		an Milotić, assoc	•					
Associate/s		an Milotić, assoc	late professor			Ctud	ent workload	
We	ekly hours	kly hours Individual student ho			semester)		efficient S _o	
L	TE	LE	L	TE	LE		So	
2	2	0	2	2	0		1,5	
		hours, per seme	ster)	Total student w				
2*1	5 + 2*15 +				· 2*15*1,5 ·		= T	
	30+ 30+ 0	-	al workload: 60		5 + 45 + 0 =	90 h		
	Dumast	ering this course						
Course aims and				wledge about techn	ological pro	rassas in a	nvironmental	
learning outcomes				impact of SUS engin				
	protecti			impact of 505 engin		Invironmen		
Prerequisites	Does no	ot have						
Teaching methods		s, auditory exerc	ises, seminar p	paper				
				nt, concepts of rene	ewability ar	nd energy e	fficiency	
	2. Energ	gy and climate						
		3. The role of stratospheric ozone ("Champagne ozone cycle")						
		4. Impact of energy, industry and transport on the environment						
		5. Impact of SUS engines on the environment						
		 Toxic exhaust emissions from otto and diesel engines I colloquium 						
Course content		 7. I colloquium 8. Standards (regulations) in the field of engine exhaust emissions 						
course content		9. Exhaust gas treatment of internal combustion engines						
		er engine emissio						
		11. SUS engine noise						
		12. Wastewater and management principles						
		-		ties, composition ar	-	-		
			finition, classi	fication and manage	ement prind	ciples. Was	te disposal.	
	15. II co	lloquium						
	Textbook (s)							
Author/s		Name	of nublication	n nuhlisher				
Author/s							es (from-to)	
Author/s R.A. Hinrichs, M. K	leinbach		e and the Envi	ronment, Harcourt			es (from-to) 1-258	
	leinbach			ronment, Harcourt shers				
		Energy Its Us	e and the Envi College Publi	ronment, Harcourt shers eadings		2		
R.A. Hinrichs, M. K		Energy Its Us Nan	e and the Envi College Publi Additional r ne of publicati	ronment, Harcourt shers eadings	2002 Year	Pag	1-258	
R.A. Hinrichs, M. K Author/s		Energy Its Us Nan Sources and Co	e and the Envi College Publi Additional r ne of publicati ontrol of Air Po	ronment, Harcourt shers eadings on, editor ollution, Prentice Ha	2002 Year	Pag	1-258 (from-to) 1-238	
R.A. Hinrichs, M. K Author/s		Energy Its Us Nan Sources and Co	e and the Envi College Publi Additional r ne of publicati	ronment, Harcourt shers eadings on, editor ollution, Prentice Ha	2002 Year	Pag	1-258 (from-to)	
R.A. Hinrichs, M. K Author/s R.J. Heinsol	in	Energy Its Us Nan Sources and Co	e and the Envi College Publi Additional r ne of publicati ontrol of Air Po	ronment, Harcourt shers eadings on, editor ollution, Prentice Ha	2002 Year	Pag	1-258 (from-to) 1-238	
R.A. Hinrichs, M. K Author/s	in	Energy Its Us Nan Sources and Co A m obligations	e and the Envi College Publi Additional r ne of publicati ontrol of Air Po assesment me	ronment, Harcourt shers eadings on, editor ollution, Prentice Ha	2002 Year	Pag	1-258 (from-to) 1-238	
R.A. Hinrichs, M. K Author/s R.J. Heinsol	in	Energy Its Us Nan Sources and Co A m obligations	e and the Envi College Publi Additional r ne of publicati ontrol of Air Po assesment me	ronment, Harcourt shers eadings on, editor ollution, Prentice Ha thods nce at lectures and	2002 Year	Pag Points	1-258 res (from-to) 1-238 Percentage	

	II colloquium	10	10%				
	Final exam						
