Anne	x 3 Program of	the Course for	Integrated First a	nd Second c	ycle		
1.	Title of Course		ANATOMY 1				
2.	Code		3MF100212				
3.	Study program		General medicin				
4.	Organizer of the Study pro	gram		Goce Delce University – Stip			
			Faculty of Medic				
5.	Level (first, second or thir	d cycle of	Integrated First	and Second	cycle		
6	studies) Academic year/ semester		I Semester –first	t Year 7.	Numba	er of ECTS 8	
6. 8.	Professor (s)		Associate Profes			HOLECIS O	
9.	Requirements for enrollin	g the course	recorded first se		a jovevska		
10.	Aims of the course (compe				etencies): In	troduction to a	natomy as
	morphological science, ma						
11.	Contents of the course (pe	r 15 weeks per	semester):	•	•	•	
	 The content of the 						
			anatomy, types o		ne componer	nts, specialized t	terminology.
			t of the upper lim				
			rt of the lower lim	b			
	4.Bones chest an5 Introduction in		ı, clue wrist, comp	onants of th	o joint typo	c of joints	
	• 6.Sindezmologia		i, ciue wrist, comp	onents of th	ie joint, type.	s or joints	
	 7.Sindezmologia 		ower limb				
	 8.Bones head (sk 						
	 9. Joints head (sk 	cull and face), tr					
			giologia, Neurolog				
			nd the lower limb				
			gy and the lower l				
	13. Angiologia of14. Neurology of		and the lower lin	1D			
	■ 15. Neurology of						
			capula, upper arn	ı. forearm b	ones (radius	and ulna)	
			h of hand), hand b				d spine
			b pelvic bone, ske				•
			mur, and bones of	the knee-til	oia, fibula, pa	atele	
	 5.Skeleton foot-b 						
	• 6.Joints the uppe		id spine				
	7.Joints of lower8 Rones head the		l and facial bones	١			
	• 9.Joints head (sk		i aliu laciai bolles)			
	■ 10.Muscules of the						
	 11.Mucules and of 		ıb				
	 12. Blood vessels 						
	 13. Blood vessels 						
	 14. Inervation of 						
12	■ 15. Inervation of				. 1 .		
12. 13.	Methods of learning: Inter Total amount of available		naiviauai consuit	ations with	students		
14.	Distribution of available ti		+1 per week				
15.	Forms of teaching /		ectures / theoretic	cal, contact t	teaching.	36 hours	
	learning activities	e-	learning		<u> </u>	<u> </u>	
			xercises (practical			24 hours	
		15.2 th	eoretical, semina				
16.	Other forms of activities		rojects			7 hours	
			idividual work			1 hours	
4.7	16 d 1 C	16.3 H	ome learning			4 hours	
17.	Method of assessment	Evam			70 000000		
	17.1 Tests / Oral 17.2 Individual w		on, projects, pract	rical)	70 scores 10 scores		
		participation	on, projects, pract	iicai j	20 scores		
18.	Assessment Criteria (score			up to 50 p		5 (five).	(F)
	322223312 3110110 (5001)	- / F - 11100)		51 to 60 p		6 (six)	(E)
				61 to 70 p		7 (seven)	(D)
	71 to 80 points 8 (eight) (C)						
				81 to 90 p	oints	9 (nine)	(B)
				91 to 100	points	10 (ten)	(A)

19.			ance to the final exam/ or		Attendance at lectures at least 7 (60%) continuous			
	transition in the ne	xt year		checks lectures and 10 tutorials for Final Exam Scored				
				42 points and laid conti	inuous checks.			
20.	Language of teachir			English				
21.	Methods of measur	ing / mon	itoring the quality of	Standardized motor tes	sts, observation, surv	vey		
	teaching			Self-evaluation				
22.	Literature							
	22.1	Basic lit	erature					
		No	Author	Title	Publisher	Year		
		1.	A. Kargovska-Klisarova, J	Anatomy of human-	educational			
			Joseph	General of	work			
		2.	A. Kargovska-Klisarova,	Anatomy of man-	educational			
			N Djordjevic, D Lazarova	Osteologia	work			
		3.	A. Kargovska-Klisarova	Anatomy of human-arn	1			
			A. Kargovska-Klisarova, J	and chest				
			Joseph	Anatomy of man-Head				
			A. Kargovska-Klisarova	and Neck				
				Anatomy of man-Foot				
	22.2	Addition	nal literature		•	•		
		No	Author	Title	Publisher	Year		
		1.	Sinelnikov	Anatomical Atlas of	•			
				man (I, II, III part)				
		2.	F.N. Netter	Atlas of human				
				anatomy				
		3.						

Anne	ex 3 Program of the Cour	se for Integrated First and Second cycle								
1.	Title of Course	BIOLOGY								
2.	Code	3MF100812								
3.	Study program	General medicine								
4.	Organizer of the Study program	Goce Delce University – Stip								
		Faculty of Medical Sciences								
5.	Level (first, second or third cycle	Integrated First and Second cycle								
	of studies)									
6.	Academic year/ semester	I Semester – first year 7. Number of ECTS 5								
8.	Professor (s)	Associate professor Nevenka Velickova PhD								
9.	Requirements for enrolling the	None								
	course									
10.	Aims of the course (competences):									
		idents to get familiar with the routines, techniques and methods that are related								
		c knowledge in the field of cell biology. They study the cytological methods used								
	in medicine which are especially important in the diagnosis of certain diseases. Students develop specific									
		entific research procedures and technics which are used in microscopy, building								
		used during the diagnostic of certain hereditary and nonhereditary diseases,								
		e for the cell and cell organelles, especially the nucleus structure and aterial. All membrane and nonmembrane organelles are included with special								
		iated pathologies. In this way the students will be able to identify a normal cell								
		Students have a goal to get familiar with the structure and function of								
		nd the clinical-biochemical correlations in it. All the theoretical knowledge that								
		re controlled and determined with practical laboratory work and practice.								
11.	Content of the course program:	re controlled and determined with procedur abordeory work and proceded								
	Composition of the co	al]								
	Chemical composition									
	Cell membrane struct									
	Transport through th	••••								
	Endoplasmic reticulu									
	Golgi apparatus struc									
	Mitochondrial structu									
	Structure of lysosome									
	Cytoskeleton	F								
	Structure of the nucle	PUS								
	Cell division									
	1 Gen division									

		Cell differer	atiation					
		Apoptosis	iuauull					
12.	Methods of	1 1						
14.			rc receard	ch and practical activi	ties			
13.		int of available			ties			
14.		n of available t		110013				
17.	2+2+1 per		iiiie.					
15.	Forms of to		15.1	Lectures / theoret	tical, contact teaching,	60 hours		
10.	learning ac		10.1	e-learning				
				Exercises (practic	al. laboratory.	60 hours		
			15.2	theoretical, semin				
16.	Other form	s of activities	16.1	Projects	· · · · · · · · · · · · · · · · · · ·	0 hours		
			16.2	Individual work		15 hours		
			16.3	Home learning		15 hours		
17.	Method of	assessment				•		
	17.1 Tests / Oral Exam				70 scores			
	17.2			entation, projects,	10 scores			
		practical)	•					
	17.3	Activity and	participat	tion	20 scores			
18.	Assessmen	ıt Criteria (scor	es/ points	(3)	up to 50 points	5 (five). (F)		
					51 to 60 points	6 (six) (E)		
					61 to 70 points	7 (seven) (D)		
					71 to 80 points	8 (eight) (C)		
					81 to 90 points	9 (nine) (B)		
					91 to 100 points	10 (ten) (A)		
19.		approval and er in the next year		the final exam/ or	60% active participat	ion at the course		
20.	Language o	of teaching / stu	ıdy		English			
21.	Methods of teaching	f measuring / n	nonitoring	the quality of	Standardized motor tests, observation, survey Self-evaluation			
22.	Literature							
	22.1	Basio	literature	е				
		No	Auth	or	Title	Publisher	Year	
		1.		ael HRoss;	Cell and molecular		2010	
				na Vojnic	biology			
		2.		as Pollard; William	Cell Biology	Elsevier	2008	
			Earns	shaw				
		3.						
	22.2		tional liter		I mul	I 5 1 11 1		
		No	Auth	or	Title	Publisher	Year	
		1.	Sylvia	a S. Mader, Michael	Biology	Windelspecht:,McG raw-Hill Higher Education	2015	
		2.	Junqı	ıeira, L. C. Et al.	Basic Histology: Text & Atlas,	McGrawHill, New York, 10th Edition,		

	Program of the Cours	se for Integrated First and Se	econd cyc	le			
1.	Title of Course	MEDICINAL CHEMISTRY					
2.	Code	3MF134012					
3.	Study program	General Medicine					
4.	4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences						
5.	Level (first, second or third cycle of studies)	Integrated First and Second Cycle					
6.	Academic year/ semester	I Semester – first year	7.	Number of ECTS	6		
8.	Professor (s)	Prof. Dr. Rubin Gulaboski Prof. Dr. Emilija Janevik Iv	anovska				
9.	Requirements for enrolling the course	None					
10.	Aims of the course (competences):						

The course of Medicinal Chemistry focuses on the basics of inorganic and organic chemistry, while also covering relevant aspects on simple organic synthesis, design and development of pharmaceuticals, first principles of drug action related to the structure activity relationships and short introduction on drug-target interactions. After successful completion of the course, students will be able to understand the output of many chemical phenomena in the living systems. Moreover, they will be also able to perform simple organic synthesis of some drugs, to assess potential activity of many drugs, and to learn about implications of relevant drug-target interactions.

- 11. Contents of the course (per 15 weeks per semester):
 - I. Theoretical part:
 - 1. Introduction; Theories of atomic structure; Quantum mechanical model of electronic structure;
 - 2. Atoms, molecules, ions. State of the matter. Chemical bonds;
 - 3. Mole, Amount of substance. Basic concepts for calculation according to molecular formulas. Nomenclature of inorganic compounds.
 - 4. Introduction to the properties of gasses. Medical gases, properties and application.
 - 5. Solution chemistry; Solution preparation; Dilution of solutions; Autoionization of water; Concept of pH; Acids, inorganic Bases; salts
 - Chemical reactions; Kinetics of chemical reactions; chemical equilibria; Thermochemistry;
 Thermodynamics; Gibbs free energy.
 - 7. Hydrolysis; Buffers; calculation pH of buffers; Buffer properties; Relevant Buffers for living cells.
 - 8. Carbon chemistry; Molecular orbitals; Concepts of bond formation in organic chemistry; Nomenclature of organic compounds.
 - 9. Reactions in organic chemistry; substitution; addition, elimination; Polymerization; Free radicals;
 - 10. Aliphatic organic compounds; alcohols, aldehydes, ketones, organic carboxylic acids, esters, amides, amines, ethers; chemical reactions; functions.
 - 11. Aromatic organic compounds; Chemistry of benzene. Chemical reactions of aromatic compounds;
 - 12. Heterocyclic aromatic compounds; Members; Functions; Reactivity
 - 13. Aromatic acids; Polyphenols; Radical Scavengers;
 - 14. Short overview of natural aromatic products used in medicine. Synthesis and functions. Methods of synthesis of drugs; Methods for separations in organic chemistry
 - 15. Structure activity relationships (SAR), Drug targets; Drug-target interactions.
 - II. Practice in Medicinal Chemistry (Laboratory exercises)
 - 1. Introduction to practical work in chemical laboratory; safety measures;
 - 2. Introduction to chemical calculations;
 - $3. \quad \mbox{Medical gases; synthesis of some medical gases; properties.}$
 - 4. Preparation of solutions; dilutions; properties of solutions; acids, bases; salts.
 - 5. Solution chemistry; Chemical reactions; kinetics of chemical reactions; thermochemistry; hydrolysis
 - 6. Buffers; properties of buffers; physiological buffers; Buffers preparation; buffer capacity.
 - 7. Introduction to organic chemistry; Organic nomenclature;
 - 8. Basic reactions in organic chemistry; Polymerization reactions
 - 9. Reactions of alcohols and ethers
 - 10. Reactions of aldehydes, ketones and carboxylic acids
 - 11. Reactions of carboxylic acids;
 - 12. Chemical reactions of aromatic compounds.
 - 13. Organic synthesis of some simple drugs. Synthesis of acetyl salicylic acid. Synthesis od benzamide; synthesis of iodoform.
 - 14. Extraction and isolation of natural products used in medicine. Extraction and isolation of polyphenols from fruits
 - 15. Drug-target interactions; Methods for measuring kinetics and thermodynamics of drug-drug interactions;

12.	Methods of	learning: teac	hing; intera	ctive activities at clas	ses; student's seminars	; project works; workshops.		
13.	Total amou	nt of available	time: 6 EC'	ΓS x 30 h = 180 h				
14.	Distribution	of available t	ime: 45+30)+30+30+30 = 180 h (2+2+1)			
15.	Forms of tea	aching /	15.1	Lectures / theoreti	cal, contact teaching,	15 x 3h = 45 hours		
	learning act	rning activities e-learning						
				Exercises (practica	l, laboratory,	15 x 2h = 30 hours		
			15.2	theoretical, semina	rs, team work)			
16.	Other forms	of activities	16.1	Projects		15 hours		
			16.2	Individual work		30 hours		
			16.3	Home learning		60 hours		
17.	Method of a	ssessment						
	17.1	Tests / Oral	Exam		70 scores			
	17.2	Individual w	ork (prese	ntation, projects,	10 scores			
		practical)	-	·				
	17.3 Activity and participation			on	20 scores			
18.	Assessment	Criteria (scor	es/ points)	•	up to 50 points	5 (five). (F)		
	1	` ', ', '				6 (civ) (E)		

Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study English									
Signature approval and entrance to the final exam/ or transition in the next year 10 (ten) (A) 10 (ten) (•				
19. Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study 21. Methods of measuring / monitoring the quality of teaching 22. Literature 22.1 Basic literature 22.1									
19. Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study 21. Methods of measuring / monitoring the quality of teaching 22. Literature 22.1 Basic literature 22.1 Basic literature 22.1 Medicinal Chemistry An Introduction to medicinal Chemistry Self-evaluation 22. G. L. Patrick 23. C. Wermuth 24. Additional literature 25. Additional literature 26. C. Wermuth 27. Title 28. Academic Press Academic					81 to 90 points	9 (nine) (B)			
Transition in the next year English					91 to 100 points 10 (ten) (A)				
20. Language of teaching Study English	19.	Signature approval	and entra	ance to the final exam/ or	60% active participati	ion at the course			
22. Literature 22.1 Basic literature 22.1 Basic literature No Author Title Medicinal Chemistry An Introduction 2nd Edition 2. G. L. Patrick An introduction 2nd Edition 3. C. Wermuth The Practice of Medicinal Chemistry, 2nd Edition 2. Additional literature No Author Title Publisher Year Miley 2007 Academic Press 2003 2008 Academic Press 2003 Title Publisher Year The Practice of Medicinal Chemistry, 2nd Edition Academic Press 2003 Title Publisher Year Academic Press 2003 Title Publisher Year Academic Press 2003 Display Edition Subject		transition in the ne	xt year						
Self-evaluation Self-evaluation	20.				English				
Description of the property	21.	Methods of measur	ing / mon	nitoring the quality of	Standardized motor te	sts, observation, surve	ey		
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No Author Title Publisher Year 1. T. Garaeth Medicinal Chemistry An Introduction 2nd Edition 2. G. L. Patrick An introduction to medicinal Chemistry 5nd Edition 3. C. Wermuth The Practice of Medicinal Chemistry, 2nd Edition 4. C. Wermuth Edition 22.2 Additional literature No Author Title Publisher Year 1. C. Wermuth, D. Aldous, P. Raboisson, D. Rognan Medicinal Chemistry, 4th Edition 2. John M. Beale, Jr., John H. Block. 3. Thomas L. Lemke, David A. Williams; associate editors, Victoria F. Roche, Medicinal-Chemistry, 7th Edition Title Publisher Year Academic Press 2003 Academic Press 2015 Academic	22.	Literature							
1. T. Garaeth Medicinal Chemistry An Introduction 2nd Edition 2. G. L. Patrick An introduction to medicinal Chemistry 5nd Edition 3. C. Wermuth The Practice of Medicinal Chemistry, 2nd Edition 4. C. Wermuth The Practice of Medicinal Chemistry, 2nd Edition 5. Academic Press Academic Press Academic Press Medicinal Chemistry, 2nd Edition 7. C. Wermuth, D. Aldous, P. Title Publisher Year 1. C. Wermuth, D. Aldous, P. Raboisson, D. Rognan Medicinal Chemistry, 4nd Edition 7. G. Wermuth, D. Aldous, P. Raboisson, D. Rognan Medicinal Chemistry, 4nd Edition 7. G. Wermuth, D. Aldous, P. The practice of Medicinal Chemistry, 4nd Edition 8. John M. Beale, Jr., John H. Block. Williams & Wilkins, a Wolters Kluwer business. Chemistry. — 12th ed. 8. Thomas L. Lemke, David A. Williams; associate editors, Victoria F. Roche, 7th Edition Williams & Wilkins, a Wolters		22.1	Basic lit	erature					
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2. John M. Beale, Jr., John H. Block. Wilson and Gisvold's textbook of organic medicinal and pharmaceutical chemistry. — 12th ed. 3. Thomas L. Lemke, David A. Williams; associate editors, Victoria F. Roche, Tohn M. Beale, Jr., John H. Wilson and Gisvold's textbook of organic medicinal and Williams & Wilkins, a Wolters Kluwer business. Foye-s-Principles-of-Medicinal-Chemistry 7th Edition Wilson and Gisvold's textbook of organic Williams & Wilkins, a Wolters				Taboloson, D. Rognan					
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S. WIIIIAM ZITO Kluwer business.				S. William Zito		Kluwer business.			

Anne	ex 3	Program of the Cour	se for Integrated First and Sec	ond cycle				
1.	Title of Cours	se	Biophysics	Biophysics				
2.	Code		3MF129212	3MF129212				
3.	Study progra	m	General Medicine					
4.	Organizer of	the Study program	Goce Delce University - Stip)				
			Faculty of Medical Sciences					
5.	Level (first, s	econd or third cycle	Integrated First and Second	cycle				
	of studies)							
6.	Academic yea	ar/ semester	I Semester – first year	7.	Number of ECTS	5		
8.	Professor (s)		Prof. Zdenka Stojanovska					
9.	Requirement	s for enrolling the	None					
	course							
10.	Aims of the co	ourse (competences):						
			ic theoretical knowledge of ph	ysics and	its application in medica	l science.		
11.		he course (per 15 wee						
			ems, energy, work and power					
			;Ultrasound and its applicatio					
			oort Processes. Electrical phen					
			py. Basic phenomena and laws					
			the medicine. Ionization radia	ation, gene	eration, interactions, biol	ogical effects.		
		clear medicine, radiol	ogy and radiotherapy.					
12.	Methods of le							
		-	ical exercises, homework, hom	e learning	, ,			
13.		t of available time: 150						
14.	Distribution of	of available time: 30+3	0+0+45+45=150 hours					

15.	Forms of te	0,	15.1	Lectures / theoretical, cont learning	act teaching, e-	30 hours		
	0		15.2	Exercises (practical, labora seminars, team work)	tory, theoretical,	30 hours		
16.	Other forms	s of activities	16.1	Projects		0 hours		
			16.2	Individual work		45 hours		
			16.3	Home learning		45 hours		
17.	Method of a	ssessment				•		
	17.1	Tests / Oral	Exam		70 scores			
	17.2	Individual w	ork (prese	ntation, projects, practical)	10 scores			
	17.3	Activity and	participati	on	20 scores			
18.	Assessment	t Criteria (scor	es/ points)		up to 50 points	5 (five).	(F)	
					51 to 60 points	6 (six)	(E)	
					61 to 70 points	7 (seven)	(D)	
					71 to 80 points	8 (eight)	(C)	
					81 to 90 points	9 (nine)	(B)	
					91 to 100 points	10 (ten)	(A)	
19.	Signature a in the next		ntrance to t	he final exam/ or transition	60% active particip	ation at the cou	rse	
20.	Language o	f teaching / stu	ıdy		English			
21.	Methods of	measuring / n	nonitoring t	the quality of teaching	Standardized motor Self-evaluation	tests, observat	ion, survey	
22.	Literature							
	22.1	Basic	literature					
		No	Autho		Title	Publisher	Year	
		1.	Zdenk	a Stojanovska	Lecture notes	UGD		
		2.	Herma	ın P. Irving.	Physics of the Human Body	Springer- Verlag Berlin Heidelberg	2007	
		3.	Antho	l T. Bushberg, J. ny Seibert, Edwin M oldt, John M Boone	The Essential Physics of Medical Imaging; Third edition;	Lippincott Williams & Wilkins;	2012	
	22.2	Addi	tional litera	nture				
		No	Autho	r	Title	Publishe	Year	
	1.			n Franklin, Paul Muir, Terry Lara Wilcocks, Paul Yates.	Introduction to Biological Physics for the Health and Life Sciences	Wiley	2010	

	Program o	of the Course t	or I	ntegrated First and S	econd cycle		
1.	Title of Course	Introduction to	o me	edicine			
2.	Code						
3.	Study program	General Med	icine				
4.	Organizer of the Study	Goce Delcev	Uni	versity – Stip			
	program	Faculty of Me	dica	l Sciences			
5.	Level (first, second or	Integrated Fir	st a	nd Second cycle			
	third cycle of studies)						
6.	Academic year/	First year/	7.	Number of ECTS	2		
	semester	First or					
		second					
		semester					
8.	Professor (s)	Assistant Pro	fess	or PhD MSc. MD Vale	ntina		
		Simonovska	Simonovska				
9.	Requirements for	None					
	enrolling the course						
10	Aims of the course (comp	etences): The	aim	of this course is for stu	dents to gain		
	basic knowledge of Medic	cine as a scienc	e. S	Students will get to kno	w: basic		
	principles and tasks in Me	edicine, history	of M	ledicine and medical e	ducation.		
11	Contents of the course (p	er 15 weeks pe	er se	mester):			
	Medicine in the	Antic period					
	Medical revelat	ions – evolution	n of	medicine			
	3. Evolution of Me	edicine in RNM					
	4. Evolution of me	dical education)				
	5. Health and fact						
	6. Natural course	of diseases. So	cient	ific and alternative Me	dicine		
	7. Characteristics	of medicine an	d m	edical professions			
	8. Clinical Medicir						
	Globalization of						
	10. Latest health co		vorlo	i			
	11. Organizations i						
	12. Medical informa	ation					

12	Methods	of learning	g:				
	Classes,	methods	of group	discussions, in	dividual assignme	ents, papers	and
	presenta	tions.					
13	Total am	ount of av	ailable ti	me: 2 ECTS * 3	30 hours = 60 hou	ırs	
14	Distributi	on of avail	lable tim	e: 30 + 0 + 15 -	+ 5 + 10 = 60 hou	rs	
15	Forms of		15.1	Lectures / the	oretical, contact		30 hours
	teaching	/		teaching, e-le	arning		
	learning	activities		Exercises (pra	actical,		0 hours
			15.2	laboratory, the	eoretical,		
				seminars, tea	m work)		
16	Other for	ms of	16.1	Projects			15 hours
	activities		16.2	Individual wor	k		5 hours
			16.3	Home learning	g	10 hours	
17	Method o	of					
	assessm	ent					
	17.1	Tests / O	ral Exan	n			70 scores
	17.2	Individua	l work (p	resentation,			10 scores
		projects,	practica	l)			
	17.3	Activity a	nd partio	cipation			20 scores
18	Assessm	ent Criteri	ia (score	s/ points)	up to 50 points	5 (five).	(F)
					51 to 60 points	6 (six)	(E)
					61 to 70 points	7 (seven)	(D)
					71 to 80 points	8 (eight)	(C)
					81 to 90 points	9 (nine)	(B)
					91 to 100	10 (ten)	(A)
					points		
19	Signature approval and entrance to the			Attendance of classes and a minimum			
	final exam/ or transition in the next year			of 42 points from	m all pre-exa	m activities.	
20	Languag	e of teach	ing / stud	dy			English
21	Methods	of measu	ring / mo	nitoring the	Standardized me	otor tests, ob	servation,

	quality of teac	hing		survey			
				Self-evaluation			
22	Literature						
	22.1	Basic	literature				
		No	Author	Title	Publisher	Year	
		1.	W. Bynum	The history of medicine	Oxford	2003	
		2.					
		3.					
	22.2	Additi	onal literature				
		No	Author	Title	Publisher	Year	
		1.	Theodore H.	The New	"Studentski	2003	
			Tulchinsky, Elena	Public Health	zbor" –		
			A. Varavikova		Skopje		
		2.					
		3.					

Ann	ex 3.	Program of the Cours	e for Integrated First cycle	studies	3				
1.	Title of Cour	rse	ENGLISH LANGUAGE						
2.	Code		4FF100621						
3.	Study progra	am	General medicine						
4.	Organizer of	the Study program	Goce Delchev University – Stip Faculty of Medical Sciences						
5.	Level (first, sof studies)	second or third cycle	First cycle						
6.	Academic ye	ear/ semester	I Semester – first year	7.	Number of ECTS	4			
8.	Professor (s)	Dragan Donev						
9.	Requirements for enrolling the course None								
	Aims of the course (competences): At the end of the course the student is expected to: - understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type;								

10

- introduce him/herself and others and can ask and answer questions about personal details such as where they
- live, people they know and things they have;
- interact in a simple way provided the other person talks slowly and clearly and is prepared to help;
- identify himself and answer questions concerning, for example, his nationality, his age, his place of residence, his date of birth, his school and possibly, to ask himself questions of this type to somebody;
- recognize names, the most common words or expressions in simple situations of the everyday life: signs, handwritten indications doubled by icons, prices, schedules;
- spot and understand quantified data, proper nouns and other very simple information in a short text;

identify globally (in their aspect, their typography, their localization) the function of certain common texts of the daily environment or the school environment; write a very simple message concerning the activities of the daily life containing some personal details. Contents of the course (per 15 weeks per semester): Vocabulary: Basic vocabulary including: numbers, colours, classroom objects, family-related words, appearance, character adjectives, everyday activities, jobs, rooms, things in the house, buildings, star signs, foods, containers, weather, seasons, months, feelings, clothes, parts of the body, animals, sports, sport equipment, travelling, natural features. Grammar: Basic grammar: verb to be, articles - a/an, this/that, question words, have got, possessive case/pronouns/adjectives, present simple, love/like + ing, prepositions of time, adverbs of frequency, there is/are, plurals, prepositions of place, imperative, countable/uncountable nouns, some/any/much/many/a lot of, 11 present continuous, comparisons, ordinals, past simple (regular verbs), used to, had, past simple (irregular verbs), future simple, be going to, present continuous for future arrangements, modal verbs (can, could, must, mustn't should, shouldn't), present perfect, superlatives. All communicative skills are equally included in the course including basic communication: spelling names, exchanging phones, talking about counties and nationalities, greetings and introductions, describing physical appearances and character, talking about abilities, asking for and offering help, talking about daily routines, preferences, jobs, telling time, talking about houses and locations, giving directions, talking about food preferences and preparing food, giving advice, , making predictions about the future, talking about plans and intentions, talking about travelling and personal experiences, etc. The students will acquire basic knowledge of English culture. Methods of learning: 12 Interactive method: group work, reports, homework, seminar papers, discussion, debate, cooperative studying techniques, individual tasks, simulation of extra-curricular educational activities, individual studying. 13 Total amount of available time: 120 14 Distribution of available time: 2+1+1 Lectures / theoretical, contact teaching, e-15.1 30 hours learning 15 Forms of teaching / learning activities Exercises (practical, laboratory, theoretical, 15 hours 15.2 seminars, team work) 16.1 **Projects** 15 hours Other forms of 16 16.2 Individual work 30 hours activities 30 hours 16.3 Home learning 17 Method of assessment 18.1 Tests / Oral Exam 70 scores Individual work (presentation, projects, 18 18.2 10 scores practical) 18.3 Activity and participation 20 scores 5 (five) up to 50 points (F) 51 to 60 points (E) 6 (six) 7 61 to 70 points (seven) (D) 19 Assessment Criteria (scores/points) 71 to 80 points 8 (eight) (C) 81 to 90 points (nine) (B) 91 to 100 points 10 (ten) (A) Signature approval and entrance to the final exam/ or 60% active participation at the course transition in the next year 21 Language of teaching / study English 22 Methods of measuring / monitoring the quality of Standardized motor tests, observation, survey Self-evaluation teaching Literature

		Basic lit	erature							
23	22.4	No	Author	Title	Publisher	Year				
	23.1	1. VIRGINIA EVANS -JENNY DOOLEY		Upstream Elementary A2	Express Publishing	2006				
		2.	Clive Oxenden and Christina Latham-Koenig	New English File Beginner	Oxford University Press	2011				
	23.2	Additional literature								
		No	Author	Title	Publisher	Year				
		1.	Zoze Murgoski	English Grammar: With Contrastive Notes on Macedonian	National and University Library Kliment Ohridski	1997				

Anne	x 3.	Program of	the Course	for Integrated First cycle studi	es				
1.	Title of Co	urse		GERMAN LANGUAGE LEVEL	A1.1				
2.	Code			4FF100221					
3.	Study pros	gram		General medicine					
4.	Organizer	of the Study	program	Goce Delchev University – Stip Faculty of Medical Sciences)				
5.	Level (firs	t, second or t udies)	hird	First cycle					
6.	Academic	year/ semest	ter	First year / First semester 7. Number of ECTS 4					
8.	Professor	(s)		Lecturer MA Marica Tasevska					
9.		ents for enro	lling the	None					
10.	Aims of the course (competences): Students to be able to conduct short dialogues when meeting, greeting, to express opinions on everyday topics, to find an unknown city, to communicate with people from German-speaking countries, to shop in Germany, to make recommendations, to describe and express specific opinions, to get acquainted with the culture and civilization in the German-speaking countries, etc. Contents of the course (per 15 weeks per semester): Grammar: verbs and conjugation of verbs (haben, sein, kommen, sprechen, fahren, schlafen, sehen) question words (wer, wo, woher, wie,) personal pronouns (accusative and dative), possesive pronouns (nominative and accusative), definite / indefinite article, separable verbs, adverbs in time (accusative and dative), question sentences, modal verbs (mögen, können, wollen, dürfen, sollen, müssen), perfect (past tense), imperative (ordering, adverbs of place, modality (könnten, würden + infinitiv), comparative and conjugative adjectives (viel, gern, gut), verbs with dative, conjunctions for independent sentences (und, oder, aber, de nn), ordinal numbers. Vocabulary: words from the field: greeting, presentation, eating and drinking, weight measures, furniture,								
12.	Methods of learning: Interactive method: group work, reports, homework, seminar papers, discussion, debate, cooperative studying techniques, individual tasks, simulation of extra-curricular educational activities, individual studying.								
13.	Total amount of available time: 120								
14.	Distribution of available time: 2+1+1								
15.	Forms of t		15.1	Lectures / theoretical, contact learning	ct teachin	ig, e- 30 hours			

			15.2	Exercises (practica seminars, team wo	ıl, laboratory, theoretical, rk)	15 hours			
			16.1	Projects	,	15 hours			
16.	Other for		16.2	Individual work		30 hours			
	activities		16.3	Home learning		30 hours			
17.	Method o								
	18.1	Tests / Oral	Exam		70 scores				
18.	18.2	Individual w	vork (prese	ntation, projects,	10 scores				
	18.3 Activit		participati	on	20 scores				
					up to 50 points	5 (five)	(F)		
					51 to 60 points	6 (six)	(E)		
10			, .		61 to 70 points	7 (seven)	(D)		
19.	Assessme	ent Criteria (s	cores/ poin	tsj	71 to 80 points	8 (eight)	(C)		
					81 to 90 points	9 (nine)	(B)		
					91 to 100 points	10 (ten)	(A)		
20.	Signature approval and entrance to the final exam/ or transition in the next year 60% active pa				60% active participation	at the course			
21.	Language of teaching / study English and German								
22.	Methods teaching	of measuring	/ monitorii	ng the quality of	Standardized motor tests, Self-evaluation	, observation, surve	ey .		
	Literatur	ture							
		Basi	c literature						
		No	Autho	r	Title	Publisher	Year		
23.	23.1	1.	Hilper Reima	n Kerner, Silke t, Monika nn,Andreas szewski	Schritte International 1 Kusrbuch + Arbeitsbuch	Hueber Verlag	2006		
		2.		rike Jin, Ute Voß	Grammatik aktiv Üben, Hören, Sprechen	Cornelsen	2018		
		3.	Ранка Петер	Грчева Рау	Голем македонско- германски и германско- македонски речник	Магор	2006		
	23.2	Addi	tional litera	ature					
		No							
		1.		грија Гацов	Германска Граматика	НУБ "Климент Охридски" - Скопје	1995		
		2.	Pude A Sprech	Sandra, Angela, nt Franz	Menschen A1.2	Hueber Verlag	2012		
		3.	Olga S	werlowa	Grammatik & Konversation Arbeitsblätter für den Deutschunterricht A1-A2-B1	Langenscheid	2013		

Annex	х 3.	Program of	the Cours	e for Integrated F	irst cycl	e studies		
7.	Title of Co	ourse		ITALIAN LANGU	JAGE LE	VEL A1.1		
8.	Code			4FF100421				
9.	Study pro	gram		General medicin	ie			
10.	Organizer	of the Study	program	Goce Delchev Un Faculty of Medic				
11.		st, second or t	hird	First cycle	ar beren			
12.	cycle of st Academic	year/ semest	ter	First year / First semester	t 7.	Number of ECTS	4	
8.	Professor	· (s)		Nadica Negrievs	ka			
9.	Requirem course	ents for enro	lling the	None				
10.	At the end of the course the student is expected to: - understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type; - introduce him/herself and others and can ask and answer questions about personal details such as where they live, people they know and things they have; - interact in a simple way provided the other person talks slowly and clearly and is prepared to help; - identify himself and answer questions concerning, for example, his nationality, his age, his place of residence, his date of birth, his school and possibly, to ask himself questions of this type to somebody; - recognize names, the most common words or expressions in simple situations of the everyday life: signs, handwritten indications doubled by icons, prices, schedules; - spot and understand quantified data, proper nouns and other very simple information in a short text; - identify globally (in their aspect, their typography, their localization) the function of certain common texts of the daily environment or the school environment; - write a very simple message concerning the activities of the daily life containing some personal details. Contents of the course (per 15 weeks per semester):							
11.	Vocabular character parts of the Basic gran pronouns All comm very simp appearan preference The stude	ry: Basic voca adjectives, evene body. mmar structures, adjectives, punicative skillole way; talkin ces and chara es, telling timents will acquiof learning:	bulary inc reryday ac rese: correc resent sim is are equa g about cc cter, talkin e, talking a re basic ki	luding: numbers, tivities, jobs, roomet pronunciation of the prepositions ally included in the punties and nation about houses and nowledge of Italia	colours, ns, thing of Italian of time, e course alities, a asking f location n cultur	s in the house, buildings werbs essere/avere, art adverbs of frequency, plincluding basic community eetings and introduction and offering help, talk s, etc.	ly-related words, appearance, s, foods, containers, months, cicles, question words, lurals, prepositions of place. nication: communicate, in a ons, describing physical king about daily routines,	
12.						educational activities, ir		
13.	Total amo	ount of availab	ole time: 1	20				
14.	Distributi	on of availabl	e time: 2+					
15.	Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e- learning 30 hours Exercises (practical, laboratory, theoretical, 15 hours)							
	rearining a	1001410109	15.2	seminars, tear		iboratory, tileoretical,	15 hours	
	Oals are fr	of	16.1	Projects			15 hours	
16.	Other forms of activities 16.2			Individual wo	rk		30 hours	
			16.3	Home learnin	g 5		30 hours	
17.	Method o							
	18.1 Tests / Oral Exam 70 scores							

	18.2	Individual wor	k (presentation, ical)	10 scores					
	18.3	Activity and pa	rticipation	20 scores					
				up to 50 points	5	(five)	(F)		
				51 to 60 points	6	(six)	(E)		
10	A	out Cuitouis (see	and the simbol	61 to 70 points	7	(seven)	(D)		
19.	Assessme	ent Criteria (scor	es/ points)	71 to 80 points	8	(eight)	(C)		
				81 to 90 points	9	(nine)	(B)		
				91 to 100 points	10 (ten)		(A)		
20.	Signature approval and entrance to the fina exam/ or transition in the next year			60% active participation at the course					
21.	Language	e of teaching / st	udy	English and Italian					
22.	Methods of teachin		nonitoring the quality	Standardized motor tests, obser Self-evaluation	vation	, survey			
	Literatur	e							
		Basic li	terature	· · · · · · · · · · · · · · · · · · ·					
23.		No	Author	Title	Publisher		Year		
	23.1	1.	Marin,T. & Magnelli,S.	Progetto italiano 1, nuovo (Libro dello studente)	Edilingua		2006		
		2.	Marin,T. & Magnelli,S.	Progetto italiano 1, nuovo (Quaderno degli esercizi)	Ediliı	ıgua	2006		
	23.2	Additio	nal literature						
		No	Author	Title	Publi	sher	Year		
		1.	Marin,T.	La prova orale 1 (Manuale di conversazione, livello elementare - intermedio)	Edili	ngua	2000		
		2.	L. Toffolo & N. Nuti,	Allegro 1, Corso di italiano per stranieri, Livello elementare	Edilii	ngua	2003		
		3.	Cozzi, N., Federico F. & Tancorre, A.	Caffè Italia, Corso di italiano 1	ELI s.r.l.		2005		

Anne	x 3.	Program of the Cours	e for Integrated Firs	st cycl	e studies				
13.	Title of Co	urse	RUSSIAN LANGUA	GE LE	EVEL A1.1				
14.	Code		4FF100321						
15.	Study prog	gram	General medicine						
16.	Organizer	of the Study program		Goce Delchev University – Stip Faculty of Medical Sciences					
17.	Level (firs	t, second or third udies)	First cycle						
18.	Academic	year/ semester	First year / First semester	7.	Number of ECTS	4			
8.	Professor	(s)	Igor Stanojoski						
9.	Requiremo course	ents for enrolling the	None						
10.	The main g of Russian 800 words	language proficiency, t s, developed habits for p	train students in pra through which they perceiving speech in	will a	Russian language proficie cquire a vocabulary of Rus orm of monologue and dia ding and writing habits.	sian words	- from 500 to		

11. 12. 13.	Introduct Asking qu Occupation Methods of Interactive technique Total amod	ion, Asking questions like "on / Work, Co of learning: re method: gross, individual ount of availal	nestions lil Who are yountry and oup work, tasks, simu	ke "Who is this?" And "ou?", Pets, Using "How Language, Wh-questio	ons. eminar papers, discussion, o	ressing "How o	gratitude, "M	ly, mine",								
13.	Interactive technique Total amo	e method: groes, individual sount of availal	tasks, simu		king questions like "Who are you?", Pets, Using "How much?", Asking questions "How old are you?", cupation / Work, Country and Language, Wh-questions. thods of learning: eractive method: group work, reports, homework, seminar papers, discussion, debate, cooperative studying hniques, individual tasks, simulation of extra-curricular educational activities, individual studying.											
	Distributi		nle time: 1		ılar educational activities, i			studying								
1.4		an af 11 11	Total amount of available time: 120													
14.	Forms of	Distribution of available time: 2+1+1														
15.		teaching /	15.1	learning	ical, contact teaching, e-	30 h	ours									
	learning a	ictivities	15.2	seminars, team wo	al, laboratory, theoretical, ork)		15 hours									
			16.1	Projects		15 h	ours									
16.	Other for activities	ms of	16.2	Individual work		30 h	ours									
			16.3	Home learning			30 hours									
17.	Method o															
	18.1	Tests / Oral	Exam		70 scores											
18.	18.2	Individual w practical)	ork (prese	entation, projects,	10 scores											
	18.3	Activity and	participat	ion	20 scores											
					up to 50 points	5	(five)	(F)								
					51 to 60 points	6	(six)	(E)								
10	A	nt Cuitonio (o		-+-)	61 to 70 points	7	(seven)	(D)								
19.	Assessine	nt Criteria (so	tores/ pon	ntsj	71 to 80 points	8	(eight)	(C)								
					81 to 90 points	9	(nine)	(B)								
					91 to 100 points	10	(ten)	(A)								
20.		approval and in the next y		to the final exam/ or	60% active participation	at the c	course									
21.		of teaching /			English and Russian											
22.	Methods teaching	of measuring	/ monitori	ng the quality of	Standardized motor tests Self-evaluation	s, obser	vation, surve	ey								
	Literature	e														
		Basic	cliterature													
23.	23.1	No	Autho	or	Title	Publ	isher	Year								
		1.	Ирин	а Осипова	«Ключ» - Учебник русского языка для начинающих.	русского языка для Моск		2005								
	23.2	Addi	tional liter	rature												
		No	Autho	or	Title	Publ	isher	Year								

1.	S. A. Khavronina, A. I. Shirochenskaya	Русский язык в упражнениях. (Russian in exercises)	Русский язык. Курсы 2017 г.	2017
2.	Л.В.Московкин, Л.В.Сильвина	Русский язык. Учебник для иностранных студентов подготовительных факультетов	СМИО Пресс, Санкт- Петербург	2006

				фа	культетов			
Annex	κ 3.	Program of	f the Cours	e for Integrated First cycle	studies			
19.	Title of Co	urse		FRENCH LANGUAGE LEV	EL A1.1			
20.	Code			4FF100521				
21.	Study pro	gram		General medicine				
22.	Organizer	of the Study	program	Goce Delchev University - Faculty of Medical Science				
23.	Level (firs	t, second or t	hird	First cycle				
24.		year/ semes	ter	First year / First semeste	7.	Number	of ECTS	4
8.	Professor	(s)		Svetlana Jakimovska	•	1		- 1
9.	-	ents for enro	lling the	None				
10.	Aims of the course (competences): At the end of the course the student is expected to: - understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type; - introduce him/herself and others and can ask and answer questions about personal details such as where they live, people they know and things they have; - interact in a simple way provided the other person talks slowly and clearly and is prepared to help; - identify himself and answer questions concerning, for example, his nationality, his age, his place of residence, his date of birth, his school and possibly, to ask himself questions of this type to somebody; - recognize names, the most common words or expressions in simple situations of the everyday life: signs, handwritten indications doubled by icons, prices, schedules; - spot and understand quantified data, proper nouns and other very simple information in a short text; - identify globally (in their aspect, their typography, their localization) the function of certain common texts of the daily environment or the school environment; - write a very simple message concerning the activities of the daily life containing some personal details. Contents of the course (per 15 weeks per semester): Vocabulary: Basic vocabulary including: numbers, colours, classroom objects, family-related words, appearance, character adjectives, everyday activities, jobs, rooms, things in the house, buildings, foods, containers, months, parts of the body. Basic grammar structures: correct pronunciation of French, verbs être/avoir, articles, question words, pronouns,						dy; signs, xt; on texts of tails. Dearance, nonths, pronouns, te, in a tail	
12.	The students will acquire basic knowledge of French culture. Methods of learning: Interactive method: group work, reports, homework, seminar papers, discussion, debate, cooperative studying techniques, individual tasks, simulation of extra-curricular educational activities, individual studying.							
13.	Total amount of available time: 120							
14.	Distribution of available time: 2+1+1							
15.	Forms of t		15.1	Lectures / theoretical, of learning			30 hours	
	learning a	ctivities	15.2	Exercises (practical, lab seminars, team work)	oratory, th	eoretical,	15 hours	

			16.1	Projects		15 hours		
	Other for	ms of		1				
16.	activities		16.2	Individual work		30 hours		
			16.3	Home learning		30 hours		
17.	Method o							
	18.1	Tests / Oral	Exam		70 scores			
18.	18.2	Individual w practical)	vork (prese	ation, projects, 10 scores				
	18.3	Activity and	participation	20 scores				
				up to 50 points		5 (five)	(F)	
					51 to 60 points	6 (six)	(E)	
10	A	ant Cuitania (a	/	4-2)	61 to 70 points	7 (seven)	(D)	
19.	Assessment Criteria (scores/ points)		71 to 80 points	8 (eight)	(C)			
					81 to 90 points	9 (nine)	(B)	
					91 to 100 points	10 (ten)	(A)	
20.		approval and in the next y		o the final exam/ or	60% active participation a	at the course		
21.	Language	of teaching /	study		English and French			
22.	Methods teaching	of measuring	/ monitorir	ng the quality of	Standardized motor tests, observation, survey Self-evaluation			
	Literatur	e						
		Basi	c literature					
23.		No	Autho	r	Title	Publisher	Year	
	23.1	1.	CAPEL MENA	ILE, G. & ND,R.	Taxi 1 (Méthode de français)	Edilingua	2003	
		2.	CAPEL MENA	.LE, G. & ND,R.	Taxi 1 (Cahier des exercices)	Edilingua	2003	
	23.2 Additional literature							
		No	Autho	r	Title	Publisher	Year	
		1.						
		2.						
		3.						

Anne	х 3.	Program of the Cours	e for Integrated First cycle studies					
25.	Title of Co	urse	SPANISH LANGUAGE LEVEL A1.1					
26.	Code		4FF100121					
27.	Study prog	gram	General medicine					
28.	Organizer	of the Study program	Goce Delchev University – Stip Faculty of Medical Sciences					
29.	Level (first	t, second or third udies)	First cycle					
30.	Academic	year/ semester	First year / First semester	7.	Number of ECTS	4		

8.	Professo	or (s)		Marija Todorova						
9.	Require course	ments for enro	olling the	None						
10.	Aims of the course (competences): At the end of the course the student is expected to: - understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type; - introduce him/herself and others and can ask and answer questions about personal details such as where they live, people they know and things they have; - interact in a simple way provided the other person talks slowly and clearly and is prepared to help; - identify himself and answer questions concerning, for example, his nationality, his age, his place of residence, his date of birth, his school and possibly, to ask himself questions of this type to somebody; - recognize names, the most common words or expressions in simple situations of the everyday life: signs, handwritten indications doubled by icons, prices, schedules; - spot and understand quantified data, proper nouns and other very simple information in a short text; - identify globally (in their aspect, their typography, their localization) the function of certain common texts of the daily environment or the school environment; - write a very simple message concerning the activities of the daily life containing some personal details. Contents of the course (per 15 weeks per semester): Vocabulary: Basic vocabulary including: numbers, colours, classroom objects, family-related words, appearance,									
11.	Content Vocabul characte parts of Basic gr question All common very sime appeara preferent The student									
12.	Methods of learning: Interactive method: group work, reports, homework, seminar papers, discussion, debate, cooperative studying techniques, individual tasks, simulation of extra-curricular educational activities, individual studying.									
13.	Total an	nount of availa	ble time: 12	20						
14.	Distribu	tion of availab	le time: 2+	1+1						
15.		f teaching / activities	15.1	learning Exercises (practical	ical, contact teaching, e- al, laboratory, theoretical,	30 hours				
			15.2 16.1	Projects	seminars, team work)					
16.	Other fo	rms of		Individual work		15 hours				
10.	activitie	S	16.2	Home learning		30 ho	31 hours			
17	Method	of	10.5	Home learning		,	or nours			
17.	assessm				1					
18.	18.1	Tests / Oral		entation, projects,	70 scores					
18.	18.3	practical) Activity and	l narticinat	ion	21 scores					
	10.5	Activity and	i pai titipat	1011		F	(fixe)	(E)		
					up to 50 points 51 to 60 points	5 6	(five)	(F) (E)		
					-		(six)			
19.	Assessm	nent Criteria (s	cores/ poir	nts)	61 to 70 points	7	(seven)	(D)		
					71 to 80 points	8	(eight)	(C)		
					81 to 90 points	9	(nine)	(B)		
]				91 to 100 points	10	(ten)	(A)		

20.	Signature approtransition in the		ntrance to the final exam/ or	60% active participation at the course			
21.	Language of tead	ching / stu	udy	English and Spanish			
22.	Methods of measuring / monitoring the quality of teaching			Standardized motor tests Self-evaluation	, observation, surve	ey	
	Literature						
		Basic li	terature				
		No	Author	Title	Publisher	Year	
23.	23.1	1.	Dr. Marianne Barceló,Juana Sánchez Benito, Verónica Beucker, P.M. Luengo,Bibiana Wiener	¡Vamos! - 1	Mundo Español ediciones	2007	
		2.	A. Jarvis, R. Lebredo, F. Mena-Ayllón	"Basic Spanish Grammar"	Houghton Mifflin Company -USA	2000	
	23.2	Additio	nal literature				
		No	Author	Title	Publisher	Year	
	1.		A. Gonzales Hermoso, J. R. Cuenot, M. Sanchez Alfaro	"Gramatica de español lengua extranjera"	Мадрид, Шпанија	1999	
		2.	Cristina Karpacheva	"Manual de español"	Софија	1998	
		3.	Ramon Sarmiento	"Gramatica progresiva de español para extranjeros"	"Colibri", Софија	1998	

Anne	Annex 3. Program of the Cou		e for Integrated First cycle studies				
7.	Title of Cour	rse	MACEDONIAN LANGUAGE LEVEL A1.1				
8.	Code		4FF101521				
9.	Study progr	am	General medicine				
10.	Organizer of	f the Study program	Goce Delcev University – Stip Faculty of Medical Sciences				
11.	11. Level (first, second or third cycle of studies)		First cycle				
12.	Academic year/ semester		First year / First semester	7.	Number of ECTS	0	
8.	Professor (s)	Ana Vitanova-Ringaceva				
9.	Requirement course	its for enrolling the	None				
10.	Aims of the course (competences): At the end of the course the student is expected to: - understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type; - introduce him/herself and others and can ask and answer questions about personal details such as where they live, people they know and things they have; - interact in a simple way provided the other person talks slowly and clearly and is prepared to help;						

11.	Vocabulary objects, pro the head an Grammar: interrogati determinat All commu exchanging appearance and locatio Macedonia Methods of Interactive	r: Basic vocab ofessions, cound the body, for Basic gramm ve form), pre- tion), adjective nicative skills g phones, talk es and characters, talking ab n culture. I learning: method: gro	oulary intries free tir ar: per sent to es and s are e- ting ab cter, ta oout fo	rsonal pronouns and the autense (a-, e- and i-verb group d possessive pronouns-adje qually included in the cours to the counties and nationalities and preparities and preparities, reports, homework, semi	and drinks, meals xiliary verb "cym" - os), nouns (gender, ectives. se including basic cies, greetings and it gabout daily routing food, etc. The standard papers, discussions and papers, discussions and papers, discussions and papers, discussions and drivers and discussions are set of the standard papers, discussions and drivers are set of the standard papers, discussions are set of the standard papers.	t, days, months, clothes, to be" (affirmative, no number and ommunication: spelling ntroductions, describing time, talking cudents will acquire basession, debate, cooperati	egative and grands grands grands grands grands about his consistence where the street and grands are street and grands gr	parts of and ;, cal nouses vledge of	
12	•			imulation of extra-curricula	ir educational activ	riues, individual studyii	ng.		
13.	Total amol	ınt of availab	ie time	e: 120 					
14.	Distributio	n of available	e time:	2+1+1					
15.	Forms of te	eaching /	15.1	1 Lectures / theoreti	cal, contact teachir	ng, e-learning	30 ho	urs	
13.	learning ac	tivities	15.2		ll, laboratory, theoi	retical, seminars, team	15 ho	urs	
			16.1	1 Projects			15 ho	urs	
16.	16. Other forms of activities			2 Individual work		30 ho	urs		
			16.3	3 Home learning	Home learning				
17.	Method of	assessment							
	18.1	Tests / Ora	l Exam	1		70 scores			
18.	18.2	Individual	work (presentation, projects, prac	10 scores				
	18.3	Activity and	d parti	icipation	_	20 scores			
					up to 50 points	5 (five))	(F)	
					51 to 60 points	6 (six)		(E)	
19.	Assessmen	t Criteria (sc	ores/ ı	points)	61 to 70 points			(D)	
27.	1100000111011	001100110	0100/ 1	pomoj	71 to 80 points 8 (eigh			(C)	
					81 to 90 points	9 (nine	<u> </u>	(B)	
					91 to 100 points	s 10 (ten)		(A)	
20.		approval and in the next ye		nce to the final exam/ or	60% active parti	cipation at the course			
21.		of teaching / s			English				
22.		f measuring /	' moni	toring the quality of		otor tests, observation, s	survey		
	teaching Literature				Self-evaluation				
	Literature	Bas	ic liter	ature					
		No		Author	Title	Publisher		Year	
		110		Марија Кусевска,	Зборувате ли	МЕДИС-		1995/	
22		1.		Лилјана Митковска	македонски?	информатика	ı	2016	
23.	23.1		1	Елени Бужаровска,	(учебник) Зборувате ли	МЕДИС-		1995	
		2.		елени вужаровска, Татјана Гочкова-	македонски?	медис- информатика	1	1773	
			(Стојановска	(работна тетра	гка)			
			Татјана Гочкова-		Божилак	Универзитет	"Св.	2012	
		3.		Стојановска, Искра Пановска Димкова		Кирил и Методиј"			
	23.2	Add	•	Пановска димкова l literature	1	петодиј	1		
		No		Author	Title	Publisher	Y	ear ear	
		1.							