	for example. final exam (oral / written) 50 50%						
	IN TOTAL	100	100%				
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Doboj						

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82				Profile: Mo				40501
43ra 30 54			I cycle			l year of stu	-	Anno antigati
Course title						ON OF TRAFFIC		
Department	D	epartme	ent of Tran	sport Engi	neerin	g - Faculty of Tr	ansportation I	Doboj
Co			Соц	urse status	;	Seme		ECTS credits
САФ11SM07				0		VII	I	5.00
Professor/s			jković, full	-				
Associate/s	Bojan	a Ristic,	senior assis	stant				Student workload
W	eekly hou/	rs		Individ	ual stu	udent hours (po	er semester)	coefficient So
L	TE		LE	L		TE	LE	So
2	2		0	2*15*1,5	5=45	2*15*1,5=4 5	0*15*1,5=0	1,5
Total teache 2*	r workloac 15 + 2*15	-	-	ter)	•		workload (hou + 2*15*1,4+ 0	ırs, per semester) *15*1,4 =90
			Tota	l workload	: 60 +	90 = 150 h		
	By ma	stering t	his course					
 Course aims and learning outcomes 1. learn the basic concepts of organization, as well as types and organizational models of enterprises; 2. will be able to analyze the organization of large business systems, business and development policy and development factors; 3. independently organize and lead a meeting according to defined rules; 4. acquired knowledge in practice to apply and establish their own company as well as t instructions to others on how to do it; 					usiness and es;			
Prerequisites	Does	not have						
Teaching method	I s Lectur	es, audi	tory exerci	ses, semin	ar pap	er		
Course content	2. Typ 3. Org 4. Org 5. Org 6. Bus 7. Cha 8. Bas 9. Org 10. Or 11. Bu 12. Or 13. Or 14. Or	 The concept and development of the organization Types of organizational structure Organizational models of the company Organizing large business systems Organizational models of transport companies Business and development policy Characteristic business factors (I colloquium) Basic methods and techniques for optimization Organizational culture Organization of business functions Business information systems Organization control. Organizing a meeting Organization and management of investments Organization design. Organizational transformation of the company Il colloquium 						Y
					ook (s			
Author/		-		of publica	-		Year	Pages (from-to)
.Veskovic, B.V, Bo	-	-		-		panies, Faculty	/00/	
Knezevic, l	_j.IN.	Ir	ansport ar	Addition		ering, Belgrade.		
Author/	/s		Nam	e of public		-	Year	Pages (from-to)
	-		- Tull			, - 41.01	- Cul	1 4860 (110111 10)

	Assesment methods	Points	Percentage
	Pre-exam obligations		
	attendance at lectures and exercises	10	10%
Freelanding and and	I colloquium	40	40%
Evaluation criteria	II colloquium	20	20%
	passed colloquia (theory)	20	20%
	Final exam		
	Oral	10	100%
	IN TOTAL	100	100%
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	I-ciklus-202	L.pdf
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	raffic engine	eering Doboj

		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Motor Vehicles							
d d Sten 30 M			l cycle		l year of stu	-			
Course title				CHNICAL INSPECT					
Department		Departi	ment of Moto	or Vehicles, Opera	tion, Mainten	ance and Dia	agnostics o	f Vehicles	
	Code		Cou	ırse status	Seme	ster	ECTS credits		
CAΦ11SM	САФ115М07217785,0220			I	VI	I		5.00	
Professor/s				ant professor					