		Program of	f the Cours	e for Integrated Firs	st and S	econd cycle			
1.	Title of Cou				SPORT AND RECREATION				
2.	Code			4F0107717					
3.	Study progr			General medicine					
4.	Organizer o	f the Study pro	ogram	Goce Delce Univers					
				Faculty of Medical					
5.	Level (first, of studies)	second or thir	d cycle	Integrated First an	nd Secon	nd cycle			
6.	Academic ye	ear/ semester		I semester - first year	7.	Number of ECTS		0	
8.	Professor (s	3)		Assoc. prof. Biljana	a Popes	ka, PhD			
9.	Requiremen	nts for enrollin	g the	None	•	•			
	course								
10.	To fulfill stu motor abilit physical act	ies; to adopt is ivity and recre	for movem nformation eational sp	ent and physical activity; to improve and develop students movement skills and and knowledge for independent choice and participation in adequate type of ort based on individual needs and preferences; to learn how to practice earn about the benefits from regular physical activity for overall health and					
11.									
12.				ises, method of spor	rt traini	ng			
13.		nt of available							
14.		of available t					101		
15.	Forms of tea learning act		15.1	Lectures / theor e-learning Exercises (practi			0 hours 12 hours		
			15.2	theoretical, semi			12 1100113		
16.	Other forms	of activities	16.1	Projects	5, 66	· · · · · · · · · · · · · · · · · · ·	0 hours		
			16.2	Individual work			0 hours		
			16.3	Home learning			0 hours		
17.	Method of a	ssessment					•		
	17.1	Tests / Oral			0 s	cores			
	17.2			entation, projects,	0 s	cores			
		practical)							
	17.3	Activity and				cores			
18.	Assessment	Criteria (scor	es/ points)		to 50 points	5 (five).	(F)	
						to 60 points	6 (six)	(E)	
						to 70 points	7 (sever		
						to 80 points	8 (eight)) (C)	
						to 90 points	9 (nine)	(B)	
						91 to 100 points 10 (ten) (A)			
19.		oproval and en the next year		the final exam/ or	60	% active participa	tion at the co	ourse	
20.		f teaching / stu			En	glish			
		~ .			•				

21.	Methods of measur teaching	ring / mor	nitoring the quality of	Standardized motor tests, observation, survey, self-evaluation						
22.	Literature									
	22.1	Basic lit	terature							
		No	Author	Title	Publisher	Year				
		1.	Haywood, K., & Getchell, N.	Life span motor development	Champaign: IL. Human Kinetics.	2004				
		2.	Kohl, H., Murray, D., & Salvo, D	Foundations of Champaign: Physical Activity and Public Health (Second Edition)		2018				
		3.	Wilmore, J. & Costill, D.	Physiology of sport and exercise, (Third edition) Champaign: Human Kinetic, Illinois		2002				
	22.2	Additio	nal literature							
		No	Author	Title	Publisher	Year				
		1.	Malina, R., Bouchard, C. & Bar – Or, O	Growth, Maturation and Physical Activity (Second Edition).	Champaign: IL. Human Kinetics.	2004				
	2.		Beashel, P., Sibon, A., & Tailor,J	Sport examined	Nelson Thornes Ltd,	2004				

	I allo1,j	Ltu,				
Anne		Integrated First and Second cycle				
1.	Title of Course	ANATOMY 2				
2.	Code	3MF100312				
3.	Study program	General medicine				
4.	Organizer of the Study program	Goce Delce University – Stip				
		Faculty of Medical Sciences				
5.	Level (first, second or third cycle of	Integrated First and Second cycle				
	studies)					
6.	Academic year/ semester	II Semester – first year 7. Number of ECTS 7				
8.	Professor (s)	Associate Professor Svetlana Jovevska				
9.	Requirements for enrolling the course	recorded first semester				
10.		tives of the curriculum (competencies): Introduction to the anatomy of the				
		pical and holotopical ratios of these organs in body cavities				
11.	Contents of the course (per 15 weeks per	semester):				
	• The content of the curriculum:					
	 1. Walls of the chest, breast cons 2 Second Bodies of the system for 					
	2.Second Bodies of the system for3. The bodies of the System for I					
	 4. Abdominal wall muscle, vascu 					
		ty-peritoneum, esophagus, stomach				
	6. Organs in the abdominal cavit					
	7. Liver, bile tract, pancreas	ty und smail bower				
	8. Spleen, kidney, adrenal gland					
	9. Urinary tract					
	 10. Pelvic cavity-wall- muscle 					
	 11. Pelvic cavity-wall -vasculatu 	ire				
	 12. Pelvic cavity-wall- innervation 	on				
	 13. Pelvic cavity-limits and cons 	struction; urines authorities				
	 14. Female genital 					
	15. Male genitalia					
		sion of mediastinum, borders, composition, topography				
		tios; structure and topography of the respiratory system				
		-heart and major blood vessels, topography and proportions				
		scle ratios of muscle organs, vasculature and innervation				
		cavity-peritoneum, esophagus, stomach				
		abdominal cavity-structure and orientation of the small and large intestine				
	, or entation models of niver, b	·				
	8. Orientation patterns of spleer9. Kidney, adrenal gland, urinary					
		y tract ographic relations of bodies, pelvic organs				
	• 11. Pelvic cavity-urines bodies,					
	 11. Felvic cavity-unities bodies, 12. Pelvic cavity- vascularization 	•				
	12.1 civic cavity vascularization	11				

		B. Pelvic cavity			hau hadiaa					
				tion, relations with ot ion, relations with oth						
12.	Methods of	learning: Inter	active cla	sses, individual consul	tations with students					
13.	Total amou	nt of available	time: 210	e: 210						
14.	Distribution	n of available t	ime:210 /	3+3+1 / per week						
15.	Forms of tea	aching /	15.1	Lectures / theoret	ical, contact teaching,	36 hours				
	learning act	ivities		e-learning						
				Exercises (practical		24 hours				
			15.2	theoretical, semin	ars, team work)					
16.	Other forms	s of activities	16.1	Projects		0 hours				
			16.2	Individual work		1 hours				
			16.3	Home learning	rning 4 hours					
17.	Method of a				T = 0					
	17.1	Tests / Oral			70 scores					
	17.2		ork (pres	entation, projects,	10 scores					
	450	practical)								
10	, i		20 scores	F (C) (D)						
18.	Assessment	Criteria (scor	es/ points)	up to 50 points	5 (five). (F)				
					51 to 60 points	6 (six) (E)				
					61 to 70 points	7 (seven) (D)				
					71 to 80 points	8 (eight) (C)				
					81 to 90 points	9 (nine) (B)				
10	C: ·	1 1		.1 (: 1 /	91 to 100 points	10 (ten) (A)				
19.				the final exam/ or		s at least 7 (60%) cont				
	transition if	n the next year	•		42 points and laid con	0 tutorials for Final Exam Scored				
20.	Languago of	f teaching / stu	ıdır		English	itiliuous tiletks.				
21.				the quality of	Standardized motor tests, observation, survey Self-evaluation					
21.	teaching	measuring / n	ioiiitoi iiig	the quality of						
22.	Literature				Sen evaluation					
22.	22.1	Rasio	literature	<u> </u>						
	22.1	No	Autho		Title	Publisher	Year			
		1.		rgovska-Klisarova	Anatomy of human-	educational work	Tear			
		1.	71.714	150 volka Tilloaro va	arm and chest	caacacionai work				
		2.	A.Kar	govska-Klisarova,	Anatomy of man-	educational work				
				Ozhidrova, A.	Abdomen					
			Strate	eska-Zafiroska						
		3.								
	22.2	Addi	tional lite	ature			1			
		No	Autho		Title	Publisher	Year			
		1.	Sinel	nikov	Anatomical Atlas of man (I, II, III part)					
		2.	F.N. N	letter	Atlas of human anatomy					
		3.								
			1		1		ı.			

	Program of the Cour	se for Integrated First and Sec	ond cycle	e			
1.	Title of Course	HISTOLOGY AND EMBRIO	LOGY 1				
2.	Code	3MF103912					
3.	Study program	General medicine					
4.	Organizer of the Study program	Goce Delce University – Stip Faculty of Medical Sciences					
5.	Level (first, second or third cycle of studies)	Integrated First and Second	l cycle				
6.	Academic year/ semester	II Semester – first year	7.	Number of ECTS	7		
8.	Professor (s)	Dzengis Jasar, Vanja Filipov	ski, Kate	rina Kubelka-Sabit			
9.	Requirements for enrolling the course						
10.	Aims of the course (competences): The purpose of this course is to introduce students to the histological structure of all tissues and organ systems. By studying this course, students will gain basic knowledge in the field of Histology						

	Pathology ar		iology. Åll	the theoretical knowle	ng some subsequent subjected in this course, the se					
11.	Contents of t • Epithelial t	the course (pe		ss per semester):						
	Joint tissueMuscle tiss									
	Nervous tissue Spermatogenesis and oogenesis									
	Embryonic leavesOrganogenesis									
	• Placentation									
		embryonic de	evelopmer	nt						
	• Skin									
		estinal system								
12.				truction, practical exer						
13.				$TS \times 30 \text{ hours} = 210 \text{ he}$						
14.				5+15+25+80 = 210 ho		_				
15.	Forms of tea		15.1		cal, contact teaching,	45 hours				
	learning acti	vities		e-learning	1.1.1	451				
			15.2	Exercises (practical		45 hours				
4.6	0.1 6	C	15.2	theoretical, semina	451					
16.	Other forms	or activities	16.1	Projects Individual work						
			16.2 16.3	Home learning		45 hours 45 hours 15 hours 25 hours 80 hours 5 (five). (F) 6 (six) (E) 7 (seven) (D) 8 (eight) (C) 9 (nine) (B) 10 (ten) (A) on at the course				
17.	Method of as	reassment	10.5	nome learning		00 11	ours			
17.	17.1	Tests / Oral	Evam		70 scores					
				entation, projects,	10 scores					
	17.2	practical)	ork (pres	entation, projects,	10 300163					
	17.3	Activity and	narticinat	ion	20 scores					
18.		Criteria (scor			up to 50 points	5 (five). (F)				
10.	110000001110110	orreeria (seor	es, ponite)	51 to 60 points					
					61 to 70 points					
					71 to 80 points	()				
					81 to 90 points					
19.	Signature ap	proval and er	ntrance to	the final exam/ or	60% active participation at the course					
	transition in	the next year	•	•						
20.		teaching / stu			English					
21.	Methods of r			the quality of	Standardized motor to	ests, observation, surv	ey			
	teaching				Self-evaluation					
22.	Literature									
	22.1		c literature		T	T = 11.	T			
		No	Autho		Title	Publisher	Year			
		1.		Carlos Junqueira, Jose	Basic Histology :	Lange	2002			
			Carne	eiro	Text and Atlas 10th edition Edition					
					Total edition Edition					
		L								
		2.	Mech	er	Junqueira's Basic	Lange	2018			
					Histology: Text and					
					Atlas 15th Edition					
	22.2		tional liter		I mul	I 5 111 1	T			
		No	Autho	or	Title	Publisher	Year			
					į.	1	1			
		1.	Autho	orized lectures						
		1. 2.	Autho	orized lectures						

Annex No.3	Program of the Course for Integrated First and Second cycle

1	Title of the Course	T	IUMAN GENETICS			
1. 2.	Code		MF126712			
3.	Study Program		General medicine			
4.	Organizer of the study program (unit or		Iniversity Goce Delcev			
	institute, Faculty, department)		aculty of medical sciences			
5.	Cycle (first, second and third cycle)		ntegrated First and Second cycle)		
6.	Academic year / semester	F	irst year/ 7. N	lumber (of credits 4	
			econd semester			
8.	Professor (s)	P	rof. Darko Bosnakovski			
9.	Requirements for enrollment the Course					
10.	Purposes of the curriculum (competencies					
11	Introduction to basic scientific knowledge	of humar	n genetics.			
11.	Content of the course program: The content of the curriculum:					
	1. Cytological basis of heredity. Morpholog	v and nh	vsiology of the cell Organization	of DNA	in chromosomes	
	2. Structure and function of DNA and RNA			I OI DIVII	in cin omosomes.	
	3. Inheritance of properties-principles, gen			ion gen	ome, genotype, genetic	
	code, alleles, and regulation of gene expres					
	4. Structure and function of the chromoson				neiosis.	
	5. Autosomal and recessive inheritance, X l			itance.		
	6. Numerical chromosomal aberrations: an 7. Structural chromosomal aberration: dele			oi on a		
	8. Mutations. Mutagenic factors.	etions, at	ipiications, translocations, inver	SIOHS.		
	9. Epigenetics.					
	10. The genetic basis of malignancy (cance	r genetic	s).			
	11. Basic molecular biology and cytogeneti			ı (PCR),	RT-PCT, qPCR,	
	Fluorescence in situ hybridization (FISH), v	western l	blot, southern blot, immunostair	ning, ELI	SA, DNA and RNA	
	sequencing, RNAi, microarray)					
	12. Prenatal diagnosis of genetic disease: noninvasive and invasive methods. Genetic engineering.					
12.	Learning methods: Lectures, exercises, seminars, research and	ا ا مام مام ا				
		1 14001 411				
13.	Total available time		24+24+12			
14.	Distribution of available time	1454	2+2+1 / per week		241	
15.	Forms of teaching / learning activities	15.1.				
			teaching, e-teaching			
		15.2.			24 hours	
			e-exams, preparation of	,		
			independent seminar work			
16.	Други форми на активности	16.1.	Project tasks		4 hours	
		16.2.	Individual tasks		4 hours	
		16.3.	Home learning		4 hours	
17.	Method of assessment					
	17.1. Tests / oral exams			70 po	ints	
	17.2. Seminars (paper / project - prese	entation:	written and/or oral)	10 po	ints	
	17.3. Activity and participation			20 poi	ints	
10	J 1 1		 	•		
18.	Assessment Criteria (points / score)	-	up 50 points	1	(five) (F)	
		-	51 to 60 points 61 to 70 points		(six) (E) (seven) (D)	
		-	71 to 80 points		(eight) (C)	
		-	81 to 90 points		(nine) (B)	
			91 to 100 points		(ten) (A)	
19.	Signature requirement and passing the fina		42 points 10 (ten) (A)			
	exam		r			
20.	Language of teaching / study		Macedonian			
1						
21.	Method of monitoring the quality of teaching		Self-evaluation			

Anne	y 3 Program of the Cours	e for Integrated First and Second cycle
1.	Title of Course	BASIC BIOCHEMISTRY 1
2.	Code	3MF101712
3.	Study program	General medicine
4.	Organizer of the Study program	Goce Delcev University – Stip
		Faculty of Medical Sciences
5.	Level (first, second or third cycle	Integrated First and Second cycle
]	of studies)	
6.	Academic year/ semester	Second year/ 7. Number of ECTS 5
		First semester
8.	Professor (s)	Prof. Dr. Tatjana Ruskovska
		Prof. Dr. Biljana Gjorgjeska
9.	Requirements for enrolling the	None
	course	
10.	Aims of the course (competences):	
		to provide students with knowledge on biochemistry of human body. Students
		lements in the human body, as well as the role of the water and electrolytes for
		llowed by detailed elaboration on chemical structure of proteins, lipids,
		hich are of crucial importance for the cellular structure, functions and
		laborated in detail, including their chemical structure, catalytic function, and
		ons. The last two lectures will be focused on vitamins, their classification,
11	chemical structures and functions.	les non consortent.
11.	Contents of the course (per 15 wee	ks per semester):
	■ <u>Lectures</u> ○ Definition of bio	chemistry as a basic and applied science.
		tes and buffers in the human body.
		nemical structure, classification and biological roles.
		oteins – Chemical structures, classification and biological functions.
		d fatty acids – Chemical structures, classification and biological roles.
		lycolipids, steroids and carotenoids – Chemical structures, classification and
	biological roles.	· · ·
	■ First co	olloquium
		s – Chemical structures, classification and biological roles.
		s and polysaccharides – Chemical structures, classification and biological roles.
		nical structure and function.
		anism and kinetics of enzymatic reactions.
	Nucleotides and Hydrogolyblo vii	
		ramins – Chemical structures and biological roles.
		mins – Chemical structures and biological roles. colloquium
	- Second	Conoquium
	 <u>Laboratory work</u> 	
		he work in biochemistry laboratory, and lab safety.
		rs in the human body.
	 Classification an 	d structure of proteins, and analysis of their general chemical properties.
		proteins with colored reactions.
		d structure of lipids, and analysis of their general chemical properties.
		cholesterol and triglycerides with colored reactions.
		olloquium
		d structure of monosaccharides, and analysis of their general properties.
		nical properties of oligo- and polysaccharides. enzymes, and analysis of their general properties
		enzymes, and analysis of their general properties kinetics of enzymatic reactions.
	Mechanism andIsolation of nucl	
		hydrosoluble vitamins.
		liposoluble vitamins.
		al exam
12.	Methods of learning:	
	■ <u>Lectures</u>	
		rge group of students.
	o Multimedia.	
	o E-learning.	
	o Individual consu	
		ith small groups of students
	Laboratory work Laboratory productions are a second production.	tical words with small groups of students
	o Laboratory prac	tical work, with small groups of students

		o Semi	nare with l	arger groups of studer	nte		
			ical exam.	inger groups or studer	163		
13.	Total amo			edits x 30 hours = 150) hours		
14.				0+0+45+45=150 hours			
15.	Forms of t	teaching /	15.1		ical, contact teaching,	30 hours	
	learning a	cuvities		Exercises (practical	al laboratory	30 hours	
			15.2	theoretical, semina		30 110013	
16.	Other form	ns of	16.1	Projects	,	0 hours	
	activities		16.2	Individual work		45 hours	
			16.3	Home learning		45 hours	
17.	Method of	fassessment					
	17.1	Tests / Ora			70 scores		
	17.2		work (prese	entation, projects,	10 scores		
		practical)					
1.0	17.3	Activity and			20 scores	T (0) (72)	
l8.	Assessme	nt Criteria (sc	ores/ points	5)	up to 50 points	5 (five). (F)	
					51 to 60 points	6 (six) (E)	
					61 to 70 points	7 (seven) (D) 8 (eight) (C)	
					71 to 80 points	u (018111) (0)	
					81 to 90 points 91 to 100 points	9 (nine) (B) 10 (ten) (A)	
19.	Signature	annroval and	antranca to	the final exam/ or	60% active participa	. ()	
1).		in the next ye		the imal exam, of	00 % active participa	tion at the course	
20.		of teaching / s			English		
21.	Methods	of measuring /	monitoring	the quality of	Standardized tests, o	bservation, survey	
	teaching				Self-evaluation		
22.	Literature	<u>, </u>					
	22.1	Bas	ic literature				_
		No	Autho		Title	Publisher	Year
		1.		L. Nelson and	LEHNINGER,	W.H. Freeman and	2017
			Micha	iel M. Cox	Principles of	Company, New	
	22.2	A 1 1			biochemistry	York	1
	22.2		litional liter		mid.	D1-1:-1	37
		No	Autho		Title	Publisher	Year
		1.		ry literature –			
			Relev	ant scientific papers			

x 3	Program of the Cours	e for Integrated Firs	t and	Second cycle	
Title of Course	e	First Medical Aid		-	
Code		3MF111112			
Study program	n	General medicine			
Organizer of t	he Study program				
Level (first, se of studies)	econd or third cycle	Integrated First an	d Sec	ond cycle	
Academic year	r/ semester	II Semester -	7.	Number of ECTS	2
		first year			
Professor (s)					
		Ass. Prof. Dr Jasmii	n Ciri	viri	
Requirements	for enrolling the	None			
course					
			n mas	ss disasters, learning	
			ion		
		and fracture			
	Title of Course Code Study program Organizer of t Level (first, se of studies) Academic yea Professor (s) Requirements course Aims of the collearning the s and complicate the skills for h Contents of th 1.Int 2. Ac 3.Ac 4. Ba 5. Ac 6. Pr	Title of Course Code Study program Organizer of the Study program Level (first, second or third cycle of studies) Academic year/ semester Professor (s) Requirements for enrolling the course Aims of the course (competences): learning the skills to save the life of and complications, perform triage at the skills for heart ,lung,and brain recontents of the course (per 15 week 1.Introduction to cardio-p 2. Acute respiratory failure 3.AcuteCardiac Arrest(CA) 4. Basiclife support 5. Advanced life support 6. Prolonged life support	Title of Course Code Study program Organizer of the Study program Level (first, second or third cycle of studies) Academic year/ semester Professor (s) Ass. Prof. Dr. Biljan Ass. Prof. Dr Jasmin Requirements for enrolling the course Aims of the course (competences): learning the skills to save the life of wounded, and preve and complications, perform triage and provide first aid ithe skills for heart ,lung,and brain resuscitation Contents of the course (per 15 weeks per semester): 1.Introduction to cardio- pulmonary resuscitation Contents of the course (part) 3.Acute Cardiac Arrest(CA) 4. Basiclife support 5. Advanced life support	Title of Course Code Study program Organizer of the Study program Level (first, second or third cycle of studies) Academic year/ semester Professor (s) Aims of the course (competences): learning the skills to save the life of wounded, and prevent the and complications, perform triage and provide first aid in mast the skills for heart ,lung,and brain resuscitation Contents of the course (per 15 weeks per semester): 1.Introduction to cardio- pulmonary resuscitation 2. Acute respiratory failure 3.AcuteCardiac Arrest(CA) 4. Basiclife support 5. Advanced life support 6. Prolonged life support	Title of Course Code 3MF11112 Study program General medicine Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences Level (first, second or third cycle of studies) Academic year/ semester II Semester – 7. Number of ECTS First year Professor (s) Ass. Prof. Dr. Biljana Eftimova Ass. Prof. Dr Jasmin Ciriviri Requirements for enrolling the course Aims of the course (competences): learning the skills to save the life of wounded, and prevent the injury and complications, perform triage and provide first aid in mass disasters, learning the skills for heart ,lung,and brain resuscitation Contents of the course (per 15 weeks per semester): 1.Introduction to cardio- pulmonary resuscitation 2. Acute respiratory failure 3. Acute Cardiac Arrest (CA) 4. Basiclife support 5. Advanced life support 6. Prolonged life support

	T						
		First aid in ble					
		First aid in bu					
		0.First aid for f					
		1.First aid for d					
		2.First aid and	triage in n	nass disasters			
12.	Methods of						
		and practical					
13.		nt of available	time:				
		0 h = 60 hours					
14.			ime: 15+1	5+0+15+15(1+1+0)			
15.	Forms of te		15.1		etical, contact teaching,	15 hours	
	learning ac	tivities		e-learning			
				Exercises (praction		15 hours	
			15.2	theoretical, semi	nars, team work)		
16.	Other form	s of activities	16.1	Projects		0 hours	
			16.2	Individual work		15 hours	
			16.3	Home learning		15 hours	
17.	Method of a	assessment					
	17.1	Tests / Oral			70 scores		
	17.2	Individual w	ork (pres	entation, projects,	10 scores		
		practical)					
	17.3	Activity and	participat	tion	20 scores		
18.	Assessmen	t Criteria (scor	es/ points	s)	up to 50 points	5 (five). (1	F)
		-			51 to 60 points	6 (six) (H	Ξ)
					61 to 70 points	7 (seven) (1	D)
					71 to 80 points	8 (eight) (C)
					81 to 90 points	9 (nine) (B)
					91 to 100 points	10 (ten) (A)
19.		pproval and er n the next year		the final exam/ or	60% active participa	ntion at the course	
20.		of teaching / stu			English		
21.		measuring / n		the quality of	Standardized motor	tests observation su	rvev
21.	teaching	measuring / n	101111011111	the quality of	Self-evaluation	icsis, obsci vation, su	ivey
22.	Literature				Jen evaluation		
22.	22.1	Racio	literatur	Δ			
	22.1	No	Auth		Title	Publisher	Year
		1.		Auerbach	Medicine for the	. Elsevier	2008
		1.	1.5.7	Auer bacii	outdoors	. Liseviei	2000
		2.					
		3.					
	22.2		tional lite			T-	
		No	Auth	or	Title	Publisher	Year
		1					
		1.					
		2.					
		3.					