Associate/s	Mi	roslav Pa	vlovic, assista	int					
	Weekly h	ours		Individual stu	dent hours (p	er semester)		ent workload efficient So	
L	TE		LE	L	TE	LE		So	
					1				
Course aims an	al			Total workloa	d:				
learning outco									
Prerequisites									
Teaching meth	ods								
Course content	t								
				Textbook (s)					
Autho	or/s		Name	of publication, p	ublisher	Year	· Pa	ges (from-to)	
				Additional read	ings				
Autho	or/s		Nam	e of publication,	-	Year	Pa	ges (from-to)	
		I	A	ssesment method	ls		Points	Percentage	
	Pre	e-exam ol	oligations					-	
			for exar	mple. attendance					
Evaluation crite	eria					nar papers			
						colloquium			
					II e	colloquium			
	Fin	al exam							
				for example. f	inal exam (ora	l / written)			
		TOTAL							
Web sources				vp-content/uploa					
Applicable from	n 11,	/15/2022	- 198 Sessior	n of the Councile,	Faculty of Tra	nsport and T	raffic engir	neering Doboj	

		UNIV Faculty of T		2005				
1975 ASTER 30 199		l cycle	у	A OEDI				
Course title		I cycle IV year of study TRAFFIC SAFETY						
Department	De	partment of Transport Engineering - Faculty of Transportation Doboj						
Coc	le	Course status Semester			r	ECTS credits		
CAФ11SM072	04785,022	D	I		5.00			
Professor/s	Ph.D. B	ojan Maric, Assoc	iate professor					
Associate/s	Ph.D. B	ojan Maric, Assoc						
W	eekly hours	s Individual s		udent hours (per	semester)	Student workload coefficient So		
L	TE	LE	L	TE	LE	So		
2	2	0	2*15*1,5=45	2*15*1,5=45	0*15*1,5=0	1,5		
	ning load (ir 15 + 2*15 +	n hours, semester 0*15 = 60)	total student wo 2*15*1,5 +	orkload (in h 2*15*1,5+ 0'			
Тс	otal workloa		teaching + stude 90 = 150 hours p	ent): W + T = Uopt per semester	hours per ser	nester		
	By mast	tering this course						
				in traffic safety in				
Course aims and	2. expla	in the concept an	d elements of t	he traffic safety ma	anagement p	rocess		
learning outcome	s 3. Expla	in traffic safety fa	actors					
	4. meas	sure traffic safety performance indicators						
	5. unde	rstands the invest	tigation and ana	lysis of traffic acci	dents			
Prerequisites	None							
Teaching methods	s lectures	s ex chair, worksh	ops, discussion,	focus groups, indi	vidual and gr	oup work		
Course content	2. Scien 3. State 4. Traff 5. Prote 6. Regu 7. Meas 8. Traff 9. Traff 10. Traf 11. Traf 12. Traf	tific discipline bases and tendencies in a safety factors ection system and lations in traffic s surement in traffic is safety indicator is safety manager fic safety measur fic accidents, Inve fic-technical anal-	sed on traffic sat n traffic safety responsibilities afety c safety s nent es estigation of traffic acc	in traffic safety ffic accidents cidents	Inclinus			
		eed control						
	15. Dat	abases of importa						
			Textbook (•				
Author/		Name	of publication,	publisher	Year	Pages (from-to)		
Lipovac Krsto, Jo Dragan and Vuja		Basics of traffic safety,, Criminal Police Academy, Belgrade			2014	1-388		
Lipovac Kr	sto	Traffic safety, High School of Internal Affairs, Banja Luka			2007	166-174		
			Additional rea	dings		·		
Author/	s	Nam	e of publication	, editor	Year	Pages (from-to)		
				d Traffic Safety in No. 6/06, 75/06, 19.				

	Law on Road Traffic Safety, official messenger RS no. 41/09, 53/10, 101/11, 32/13 -US, 55/14.								
	Assesment methods	Points	Percentage						
	Pre-exam obligations								
	activity during classes - tests	10	10%						
	colloquiums	15	15%						
Evaluation criteria	positively evaluated seminar paper	20	20%						
	Final exam								
	Written exam	35	35%						
	Final exam-oral	20	20						
	IN TOTAL	100	100 %						
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-	-I-ciklus-202	<u>1.pdf</u>						
Applicable from	11/15/2022 - 198 Session of the Councile, Faculty of Transport and T	Fraffic engin	eering Doboj						

•18.		UNIV	ERSITY OF	EAST S	SARAJEVO		2005			
		Faculty of T	Jose Marine Contract							
		S P								
Core 10 Martin		l cycle	AOEOJ							
Course title		COMPRESSORS, PUMPS AND FANS								
Department	gnostics of Vehicles									
Code		Course status		;	Semest	er	ECTS credits			
САФ115М0723			I		VIII		5.00			
Professor/s		erica Gojković, Full professor								
Associate/s	Svetko Milutii	novic, assist	ant				Student workload			
Wee	kly hours		Individ	ual stu	dent hours (pe	semester)	coefficient S _o			
L	TE	LE	L		TE	LE	So			
2	2	0	2		2	0	1,5			
	ng load (in hour + 2 * 15 + 0 * 1)			•	n hours, semester) + 0 * 15 * 1.5 = T			
	+ 2 * 15 + 0 * 1 30+ 30+ 0 = 60 ł			4		* 15 * 1.5 • + 45 + 0 =				
			eaching +	studen	t): W + T = Uopi					
1012			90 + 120 =			nours per s	Serriester			
	By mastering				ires knowledge	and acquair	ntance with			
Course aims and										
learning outcomes		Reciprocating compressors used as an important aggregate machine, as well as introduction								
	to the types a	nd characte	eristics of p	oumps	and fans					
Prerequisites	None									
Teaching methods	Lectures, aud	itory exercis	ses semin	ar nane	۲					
		-								
		 Introduction to reciprocating compressors Theoretical duty cycle of a reciprocating compressor 								
	3 Realistic re	. Realistic reciprocating compressor duty cycle. Multistage compaction								
			compress	or duty	cycle. Multistag	-				
	4. Calculation	n of the r	compress	or duty	cycle. Multistag	-	on npressor. Reciprocating			
	4. Calculation compressor s	n of the n ystems	compresso main dime	or duty ensions	cycle. Multistag of the recipr	-				
	 Calculation compressor s Reciprocation 	n of the n ystems ng compres	compresso main dime ssor capaci	or duty ensions ity regu	cycle. Multistag of the recipr lation	ocating cor	mpressor. Reciprocating			
	 Calculation compressor s Reciprocati Reciprocati 	n of the n ystems ng compres ng compres	compresso main dime ssor capaci	or duty ensions ity regu	cycle. Multistag of the recipr	ocating cor	mpressor. Reciprocating			
	 Calculation compressor s Reciprocation 	n of the n ystems ng compres ng compres	compresso main dime ssor capaci	or duty ensions ity regu	cycle. Multistag of the recipr lation	ocating cor	mpressor. Reciprocating			
Course content	 Calculation compressor s⁻ Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of 	n of the n ystems ng compres ng compres n	compresso nain dime ssor capaci ssor constr characteri	or duty ensions ity regu ruction. stics of	cycle. Multistag of the recipr lation Reciprocating o	ocating cor ompressor	mpressor. Reciprocating			
Course content	 Calculation compressor st Reciprocati Reciprocati Reciprocati I colloquiunt Pumps Specifics of pumps and su 	n of the n ystems ng compres ng compres n operating o idden chang	compresso nain dime ssor capaci ssor constr characteri ges in oper	or duty ensions ity regu ruction. stics of ration	cycle. Multistag of the recipr llation Reciprocating o radial, semi-axi	ocating cor ompressor al and axial	mpressor. Reciprocating operation centrifugal pumps. Start			
Course content	 Calculation compressor st Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping pumping pumping 	n of the n ystems ng compres ng compres n operating o idden chang	compresso nain dime ssor capaci ssor constr characteri ges in oper	or duty ensions ity regu ruction. stics of ration	cycle. Multistag of the recipr lation Reciprocating o	ocating cor ompressor al and axial	mpressor. Reciprocating operation centrifugal pumps. Start			