Ann	ex 3	Program of the Course for Integ	rated First and Second cycle			
1.	Title of Cour	se	BASICS OF CLINICAL PRACTI	CE 1		
2.	Code		3MF108112			
3.	Study progra	ım	General medicine			
4.	Organizer of	the Study program	Goce Delce University - Stip			
			Faculty of Medical Sciences			
5.	Level (first, s	econd or third cycle of studies)	Integrated First and Second cy	/cle		
6.	Academic ye	ar/ semester	II Semester – first year	7.	Number of ECTS	5
8.	Professor (s)		Andon Cibisev			
			Biljana Ilievska			
			Ivica Smokovski			
			Valentina Velkovska Nakova			
			Gordana Kamceva			
			Ivana Trajkovska			
			Igor Nikolov			
9.	Requirement	ts for enrolling the course	None			

10.		course (comp						
						ical history, all parts of i		
						communication. Student		
						They will be able to follo		
						ment - discharge letter.		dge that
11						d by practical exercises.		
11.		the course (p			er):			
		roduction to munication w						
		mmunication w						
		proach to the				rtive		
		dical history	patient		е регорес			
		dical history	in specific si	tuations				
		amnesis						
		e course of th	e disease					
		eatment						
10		charge letter				1 1		
12.				ses, seminar	s, researc	h and practical activitie	S	
13.		nt of available of available t		. O . A E . A E . 1	ΕO			
14. 15.	Forms of tea		15.1			cal, contact teaching,	30 hours	
15.	learning acti		13.1	e-learning		cai, contact teaching,	30 Hours	
	icai iiiig atti	VILLES				l, laboratory,	30 hours	
			15.2			rs, team work)	Joniours	
16.	Other forms	of activities	16.1	Projects	,	-,	0 hours	
			16.2	Individual	work		45 hours	
			16.3	Home lear			45 hours	
17.	Method of as	ssessment						
	17.1	Tests / Oral	Exam			70 scores		
	17.2	Individual v	vork (presen	itation, proje	ects,	10 scores		
		practical)						
	17.3	Activity and		n		20 scores	T	
18.	Assessment	Criteria (sco	res/ points)			up to 50 points	5 (five). (F)	
						51 to 60 points	6 (six) (E)	
						61 to 70 points	7 (seven) (D)	
						71 to 80 points	8 (eight) (C)	
						81 to 90 points	9 (nine) (B)	
10	Ciamatuus au			a final arran	. /	91 to 100 points	10 (ten) (A)	
19.		proval and end the next year		ie imai exam	1/ 01	60% active participat	ion at the course	
20.		teaching / st				English		
21.		measuring / r		he quality of	•		ests, observation, surve	v
21.	teaching	incubuling / 1	inomicorning c	ire quarry or		Self-evaluation	observation, surve	. 9
							gained through the att	endance
							on on the theoretical, p	
						work, individual activ	ities and tests.	
22.	Literature	т						
	22.1		c literature		I		T =	T
		No	Author		Title		Publisher	Year
		1.	M.Vavl			Clinical Practice	UGD-Stip	2014
		2.	M.Vavl			ım with general	UGD-Stip	2015
			G.Kamo	eva		nes for clinical ation of an		
						ation of an stically ill patient		
		3.	Rohert	E.Rakel		nedicine textbook	Tabernakul	2010
	22.2		itional litera		I TOTTILLY I		1 abel lianai	2010
		No	Author			Title	Publisher	Year
		1.		imivski with	1	Internal Medicine	University Ss. Ciril	2004
			associa			Clinical Trials -	and Methodius –	
						Internal	Skopje	
						Propedeutics		
		2.	K.P.Set	uraman		Communication	Tabernakul	2009
						skills in clinical		
						practice		

Anne	ov 3 D	rogram of	the Course	for Integrated First a	nd Second cycle	
1.	Title of Course	ogram or		ANATOMY 3	na secona cycle	
2.	Code			3MF100412		
3.	Study program			Medicine		
4.	Organizer of the	Study pro		Goce Delce University	z _ Stin	
4.	Organizer of the	Study pro		Faculty of Medical Sc		
5.	Level (first, seco	nd or thir		Integrated First and		
э.	of studies)	iiu oi uiii (i cycle	integrated rirst and .	second cycle	
6.	Academic year/	aamaatan	+	III Comportor gogono	l year 7.	Number of ECTS 7
	Professor (s)	semester		III Semester – second Associate Professor S	5	Number of EC15 /
8.						
9.	Requirements for	r enroiling	gtne	recorded first semest	er	
10	course				1 (
10.	Aims of the cour	se (compe	tences): Of	ojectives of the curric	ulum (competencies): Ir	ntroduction to the anatomy of the
					s system and their inter	connection.
11.	Contents of the o					
			e curriculu	m:		
		ogia of the				
		gia of the				
			head and n			
				d and neck		
		-		nead and neck		
				omenclature ratios		
				vacional areas		
				copography ratios		
		ocrine glan		watan in haad and	ale	
				ystem in head and ne		
				y system in head and	песк	
			n, eye and e		Cilcana diniciana a Calcana	
					libers division of the nei	rvous system, ventricular system
				in, midbrain,		
	■ 15. bet	ween brai	n, a brain n	nembranes of brain		
	- 1 M:-1.		1			
		gia of the				
		ogia of the	neck head and n	al-		
				d and neck		
				nead and neck		
	• 6. Kran		inal nerves			
			ligactiva cu	stem located in the h	and and nock	
				system located in the		
				parts, structure, func raphy ratios	uon	
				n, anatomy of orbit		
				n, anatomy of orbit ips with other agenci	20	
				uch and balance	LO .	
				uch and balance em-anatomical divisi	on function	
12.				es, individual consult		
13.	Total amount of			co, marviuuai cuiisuii	anons with students	
14.	Distribution of a			3+2+1 / 36+36+12 /	nor wook	
15.	Forms of teaching		15.1		cal, contact teaching,	36 hours
13.			13.1	,	cai, contact teaching,	30 11001 5
	learning activitie	:5		e-learning Exercises (practica	l laborate	24 hours
			15 2	**		24 HOUIS
1.0	Oth or form	ablastet :	15.2	theoretical, semina	rs, team workj	house
16.	Other forms of a	ctivities	16.1	Projects		hours
			16.2	Individual work		1 hours
			16.3	Home learning		4 hours
17.	Method of assess				r	
		sts / Oral I			70 scores	
	17.2 Inc	lividual w	ork (preser	ntation, projects,	10 scores	
		ictical)				
		tivity and i	participatio	on	20 scores	
	17.3 Act	ivity and				
18.	Assessment Crit				up to 50 points	5 (five). (F)
18.					up to 50 points 51 to 60 points	5 (five). (F) 6 (six) (E)

				71 to 80 points	8 (eight) (C)	
				81 to 90 points	9 (nine) (B)	
				91 to 100 points	10 (ten) (A)	
19.	Signature approva	l and entr	ance to the final exam/ or	Attendance at lectures	at least 7 (60%) con	tinuous
	transition in the ne	ext year		checks lectures and 10	tutorials for Final Ex	am Scored
				42 points and laid con	tinuous checks.	
20.	Language of teachi	ng / study	7	English		
21.	Methods of measur	ring / moi	nitoring the quality of	Standardized motor te	sts, observation, surv	vey .
	teaching			Self-evaluation		-
22.	Literature					
	22.1	Basic li	terature			
		No	Author	Title	Publisher	Year
		1.	A. Kargovska-Klisarova, J	Anatomy of human-	educational work	
			Joseph	General part		
		2.	A. Kargovska-Klisarova, J	Anatomy of man-	educational work	
			Joseph	Head and Neck		
		3.	A. Kargovska-Klisarova, J	Anatomy of man-		
			Joseph	central nervous		
				system and sensory		
				organs		
	22.2	Additio	nal literature			
		No	Author	Title	Publisher	Year
		1	Cincellations	A		
		1.	Sinelnikov	Anatomical Atlas of	•	
		-	DN N	man (I, II, III part)		-
		2.	F.N. Netter	Atlas of human		
		-		anatomy		
		3.				

Anne	Drogram o	f the Cour	se for Integrated Fi	ret and Co	cond cyclo		
1.	Title of Course	i the coul	HISTOLOGY AND E				
2.	Code		3MF104012	HDINIOLO	- G1 =		
3.	Study program		General medicine				
4.	Organizer of the Study pro	ogram	Goce Delce Universi	ty – Stip			
			Faculty of Medical S	ciences			
5.	Level (first, second or thir	d cycle	Integrated First and	Second cy	/cle		
6.	of studies) Academic year/ semester		III Semester –	7.	Number of E	CTC	7
0.	Academic year / semester		second year	/.	Number of E	613	/
8.	Professor (s)		Dzengis Jasar, Vanja	Filinovsk	i Katerina Kub	elka-Sahit	
9.	Requirements for enrolling	g the	Dzengio jasar, vanja	Timpovan	i, naterina nab	cina babit	
	course	8					
10.	Aims of the course (compo	etences): T	he purpose of this co	urse is to	introduce stude	ents to the histo	ological structure
	of all tissues and organ sy	stems. By s	tudying this course, s	students v	vill gain basic k	nowledge in the	e field of Histology
	and Embryology as an ine	vitable pre	requisite for masteri	ng some s	ubsequent subj	ects or module	s, such as
	Pathology and Pathophysi	iology. Āll t	he theoretical knowl	edge in th	is course, the st	udents check a	nd determine with
	practical laboratory work	and exerci	ses.	_			
11.	Contents of the course (pe	er 15 weeks	s per semester):				
	 Cardiovascular system 						
	• RES						
	 Respiratory system 						
	 Urogenital system 						
	 Nervous system 						
	 Endocrine system 						
12.	Methods of learning: theo				ninar work		
13.	Total amount of available	time: 7 EC	ΓS x 30 hours = 210 h	iours			
14.	Distribution of available to	ime: 45+45					
15.	Forms of teaching /	15.1	Lectures / theoret	ical, conta	ict teaching,	45 hours	
	learning activities		e-learning				
			Exercises (practic		.	45 hours	
		15.2	theoretical, semin	ars, team	work)		
16.	Other forms of activities	16.1	Projects			15 hours	
		16.2	Individual work			15 hours	
		16.3	Home learning		·	60 hours	

17.	Method of	f assessme	ent				
	17.1	Tests	/ Oral Ex	am	70 scores		
	17.2	Individuo practio		k (presentation, projects,	10 scores		
	17.3	Activit	ty and pa	articipation	20 scores		
18.	Assessme				up to 50 points	5 (five). (I	7)
					51 to 60 points	6 (six) (E	<u>;</u>)
					61 to 70 points	7 (seven) (I))
					71 to 80 points	8 (eight) (C)
					81 to 90 points	9 (nine) (1	B)
					91 to 100 points	10 (ten) (A	A)
19.	Signature transition			ance to the final exam/ or	60% active participat	ion at the course	
20.	Language	of teachin	g / stud	V	English		
21.				nitoring the quality of	Standardized motor to Self-evaluation	ests, observation, su	rvey
22.	Literature)					
	22.1		Basic li	terature			
			No	Author	Title	Publisher	Year
			1.	Luiz Carlos Junqueira, Jose Carneiro	Basic Histology : Text and Atlas 10th edition Edition	Lange	2002
			2.	Mecher	Junqueira's Basic Histology: Text and Atlas 15th Edition	Lange	2018
			3.				
	22.2			nal literature	T	•	
			No	Author	Title	Publisher	Year
			1.	Authorized lectures			
			2.				
			3.				

Anne	ov 3	Program of the Cours	se for Integrated First and Se	cond	cycle	
1.	Title of Cours		PHYSIOLOGY 1	conu	cycle	
2.	Code		3MF103612			
3.	Study progra	m	General medicine			
4.	Organizer of	the Study program	Goce Delcev University – St Faculty of Medical Sciences			
5.	Level (first, so of studies)	econd or third cycle	Integrated First and Second	d cycl	le	
6.	Academic yea	ar/ semester	III Semester – second year	7.	Number of ECTS	7
8.	Professor (s)		Ass prof Zoran Handjiski			
9.	Requirement course	s for enrolling the	None			
10.	The students		e knowledge of basic principation of organs and organic sy			logy. The accent is
11.	IntrentPhyMerpote	ironment siology of cell: The cell nbrane physiology, ner	es per semester): r: functional organization of land its functions; Genetic converse and muscle: Transport of the intials; Excitation and contractions.	ntrol subs	of protein synthesis and tances through cell memb	cell reproduction orane; membrane

- The heart: The heart as pump and function of heart valves; Rhythmical excitation of the heart; Normal electrocardiogram
- The circulation: Biophysics of pressure, flow and resistance; Vascular distensibility an functions of the arterial an venous systems; The microcirculation and lymphatic system; Local and humoral control of tissue blood flow; Nervous regulation of the circulation and rapid control of arterial pressure; Role of the kidneys in long-term control of arterial pressure; Cardiac output, venous return and their regulation; Muscle blood flow and cardiac output during exercise; Coronary circulation; heart valves and heart sounds
- Blood cells, immunity and blood coagulation: Red blood cells; Resistance of the body to infection (leukocytes, granulocytes, monocyte-macrophage system and inflammation); Resistance to body to infection (immunity); Blood types; Hemostasis and blood coagulation
- Respiration: Pulmonary ventilation; Pulmonary circulation; Principles of gas exchange; Transport of oxygen and carbon dioxide in blood and tissue fluids; Regulation of respiration
- Nervous system: general principles and sensory physiology; Organization of the nervous system, basic functions of synapses and neurotransmitters; Sensory receptors, neuronal circuits for processing information; Somatic sensation I – general organisation, the tactile and position senses; Somatic sensation II – pain, headache and thermal sensations
- Methods of learning: lectures, consultations, single-handed learning, participating in handwork of theme, exercise in 12. laboratory (demonstration, individual, participating in group)

13. Total amount of available time: 7 ECTS x 30 hours = 210 hours

13.	Total amount of available time. 7 LC13 x 30 hours – 210 hours
14.	Distribution of available time: $45 + 45 + 15 + 15 + 90 = 210$ hours

15.	Forms of teaching /	15.1	Lectures / theoretical, contact teaching,	45 hours
	learning activities		e-learning (15 weeks x 3 hours)	
			Exercises (practical, laboratory,	45 hours
		15.2	theoretical, seminars, team work) 15	
			weeks x 3 hours	
16.	Other forms of activities	16.1	Projects	15 hours
		16.2	Individual work	15 hours
		16.3	Home learning	90 hours
17.	Method of assessment			

17. Method of assessmen	t
-------------------------	---

1/.	Method of a	issessillent			
	17.1	Tests (2 colloquies x 20 scores)	40 scores		
	17.2	Individual work (presentation, projects,	10 scores		
		practical)			
	17.3	Activity and participation	20 scores		
	17.4	Final exam (theoretical and practical)	30 scores		
18.	Assessment	Criteria (scores/ points)	up to 50 points	5 (five). (F)	
			51 to 60 points	6 (six) (E)	
			61 to 70 points	7 (seven) (D)	
			71 to 80 points	8 (eight) (C)	
			81 to 90 points	9 (nine) (B)	
			91 to 100 points	10 (ten) (A)	
19.	Signature a	pproval and entrance to the final exam/ or	60% active participa	tion at the course	
	transition in	n the next year			
20.	Language o	f teaching / study	English		
21.	Methods of	measuring / monitoring the quality of	Standardized motor tests, observation, survey		
	teaching		Self-evaluation		

	teaching			Self-evaluation		
22.	Literature					
	22.1	Basic lit	erature			
		No	Author	Title	Publisher	Year
		1.	Arthur C. Guyton and Hall	Textbook of Medical Physiology	Elsevier	2016
		2.	Rodney A. Rhoades, David R.Bell	Medical Physiology	Wolters Kluwer	2018
		3.	Dee Unglaub Silverthorn	Human Physiology	Pearson Education Limitied	2019
	22.2	Additional literature				
		No	Author	Title	Publisher	Year
		1.	Walter F. Boron; Emile L. Boulpaep	Medical Physiology	Elsevier	2017
		2.	Gilian Pocock, Christopher D,. Richards, David A. Richards	Human Physiology	Oxford University Press	2018
		3.				
		·		·	·	

Annex	3	Program o	f the Cours	e for Integrated First	and Second cycle	e		
1.		Course		BASICS OF CLINICA				
2.	Code			3MF108212				
3.		rogram		General medicine				
4.	_	zer of the Stud	y	Goce Delce Universit				
	progra			Faculty of Medical Sciences				
5.		first, second o f studies)	r third	Integrated First and Second cycle				
6.	Acaden	nic year/ seme	ester	III Semester – seco year	ond 7.	Number of ECTS	4	
8.	Profess	Andon Cibisev Biljana Ilievska Ivica Smokovski Valentina Velkovska Nakova Gordana Kamceva Ivana Trajkovska Igor Nikolov						
9.	_	ements for en	rolling	None				
10.	Aims of	rse f the course (c	ompetence	s):				
	The ain patient abdomediagnos	n of this cours examination l en, urogenital stic methods u	e is to prov by separate and locome ised in mak	ide students with the e systems: head and no otor system. They will ing a diagnosis of a pa	eck, thoracic che also have the o articular disease	ood clinical examination, book est with lungs, heart and blook pportunity to become family. All theoretical knowledge	ood vessel, liar with the basic	
11.			e (per 15 w	validated by practical veeks per semester): ination	exercises.			
		Vital signs	Sicai Caili	mation				
	•			nation - chest and lun				
	-	Special phy:	sical exami	nation - heart and blo	od vessels			
	•			nation - abdomen				
	•			nation - urogenital sy:				
	-			nation - locomotor sys	stem			
10	3.6.3	Basic diagno						
12.				xercises, seminars, re	search and prac	tical activities		
13.		mount of avail						
14. 15.				0+15+15+30+30=120 Lectures / theoret		ahina 20 hawa		
15.		of teaching /	15.1	,	icai, contact tead	ching, 30 hours		
	learnin	g activities		e-learning	al laboratore 15 hours			
			15.2	Exercises (practical theoretical, seminal		15 hours		
16.	Other f	orms of	16.1	Projects	ars, team work)	15 hours		
10.	activiti		16.2	Individual work		30 hours		
	activiti	CS	16.3	Home learning		30 hours		
17.	Method	l of	10.0	monne rear ming		30 110013		
	assessr							
	17.1	Tests / Oral	Exam		70 scores			
	17.2			entation, projects,	10 scores			
		practical)	(1.000	, F, 5000)				
i	17.3 Activity and participation		ion	20 scores		20 scores		
ļ	Assessment Criteria (scores/ points)		i particibati					
18.						ts 5 (five).	(F)	
18.					up to 50 point 51 to 60 point		(F) (E)	
18.					up to 50 poin 51 to 60 poin	ts 6 (six)	(E)	
18.					up to 50 poin 51 to 60 poin 61 to 70 poin	ts 6 (six) (ts 7 (seven)	(E) (D)	
18.					up to 50 poin 51 to 60 poin 61 to 70 poin 71 to 80 poin	ts 6 (six) (ts 7 (seven) ts 8 (eight)	(E) (D) (C)	
18.					up to 50 poin 51 to 60 poin 61 to 70 poin 71 to 80 poin 81 to 90 poin	ts 6 (six) (ts 7 (seven) ts 8 (eight) ts 9 (nine)	(E) (D) (C) (B)	
19.	Assessi	nent Criteria (scores/ po		up to 50 poin 51 to 60 poin 61 to 70 poin 71 to 80 poin 81 to 90 poin 91 to 100 poin	ts 6 (six) (ts 7 (seven) ts 8 (eight) ts 9 (nine)	(E) (D) (C)	
19. 20.	Assessi Signatu or tran Langua	nent Criteria (are approval a sition in the no ge of teaching	scores/ po nd entrance ext year :/ study	e to the final exam/	up to 50 poin 51 to 60 poin 61 to 70 poin 71 to 80 poin 81 to 90 poin 91 to 100 poi 60% active p	ts 6 (six) (seven) ts 7 (seven) ts 8 (eight) ts 9 (nine) ints 10 (ten) articipation at the course	(E) (D) (C) (B) (A)	
19.	Assessi Signatu or tran Langua	nent Criteria (are approval a sition in the no ge of teaching	scores/ po nd entrance ext year :/ study	ints)	up to 50 poin 51 to 60 poin 61 to 70 poin 71 to 80 poin 81 to 90 poin 91 to 100 poi 60% active p	ts 6 (six) (ts 7 (seven) ts 8 (eight) ts 9 (nine) ints 10 (ten)	(E) (D) (C) (B) (A)	

				active participation or	Minimum of 42points gained through the attendand active participation on the theoretical, practical wo individual activities and tests.				
22.	Literature								
	22.1	Basic literature							
		No	Author	Title	Publisher	Year			
		1.	M.Vavlukis	Basic of Clinical Practice	UGD-Stip	2014			
		2.	M.Vavlukis G.Kamceva	Practicum with general guidelines for clinical examination of an internistically ill patient	UGD-Stip	2015			
		3.	G.Kamceva M.Vavlukis	Clinical Trial - Internist Aspects of Adult Patient Examination	UGD-Stip	2019			
	22.2	Addit	onal literature	•					
		No	Author	Title	Publisher	Year			
		1.	V.Serafimivski with associates	Internal Medicine Clinical Trials - Internal Propedeutics	University Ss. Ciril and Methodius – Skopje	2004			
		2.	K.P.Seturaman	Communication skills in clinical practice	Tabernakul	2009			
		3.							

Anne	x 3 Program of the Cours	se for Integrated First and Second cycle			
1.	Title of Course	BASIC BIOCHEMISTRY 2			
2.	Code	3MF100912			
3.	Study program	General medicine			
4.	Organizer of the Study program	Goce Delcev University – Stip			
		Faculty of Medical Sciences			
5.	Level (first, second or third cycle	Integrated First and Second cycle			
	of studies)				
6.	Academic year/ semester	III Semester – second year 7. Number of ECTS 5			
8.	Professor (s)	Prof. Dr. Tatjana Ruskovska			
		Prof. Dr. Biljana Gjorgjeska			
9.	Requirements for enrolling the	None			
	course				
10.	Aims of the course (competences):				
		s to provide students with basic understanding of cell signaling, and detailed			
		bioenergetics. Students will learn in detail the metabolism of carbohydrates in			
		ions, which will be followed by detailed elaboration on cellular lipid metabolism			
		teins. The final lectures will be focused on metabolism of proteins, amino acids,			
	porphyrins and nucleic acids.				
		arse, the focus is on the laboratory techniques and methods that are applied in the			
		$as\ fractional\ centrifugation,\ electrophores is,\ chromatography,\ spectrophotometric$			
		proteins, and some of the biomarkers for DNA damage and oxidative stress.			
11.	Contents of the course (per 15 wee	eks per semester):			
	• <u>Lectures</u>				
		branes and transport.			
	o Basic principles of biosignaling.				
		bioenergetics and metabolism. Glycolysis.			
		s and pentose phosphate pathway.			
		of metabolic regulation.			
	Metabolism of the Matabolism of the Matabol				
		formations of pyruvate. The citric acid cycle.			
		olloquium			
		espiratory chain and oxidative phosphorylation. riglycerides and beta-oxidation of fatty acids. Biosynthesis of ketones.			
		fatty acids, phospholipids and sterols. Prostaglandins.			
	o Biosynthesis of	iatty acius, phospholipius and sterois. Prostagianums.			