Course content	 Calculation compressor st Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping j Fans 	n of the n ystems ng compres ng compres n operating o idden chang plants. Appl	compresso nain dime ssor capaci ssor constr characteri ges in oper ication of	or duty ensions ity regu ruction. stics of ration pumps	cycle. Multistag of the recipr lation Reciprocating o radial, semi-axi on SUS engines	ocating cor ompressor al and axial and vehicle	mpressor. Reciprocating operation centrifugal pumps. Start s			
Course content	 Calculation compressor st Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping j Fans 	n of the n ystems ng compres ng compres n operating o idden chang plants. Appl	compresso nain dime ssor capaci ssor constr characteri ges in oper ication of	or duty ensions ity regu ruction. stics of ration pumps	cycle. Multistag of the recipr lation Reciprocating o radial, semi-axi on SUS engines	ocating cor ompressor al and axial and vehicle	mpressor. Reciprocating operation centrifugal pumps. Start			
Course content	 Calculation compressor s² Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping p Pumping p Fans Specifics of in operation 	n of the n ystems ng compres n operating o odden chang blants. Appl of working o	compresso nain dime ssor capaci ssor constr characteri ges in oper ication of characteris	or duty ensions ity regu ruction. stics of ration pumps stics of	cycle. Multistag of the recipr lation Reciprocating o radial, semi-axi on SUS engines	ocating cor ompressor al and axial and vehicle fans. Fan st	mpressor. Reciprocating operation centrifugal pumps. Start s			
Course content	 Calculation compressors Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping p Fans Specifics of in operation Fan plants Hasic way 	n of the n ystems ng compres ng compres n operating o idden chang olants. Appl of working o s. Applicatio s of regulat	compresso main dime ssor capaci ssor constr characteri ges in oper ication of characteris	or duty ensions ity regu- ruction. stics of ration pumps stics of on SUS of and fa	cycle. Multistag of the recipr llation Reciprocating of radial, semi-axi on SUS engines radial and axial engines and veh	ocating cor ompressor al and axial and vehicle fans. Fan st icles	mpressor. Reciprocating operation centrifugal pumps. Start s			
Course content	 Calculation compressor sr Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping p Fans Specifics of in operation Fan plants Hasic way in the develop 	n of the n ystems ng compres ng compres n operating o idden chang blants. Appl of working o s. Applicatio s of regulat pment of pu	compresso main dime ssor capaci ssor constr characteri ges in oper ication of characteris	or duty ensions ity regu- ruction. stics of ration pumps stics of on SUS of and fa	cycle. Multistag of the recipr llation Reciprocating of radial, semi-axi on SUS engines radial and axial engines and veh	ocating cor ompressor al and axial and vehicle fans. Fan st icles	mpressor. Reciprocating operation centrifugal pumps. Start s tart and sudden changes			
Course content	 Calculation compressors Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping p Fans Specifics of in operation Fan plants Hasic way 	n of the n ystems ng compres ng compres n operating o idden chang blants. Appl of working o s. Applicatio s of regulat pment of pu	compresso main dime ssor capaci ssor constr characteri ges in oper ication of characteris on of fans o ing pumps umps and f	or duty ensions ity regu ruction. stics of ration pumps stics of on SUS s and fa fans in t	cycle. Multistag of the recipr lation Reciprocating of radial, semi-axi on SUS engines radial and axial engines and veh ans. Measurement the world	ocating cor ompressor al and axial and vehicle fans. Fan st icles	mpressor. Reciprocating operation centrifugal pumps. Start s tart and sudden changes			