- Metabolism of plasma lipoproteins.
- o Metabolism of proteins. Metabolism of amino acids.
- o Metabolism of porphyrins. Metabolism of nucleotides.
 - Second colloquium

Laboratory work

- o Enzyme cofactors.
- cell biochemistry as an experimental science specificity of the research in cell biochemistry.
- Basic methods and techniques in the cell biochemistry research.
- o Hydrodynamic methods in cell biochemistry.
- o Separation and analysis of plasma lipoproteins.
- o Principles of agarose gel electrophoresis.
- Horizontal electrophoresis of plasma LDL fraction on agarose gel.
 - First colloquium
- o Principles of the methods for evaluation of DNA damage.
- o Horizontal electrophoresis of single cells on agarose gel Comet assay.
- Spectrophotometric and immunochemistry methods for analysis of proteins.
- o Separation of proteins with SDS-PAGE electrophoresis.
- o Chromatographic methods for analysis of biological samples.
- Biomarkers of oxidative stress. Analysis of the level of lipid peroxidation and the total antioxidant status.
 - Practical exam

12. Methods of learning:

<u>Lectures</u>

- o Lectures with large group of students.
- o Multimedia.
- o E-learning.
- Individual consultations
- Consultations with small groups of students

Laboratory work

- o Laboratory practical work, with small groups of students
- o Seminars, with larger groups of students
- Practical exam.

	o Practical exam.								
13.	Total amount of available time: 5 credits x 30 hours = 150 hours								
14.			lable time: 30+30+0+45+45 = 150 hours (2+2+0)						
15.	Forms of t		15.1	Lectures / theoret	ical, contact teaching,	30 hours			
	learning a	ctivities		e-learning					
				Exercises (practical		30 hours			
			15.2	theoretical, semina	ars, team work)				
16.	Other forn	ns of	16.1	Projects		0 hours			
	activities		16.2	Individual work		45 hours			
			16.3	Home learning		45 hours			
17.		assessment			T				
1	17.1	Tests / Ora			70 scores				
	17.2		work (prese	entation, projects,	10 scores				
		practical)							
	17.3	Activity and			20 scores				
18.	Assessmer	nt Criteria (sco	ores/ point	s)	up to 50 points	5 (five). (F)			
					51 to 60 points	6 (six) (E)			
					61 to 70 points	7 (seven) (D)			
					71 to 80 points	8 (eight) (C)			
					81 to 90 points	9 (nine) (B)			
					91 to 100 points	10 (ten) (A)			
19.				the final exam/ or	60% active participation at the course				
		in the next ye							
20.		of teaching / s			English				
21.		f measuring /	monitoring	g the quality of	Standardized tests, observation, survey				
	teaching				Self-evaluation				
22.	Literature								
	22.1 Basic literat								
		No	Autho		Title	Publisher	Year		
		1.		l L. Nelson and	LEHNINGER,	W.H. Freeman and	2017		
			Micha	nel M. Cox	Principles of	Company, New			
					biochemistry	York			
	22.2	Add	litional liter	ature					

No	Author	Title	Publisher	Year
1.	Primary literature – Relevant scientific papers			

Anne	ex 3 Program o	f the Cours	e for Integrated First a	nd Second cy	rcle				
1.	Title of Course	the dours	PHYSIOLOGY 2	ina becoma ey	Cic				
2.	Code		3MF103212						
3.	Study program		General medicine						
4.	Organizer of the Study pr	ogram	Goce Delcev University – Stip Faculty of Medical Sciences						
5.	Level (first, second or thing of studies)	rd cycle	Integrated First and Second cycle						
6.	Academic year/ semester		IV Semester – second 7. Number of ECTS 7						
8.	Professor (s)		yea Ass prof Zoran Handj	iski					
9.	Requirements for enrolling	ng the	None	10111					
	course	0							
10.	Aims of the course (comp The students should be a on the characteristics and	equired the			e field of human	physiology. The	accent is put		
12.	formation by the reabsorption and concentration; I mechanisms for Nervous system neurophysiolog Nervous system reflexes; Corticate overall motor contraction of the system of the system overall motor of the system over and motivational fluid and brain in the system over a system ov	e kidneys; (d secretion denal regula control of - Special s y of vision) - Motor and al and brain ontrol; Cere al mechanis ves); Autor netabolism physiology od in the al astrointesti temperatu otein metab etics and m and reprodu l'hyroid me tonin, calci ons of the a nancy and y ares, consul on, individu	y: General principles (ratimentary tract; Secret nal tract are regulation: Metabolism; The liver as an actabolic rate; Body teruction: Introduction to etabolic hormones; Adam and phosphate metabolic nale and function of pilactation; Fetal and new lations, single-handed and, participating in ground traction in ground size.	enal blood floand dilution; cium, phosphracellular fluiof vision, recursiology: Motor function; Coal functions of mbic system and adrenal motility, nervory functions of carbologan; Dietar mperature reendocrinologenocortical fabolism, vitaineal gland; Fonatal physical learning, papers	ow and their con Regulation of EC ate and magnesid volume; Acid-beptor and neural all Senses (taste a for functions of the hypothal medulla; Cerebratous control and be of the alimentary balances (regugulation gy; Pituitary hornores; Insulimin D, bone, tee emale physiolog	trol; Renal tubula F osmolality and um; Integration hase regulation function, central n smell) he spinal cord and rebellum and basing and memory lamus); States od all blood flow, cert colood circulation by tract; Digestion mation of ATP; L lation of feeding mones and their n and glucagon; I th; Reproductive y before pregnar	ar d sodium of renal d cord sal ganglia to g Behavioral d brain activity ebrospinal a); Propulsion and aipid control by the Parathyroid and and and and and and and and and an		
13.	Total amount of available								
14.	Distribution of available t								
15.	Forms of teaching / learning activities	15.1	Lectures / theoretice-learning (15 wee	ks x 3 hours)	eaching,	45 hours			
		15.2	Exercises (practica theoretical, semina weeks x 3 hours		k) 15	45 hours			
16.	Other forms of activities	16.1	Projects			15 hours			
		16.2	Individual work			15 hours			
45	36 (1 1 6	16.3	Home learning			90 hours	3		
17.	Method of assessment	1 2	0	40					
	17.1 Tests (2 colloquies x 20 scores)			40 scores					
	17.2 Individual work (presentation, projects, practical) 10 scores								

	17.3	Activity and p	articipation	20 scores				
	17.4	Final exam (t	neoretical and practical)	30 scores				
18.	Assessmen	it Criteria (scores	/ points)	up to 50 points	5 (five). (F)			
				51 to 60 points 6 (six) (E)				
				61 to 70 points 7 (seven) (D)				
				71 to 80 points 8 (eight) (C)				
				81 to 90 points				
				91 to 100 points	10 (ten) (A)			
19.	Signature a	approval and ent	rance to the final exam/ or	60% active participat	ion at the course			
		in the next year						
20.	Language o	of teaching / stud	y	English				
21.	Methods of	f measuring / mo	nitoring the quality of	Standardized motor to	ests, observation, surve	ey		
	teaching			Self-evaluation .				
22.	Literature							
	22.1	Basic l	iterature					
		No	Author	Title	Publisher	Year		
		1.	Arthur C. Guyton and Hall	Textbook of Medical Physiology	Elsevier	2016		
		2.	Rodney A. Rhoades, David R.Bell	Medical Physiology	Wolters Kluwer	2018		
		3.	Dee Unglaub Silverthorn	Human Physiology	Pearson Education Limitied	2019		
	22.2	Additio	onal literature	•	•			
		No	Author	Title	Publisher	Year		
		1.	Walter F. Boron; Emile L. Boulpaep	Medical Physiology	Elsevier	2017		
		2.	Gilian Pocock, Christopher D,. Richards, David A. Richards	Human Physiology	Oxford University Press	2018		
		3.						

Anne	ex No.3 Program of the Course for i	integrated First and Second cycle
1.	Title of the Course	MICROBIOLOGY 1
2.	Code	3MF101412
3.	Study Program	General medicine
4.	Organizer of the study program (unit or	University "Goce Delchev" Shtip
	institute, Faculty, department)	Faculty of Medical sciences
		Department of Microbiology
5.	Cycle (first, second and third cycle)	Integrated First and Second cycle
6.	Academic year / semester	IV Semester – second 7. Number of credits 6
		year
8.	Professor (s)	Prof. d-r Vaso Taleski, MD, D-r Sc.
		Ass. prof. d-r Golubinka Boshevska, MD, D-r Sc.
9.	Requirements for enrolment the Course	None
10.	Purposes of the curriculum (competencie	
		roduce and enable students to acquire theoretical, practical knowledge, skills
	and competences in field of general micro	obiology
11.	Contents of the course program	
		d development of microbiology science, most important inventions,
		isms. Classification of bacteria, taxonomic categories, nomenclature, size,
	shape and disposition of ba	
		of bacterial cells: capsule, cell wall, cytoplasmic membrane, cytoplasm and
	cytoplasmic inclusions, fim 3. Bacterial spores, bacterial	movement. Conditions for growth and multiplication, growth phases,
	bacterial colonies	movement. Conditions for growth and multiplication, growth phases,
		acteria, metabolism, mechanism of bacterial feeding, metabolism of energy:
	fermentation, respiration,	
		is. DNA replication. Nucleic acids decomposition
		al variations: phenotype and genotype variations
		, transformation, transduction
		ms. Ecology of microorganisms. Associations between microorganisms.
		porganisms and high live organisms.
	110001ation between inter-	

- 9. Pathogenicity and virulence. Nonspecific and specific immunity in humans. Antigen-antibody reactions. Immunotherapy and immune-prophylaxis.
- 10. Sterilization and disinfection. Antibiotics and chemotherapeutics. Antibiotics groups according mechanism of action. Microorganism's resistance toward antibiotics. Side effects of chemotherapeutics.
- 11. Infections and infective diseases. Microbiological aspects of hospital infections.
- 12. Morphology, structure, classification and multiplication of viruses, fungi and parasites

Contents of practical program

- 1. Principles of safety work in microbiology laboratory
- 2. Sampling, packaging and delivering samples for microbiology testing
- 3. Microscope and microscopic examinations of microorganisms (light microscope, fluorescence microscope, electron microscope)
- 4. Staining of microorganisms (Gram, Giemsa, Ziehl-Neelsen, Cold staining of mycobacterium)
- 5. Culture media and bacterial cultivation
- 6. Identification of bacteria (classical biochemical reactions, automatic systems for identification
- 7. Antibiotic susceptibility testing of bacteria/antibiogram (classical diffusion and dilution methods, automatic systems, E-test)

180 hours

- 8. Classical serologic reactions. Rapid tests
- 9. Immune-enzymes methods (ELISA, VIDAS)
- 10. Hemocultures
- 11. Sterilization
- 12. Disinfection

Total available time

12. Learning methods:

13.

Methods of oral and visual learning/presentations and practical work in the lab.

4.4	D			2 2 4 1				
14.		ution of available time		3+2+1 per week				
15.	Forms	of teaching / learning activities	15.1.	lectures / theoretical - conta e-teaching		40 hours		
			15.2.	theoretical and practical exe e-exams, preparation of indo seminar work		40 hours		
16.	Други	форми на активности	16.1.	Project tasks		10 hours		
			16.2.	Individual tasks		10 hours		
			16.3.	Home learning		60 hours		
17.	Method	l of assessment		1				
	17.1.	Tests			40 points			
	17.2.	Seminars (paper / project - pres	sentation: v	: written and/or oral) 10 points				
	17.3.	Activity and participation durin	g lecturing		10 points			
	17.4	Activity and participation durin	g lab practi	cal work	10 points			
18.	Assessr	nent Criteria (points / score)		p 50 points	5 (five)	(F)		
				1 to 60 points	6 (six)	(E)		
				1 to 70 points	7 (seven)			
				1 to 80 points	8 (eight)	(C)		
				1 to 90 points	9 (nine)	(B)		
				1 to 100 points	10 (ten)	(A)		
19.	Signatu exam	re requirement and passing the fir	W	equirements for signature: provork.		• .		
				Requirements for final exam: at				
				olloquia, presence at lecturing,				
				paper/project - presentation. (
				onnected. For students with po				
				professor could organize additional colloquium with maximum of 10 additional points				
20.	Langua	ge of teaching / study		nglish				
21.	Method	of monitoring the quality of teach		tudent evaluation				
			S	elf-evaluation				

Ann	ex 3 Program of the Co	urse for Integrated First and	l Second	cycle				
1.	Title of Course	IMMUNOLOGY						
2.	Code	3MF100712						
3.	Study program	General medicine						
4.	Organizer of the Study program	Goce Delce University -						
		Faculty of Medical Scien						
5.	Level (first, second or third cycle	Integrated First and Se	cond cycle	e				
	of studies)							
6.	Academic year/ semester	IV Semester – second	7.	Number of ECTS	4			
		year						
8.	Professor (s)	Sotirija Duvlis						
9.	Requirements for enrolling the	None						
	course							
10.	Aims of the course (competences		.11.1					
	By mastering the curriculum con							
	components of the immune syste							
	and defends the organism from r							
	components of the immune syste involved in the immune system a							
	as processed, humoral and cellula							
	hypersensitivity reactions, autoir							
	response to tumors and the immi			onarciono (congenicar an	a acquireaj, illiliane			
	Through hands-on instruction stu			methods of				
	examining the immunology and p							
	precipitation, electrophoresis, flo		munocyt	ochemistry				
	immunofluorescent staining, bas			·				
	determination of blood groups	-						
11.	Contents of the course							
	Theoretical instruction:							
	1. Introduction to Immunology							
	2. Cells, tissues and organs involv							
	3. Inborn and acquired immunity	•						
	4. Antigens and antibodies	_						
	5. Antibody acquisition, generation							
	6. Cellular immunity and humora							
	7. Cytokines and complement sys							
	8. Immune tolerance. Autoimmur 9. Immune response to non-infec							
	10. Hypersensitivity reactions	nous antigens. Chancellor.						
	11. Immunodeficiency							
	Transplant and transplant antige	ns						
	Practical instruction:							
	1. Introduction to immunology, g	eneral terms and definition	5.					
	2. Immune system cells and their							
	3. Lymphoid organs and tissues.							
	4. Microscopic preparations of ly	mphoid tissues and organs a	and recog	nition of				
	their structural components.							
	5. Techniques for isolating and pr		dies. Imn	nunochemical and Immur	no-Physical-Chemical			
	Methods (Column Chromatograp							
	Chromatography, Gel Filtration, A							
	6. Different types of immune reac		ractions.	Reactions				
	of agglutination. Determination of							
	7. Immunoprecipitation reactions							
	8. Immunoelectrophoresis. Nothe							
	9. Immunoassays using a marker		oflueres -	ant staining				
		rescence. Immunocytochemistry and immunofluorescent staining.						
	11. Principles of flow cytometry.	oc wave of gotting them						
12.	12. Vaccines - characteristics, typ		m hasa d	loarning and				
12.	Methods of learning: Lectures, gr problem-based learning, auditory							
	project tasks.	and laboratory exercises, I	nuividual	assigninents,				
13.	Total amount of available time: 4	FCTS v 30 hours - 120 hou	re					
10.	1 otal allount of available tille. T	2010 A 30 Hours - 120 Hou						

Distribution of available time: 30+15+15+10+50 = 120 hours

15.	Forms of tea		15.1	e-learning	cal, contact teaching,	30 hours		
			15.2	Exercises (practical theoretical, seminal		15 hours		
16.	Other forms	of activities	16.1	Projects	,	15 hours		
			16.2	Individual work		10 hours		
			16.3	Home learning		50 hours		
17.	Method of a	ssessment	ssment					
	17.1	Tests / Oral	Exam		70 scores			
	17.2	Individual w	ork (presei	ntation, projects,	10 scores			
		practical)	•					
	17.3	Activity and	participation	on	20 scores			
18.	Assessment	Criteria (scor	es/ points)		up to 50 points	5 (five). (F)		
					51 to 60 points	6 (six) (E)		
					61 to 70 points	7 (seven) (D)		
					71 to 80 points	8 (eight) (C)		
				81 to 90 points	9 (nine) (B)			
				91 to 100 points	10 (ten) (A)			
19.		pproval and ern the next year		ne final exam/ or	60% active participation at the course			
20.	Language of	f teaching / stu	ıdy		English			
21.		measuring / n		he quality of		ests, observation, surve	У	
22.	Literature							
	22.1 Basic literature							
		No	Author	•	Title	Publisher	Year	
		1.		as J. Kindt, <u>Barbara</u> orne, <u>Richard A.</u> <u>y</u>	Kuby	W. H. Freeman & Company; 6th edition (August 15, 2006 bloackwell)	2006	
		2.		Chapel,Mansel y, Siraj Misbah, Neil en	Essentials of Clinical Immunology	Wiley & sons	2014	
	22.2	Addi	tional litera					
		No	Author	•	Title	Publisher	Year	
		1.		D. (ed) Saunders	Immunoassay Handbook (4th ed.).	The Elsevier Science Ltd.	2013	
	2.		Abbas, Pillai. S	A., Lichtman, A.H., S.	Basic Immunology: Functions and disoders of the immune system (4thed)	Elsevier, Philadelphia	2012	

Anne	ex 3	Program of the Cours	e for Integrated First and Second o	ycle			
1.	Title of Cours	se	PHARMACOLOGY AND TOXICOLOGY 1				
2.	Code		3MF113012				
3.	Study progra	m	General medicine				
4.	Organizer of	the Study program	Goce Delce University – Stip Faculty of Medical Sciences				
5.	Level (first, sof studies)	econd or third cycle	Integrated First and Second cycle				
6.	Academic yea	ar/ semester	IV Semester – second year	7.	Number of ECTS	4	
8.	Professor (s)		Marija Darkovska Serafimovska				
9.	Requirement	s for enrolling the	None				
	course						
10.							
11.	Contents of the	he course (per 15 week	s per semester):				

Basic pharmacology Pharmacokinetics Absorption of medicines Distribution of medicines Elimination of medicines Pharmacodynamics Mechanism of action of medicine Factors that affect the actions of medicines General terms of accumulation and tolerance Interaction between medicines Side effects of medicines Addiction to medicines Methods of learning: Lectures, exercises, project assignments, discussion, debate and individual assignments 12. Total amount of available time: 4 EKTC x 30 = 120 hours Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) 15. Forms of teaching / 15.1 Lectures / theoretical, contact teaching, e-30 hours learning activities learning (15 weeks x 2 = 30)Exercises (practical, laboratory, theoretical, 15 hours 15.2 seminars, team work) (15 weeks x 1 = 15)Other forms of activities 15 hours 16. 16.1 Projects Individual work 16.2 30 hours Home learning 30 hours 16.3 Method of assessment 17. 17.1 Tests / Oral Exam 70 scores Individual work (presentation, projects, 17.2 10 scores practical) 17.3 Activity and participation 20 scores 18. 5 (five). (F) Assessment Criteria (scores/points) up to 50 points 51 to 60 points 6 (six) (E) 61 to 70 points 7 (D) (seven) 71 to 80 points 8 (eight) (C) 81 to 90 points 9 (nine) (B) 91 to 100 points 10 (ten) (A) Signature approval and entrance to the final exam/ or 60% active participation at the course transition in the next year 20. Language of teaching / study Methods of measuring / monitoring the quality of Standardized motor tests, observation, survey Self-evaluation teaching 22. Literature Basic literature 22.1 Publisher No Author Title Year Rang HP, Dale MM, Ritter PHARMACOLOGY Churchill London, 1. JM, Moore PK Livingstone 2005 2. 3. Additional literature 22.2 Title Publisher No Author Year 1. Goodman & Gilman's The Pharmacological last edition basis of Therapeutics; 2.

Anne	ex 3	Program of	f the Cours	se for Integrated First	and Second	cvcle		
1.	Title of Cou		the dour	HYGIENE WITH ME	DICAL ECC	LOGY		
2.	Code			3MF120912				
3.	Study progr	ram		General medicine				
4.		f the Study pro	ogram	Goce Delce Universit	y – Stip			
			_	Faculty of Medical So	ciences			
5.	Level (first,	second or thir	d cycle	Integrated First and	Second cyc	le		
	of studies)							
6.	Academic y	ear/ semester		IV Semester – secon	d 7.	Number of	f ECTS	4
				year				
8.	Professor (s			Associate professor	Nevenka Ve	elickova PhD		
9.		nts for enrollin	ng the	None				
4.0	course							
10.		course (comp		1	1 1 6	.1		
				udents to gain basic kr	iowledge fr	om the area o	of medical ecolo	ogy, the protection
		onment and h		about the besis sons	nta and nui	asinles of bre	riana and antin	anmantal haalth
				about the basic conce ne practice at personal				
				the importance of hav				
				water and how can as				es and a caulicili
11.		the course pro		and now can as	soo the sta	cao or water	P. 0 4 1010111	
		itroduction to						
				vironment risks				
				ealth aspect of air pollu	ıtion			
				health aspect of water		d sanitation		
				face water and swimn			er	
				ist; public health aspec				
		ıblic health ası						
				izing and nonionizing	radiation			
		ealth-ecologica						
				nmunal facilities				
	• Ec	lucation facilit	ies hygien	e				
	• He	ealth facilities	hygiene					
12.	Methods of							
				ch and practical activit	ies			
13.		nt of available	time:					
	120	. 20 . 20)						
1.4	(30+15+15	+30+30) 1 of available t						
14.	2+1+1 / per		ime:					
1 5	, ,		151	Loctures / theoret	ical contac	t toaching	30 hours	
15.	Forms of tellearning act		15.1	Lectures / theoret	icai, contac	t teaching,	30 Hours	
	rear ming act			e-learning Exercises (practical	al laborato	w	15 hours	
			15.2	theoretical, semina			15 110015	
16.	Other forms	s of activities	16.1	Projects	aro, coulli W	····)	15 hours	
10.			16.2	Individual work			30 hours	
			16.3	Home learning			30 hours	
17.	Method of a	issessment		,			1	
	17.1	Tests / Oral	Exam		70 score	S		
	17.2			entation, projects,	10 score			
		practical)	Cr- 20	, r -,,				
	17.3	Activity and	participat	tion	20 score	S		
18.		t Criteria (scor			up to 50		5 (five).	(F)
		•	. •		51 to 60		6 (six)	(E)
					61 to 70		7 (seven)	(D)
					71 to 80		8 (eight)	(C)
					81 to 90		9 (nine)	(B)
					91 to 10		10 (ten)	(A)
19.	Signature a	pproval and er	ntrance to	the final exam/ or			tion at the cour	
<u></u>	transition in	n the next year	•		27,0 source participation at the course			
20.	Language o	f teaching / st	udy		English		<u> </u>	
21.	Methods of	measuring / n	nonitoring	the quality of	Standard	ized motor to	ests, observatio	on, survev
-1.	teaching	casaring / II		, and quality of	Self-eval		Joseph Joseph Vacio	, our voy
1		eaching Sen-evaluation						

22.	Literature									
	22.1	Basic lit	erature							
		No	Author	Title	Publisher	Year				
		1.	Prof. P. Gatseva, MD, PhD	Hygiene and Medical Ecology	Lax Book	2016				
		2.	Herman Koren, Michael S. Bisesi	Handbook of CRC Press Environmental Health, Two Volume Set 4th Edition		2018				
		3.	Hoffman D. J. Et al.	Handbook of Ecotoxicology. 2nd ed.	Lewis Publishers, A CRC Press Company	2003				
	22.2	Additio	Additional literature							
		No	Author	Title	Publisher	Year				
		1.	Shibanov S.E.	General Hygiene and Medical Ecology, TEXTBOOK for Students of Medical Faculties	Ministry of Education & Science of The Russian Federation Crimean Federal University	2018				
		2.	Show LM, Kwong TC et al.	The clinical toxicology laboratory: contemporary practice of Poisoning evaluation.	. Washington: AACC Press,	2001				

	Program o	f the Course	for I	ntegrated First and S	econd cycle		
1.	Title of Course	Social Medici	ne				
2.	Code						
3.	Study program	General Med	icine	;			
4.	Organizer of the Study	Goce Delce l	Jniv	ersity – Stip			
	program	m Faculty of Medical Sciences					
5.	Level (first, second or	Integrated First and Second cycle					
	third cycle of studies)						
6.	Academic year/	First year/	7.	Number of ECTS	3		
	semester	First or					
		second					
		semester					
8.	Professor (s)	Assistant Pro	fess	or PhD MSc. MD Vale	ntina		
		Simonovska					
9.	Requirements for None						
	enrolling the course						
10	Aims of the course (comp	etences): Getti	ng f	amiliarized with Social	Medicine as a		
	science, organization of H	ealthcare, soc	io-m	edical aspect of health			
11	Contents of the course (pe	•		,			
	Evolution of Social Me	edicine and hea	altho	are			
	2. Factors that impact th		• •				
	3. Analyzing the health of						
	4. Methods for observing			,			
	5. Organization of health			•			
	6. Healthcare and welfar	•	•	• •			
				ses of socio-medical im			
				sferrable diseases – P			
				sferrable diseases – P	ап II		
	10. Characteristics of add						
	11. Characteristics of juve	•	•	practica			
	12. Methods and means in	n nealth-educa	uuON	practice			

12	2 Methods of learning:								
	- in	teractive c	lasses, i	ndividual learni	ng with education	al to	ols, e-lea	arning	
13	Total am	ount of av	ailable ti	me:					
	3 ECTS	* 30 hours	s = 90 ho	ours					
14	Distributi	on of avai	lable time	e:					
-	30+15+0	+30+15 =	90 hours	s (2+1+1)					
15	Forms of		15.1	Lectures / the	oretical, contact			30 hours	
-	teaching	/		teaching, e-le	arning				
	learning	activities		(15 weeks * 2	hours = 30				
				hours)					
				Exercises (pra	actical,			15 hours	
			15.2	laboratory, the	eoretical,				
				seminars, tea	m work)				
				(15 weeks * 1	hour = 15				
				hours)					
16	Other for	ms of	16.1	Projects				0 hours	
	activities		16.2	Individual wor	Individual work			30 hours	
			16.3	Home learning	g			15 hours	
17	Method o	of							
	assessm	ent							
	17.1	Tests / O	ral Exam	า				70 scores	
	17.2	Individua	l work (p	resentation,				10 scores	
		projects,	practical)					
	17.3	Activity a	nd partic	cipation				20 scores	
18	Assessm	ent Criteri	ia (score	s/ points)	up to 50 points	5	(five).	(F)	
					51 to 60 points	6	(six)	(E)	
					61 to 70 points	7	(seven)	(D)	
					71 to 80 points	8	(eight)	(C)	
					81 to 90 points	9	(nine)	(B)	
					91 to 100	10	(ten)	(A)	
					points				
1									

19	Signature app	roval a	nd entrance to the	Attendance of	classes and a m	ninimum	
	final exam/ or	transit	tion in the next year	of 42 points from all pre-exam activities.			
20	Language of t	eachin	g / study			English	
21	Methods of mo	easurir	ng / monitoring the	Standardized mo	otor tests, observ	vation,	
	quality of teac	hing		survey			
				Self-evaluation			
22	Literature						
	22.1	Basic	literature				
		No	Author	Title	Publisher	Year	
		1.	S. Sharma	Preventive and	Elsevier	2005	
				social			
				medicine			
		2.	Doncho Donev,	Social	UKIM, Faculty	2013	
			Mome Spasovski	Medicine	of Medicine		
			and others.				
		3.					
	22.2	Additi	onal literature				
		No	Author	Title	Publisher	Year	
		1.	Doncho Donev,	Pavlekovic,		2007	
			Gordana	Lijana Zaletel			
			Pavlekovic, Lijana	Krage Health			
			Zaletel Krage	promotion and			
				disease			
				prevention			
		2.					
		3.					

	Program of	the Course	e for Integrated Firs	et and Second cycle					
1.	Title of Course	the course	MEDICAL ETHICS						
2.	Code		3MF121712						
3.	Study program		General medicine						
4.	Organizer of the Study pro	ogram	Goce Delcev Unive	rsity – Stip					
			Faculty of Medical						
5.	Level (first, second or thin	d cycle	Integrated First ar	d Second cycle					
	of studies)			I = I					
6.	Academic year/ semester		The second	7. Number of ECTS	2				
0	Duafagan (a)		semester Ass. Prof Natasha	Davida					
8. 9.	Professor (s) Requirements for enrollir	og tho	None	Daveneva					
9.	course	ig tile	None						
10.			ntroduction into the	elementary principles o	of ethics and the relationship between				
11	Contents of the course (n	1 C al							
11.	Contents of the course (po	er 15 week	s per semester):						
	Theoretical Consideration								
	Decision Making, Fallibilit			orthiness in Medicine					
	Doctors and Their Patient			hility					
	The Ongoing Dialectic bet The Physician as Citizen	ween Auto	nomy and Respons	Dility					
	Physicians and Patients in	a Pluralist	World						
	Risk Taking: Health Profe								
	Organ Donation								
	Problems in the Care of th		lly Ill						
	Problems at the Beginning								
	Problems of Macro-Alloca								
	"Solving" Ethical Problem Medical negligance	S							
	Medical negligance								
12.	Methods of learning: Lect								
	Laborat Project		e 15 h (15 weeks x1	.n=15n)					
		dent task	15h						
		udying 1							
		, 0							
13.	Total amount of available								
14.	Distribution of available t	ime: 15+15							
15.	Forms of teaching /	15.1		etical, contact teaching,	15 hours				
	learning activities		e-learning		171				
		15.2	Exercises (pract		15 hours				
16.	Other forms of activities	15.2 16.1	Projects	nars, team work)	0 hours				
10.	Other forms of activities	16.2	Individual work		15 hours				
		16.3	Home learning		15 hours				
17.	Method of assessment	10.0	1 Home learning		10 110410				
-	17.1 Tests / Oral	Exam		70 scores					
			ntation, projects,	10 scores					
	practical)								
	17.3 Activity and participation 20 scores								
18.	Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)								
	51 to 60 points 6 (six) (E)								
	61 to 70 points 7 (seven) (D)								
	71 to 80 points 8 (eight) (C)								
				81 to 90 points	9 (nine) (B)				
10	Cignotum annus1 1	1+10 to 2 a to 1	ho final array / -	91 to 100 points	10 (ten) (A)				
19.	Signature approval and entransition in the next year		ne final exam/ or	60% active particip	pation at the course				
20	Language of teaching / str			English					
20. 21.	Methods of measuring / n	uuy nonitoring	the quality of		tasts observation survey				
41.		ioiiitoi iiig	uie quality oi	Standardized motor tests, observation, survey					
	teaching Self-evaluation								

22.	Literature									
	22.1	Basic literature								
		No	Author	Title	Publisher	Year				
		1.	Erich H. Loewy	Textbook of medical ethics	Springer Plenum Medical book company New York and London	1989				
	22.2	Additional literature								
		No	Author	Title	Publisher	Year				
		1.								
		2.								
		3.								

Annex 3 Program of the Course for Integrated First and Second cycle 1. Title of Course 9ATHOLOGY 1 2. Code 3MF102812 3. Study program General medicine 4. Organizer of the Study program Geore Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester V Semester – 7. Number of ECTS 6 third year 8. Professor (s) Dzengis Jasar, Vanja Filipovski, Katerina Kubelka-Sabit 9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): • Theoretical instruction: • Cellular damage, adaptations and death • Hemodynamic disorders, thrombosis and shock • Acute and chronic inflammation • Tissue regeneration and reparation • Specific inflammation • Immunopathology • Neoplasia • Pathology of the cardiovascular system • Practical instruction:	
1. Title of Course 2. Code 3 MF102812 3. Study program General medicine 4. Organizer of the Study program Goco Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester 7. Number of ECTS 6 hthird year 8. Professor (s) 9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological cand tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): 1 Theoretical instruction: 2 Cellular damage, adaptations and death 3 Hemodynamic disorders, thrombosis and shock 4 Acute and chronic inflammation 5 Specific inflammation 6 Immunopathology 7 Neoplasia 7 Pathology of the cardiovascular system 8 Practical instruction: 9 Requirements for enrolling the cardiovascular system 9 Practical instruction:	
1. Title of Course 2. Code 3 MF102812 3. Study program General medicine 4. Organizer of the Study program Goco Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester 7. Number of ECTS 6 hthird year 8. Professor (s) 9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological cand tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): 1 Theoretical instruction: 2 Cellular damage, adaptations and death 3 Hemodynamic disorders, thrombosis and shock 4 Acute and chronic inflammation 5 Specific inflammation 6 Immunopathology 7 Neoplasia 7 Pathology of the cardiovascular system 8 Practical instruction: 9 Requirements for enrolling the cardiovascular system 9 Practical instruction:	
2. Code 3 MF102812 3. Study program General medicine 4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester V Semester – Third year Taught lectures from Anatomy 3 and Histology and Embriok course 7. Number of ECTS 6 8. Professor (s) Dzengis Jasar, Vanja Filipovski, Katerina Kubelka-Sabit Taught lectures from Anatomy 3 and Histology and Embriok course Taught lectures from Anatomy 3 and Histology and Embriok course and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): • Theoretical instruction: • Cellular damage, adaptations and death • Hemodynamic disorders, thrombosis and shock • Acute and chronic inflammation • Tissue regeneration and reparation • Specific inflammation • Immunopathology • Neoplasia • Pathology of the cardiovascular system • Practical instruction:	
3. Study program General medicine 4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester V Semester – Third year 8. Professor (s) Dzengis Jasar, Vanja Filipovski, Katerina Kubelka-Sabit 9. Requirements for enrolling the course Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): • Theoretical instruction: • Cellular damage, adaptations and death • Hemodynamic disorders, thrombosis and shock • Acute and chronic inflammation • Tissue regeneration and reparation • Specific inflammation • Immunopathology • Neoplasia • Pathology of the cardiovascular system • Practical instruction:	
4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester V Semester – third year 8. Professor (s) Peagis Jasar, Vanja Filipovski, Katerina Kubelka-Sabit 9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	
Faculty of Medical Sciences Level (first, second or third cycle of studies) Academic year/ semester V Semester - third year Requirements for enrolling the course Taught lectures from Anatomy 3 and Histology and Embriolation and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	
5. Level (first, second or third cycle of studies) 6. Academic year/ semester V Semester - Third year 7. Number of ECTS 6 Requirements for enrolling the course Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	
6. Academic year/ semester	
8. Professor (s) Dzengis Jasar, Vanja Filipovski, Katerina Kubelka-Sabit 9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological cand tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	
9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological of and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	
9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological of and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	
10. Aims of the course (competences): Introduction to the etiology, pathogenesis and morphological cand tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester): Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction:	ogy 2
and tissues of the organism under the influence of pathological agents and their diagnostics using routine macroscopic, microscopic and modern molecular techniques. Introduction to the basic cellular and tissue responses to damage caused by various causes. 11. Contents of the course (per 15 weeks per semester):	
 Theoretical instruction: Cellular damage, adaptations and death Hemodynamic disorders, thrombosis and shock Acute and chronic inflammation Tissue regeneration and reparation Specific inflammation Immunopathology Neoplasia Pathology of the cardiovascular system Practical instruction: 	
 Mastering the skills of macroscopic and microscopic analysis and diagnostics of diseases operating material. Mastering the techniques of autopsy and determining the cause of death. 	s on biopsy and
12. Methods of learning: theoretical instruction, practical exercises, seminar work	
13. Total amount of available time: 6 ECTS x 30 hours = 180 hours	
14. Distribution of available time: 45+30+15+15+75 = 180 hours	
15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e-learning 45 hours	
Exercises (practical, laboratory, 30 hours theoretical, seminars, team work)	
16. Other forms of activities 16.1 Projects 15 hours	
16.2 Individual work 15 hours	
16.3 Home learning	75 hours
17. Method of assessment	
17.1 Tests / Oral Exam 70 scores	
17.2 Individual work (presentation, projects, practical) 10 scores	
17.3 Activity and participation 20 scores	
18. Assessment Criteria (scores/ points) up to 50 points 5 (five).	
51 to 60 points 6 (six)	(F)

	1			(1 + 70	7 () (D)	
				61 to 70 points	7 (seven) (D)	
				71 to 80 points	8 (eight) (C)	
				81 to 90 points	9 (nine) (B)	
				91 to 100 points	10 (ten) (A)	
19.	Signature approval	and entra	ance to the final exam/ or	60% active participat	ion at the course	
	transition in the ne	xt year				
20.	Language of teaching	ng / study	7	English		
21.	Methods of measur	ing / mor	nitoring the quality of	Standardized motor to	ests, observation, surve	ey
	teaching			Self-evaluation		•
22.	Literature					
	22.1	Basic lit	erature	•		
		No	Author	Title	Publisher	Year
	1.		Kumar, Abbas, Fausto, Aster	Robbins and Cotran Pathologic Basis of Disease 9thEdition	Elsevier	2014
		2.	Eduard K. Klatt	Robbins and Cotran Atlas of Pathology	Saunders, Elsevier	2009
		3.	Authorized lectures			
	22.2	Additio	nal literature			
		No	Author	Title	Publisher	Year
		1.	Kumar, Abbas, Aster	Robbins Basic Pathology 10 th edition	Elsevier	2017
		2.				
		3.				

Anne	ex 3 Program of the Cour	se for Integrated Fir	st and	Second cycle			
1.	Title of Course	PATHOPHYSIOL					
2.	Code	3MF103112					
3.	Study program	General Medicine					
4.	Organizer of the Study program	Goce Delchev Univ	versity	y – Shtip			
		Faculty of Medical		•			
5.	Level (first, second or third cycle of studies)	Integrated First a	nd Sec	ond cycle			
6.	Academic year/semester	V Semester – third year	7.	Number of ECTS	6		
8.	Professor (s)	Ass. Prof. Milka Kl	inche	va			
9.	Course prerequisites	None					
10.	Aims of the course (competences):						
	Learning about the general pathopl	ysiological processo	es in tl	ne organism			
11.	Contents of the course (per 15 week Theoretical units 1. Adaption of the cell, damage an 2. Hemodynamic disorders 3. Thrombosis 4. Inflammation and reparation, f 5. Shock and types of shock, septi 6. Neoplasia 7. Genetic control of the cellular f 8. Genetic and congenital disorde 9. Stress, acute and chronic stress 10. Disruption of the flow of water 11. Disruption of the electrolytes 12. Acid and base imbalance Practical units 1. Introduction 2. Cell damage 3. Etiological factors 4. Pathophysiology of bleeding an	ever c shock function and inherita	ance		nonary embolism		

Coagulation cascade, coagulation status, interpretation of results Pathophysiology of acute vs. chronic inflammation, acute response to infections, examples: bacterial pneumonia vs. atherosclerosis 7. Shock, septic vs. cardiogenic shock vs hemorrhagic shock Molecular bases for the occurrence of neoplasms, etiology of the different types of neoplasms Pathophysiology of select genetic diseases: osteogenesis, imperfecta, phenylketonuria, Down syndrome 10. Blood Gas analyses: Water and electrolyte imbalances 11. Reading blood gas analyses: Acid and base imbalance 12. Practicing artery vs vein blood gas analyses Learning methods: Interactive teaching, lectures, exercises, practical exercises 13. Total amount of available time: 6 ECTS x 30 hours = 180 hours Distribution of available time: 30+30+15+45+60=180 hours (2+2+1) Forms of teaching / 15.1 Lectures / theoretical, (15 weeks x 2 30 hours learning activities hours) Exercises (15 weeks x 2 hours) 30 hours 15.2 16. Other forms of activities 16.1 Projects 15 hours Individual work 16.2 45 hours 16.3 Home learning 60 hours 17. Method of assessment 17.1 Tests / Oral Exam 40 points 17.2 Individual work (presentation, written 10 points and verbal) 17.3 Activity and participation 30 points 17.4 Practical and final exam 30 points 18. Assessment Criteria (scores/points) up to 50 points 5 (five). (F) 51 to 60 points 6 (six) (E) 61 to 70 points 7 (seven) (D) 71 to 80 points 8 (eight) (C) 81 to 90 points 9 (nine) (B) 91 to 100 points 10 (ten) (A) 19. Signature approval and entrance to the final exam/ or Attendance and at least 42 points from the pre-exam transition in the next year activities Language of teaching / study Macedonian Methods of measuring / monitoring the quality of Self-evaluation teaching 22. Literature 22.1 Basic literature No Author Title Publisher Year Gamulin S. Marusic M. et Pathophysiology Sixth edition -2005 1. Medical publishing Zagreb 2. Stefan J McFee and Pathophysiology of Project of the 4th edition, diseases and Government of RM September William Genong introduction to clinical for translation of 2002, medicine books translated in 2011 Doc. Dr. Milka Klincheva Goce Delchev 3. General pathologic 2016 physiology - script University Shtip 22.2 Additional literature Title Publisher No Author Year 1. Isaac Tadjer et al. General pathologic Medical book, physiology Belgrade 2.

Anne	ex 3 Program of the Course for integr	rated First and Second cycle					
1.	Title of the Course	MICROBIOLOGY 2					
2.	Code	3MF101512					
3.	Study Program	Medicine					
4.	Organizer of the study program (unit or	University "Goce Delchev" Shtip					
	institute, Faculty, department)	Faculty of Medical sciences					
	moutate, racarey, acparement	Department of Microbiology					
5.	Cycle (first, second and third cycle)	Integrated First and Second cycle					
6.	Academic year / semester	V Semester – third year 7. Number of credits					
٥.	Trouversite year y consector	6.0					
8.	Professor (s)	Prof. Vaso Taleski, MD, D-r Sc.					
0.	110100001 (0)	Ass. prof. d-r Golubinka Boshevska, MD, D-r Sc.					
9.	Requirements for enrolment the Course	Completed attendance at course Microbiology and parasitology 1.					
10.	Purposes of the curriculum (competencies):	dompteted attendance at coarse merosiology and parasitology in					
10.		ce and enable students to acquire theoretical, practical knowledge, skills					
		ogy, to be introduced with most important bacteria, viruses, fungi and					
		osis from classical through advanced methods of isolation and					
	identification including some molecular diagr						
11.	Content of the course program:	tootic memous.					
	I. BACTERIOLOGY						
	1. Gram positive aerobic cocci:						
		nidis, S. saprofiticus) Streptococcus (S. pyogenes, S. agalactiae, S.					
	faecalis, S. pneumoniae)	(e- p) - 6 - 1 - 6 - 1 - 1 - 1 - 1 - 1 - 1 - 1					
	Gram positive anaerobic cocci: (Pep	tostreptococcus, Peptococcus)					
		ria meningitidis, Neisseria gonorrhoeae)					
	2. Gram negative rods (Hemophilus in						
		i, Klebsiella, Shigella, Salmonella, Proteus, Yersinia, Enterobacter, Serratia,					
	Providencia, Morganella, Citrobacte						
		lla, Francisella, Campylobacter, Helicobacter pylori, Vibrio					
	4. Gram negative anaerobic rods: Bacto						
	Gram positive anaerobic rods: Clost						
	Gram positive sporeforming rods : 1						
	Gram positive non-sporeforming roo						
	5. Spiral bacteria (Spirochaetaceae): T						
	6. Actynomyces, Nocardia						
	Mycobacterium (M. tuberculosis, M	I. bovis, M. leprae), Chlamydiaceae (Chlamydia trachomatis),					
	Mycoplasma, Ureaplasma, Gardnere	lla vaginalis, Rickettsia, Coxiell					
	II. VIROLOGY						
	7. Importance of viral infections, Diagr	nostic methods for viral infections					
	Classification of viruses						
	8. DNA viruses: Herpsviridae, Herpes v	rirusi (Herpes simplex 1,2, Virus varicella zoster, Cytomegalovirus, EB-					
	virus)						
	Hepadnaviridae (Hepatitis B virus)						
	Human papilloma virus						
	Adenoviridae (Adenovirus)						
	Poxviridae (Variola virus)						
	RNA – viruses:						
	9. RNA viruses:						
	Hepatitis C virus, Rubella virus, HIV,						
	Poliovirus, Coxackie viruses, Hepatit						
		A, B, Virus influenzae A subtype H5N1, H1N1					
	Paramyxoviridae (Virus mumps)						
	Morbilli virus, Lyssa virus, Rota viru	S					
	III. MICOLOGY						
	10. Special mycology						
	Surface-cutaneous mycosses	Total construction					
	Dermathophytes (Trichophyton, Mic	crosporum, Epiaermopnyton)					
	Systematic mycosses						
	Biphasic fungi (Dimorphic fungi)						
	Oportunistic fungi	oformana Candida albicana)					
	Pathogenic yeasts (Cryptococcus ne	oformans, Candida albicans)					
	Aspergillus						
	IV. PARASITOLOGY						
ì	11. Entamoeba hystolytica	nonce veginalie Leichmania Turmanasana)					
	riagenates (Giardia iambha, Trichon	nonas vaginalis, Leishmania, Trypanosoma)					

Sporosoa (Toxoplasma gondii, Plasmodium)

12. Helmintes (Taenia solium, Taenia saginata, Echinococcus, Hymenolepis nana, Shistosoma, Fasciola hepatica, Ancylostoma duodenale, Necator americanus, Strongyloides stercoralis, Ascaris lumbricoides, Enterobius vermicularis, Trichuris trichiura, Trichinela spiralis, Loa Loa, Wuchereria bancrofti)

Contents of practical program

- 1. Microbiological diagnosis of gram-positive cocci
- 2. Microbiological diagnosis of gram-negative cocci
- 3. Microbiological diagnosis of Enteropathogens
- 4. Microbiological diagnosis of Hemophilus influenzae, Bordetella, Legionella
- 5. Microbiological diagnosis of anaerobe gram positive and anaerobe gram negative rods
- 6. Microbiological diagnosis of gram-positive spore forming and gram-positive non-spore forming bacteria
- 7. Microbiological diagnosis of spiral bacteria
- 8. Microbiological diagnosis of Mycobacterium, Chlamydia trachomatis, Mycoplasma, Ureaplasma, Gardnerella vaginalis
- 9. Microbiological diagnosis of some DNA viruses
- 10. Microbiological diagnosis of some RNA viruses
- 11. Microbiological diagnosis of fungi and yeasts
- 12. Microbiological diagnosis of parasites
- 12. Learning methods:

 $Methods\ of\ oral\ and\ visual\ learning/presentations\ and\ practical\ work\ in\ the\ lab.$

13.	Total av	vailable time		180 hours				
14.		ution of available time		3+2+ 1 per week				
15.	Forms	of teaching / learning activities	15.1.	lectures / theoretical - continue-teaching	act teaching,	40 hours		
	15.2.		15.2.	theoretical and practical exe e-exams, preparation of ind work		30 hours		
16.	Other fo	orms of activities	16.1.	Project tasks		10 hours		
			16.2.	Individual tasks		10 hours		
			16.3.	Home learning		70 hours		
17.	Method	l of assessment		1		1		
	17.1.	Tests			40 points			
	17.2.	Seminars (paper / project - pres	sentation: v	written and/or oral)	10 points			
	17.3.	Activity and participation durin	g lecturing					
	17.4	Activity and participation durin	g lab pract	ical work				
	17.5	Final exam			30 points			
18.	Assessr	nent Criteria (points / score)		p 50 points		(F)		
				1 to 60 points		E)		
				1 to 70 points		D)		
				1 to 80 points		(C)		
				11 to 90 points		(B)		
10	GI .			91 to 100 points 10 (ten)		(A)		
19.		re approval and entrance to the find or transition in the next year	nai A	attendance and at least 42 poin	ts from the pre-exar	n activities		
20.		ge of teaching / study	Е	English				
21.	Method	of monitoring the quality of teach		tudent evaluation,				
			S	Self-evaluation				

Anne	ov 3	Ţ	Program of the Cou	rse fo	or Integrated First and	d Second cv	cle
1.	Title of Course		INTERNAL PROPI			a become cy	cie
2.	Code		3MF108112	DEC	1100 1		
3.	Study program		General Medicine				
4.	Organizer of the Study pro		Goce Delce Univers	sitv –	Stin		
1.	organizer of the study pro		Faculty of Medical				
5.	Level (first, second or third		Integrated First cy				
0.	of studies)	a cycle	integrated i not cy	cic			
6.	Academic year/ semester		V Semester –	7.	Number of ECTS		5
	, , , , , , , , , , , , , , , , , , , ,		third year				
8.	Professor (s)		Andon Cibisev Biljana Ilievska Po Ivica Smokovski	poska			
			Valentina Velkovsl	ra Na	zova		
			Gordana Kamceva				
			Ivana Trajkovska				
			Igor Nikoĺov				
9.	Requirements for enrolling		None				
	course						
10.	Aims of the course (competer The purpose of this course familiar with the structural anamnesis, general physical diagnostic methods used to subject, will be checked an	is to provious to be to	ne patient's medica cion and special ph internal diseases. A ed with practical e	l hist ysical All the	ory. The students will examination by patic coretical knowledge t	overcome ent systems	the skill of taking , as well as the
11.	Contents of the course (pe Introduction to In Doctor-patient Medical history Anamnesis General physica Special physica Non-invasive an	nternal Pro communica - structura al examinat I examinati	pedeutics ition l parts ion	ls for	internal diseases		
12.	Methods of learning: Lectu	res, practio	es, seminars, resea	arch a	nd practical activities	5	
13.	Total amount of available				rs		
14.	Distribution of available ti	me: 30+30-					
15.	Forms of teaching / learning activities	15.1	e-learning		contact teaching,		30 hours
			Exercises (practi				30 hours
		15.2	theoretical, semi	nars,	team work)		
	Other forms of activities	16.1	Projects				0 hours
	<u> </u>	16.2	Individual work				45 hours
		16.3	Home learning				45 hours
17.	Method of assessment						
	17.1 Tests / Oral I						40/30 scores
		ork (presen	itation, projects,				10 scores
	practical)						
10	17.3 Activity and		on	_		F (C)	20 scores
18.	Assessment Criteria (score	es/ points)		_	up to 50 points	5 (five).	(F)
				<u> </u>	51 to 60 points	6 (six)	(E)
1				<u> </u>	61 to 70 points	7 (seven	
				<u> </u>	71 to 80 points	8 (eight)	` /
1				<u> </u>	81 to 90 points	9 (nine)	(B)
4.0	Ci		C1 /	_	91 to 100 points	10 (ten)	(A)
19.	Signature approval and en	trance to th	ie final exam/ or		60	% active p	articipation at the course
20	transition in the next year	1		_			n 1:1
20.	Language of teaching / stu	ay	h a a a liter - C		randandina James	ata al	English
21.	Methods of measuring / m teaching	onitoring t	ne quality of	S N		gained thro	ough the attendance and
	* * *			a	ctive participation on	the theore	tical, practical work,
22.	Literature						

22.1	Basic lit	erature			
No Author		Author	Title	Publisher	Year
	1.	G. Kamceva M. Vavlukis	Clinical Examination - Internal Aspects of Adult Patient Examination	UGD- Stip	2019
	2.	G. Kamceva M. Vavlukis	Practicum with general guidelines for clinical examination for internistically ill patient	UGD-Stip	2015
	3.	V.Serafimovski with associates	Cliical examination in Internal Medicine- Internal Propedeutics	UKIM- Skopje	2004
22.2	Additio	nal literature			
	No	Author	Title	Publisher	Year
	1.	Lj. Georgievska Ismail	Electrocardiography	Skopje	2008
	2.	D. Dubin	Basic of Electrocardiography	Tabernacul	2010
	3.				