	 Calculation compressor sr Reciprocati Reciprocati Reciprocati I colloquiur Pumps Specifics of pumps and su Pumping p Fans Specifics of in operation Fan plants Hasic way in the develop 	n of the n ystems ng compres ng compres n operating o idden chang olants. Appl of working o s. Applicatio s of regulat oment of pu	compresso main dime ssor capaci ssor constr characteri ges in oper ication of characteris on of fans of ing pumps imps and f	or duty ensions ity regu- ruction. stics of ration pumps stics of on SUS of and fa fans in t	cycle. Multistag of the recipr lation Reciprocating of radial, semi-axi on SUS engines radial and axial engines and veh ans. Measurement the world	ocating cor ompressor al and axial and vehicle fans. Fan st icles	mpressor. Reciprocating operation centrifugal pumps. Start s tart and sudden changes ups and fans. New trends			
Course content Author/s R.A. Hinrichs, M. Kle	4. Calculation compressor s 5. Reciprocati 6. Reciprocati 7. I colloquiur 8. Pumps 9. Specifics of pumps and su 10. Pumping p 11. Fans 12. Specifics of in operation 13. Fan plants 14. Basic way in the develop 15. II colloqui	n of the m ystems ng compres ng compres n operating o idden chang olants. Appl of working o s. Applicatio s of regulat oment of pu um	compresso main dime ssor capaci ssor constr characteri ges in oper ication of characteris ing pumps imps and f Textk of publica	or duty ensions ity regu- ruction. stics of ration pumps stics of on SUS s and fa- ans in t book (s)	cycle. Multistag of the recipr lation Reciprocating of radial, semi-axi on SUS engines radial and axial engines and veh ans. Measurement the world	ocating cor ompressor al and axial and vehicle fans. Fan st icles nts on pum	mpressor. Reciprocating operation centrifugal pumps. Start s tart and sudden changes ups and fans. New trends			
Author/s	4. Calculation compressor s 5. Reciprocati 6. Reciprocati 7. I colloquiur 8. Pumps 9. Specifics of pumps and su 10. Pumping p 11. Fans 12. Specifics of in operation 13. Fan plants 14. Basic way in the develop 15. II colloqui	n of the m ystems ng compres ng compres n operating o idden chang olants. Appl of working o s. Applicatio s of regulat oment of pu um	compresso main dime ssor capaci ssor constr characteri ges in oper ication of characteris ing pumps imps and f Textk of publica	or duty ensions ity regu- cuction. stics of ration pumps stics of on SUS of and fa- ans in t pook (s) the En-	cycle. Multistag of the recipr llation Reciprocating of radial, semi-axi on SUS engines radial and axial engines and vel- ans. Measurement the world ublisher vironment	ocating cor ompressor al and axial and vehicle fans. Fan st icles nts on pum	mpressor. Reciprocating operation centrifugal pumps. Start s tart and sudden changes ups and fans. New trends			

R.J. Heinsohn		Sources and Control of Air Pollution, Prentice Hall			1-285				
	Assesment methods					Percentage			
	Pre-exam obligations								
		attendance at lectures and ex	10		10%				
		seminar	papers	20		20%			
Evaluation criteria	l colloquium					10%			
	II colloquium					10%			
	Final exam								
	Final exam (oral/ written)			50		50%			
	IN TOTAL				כ	100 %			
Web sources	http://sf.ues.rs.ba/eng/wp-content/uploads/2022/05/Engleski-NPP-I-ciklus-2021.pdf								
Applicable from	11/15/2	11/15/2022 - 198 Session of the Councile, Faculty of Transport and Traffic engineering Dol							

		UNIVERSITY OF EAST SARAJEVO Faculty of Transport and Traffic Engineering Study program: Traffic Profile: Motor Vehicles I cycle IV year of study						200 standing equition		
C 45m 40 10		I cycle								
Course title	HUMAN RESOURCES, KNOWLEDGE AND PROJECT MANAGEMENT Department of Marketing and Management, Faculty of Economics in Brcko									
Department		Departmen		ng and manage			ГСКО			
C		Course status			Semester		ECTS credits			
САФ11SM07			I VIII		/111		5.00			
				Associate professor						