Annex 3											
Title of Course	Anne	ex 3 Program of	the Course	for Integrated Fir	st and	Second cycle					
3. Study program General medicine Goce Delce University - Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) Integrated First and Second cycle of studies) 6. Academic year/ semester V Semester - T. Number of ECTS 4 8. Professor (s) Marija Darkovska Serafimovska 9. Requirements for enrolling the course Marija Darkovska Serafimovska 10. Alims of the course (competences): To introduce students with special pharmacology of the organic systems and to provide a review of the basic characteristics of most frequent medicines that are now used in everyday practice 11. Contents of the course (per 15 weeks per semester):	1.	Title of Course									
4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences	2.	Code		3MF113112							
Faculty of Medical Sciences	3.	Study program		General medicine							
Level (first, second or third cycle of studies)	4.	Organizer of the Study pro	ogram	Goce Delce Unive	rsity –	Stip					
of studies) 6. Academic year/ semester											
6. Academic year/ semester	5.		d cycle	Integrated First a	nd Sec	ond cycle					
8. Professor (s) Marija Darkovska Serafimovska 9. Requirements for enrolling the course 10. Aims of the course (competences): 10. To introduce students with special pharmacology of the organic systems and to provide a review of the basic characteristics of most frequent medicines that are now used in everyday practice 11. Contents of the course (per 15 weeks per semester): • Pharmacology of CNS (neurohumoral transmission, anxiolytics and hypnotics, antiepileptics, antiparkinsonian medicines and neuroleptics) • Pharmacology of CNS (antiepiressants, general anesthetics, local anesthetics, analgesics and relaxants) • Pharmacology of the autonomous nervous system (physiology of ANS, cholinergic and anticholinergic drugs) • Pharmacology of the autonomous nervous system (adrenergic agonists, adrenergic blockers, histamine and antihistamines, agonists and antagonists of serotonin) • Pharmacology of the cardiovascular system • Pharmacology of the respiratory system 5. • Pharmacology of digestiven system • Antimicrobials • Hormones and vitamins • Pharmacology of chemotherapy agents • Toxicology 12. Methods of learning: Lectures, exercises, project assignments, discussion, debate and individual assignments 13. Total amount of available time: 4 EKTC x 30 = 120 hours 14. Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) 15. Forms of teaching / learning 15. Lectures / theoretical, contact teaching, e- learning 16. Exercises (practical, laboratory, theoretical, 15 hours											
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9. Requirements for enrolling the course 10. Aims of the course (competences): To introduce students with special pharmacology of the organic systems and to provide a review of the basic characteristics of most frequent medicines that are now used in everyday practice 11. Contents of the course (per 15 weeks per semester): Pharmacology of CNS (neurohumoral transmission, anxiolytics and hypnotics, antiepileptics, antiparkinsonian medicines and neuroleptics) Pharmacology of CNS (antidepressants, general anesthetics, local anesthetics, analgesics and relaxants) Pharmacology of the autonomous nervous system (physiology of ANS, cholinergic and anticholinergic drugs) Pharmacology of the autonomous nervous system (adrenergic agonists, adrenergic blockers, histamine and antihistamines, agonists and antagonists of serotonin) Pharmacology of the cardiovascular system Pharmacology of the respiratory system 5. Pharmacology of the respiratory system 5. Pharmacology of digestiven system Antimicrobials Hormones and vitamins Pharmacology of chemotherapy agents Toxicology 12. Methods of learning: Lectures, exercises, project assignments, discussion, debate and individual assignments Total amount of available time: 4 EKTC x 30 = 120 hours 14. Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) 15. Forms of teaching / learning activities Exercises (practical, laboratory, theoretical, 15 hours											
 course Aims of the course (competences):			-		Serafi	novska					
10. Aims of the course (competences): To introduce students with special pharmacology of the organic systems and to provide a review of the basic characteristics of most frequent medicines that are now used in everyday practice 11. Contents of the course (per 15 weeks per semester): • Pharmacology of CNS (neurohumoral transmission, anxiolytics and hypnotics, antiepileptics, antiparkinsonian medicines and neuroleptics) • Pharmacology of CNS (antidepressants, general anesthetics, local anesthetics, analgesics and relaxants) • Pharmacology of the autonomous nervous system (physiology of ANS, cholinergic and anticholinergic drugs) • Pharmacology of the autonomous nervous system (adrenergic agonists, adrenergic blockers, histamine and antihistamines, agonists and antagonists of serotonin) • Pharmacology of the cardiovascular system • Pharmacology of the respiratory system 5. • Pharmacology of digestiven system • Antimicrobials • Hormones and vitamins • Pharmacology of chemotherapy agents • Toxicology 12. Methods of learning: Lectures, exercises, project assignments, discussion, debate and individual assignments 13. Total amount of available time: 30+15+15+30+15 = 120 hours 14. Distribution of available time: 30+15+15+30+15 = 120 hours 15. Forms of teaching / learning (15 weeks x 2 = 30) Exercises (practical, laboratory, theoretical, 15 hours	9.		g the	None							
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11. Contents of the course (per 15 weeks per semester): Pharmacology of CNS (neurohumoral transmission, anxiolytics and hypnotics, antiepileptics, antiparkinsonian medicines and neuroleptics) Pharmacology of CNS (antidepressants, general anesthetics, local anesthetics, analgesics and relaxants) Pharmacology of the autonomous nervous system (physiology of ANS, cholinergic and anticholinergic drugs) Pharmacology of the autonomous nervous system (adrenergic agonists, adrenergic blockers, histamine and antihistamines, agonists and antagonists of serotonin) Pharmacology of the cardiovascular system Pharmacology of the respiratory system 5. Pharmacology of digestiven system Antimicrobials Hormones and vitamins Pharmacology of chemotherapy agents Toxicology 12. Methods of learning: Lectures, exercises, project assignments, discussion, debate and individual assignments 13. Total amount of available time: 4 EKTC x 30 = 120 hours 14. Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) 15. Forms of teaching / learning (15 weeks x 2 = 30) Exercises (practical, laboratory, theoretical, 15 hours							de a review of the basic				
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 Pharmacology of blood Pharmacology of the respiratory system 5. Pharmacology of digestiven system Antimicrobials Hormones and vitamins Pharmacology of chemotherapy agents Toxicology Methods of learning: Lectures, exercises, project assignments, discussion, debate and individual assignments Total amount of available time: 4 EKTC x 30 = 120 hours Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) Forms of teaching / learning activities Is.1 Lectures / theoretical, contact teaching, e- learning (15 weeks x 2 = 30) Exercises (practical, laboratory, theoretical, 15 hours 					of sero	tonin)					
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13. Total amount of available time: 4 EKTC x 30 = 120 hours 14. Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) 15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e- learning (15 weeks x 2 = 30) Exercises (practical, laboratory, theoretical, 15 hours	12.		ires, exerci	ses, project assign	ments.	discussion, debate and	individual assignments				
14. Distribution of available time: 30+15+15+30+15 = 120 hours (2+1+1) 15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e- learning (15 weeks x 2 = 30) 30 hours Exercises (practical, laboratory, theoretical, 15 hours											
15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e- learning (15 weeks x 2 = 30) Exercises (practical, laboratory, theoretical, 15 hours						(2+1+1)					
learning activities learning	15.						30 hours				
(15 weeks x 2 = 30) Exercises (practical, laboratory, theoretical, 15 hours					,	Ο,					
					: 30)						
15.2 seminars team work)				Exercises (prac	tical, la	boratory, theoretical,	15 hours				
15.2 Schimars, Calli Work)			15.2	seminars, team	work)						

				(15 weeks x 1 = 15	5)				
16.	Other forms of act	ivities	16.1	Projects	,	15 hours			
			16.2	Individual work		30 hours			
			16.3	Home learning		30 hours			
17.	Method of assessm	nent							
	17.1 Tests	/ Oral E	Exam		70 scores				
	17.2 Indiv	ridual wo	ork (prese	entation, projects,	10 scores				
	prac								
	17.3 Activ	rity and p	participati	ion	20 scores				
18.	Assessment Criter	ia (score	s/ points))	up to 50 points	5 (five).	(F)		
					51 to 60 points	6 (six)	(E)		
					61 to 70 points	7 (seven)	(D)		
					71 to 80 points	8 (eight)	(C)		
					81 to 90 points	9 (nine)	(B)		
					91 to 100 points	10 (ten)	(A)		
19.	Signature approva		trance to t	the final exam/ or	60% active participation	n at the course			
	transition in the n								
20.	Language of teach				English				
21.	Methods of measu	ring / mo	onitoring	the quality of	Standardized motor tests, observation, survey				
	teaching				Self-evaluation				
22.	Literature	_							
	22.1		sic literature			1			
		No	Autho		Title	Publisher	Year		
		1.		HP, Dale MM, Ritter	PHARMACOLOGY	Churchill	London,		
			JM, M	oore PK		Livingstone	2005		
		2.							
		3.							
	22.2		ional liter	ature					
	22.2	No	Autho		Title	Publisher	Year		
		110	Tuello	,	1100	1 ubiisiici	I Cai		
		1.	Goodi	man & Gilman's	The Pharmacological		last		
					basis of Therapeutics;		edition		
		2.							
		3.							

Annex 3 Program of the Course for Integrated First and Second cycle						
1.	Title of Course	MEDICAL STATISTICS AND INFORMATICS				
2.	Code	3MF120012				
3.	Study program	General medicine				
4.	Organizer of the Study program	Goce Delce University – Stip				
		Faculty of Medical Sciences				
5.	Level (first, second or third cycle of	Integrated First and Second cycle				
	studies)					
6.	Academic year/ semester	V Semester – third year 7. Number of ECTS 3				
8.	Professor (s)	Prof. D-r Milka Zdravkovska				
9.	Requirements for enrolling the course	None				
10.		ition of knowledge for the basics of medical biostatistics – types of				
		series and their tabular and graphic display. Studying of the basic				
	parametric and non-parametric tests, den					
11.	Contents of the course (per 15 weeks per	semester):				
	Theoretical study units:					
	-	itistics; Statistic sample, statistic units, types and characteristics of the				
		attributive, numeric, spatial and periodic).				
		entory, registration and preparing of reports, method of questionnaire –				
	survey. Tabular and graphic display of tl	an statistics sories				
	 Analysis of structure of series with attributive features (relations, proportions, rates and indexes). Analysis of structure of series with numeric features (arithmetic mean, median, mode). 					
	 Measures of variability: mean deviation, variance, and standard deviation; variation coefficient. 					
	 Hypothesis/ Testing hypothesis; 					
		in the statistics series with attributive features (χ^2 test and coefficient of				

- Analysis of the relations between the statistics series with numeric features (Pearson's coefficient of correlation, Spearman's coefficient of rang correlation and multiple correlation).
- Method of sample; Assessment of the sample's parameters (parameter π and parameter μ).
- Testing of the significance of differences between two arithmetic means and and between two proportions (Student's t-test for independent and dependent samples).
- Examination of the appearances dynamic (trend, sesonic index)
- Vital statistics;
- Terms and sources of demographic statistics.
- Use of informatics in medicine.

Practical study units:

- Plan for statistic research.
- Indexes of dynamics with constant and variable basis. 2.
- Calculating arithmetical mean of non-grouped data, grouped with group interval and grouped without group interval.
- Calculating of median and mode among grouped and non-grouped data.
- Standard deviation among grouped and non-grouped data; 5.
- Coefficient of variation. 6.
- Calculating expected frequencies and χ^2 test. 7.
- Pearson's coefficient of correlation among non-grouped data. 8.
- Assessment of sample's parameters (parameter π and parameter μ). 9.
- 10. Student's t-test among two independent samples and two proportions.
- 11. Linear trend of periodic series (for odd and even number of years);
- 13. Calculating of natality, fertility, mortality, morbidity rates and natural growth of population.
- 14. Presentation of a statistical program.
- 15. Presentation of a statistical program.
- Methods of learning: Lectures, exercises, group discussions methods, individual assignments, seminar papers, presentation of scientific papers;
- 13. Total amount of available time: 90

14.	Distribution of available time: $30+15+0+30+15 = 90$	(2+1+0)

15.	Forms of teaching /	15.1 Lectures / theoretical, contact teaching,		30 hours
	learning activities		e-learning	
			Exercises (practical, laboratory,	15 hours
		15.2	theoretical, seminars, team work)	
16.	Other forms of activities	16.1	Projects	0 hours
		16.2	Individual work	30 hours
		16.3	Home learning	15 hours
17	Method of assessment			

.7 .	Method of assessment

	17.1	Tests / Oral Exam	70 scores		
	17.2	Individual work (presentation, projects,	10 scores		
		practical)			
	17.3	Activity and participation	20 scores		
18.	Assessment	Criteria (scores/ points)	up to 50 points	5 (five).	(F)
			51 to 60 points	6 (six)	(E)
			61 to 70 points	7 (seven)	(D)
			71 to 80 points	8 (eight)	(C)
			81 to 90 points	9 (nine)	(B)
			91 to 100 points	10 (ten)	(A)
19.	Signature ap	pproval and entrance to the final exam/ or	60% active participation	on at the course	
	transition in	the next year			

transition in the next year	
Signature approvaranti entrance to the iniai exami/ of	00% active participation at the cours

Language of teaching / study English Methods of measuring / monitoring the quality of Standardized motor tests, observation, survey Self-evaluation

	teaching				Jen-evaluation		
22.	Literature						
	22.1	Basi	c literature				
		No	Author	Title	;	Publisher	Year
		1.	Zdravkovska Milka	Auth	or's lectures		
		2. Michael J. Campbell, Med		ical Statistics	Wiley;	August	
			David Machin,	АТе	extbook for the Health	4 edion	2007
			Stephen J. Walters	Scie	nces, Fourth Edition.		
		3.	James F.Jekel,	Epic	lemiology,	Tabernakul	2010
			David L.Katz,	bios	tatistics and		
			Joann G.Elmore,	prev	entive medicine		
			Dorothea M G Wild				

Title of Course	Anne	x 3 Program o	f the Cours	e for Integrated Firs	st and	Second cycle			
Study program						J			
Several to the Study program Facility of Medical Sciences	2.	Code		3MF102912	3MF102912				
Faculty of Medical Sciences	3.								
Level (first, second or third cycle of studies)	4.	Organizer of the Study pr	ogram						
8. Professor (s)									
Academic year/ semester	5.		rd cycle	Integrated First ar	ıd Sec	ond cycle			
Sequirements for enrolling the course Dzengis Jasar, Vala Filipovski, Katerina Kubelka-Sabit				VII Ct	7	Nl C ECTC			
Professor (s)	о.	Academic year/ semester	[/.	Number of EC15		б	
9. Requirements for enrolling the course Taught lectures from Pathology 1	Ω	Professor (s)			ia Fili	l novski Katerina Kuh	elka-Sahit		
course Course			ng the				CIKa-Jabit		
Aims of the course (competences): Introduction to etiology and pathogenesis, morphological changes of tissues and organs, clinical picture and outcome of diseases.	<i>,</i>		ing the	raught feetares in	0111 1 0	chology 1			
organs, clinical picture and outcome of diseases. Study of degenerative, inflammatory and neoplastic diseases in organic systems. 11. Contents of the course (per 15 weeks per semester): • Theoretical instruction: • Pathology of the retriculcendothelial system; • Pathology of the digestive system; • Pathology of the digestive system; • Pathology of the breast; • Pathology of the skin; • Pathology of the breast; • Pathology of the skin; •	10.								
Contents of the course (per 15 weeks per semester): Theoretical instruction: Pathology of the reticuloendothelial system; Pathology of the digestive system; Pathology of the innary and male genital system; Pathology of the ternal genital system; Pathology of the trinary and male genital system; Pathology of the skin; Pathology o									
Theoretical instruction: O Pathology of the respiratory system; Pathology of the respiratory system; Pathology of the platobilitary system and pancreas; Pathology of the female genital system; Pathology of the female genital system; Pathology of the central and peripheral nervous system; Pathology of the self-stand and peripheral nervous system; Pathology of the sold price and peripheral nervous system; Pathology of the locomotor system. Pathology of the sold price and peripheral nervous system; Pathology of the sold price and peripheral nervous system; Pathology of the locomotor system. Pathology of the sold price and peripheral nervous system; Pathology of the locomotor system. Pathology of the sold price and peripheral nervous system; Pathology of the locomotor system. Pathology of the locomotor system. Pathology of the sold price and peripheral nervous system; Pathology of the locomotor system. Pathology of the central and peripheral nervous system; Pathology of the self-stand peripheral ne			Study of degenerative, inflammatory and neoplastic diseases in organic systems.						
Pathology of the reticuloendothelial system; Pathology of the digestive system; Pathology of the urinary and male genital system; Pathology of the broast; Pathology of the skin;	11.			s per semester):					
o Pathology of the respiratory system; Pathology of the digestive system; Pathology of the patobiliary system and pancreas; Pathology of the ternary and male genital system; Pathology of the female genital system; Pathology of the female genital system; Pathology of the breast; Endocrine Pathology; Pathology of the breast; Endocrine Pathology; Pathology of the central and peripheral nervous system; Pathology of the skin; Pathology of the central and peripheral nervous system; Pathology of the skin; Pathology of the location and the skin; Pathology of the skin; Pathology o									
Pathology of the digestive system; Pathology of the pathology of the pathology of the urinary and male genital system; Pathology of the brainary and pathology of the brainary and pathology of the skin; Pathology of the locomotor system. Practical instruction: Mastering the skills of macroscopic and microscopic analysis and diagnostics of diseases on biopsy and operating material. Mastering the techniques of autopsy and determining the cause of death.									
Pathology of the urinary and male genital system; Pathology of the female genital system; Pathology of the central and peripheral nervous system; Pathology of the locomotor system. Practical instruction: Mastering the techniques of autopsy and determining the cause of death. Mastering the techniques of autopsy and determining the cause of death. 12. Methods of learning: theoretical instruction, practical exercises, seminar work 13. Total amount of available time: 6 ECTS x 30 hours = 180 hours 14. Distribution of available time: 45+30+15±+75 = 180 hours 15. Forms of teaching / l5.1 Lectures / theoretical, contact teaching, learning activities Exercises (practical, laboratory, a) hours									
Pathology of the female genital system; Pathology of the breast; Pathology of the breast; Endocrine Pathology; Pathology of the central and peripheral nervous system; Pathology of the skin; Pathology of the locomotor system. Pathology of the locomotor system. Practical instruction: Mastering the skills of macroscopic and microscopic analysis and diagnostics of diseases on biopsy and operating material. Mastering the techniques of autopsy and determining the cause of death. Methods of learning: theoretical instruction, practical exercises, seminar work Methods of learning: theoretical instruction, practical exercises, seminar work Methods of learning: theoretical instruction, practical exercises, seminar work Distribution of available time: 45+30+15+15+75 = 180 hours 15. Forms of teaching / learning					as.				
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O Pathology of the central and peripheral nervous system; O Pathology of the locomotor system. Practical instruction: O Mastering the skills of macroscopic and microscopic analysis and diagnostics of diseases on biopsy and operating material. O Mastering the techniques of autopsy and determining the cause of death. 12. Methods of learning: theoretical instruction, practical exercises, seminar work 13. Total amount of available time: 6 ECTS x 30 hours = 180 hours 14. Distribution of available time: 45+30+15+15+75 = 180 hours 15. Forms of teaching / learning activities Proms of		 Pathology of the 	e breast;	-					
Pathology of the skin; Pathology of the locomotor system. Practical instruction: Practical instruction; Practical instruction, practical exercises, seminar work Practical instruction practical instruction, practical exercises, seminar work Practical instruction practical instruction, practical instr									
Pathology of the locomotor system. Practical instruction: Mastering the skills of macroscopic and microscopic analysis and diagnostics of diseases on biopsy and operating material. Mastering the techniques of autopsy and determining the cause of death. 12. Methods of learning: theoretical instruction, practical exercises, seminar work 13. Total amount of available time: 6 ECTS x 30 hours = 180 hours 14. Distribution of available time: 6 ECTS x 30 hours = 180 hours 15. Forms of teaching / learning activities 15.1				d peripheral nervou	ıs sys	tem;			
Practical instruction: Mastering the skills of macroscopic and microscopic analysis and diagnostics of diseases on biopsy and operating material. Methods of learning: theoretical instruction, practical exercises, seminar work									
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Operating material Mastering the techniques of autopsy and determining the cause of death.				rosconic and micro	sconic	analysis and diagnos	stice of dise	ases on hio	nev and
O Mastering the techniques of autopsy and determining the cause of death. Methods of learning: theoretical instruction, practical exercises, seminar work				roscopie una iniero.	copic	anarysis and diagno.	otics of alse	ases on bio	psy and
Methods of learning: theoretical instruction, practical exercises, seminar work				of autopsy and deter	minir	g the cause of death.			
14. Distribution of available time: 45+30+15+15+75 = 180 hours									
15.1 Lectures / theoretical, contact teaching, e-learning activities Exercises (practical, laboratory, theoretical, seminars, team work) 15.0 Exercises (practical, laboratory, theoretical, seminars, team work) 15 hours						S			
learning activities							1 .= 1		
15.2 Exercises (practical, laboratory, theoretical, seminars, team work) 15.2 16.1 Projects 15 hours 15 hours 16.2 Individual work 16.3 Home learning 75 hours 75 hours 17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 20 scores 17.3 Assessment Criterial (scores / points) 5 (five). (F) 51 to 60 points 5 (five). (F) 61 to 70 points 7 (seven) (D) 71 to 80 points 8 (eight) (C) 81 to 90 points 9 (nine) (B) 91 to 100 points 10 (ten) (A) 19. Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study English Standardized motor tests, observation, survey teaching 22.1 Basic literature 22.1 Contact Co	15.		15.1	,	etical	contact teaching,	45 hours		
15.2 theoretical, seminars, team work) 15 hours 15 hours 15 hours 15 hours 16.2 Individual work 15 hours 17 hours 17 hours 18 hours 18 hours 18 hours 18 hours 18 hours 19 hour		learning activities			inal le	la a wata wa	20 h a		
16. Other forms of activities 16.1 Projects 15 hours 17. 16.3 Home learning 75 hours 17. Method of assessment 70 scores 17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 10 scores 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F) 51 to 60 points 6 (six) (E) 61 to 70 points 7 (seven) (D) 71 to 80 points 8 (eight) (C) 81 to 90 points 9 (nine) (B) 91 to 100 points 10 (ten) (A) 60% active participation at the course 20. Language of teaching / study English 21. Methods of measuring / monitoring the quality of teaching Standardized motor tests, observation, survey Self-evaluation 22. Literature 22.1 Basic literature			15 2			30 nours			
16.2	16	Other forms of activities			ınaı s,	team work)	15 hours		
16.3 Home learning 75 hours	10.	other forms of activities							
17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 20 scores 18.							10 110 111	75 ho	urs
17.2	17.	Method of assessment		,			1		
17.3 Activity and participation 20 scores		17.1 Tests / Oral	Exam		7	0 scores			
18. Assessment Criteria (scores/ points) 19. Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study 20. Signature approval and entrance to the final exam/ or transition in the next year 21. Methods of measuring / monitoring the quality of teaching 22. Literature 23. Basic literature 24. Basic literature			work (prese	entation, projects,	1	0 scores	-	-	
18. Assessment Criteria (scores/ points) 4									
Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study Standardized motor tests, observation, survey teaching Literature							T =		
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19. Signature approval and entrance to the final exam/ or transition in the next year 20. Language of teaching / study 21. Methods of measuring / monitoring the quality of teaching 22. Literature 22.1 Basic literature									
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21. Methods of measuring / monitoring the quality of teaching Standardized motor tests, observation, survey Self-evaluation 22. Literature 22.1 Basic literature	20.				Е	nglish			
teaching Self-evaluation 22. Literature 22.1 Basic literature				the quality of			ests, observ	ation, surve	y
22.1 Basic literature								<u> </u>	-
	22.	Literature							
No Author Title Publisher Year									
		No	Autho	or	Т	itle	Publisher	•	Year

	1.	Kumar, Abbas, Fausto, Aster	Robbins and Cotran Pathologic Basis of Disease 9thEdition	Elsevier	2014
	2.	Eduard K. Klatt	Robbins and Cotran Atlas of Pathology	Saunders, Elsevier	2009
	3.	Authorized lectures			
22.2	Addition	nal literature			
	No	Author	Title	Publisher	Year
	1.	Kumar, Abbas, Aster	Robbins Basic Pathology 10 th edition	Elsevier	2017

				1	0 th edition			
		0.1 0	0. 7					
Anne		the Cours	e for Integrated Fire		Second cycle			
1.	Title of Course			PATHOPHYSIOLOGY 2				
2.	Code		3MF103212					
3.	Study program		General medicine		01			
4.	Organizer of the Study pro	ogram	Goce Delchev Univ					
_	1 166	1 1	Faculty of Medical					
5.	Level (first, second or thir of studies)	d cycle	Integrated First ar	id Sec	ond cycle			
6.	Academic year/semester		VI Semester – third year	7.	Number of ECTS		6	
8.	Professor (s)		Ass. Prof. Milka Kl	inche	ra			
9.	Course prerequisites		Passed pathophys	iology	1 exam			
10.	Aims of the course (comp	etences):						
	Learning about the pathor		cal processes in the	organ	ism by organs			
11.	Contents of the course (pe							
	Theoretical units			1	. 00			
	13. Atherosclerosis proce	ess						
	14. Pathophysiology of h		tions, ischemic hear	t dise	ase, heart failure			
	15. Pathophysiology of h							
	16. Electrocardiography							
	17. Pathophysiology of re	espiratory	diseases					
	18. Pathophysiology of th							
	19. Pathophysiology of th							
	20. Pathophysiology of th			ladde	r			
	21. Pathophysiology of th							
	22. Pathophysiology of d							
	23. Pathophysiology of th							
	24. Pathophysiology of th							
	Practical units		,					
	13. Myocardial infarction	ı, carotid d	isease, stroke, perir	herv	artery disease			
	14. Pathophysiology of h			,	,			
	15. Electrocardiography							
	16. Electrocardiography							
	17. Infection, infectious 6		is, meningitis, pneu	monia	. infectious diarrhea.	sepsis, sept	tic shock	
	18. Immune system defic	ciencies: al	lergenic rhinitis, All	DS	,,			
	19. Upper digestive vs lo							
	20. Cirrhosis	<i>G</i> -99	- 0 - 0					
	21. Pathophysiology of n	ephrotic v	s nephritic syndrom	ie				
	22. Diabetes melitus type				erthyrhoidism			
	23. Anemias, leukemias,				-			
	24. Parkinson disease, M				a, Alzheimer disease			
12.	Learning methods: Intera							
13.	Total amount of available							
14.	Distribution of available time: 30+30+15+45+60=180 hours (2+2+1)							
15.	Forms of teaching /	15.1	Lectures / theor	•		30 hours		
	learning activities		hours)		•			
			Exercises (15 w	eeks x	2 hours)	30 hours		
		15.2			,			
16.	Other forms of activities	16.1	Projects			15 hours		
		16.2	Individual work			45 hours		
		16.3	Home learning			60 hours		
17.	Method of assessment	10.5	Home learning			oo nours		
1/.	Mediou of assessificial							