Associate/s	Pn.	D. ZIVKO Ero	eg, Associ	ate professor				Student workload		
١	Veekly h	ours	Individual stud		student hours (per semeste	r) s	coefficient So		
L	TE		LE	L	TE	LE		So		
2	2		0	2	2	0		1,5		
	2*15 + 2* 30+ 3	d (in hours, 15 + 0*15 = 0+ 0= 75 h workload of	Ŵ	(teaching + stuc 60 + 90 = 150	2*15* lent): W + T = Uop	ent workload (i 1,5 + 2*15*1,5 45 + 45 + 0 ot hours per se	+ 0*15*1 = 90 h			
Course aims and learning outcom	acq	uaint studen		•				anager. The aim is to anning the needs and		
	wor	kplace and e	•	ucation and dev a, and knowledge	elopment of emplo	• •	•	ropriate climate in the		
Prerequisites	wor Nor	kplace and e	environment	, and knowledge	elopment of emplo e and projects	byees, creating	j an appr	ropriate climate in the		
Prerequisites Teaching metho	Nor ds lect	kplace and e ne cures ex cha	environment air, worksh	, and knowledge ops, discussio	elopment of emplo e and projects n, focus groups,	byees, creating	j an appr	ropriate climate in the		
-	work Nor ds lect 1. T 2. R 3. S 4. G 5. F Cha 6. C 7. I 8. C 9. C of e 10. proo 11. 12. devi 13. tech 14. F	kplace and e <u>he</u> <u>sures ex cha</u> asks and ac asks and ac esistance to trategic man clobalization functions of aracteristics a organizationa colloquium areer develo creativity and mployees ar Knowledge cesses, the b Area of appl Knowledge cesses, the b area of appl Knowledge of another and another and another another another another another another cesses, the b area of appl Knowledge of another anoth	air, worksh tivities in HF change and agement ar and human managers. and size of t al culture. Co opment and d creative te nd managers - empirical basic process ication of U2 collection, d nowledge - llectual capi agement, ob	and knowledge ops, discussio RM. Manageme d change mana nd managers. S resource mana Types of lead the group ontemporary tre education in the echniques. Creat s. Techniques for basics, understant so of knowledge Z Reference m liagnosis and as languages and tal: measuring l	elopment of emplo e and projects <u>n, focus groups,</u> nt environment gement-change m trategic human re- gement. Human re- gement. Human re- gement. Human re- gement. Human re- gement. Human re- gement. Strate trategic human re- gement. Human re- gement. Human re- trategic human re- gement. Human re- trategic human re- gement. Human re- trategic human re- gement. Human re- management model of UZ. Busin- ssessment. UZ ma	individual ar anagement sy source manag esources plann p styles. Grou nal culture gic plan of cor se. Technique rmance at wor pt of Knowled ess and proce anufacturing co ction criteria. of measuring.	an appr ad group stem ement ning in the ups and tinuing e s for dev k ge mana ss model ompanies Knowlede	o work be company group management. education veloping the creativity agement: people and ils UZ s. UZ in research and ilge structure. Search		
Teaching metho	work Nor ds lect 1. T 2. R 3. S 4. G 5. F Cha 6. C 7. I 8. C 9. C of e 10. proo 11. 12. devi 13. tech 14. F	kplace and e <u>he</u> <u>sures ex cha</u> asks and ac esistance to trategic man blobalization Functions of irracteristics a organizationa colloquium areer develo creativity and mployees ar Knowledge cesses, the b Area of appl Knowledge of elopment Modeling knowledge of Project mana	air, worksh tivities in HF change and agement ar and human managers. and size of t al culture. Co opment and d creative te nd managers - empirical basic process ication of U2 collection, d nowledge - llectual capi agement, ob	and knowledge ops, discussio RM. Manageme d change mana nd managers. S resource mana Types of lead the group ontemporary tre education in the echniques. Creat s. Techniques for basics, understant so of knowledge Z Reference m liagnosis and as languages and tal: measuring l	elopment of emplo e and projects <u>n, focus groups,</u> nt environment gement-change m trategic human re- gement. Human re-	individual ar anagement sy source manag esources plann p styles. Grou nal culture gic plan of cor se. Technique rmance at wor pt of Knowled ess and proce anufacturing co ction criteria. of measuring.	an appr ad group stem ement ning in the ups and tinuing e s for dev k ge mana ss model ompanies Knowlede	o work be company group management. education veloping the creativity agement: people and ils UZ s. UZ in research and ilge structure. Search		
Teaching metho	work Nor ds lect 1. T 2. R 3. S 4. G 5. F Cha 6. C 7. I 8. C 9. C of e 10. proo 11. 12. devi 13. tech 14. F 15. 7.	kplace and e	air, worksh tivities in HF change and nagement ar and human managers. and size of t al culture. Co opment and d creative te nd managers - empirical pasic process ication of U2 collection, d nowledge - llectual capi agement, ob	and knowledge ops, discussio RM. Manageme d change mana nd managers. S resource mana Types of lead the group ontemporary tree education in the echniques. Crea s. Techniques for basics, undersi so of knowledge Z Reference m liagnosis and as languages and ital: measuring l jectives, efficier <u>Textbool</u> of publication ces Manageme	elopment of emplo e and projects <u>n, focus groups,</u> nt environment gement-change m trategic human re- gement. Human re- trop evaluating perfor- trop evaluat	individual ar anagement sy source manag esources plann p styles. Grou nal culture gic plan of cor se. Technique ormance at woi pt of Knowled ess and proce anufacturing co ction criteria. of measuring. d analysis, me	an appr ad group stem ement ning in the ups and tinuing e s for dev rk lge mana ss model ompanies Knowlede asureme	o work be company group management. education veloping the creativity agement: people and ils UZ s. UZ in research and ilge structure. Search		
Teaching metho Course content Author	work Nor ds lect 1. T 2. R 3. S 4. G 5. F Cha 6. C 7. I 8. C 9. C of e 10. proo 11. 12. devi 13. tech 14. F 15. 7.	kplace and e	air, worksh tivities in HF change and nagement ar and human managers. and size of t al culture. Co opment and d creative te nd managers - empirical pasic process ication of U2 collection, d nowledge - llectual capi agement, ob	and knowledge ops, discussio RM. Manageme d change mana nd managers. S resource mana Types of lead the group ontemporary tre education in the echniques. Creat s. Techniques for basics, undersit ss of knowledge Z Reference m liagnosis and as languages and ital: measuring ligitation Textbool of publication	elopment of emplo e and projects <u>n, focus groups,</u> nt environment gement-change m trategic human re- gement. Human re- gement. Human re- ership. Leadershi nds in organizatio e company. Strate tivity and enterpri or evaluating perfo- tanding the conce management odel of UZ. Busin- sessment. UZ ma d tools. Tool sele (nowledge: ways of ney, monitoring an ((s) <u>n, publisher</u> nt, Golden market	individual ar anagement sy source manag esources plan p styles. Grou nal culture gic plan of cor se. Technique ormance at woi pt of Knowled ess and proce anufacturing co ction criteria. of measuring. d analysis, me	an appr ad group stem ement ning in the ups and tinuing e s for dev rk lge mana ss model ompanies Knowlede asureme	b work be company group management. education veloping the creativity agement: people and ils UZ s. UZ in research and ilge structure. Search ent, improvement Pages (from-to)		

Marušić, S		Human Resources Management, Adeco, Zagreb,	2001		1-280	
		Assesment methods	Poi	nts	Percentage	
	Pre-exar	n obligations				
		attendance at lectures and ex	kercises	10		10%
Evoluction evitoria		seminar	papers	20		20%
Evaluation criteria	I colloquium					10%
	II colloquium					10%
	Final exa	am				
	Final exam (oral/ written)		50		50%	
	IN TOTA	L		100)	100 %
Web sources	http://sf	ues.rs.ba/eng/wp-content/uploads/2022/05/Engle	ski-NPP-	I-cikl	us-2021	L.pdf
Applicable from	11/15/2	022 - 198 Session of the Councile, Faculty of Transpo	ort and T	raffio	c engine	eering Doboj