	17.1	Tests / Oral Ex	ram	40 points		
			rk (presentation, written	•		
		and verbal)	· ·	10 points		
	17.3	Activity and pa	articipation	30 points		
	17.4	Practical and fi	inal exam	30 points		
18.	Assessment C	Criteria (scores	/ points)	up to 50 points	5 (five). (F)	
				51 to 60 points	6 (six) (E)	
				61 to 70 points	7 (seven) (D)	
				71 to 80 points	8 (eight) (C)	
				81 to 90 points	9 (nine) (B)	
				91 to 100 points	10 (ten) (A)	
19.	Signature app	oroval and entr	ance to the final exam/ or	Attendance and at least	42 points from the pre-	-exam
	transition in t	the next year		activities		
20.	Language of t	eaching / study	y	English		
21.	Methods of m	easuring / mo	nitoring the quality of	Self-evaluation		
	teaching					
22.	Literature					
	22.1	Basic li	terature			
		No	Author	Title	Publisher	Year
		1.	Gamulin S. Marusic M. et al.	Pathophysiology	Sixth edition – Medical publishing Zagreb	2005
		2.	Stefan J McFee and William Genong	Pathophysiology of diseases and introduction to clinical medicine	Project of the Government of RM for translation of books	4th edition, Septemb er 2002, translate d in 2011
		3.	Doc. Dr. Milka Klincheva	General pathologic physiology – script	Goce Delchev University Shtip	2016
	22.2	Additio	nal literature		_	
		No	Author	Title	Publisher	Year
		1.	Harrison	Harrison's Principles of Internal Medicine		

Anne	ex 3 Program of the Cours	se for Integrated First and Second cycle		
1.	Title of Course	INTERNAL PROPEDEUTICS 2		
2.	Code	3MF108212		
3.	Study program	General medicine		
4.	Organizer of the Study program	Goce Delce University – Stip Faculty of Medical Sciences		
5.	Level (first, second or third cycle of studies)	Integrated First cycle		
6.	Academic year/ semester	VI Semester – 7. Number of ECTS 5 third year		
8.	Professor (s)	Andon Cibisev Biljana Ilievska Poposka Ivica Smokovski Valentina Velkovska Nakova Gordana Kamceva Ivana Trajkovska Igor Nikolov		
9.	Requirements for enrolling the course	None		
10.	Aims of the course (competences): The purpose of this course is to provide students how to establish good doctor-patient communication and to become familiar with the structural parts of the patient's medical history. The students will overcome the skill of taking anamnesis, general physical examination and special physical examination by patient systems, as well as the diagnostic methods used to diagnose internal diseases. All theoretical knowledge that students will gain in this subject, will be checked and determined with practical exercises.			
11.	Contents of the course (per 15 week	ks per semester):		

	■ Int	roduction to l	Intonnal Du	madautica						
		octor-patient								
		ledical histor								
		namnesis	y structur	ar parts						
		eneral physic	al examina	tion						
				ion by systems						
	• N	on-invasive a	ınd invasive	e diagnostic methods	for internal diseases					
12.	Methods of l	earning: Lect	ures, practi	ces, seminars, resea	rch and practical activitie	S				
13.				TS x 30 hours = 150						
14.				+0+45+45 = 150 hor		201				
15.	Forms of tea learning acti		15.1	•	tical, contact teaching,	30 hours				
	learning acu	VILLES		e-learning Exercises (practic	ral lahoratory	30 hou	ırc			
			15.2	theoretical, semin		30 1100	113			
	Other forms	of activities	16.1	Projects	ars, team works	0 hou	rs			
			16.2	Individual work		45 hou				
			16.3	Home learning		45 hou				
17.	Method of as	ssessment		<u> </u>		1				
	17.1	Tests / Oral	Exam		40/30 scores					
	17.2 Individual work (presentation, projects,				10 scores					
	practical)									
	17.3	Activity and	• •		20 scores					
18.	Assessment	Assessment Criteria (scores/ points)			up to 50 points	5 (five). (I				
					51 to 60 points	6 (six) (E				
					61 to 70 points	7 (seven) (I				
					71 to 80 points		C)			
					81 to 90 points		3)			
	-				91 to 100 points	, ,	A)			
19.				he final exam/ or	60% active participat	ion at the course				
20.		the next year teaching / stu			English					
21.				the quality of	Standardized motor to	acte observation cu	rvev			
21.	teaching	ileasuring / il	iloilitoi ilig	the quality of	Self-evaluation	ests, observation, su	ivey			
	teaching				Minimum of 42 points gained through the attendance					
					and active participation					
					work,					
22.	Literature									
	22.1	Basic	c literature							
		No	Autho	r	Title	Publisher	Year			
		1	C V		Cliniaal Faraniaatiaa	HCD CH-	2010			
		1.		nceva vlukis	Clinical Examination - Internal Aspects of	UGD- Stip	2019			
			M. va	VIUKIS	Adult Patient					
					Examination					
		2.	G. Kar	nceva	Practicum with	UGD-Stip	2015			
				vlukis	general guidelines	Jab bup	2010			
					for clinical					
					examination for					
					internistically ill					
					patient					
		3.	V.Sera	fimovski with	Cliical examination	UKIM- Skopje	2004			
			associ	ates	in Internal Medicine-					
					Internal					
	22.2	A 7 1:	Li 1 111		Propedeutics					
	22.2	Addi	tional litera Autho		Title	Dublishan	Vacr			
, ,		NT	LAUTHO	I	Title	Publisher	Year			
		No	Tuttio							
		No	riutilo							
		1.		orgievska Ismail	Electrocardiography	Skopje	2008			
					Basic of	Skopje Tabernacul	2008 2010			
		1.	Lj. Geo							

	ex 3	Program of	f the Cours	e for Integrated First	and Seco	nd cycle					
1.	Title of Cou			CLINICAL PHARMA		y					
2.	Code			3MF110512							
3.	Study prog			Medicine							
4.	Organizer o	of the Study pro	ogram	Goce Delce Univers							
				Faculty of Medical S	Sciences						
5.	Level (first	, second or thir	rd cycle	Integrated First and	l Second c	ycle					
	of studies)										
6.	Academic y	ear/ semester		VI Semester -	7. Nun	nber of ECTS		4			
				third year							
8.	Professor (s)		Prof. Andon Cibisev	7,						
				Ass. Prof. Marija Da	rkovska S	erafimovska					
9.	Requireme	nts for enrollin	ng the	None							
	course										
10.	Aims of the	course (comp	etences):								
	Introductio	n to the subjec	ct and ovje	ctives of clinical phar	macology	and its practic	ally meaning	in contem	porary		
	therapy										
11.	Contents of	the course (pe	er 15 week	s per semester):							
				of clinical pharmacolo	gy						
				of clinical pharmacol							
		 Phases and methods for clinical testing of new medicines 									
		 Ethics and legislation 									
				nacokinetics in thera	ру						
		se of medicines									
		se of medicines									
				ncy and lactation							
				t with damaged kidne							
	• U:	se of medicines	s in patien	ts with damaged live	r						
				tions between medic							
				dverse reactions to m							
12.				cises, project assignm	ents, discı	ission, debate	and individua	al assignme	ents		
13.				$TC \times 30 = 120 \text{ hours}$							
14.				5+15+30+15 = 120 h							
15.	Forms of te		15.1	Lectures / theoretical, contact teaching, 30 hours							
	learning ac	tivities		e-learning							
				(15 weeks x 2 = 30)							
				Exercises (praction			15 hours				
			15.2	theoretical, semir		work)					
				(15 weeks x 1 = 1)	.5)						
16.	Other form	s of activities	16.1		Projects		15 hours				
				Individual work							
			16.2				30 hours				
			16.2 16.3	Individual work Home learning			30 hours 30 hours				
17.	Method of a	assessment	16.3								
17.	17.1	assessment Tests / Oral	16.3 Exam	Home learning	70 scor						
17.		assessment Tests / Oral Individual w	16.3 Exam		70 scor						
17.	17.1 17.2	assessment Tests / Oral Individual w practical)	16.3 Exam vork (preso	Home learning entation, projects,	10 scor	res					
17.	17.1 17.2 17.3	assessment Tests / Oral Individual w practical) Activity and	Exam work (prese	Home learning entation, projects,	10 scor	res	30 hours				
	17.1 17.2 17.3	assessment Tests / Oral Individual w practical)	Exam work (prese	Home learning entation, projects,	10 scor 20 scor up to 5	res 0 points	30 hours 5 (five).	(F)			
	17.1 17.2 17.3	assessment Tests / Oral Individual w practical) Activity and	Exam work (prese	Home learning entation, projects,	10 scor 20 scor up to 5	res	30 hours 5 (five). 6 (six)	(F) (E)			
	17.1 17.2 17.3	assessment Tests / Oral Individual w practical) Activity and	Exam work (prese	Home learning entation, projects,	20 scor up to 5 51 to 6 61 to 7	res 0 points 0 points 0 points	30 hours 5 (five).	(E)			
	17.1 17.2 17.3	assessment Tests / Oral Individual w practical) Activity and	Exam work (prese	Home learning entation, projects,	20 scor up to 5 51 to 6 61 to 7	res 0 points 0 points	5 (five). 6 (six)	(E)			
	17.1 17.2 17.3	assessment Tests / Oral Individual w practical) Activity and	Exam work (prese	Home learning entation, projects,	20 scor up to 5 51 to 6 61 to 7 71 to 8	res 0 points 0 points 0 points	5 (five). 6 (six) 7 (seven	(E)			
	17.1 17.2 17.3	assessment Tests / Oral Individual w practical) Activity and	Exam work (prese	Home learning entation, projects,	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9	res 0 points 0 points 0 points 0 points 0 points	5 (five). 6 (six) 7 (seven 8 (eight)	(E) (D) (C)			
18.	17.1 17.2 17.3 Assessmen	assessment Tests / Oral Individual w practical) Activity and t Criteria (scor	Exam work (prese	Home learning entation, projects, ion	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1	res 0 points 0 points 0 points 0 points 0 points 0 points	5 (five). 6 (six) 7 (seven 8 (eight) 9 (nine) 10 (ten)	(E) (D) (C) (B) (A)			
18.	17.1 17.2 17.3 Assessmen Signature a	assessment Tests / Oral Individual w practical) Activity and t Criteria (scor	Exam work (prese participat res/ points	Home learning entation, projects,	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1	res 0 points 0 points 0 points 0 points 0 points 0 points	5 (five). 6 (six) 7 (seven 8 (eight) 9 (nine) 10 (ten)	(E) (D) (C) (B) (A)			
18.	17.1 17.2 17.3 Assessmen Signature a transition i	assessment Tests / Oral Individual w practical) Activity and t Criteria (scor	Exam work (preso	Home learning entation, projects, ion	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a	res 0 points 0 points 0 points 0 points 0 points to points ctive participa	5 (five). 6 (six) 7 (seven 8 (eight) 9 (nine) 10 (ten)	(E) (D) (C) (B) (A)			
18. 19. 20.	17.1 17.2 17.3 Assessmen Signature a transition i	assessment Tests / Oral Individual w practical) Activity and t Criteria (scor	Exam work (preso	Home learning entation, projects, ion) the final exam/ or	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a	res 0 points 0 points 0 points 0 points 0 points to points ctive participa	30 hours	(E) (D) (C) (B) (A) (D)	···V		
18. 19. 20.	17.1 17.2 17.3 Assessmen Signature a transition i Language o	assessment Tests / Oral Individual w practical) Activity and t Criteria (scor	Exam work (preso	Home learning entation, projects, ion) the final exam/ or	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a English	res O points O points O points O points O points Co points	30 hours	(E) (D) (C) (B) (A) (D)	ry		
18. 19. 20. 21.	17.1 17.2 17.3 Assessmen Signature a transition i Language of Methods of teaching	assessment Tests / Oral Individual w practical) Activity and t Criteria (scor	Exam work (preso	Home learning entation, projects, ion) the final exam/ or	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a English	res 0 points 0 points 0 points 0 points 0 points to points ctive participa	30 hours	(E) (D) (C) (B) (A) (D)	ey.		
18. 19. 20. 21.	17.1 17.2 17.3 Assessmen Signature a transition i Language of Methods of teaching Literature	Tests / Oral Individual w practical) Activity and t Criteria (score approval and er the next year of teaching / store measuring / next	Exam work (prese participat res/ points	Home learning entation, projects, ion) the final exam/ or the quality of	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a English	res O points O points O points O points O points Co points	30 hours	(E) (D) (C) (B) (A) (D)	ey.		
18. 19. 20. 21.	17.1 17.2 17.3 Assessmen Signature a transition i Language of Methods of teaching	Tests / Oral Individual w practical) Activity and t Criteria (score approval and er the next year of teaching / store measuring / next	Exam vork (preso participat res/ points ntrance to c udy nonitoring	the final exam/ or	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 3 60% a English Standa Self-ev	res O points O points O points O points O points Co points	5 (five). 6 (six). 7 (seven). 8 (eight). 9 (nine). 10 (ten). tion at the contests, observa	(E) (D) (C) (B) (A) (D)			
18. 19. 20. 21.	17.1 17.2 17.3 Assessmen Signature a transition i Language of Methods of teaching Literature	Assessment Tests / Oral Individual w practical) Activity and t Criteria (score Approval and er n the next year of teaching / store Emeasuring / next Basic No	Exam vork (preso participat res/ points ntrance to r udy nonitoring c literature	the final exam/ or the quality of	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a English Standa Self-ev	res O points O points O points O points O points Co points	30 hours	(E) (D) (C) (B) (A) (D)	Year		
17. 18. 19. 20. 21.	17.1 17.2 17.3 Assessmen Signature a transition i Language of Methods of teaching Literature	Tests / Oral Individual w practical) Activity and t Criteria (score approval and er the next year of teaching / store measuring / next	Exam vork (preso participat res/ points ntrance to r udy nonitoring c literature	the final exam/ or the quality of entation, projects, ion the final exam/ or	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a English Standa Self-ev	res Tes O points O points O points O points O points Co points	5 (five). 6 (six). 7 (seven). 8 (eight). 9 (nine). 10 (ten). tion at the contests, observa	(E) (D) (C) (B) (A) (D)	Year Last		
18. 19. 20. 21.	17.1 17.2 17.3 Assessmen Signature a transition i Language of Methods of teaching Literature	Assessment Tests / Oral Individual w practical) Activity and t Criteria (score Approval and er n the next year of teaching / store Emeasuring / next Basic No	Exam vork (preso participat res/ points ntrance to r udy nonitoring c literature	the final exam/ or the quality of entation, projects, ion the final exam/ or	20 scor up to 5 51 to 6 61 to 7 71 to 8 81 to 9 91 to 1 60% a English Standa Self-ev	res O points O points O points O points O points Co points	5 (five). 6 (six). 7 (seven). 8 (eight). 9 (nine). 10 (ten). tion at the contests, observa	(E) (D) (C) (B) (A) (D)	Year		

	3.										
22.2	Addition	al literature									
	No	Author	Title	Publisher	Year						
	1.	Goodman & Gilman's	The pharmacological . basis of therapeutics		Last edition						
	2.										
	3.										

Anne	Annex 3 Program of the Co		e for Integrated Firs	t and	Second cycle				
1.	Title of Cours	е	EPIDEMIOLOGY						
2.	2. Code		3MF120412						
3.	Study progra	General medicine							
4.	4. Organizer of the Study program		Goce Delce Univer	sity –	Stip				
			Faculty of Medical						
5.	5. Level (first, second or third cycle		Integrated First and Second cycle						
	of studies)					<u>_</u>			
6.	Academic yea	nr/ semester	VI Semester –	7.	Number of ECTS	5			
			third year						
8.	Professor (s)		Prof. D-r Milka Zdı	avko	⁄ska				
9.	Requirement	s for enrolling the	None						
	course								
10.	oidemiology and prevention								
	of infectious a	and non-infectious dise	ease						

11. Contents of the course (per 15 weeks per semester):

Theoretical study units:

- Epidemiological methods: descriptive, analytical and experimental
- Epidemiological process, forms of appearance, epidemiological models for occurrence of disease
- Occurrence of infection and infectious disease, mechanisms of occurrence and ways of transmission of infectious disease
- Characteristics of hydric epidemic, alimentary, aerogenic, contact and transmissive epidemics
- Prevention of disease: primary, secondary and tertiary; epidemiologic supervision
- Immunization, seroprophylaxis and chemoprophylaxis
- Intrahospital infections; disinfection, disinsection and deratisation
- Epidemiological characteristics of infectious intestine disease: acute enterocolitis, bacillary dysentery, salmonelosis, staphylococcal poisoning, intestinal typhus and paratyphus, cholera, botulism, poliomyelitis,
- Viral hepatitis A, B, C, E, G, D;
- Epidemiological characteristics of infectious respiratory disease: varicella, morbilli, variola vera, rubeola, parotitis, infectious mononucleosis, influenza, diphtheria, acute streptococcal infection, pertussis, meningococcal meningitis, tuberculosis
- Epidemiological characteristics of infectious contact disease: trichomoniasis, leprosy, ebola, gonorrhea, syphilis, HPV infection, AIDS
- Epidemiological characteristics of infectious transmissive disease: blotchy typhus, recurring fever, malaria, yellow fever;
- Epidemiological characteristics of zoonosis: tetanus, brucellosis, anthrax, tularemia, plague, rabies
- Epidemiological characteristics of non infectious chronic disease: chronic obstructive pulmonary disease, cardiovascular disease, cerebrovascular disease
- Epidemiological characteristics of malignanat neoplasm, diabetes, addiction diseases;

Practical study units:

- 16. Epidemiological methods and design of studies
- $17. \ \ Ways of collecting data, epidemiological survey, sample and defining the size of the sample$
- 18. Epidemiological process, forms of epidemiological process, epidemiological models for occurrence of disease
- 19. Epidemiological characteristics and samples of hydric, and alimentary epidemics
- 20. Epidemiological characteristics and samples of aerogenic, contact and transmissive epidemics
- 21. Immunization: obligatory vaccinations and vaccination by epidemiological indications
- 22. Prevention during professional exposition
- 23. Epidemiologic characteristics of infectious intestine disease: bacillary dysentery, salmonelosis, staphylococcal poisoning, cholera, botulism
- 24. Viral hepatitis A, B, C
- 25. Epidemiological characteristics of infectious respiratory disease: varicella, morbilli, variola vera, rubeola, parotitis, influenza, acute streptococcal infection, pertussis, tuberculosis

			characteris	stics of infectious cor	ntact disease: trichomonia	asis, gonorrhea, syphil	is, HPV		
		ction, AIDS	_						
					nsmissive disease: malar				
					inus, brucellosis, anthrax		1.		
				stics of non-infectiou	s chronic disease: chroni	c obstructive pulmona	ry disease,		
		liovascular d		-ti C1it		4:			
12					eoplasm, diabetes, addict				
12.	presentation			ses, group discussion	ns methods, individual as	signments, seminar p	apers,		
13.	Total amount								
13.	Total alliount	oi available	unie. 240						
14.	Distribution of	of available t	ime: 30+30	+15+45+60 = 240 (2	2+2+1)				
15.	Forms of teac		15.1		tical, contact teaching,	30 hours			
	learning activ			e-learning	,				
	g			Exercises (practic	al. laboratory.	30 hours			
			15.2	theoretical, semin					
16.	Other forms	of activities	16.1	Projects		15 hours			
			16.2	Individual work		45 hours			
			16.3	Home learning		60 hours			
17.	Method of ass	sessment							
	17.1 Tests / Oral Exam			70 scores					
	17.2	Individual w	ork (prese	ntation, projects,	10 scores				
		practical)							
		Activity and	•		20 scores				
18.	Assessment C	Criteria (scor	es/ points)		up to 50 points	5 (five). (F)			
					51 to 60 points	6 (six) (E)			
					61 to 70 points	7 (seven) (D)			
					71 to 80 points	8 (eight) (C)			
					81 to 90 points	9 (nine) (B)			
					91 to 100 points	10 (ten) (A)			
19.				he final exam/ or	60% active participat	ion at the course			
20	transition in t				P 1: 1				
20.	Language of t			.l	English				
21.	Methods of m teaching	ieasuring / n	nonitoring	the quality of	Standardized motor tests, observation, survey Self-evaluation				
22.	Literature				Sen-evaluation				
22.	22.1	Racio	c literature						
	22.1	No	Autho	r	Title	Publisher	Year		
		1.		Zdravkovska	Author's lectures	I addidited	1 Cui		
		2.		F.Jekel,	Epidemiology,	Tabernakul	2010		
		1.		L.Katz,	biostatistics and	- abornanui	2010		
				G.Elmore,	preventive medicine				
				hea M.G.Wild	r				
		3.		n Epidemiology	Kenneth J. Rothman,	LWW; Third,	Dec. 28,		
			3rd E		Sander Greenland,	revision edition	2012		
					Timothy L. Lash				
	22.2	Addi	tional litera	ature					
		No	Autho	r	Title	Publisher	Year		
		1.					1		
		2.							
		3.					1		

Anno	Drogram of	f the Cours	o for Integrated Ein	ct and	Socond cyclo						
Anne	Title of Course	i ine Cours	e for Integrated Fir. MEDICAL PSYCH								
2.	Code		3MF126812	OLUGI							
3.	Study program		General medicine								
4.	Organizer of the Study pro	ogram	Goce Delce Univer	sitv –	Stip						
	a sound of the county part	- 6	Faculty of Medical								
5.	Level (first, second or thir	d cycle	Integrated First ar	nd Seco	ond cycle						
	of studies)	_									
6.	Academic year/ semester		VI Semester –	7.	Number of ECTS		4				
			third year								
8.	Professor (s)	_	Prof. Dr. Lenče Mi	loševa							
9.	Requirements for enrolling	ig the	None								
10.	course Aims of the course (comp	otoncoc).									
	-To become familiar and to understand basic concepts of personality structure, psychological processes and their abnormalities; neuroanatomy and neuroendocrinology bases and changes in developmental periods; normal and abnormal psychological development; knowing and understanding human behavior and reactions of patients on illness. -To acquire basic knowledge of general psychopathology - To become familiar with mental health of children and adolescents -To become familiar with psychodiagnostic and assessment and treatment of mental health disorders (adults and children and adolescents) -To acquire basic concepts of psychotherapy as treatment -To became familiar with basic concepts of clinical neuropsychology and psychological autopsy										
11.	Contents of the course (pe	er 15 week	s per semester):								
	- Application of clinical ps - Biomedical/biopsychose - Concept of personality, pand neuroendocrine basis - Theories of psychological development Psychological processes memory and speech; sens process; - Mental health and menta - Psychodiagnostic and ass - Psychological treatment - Stress and experience of - Psychosomatic illness. P chronic and terminal illne - Psychology of pain and pasics of clinical neurop practice Basic concepts of Forens making decisions and law	ocial mode osychologics. I developm (cognitive, se and percol disorders sessment. of mental of stress, copsychoneur iss. Posttra psychologi sychology; ic psychologi testimonia	l of health and illne cal processes and be cal processes and be nent. Cognitive processes and proce	ss. ehavio esses a) and thess; att develop erapy choonc der. ients. I I asses al auto	r. Psychological procestand development. Social and development and continuous; more and couching. Sychological aspects of sment and application appropriate open and conducting of the conduct	sses and the session of the session	heir neuroanatomical hal processes and learning and forgetting; hality vs. abnormality. Chological aspects of lying, mourning. al context and clinical lying gical profile. Ability for				
10											
12.	Methods of learning: After interactive seminars; lect										
	cooperative studying tech										
	studying				carricular cu						
13.	Total amount of available 4 EKTC x 30 часа = 120 ча										
14.	Distribution of available t	ime:									
15.	30+15+15+30+15 = 120 Forms of teaching /	часа (2+1+ 15.1		etical	contact teaching, e-	30 hour	<u> </u>				
13.	learning activities	13.1	learning	cucal,	contact teaching, e-	Jo Hour	J				
	3	15.2	Exercises (pract theoretical, sem			15 hour	s				
16.	Other forms of activities	16.1	Projects		· · · · · · · · · · · · · · · · · · ·	15 hour	S				
		16.2	Individual work			30 hou					

			16.3	Home learning		30 hours			
17.	Method of a	ssessment		, 3		•			
	17.1	Tests / Oral	Exam		70 scores				
	17.2			ntation, projects,	10 scores				
		practical)	••						
	17.3	Activity and	participati	on	20 scores				
18.	Assessment	Criteria (scor	es/ points)		up to 50 points	5 (five). (F)		
			, ,		51 to 60 points	6 (six) (E)		
					61 to 70 points	7 (seven) (D)		
					71 to 80 points	8 (eight) (0	i)		
					81 to 90 points	9 (nine) (E	3)		
					91 to 100 points	10 (ten) (A	•		
19.	Signature a	pproval and er	ntrance to t	he final exam/ or	60% active participation		,		
		n the next year		,					
20.	Language o	f teaching / stu	ıdy		English				
21.		measuring / n		the quality of	Survey , Self-evaluation, Standardized criteria of quality				
	teaching	07	O	1 7	assurance				
22.	Literature								
	22.1	Basio	literature		•				
		No	Autho	r	Title	Publisher	Year		
		1.		, P., Krueger,R.,	Oxford textbook of	Oxford	2015		
			Millon		Psychopathology	Handbooks			
		2.	Hunte	r, Christine M.,	Handbook of clinical	New York:	2014		
			Hunte	r, Christopher L. &	psychology in medical	Springer			
			Kessle	r, Rodger (Eds.)	settings				
		3.	Ogden	, G.	Health Psychology	McGraw-Hill	2019		
						Education			
	22.2	Addi	tional litera	ature					
		No	Autho	r	Title	Publisher	Year		
		1.	Chatle	in, J.H.	Child & Adolescent	. W. W. Norton &	2015		
		1.	Silatk	Ш, Ј.П.	Mental Health: A	Company	2015		
					Practical, All-in-One	Company			
					Guide				
		2.	Somnl	e,D.& Smyth,R.	Oxford Handbook of	Oxford	2019		
		۷.	Sempi	c,v.a siliyul,n.	Psychiatry	Handbooks	2017		
	1				ı sycillati y	Hallubooks			

Anne	x 3	Program of the Course - first/second	d/third cycle studies						
1.	Title of t	he Course	INFECTIOUS DISEASES	1					
2.	Code		3MF107112						
3.	Study Pr	ogram	General medicine						
4.		er of the study program (unit or	Goce Delce University – S	•					
		, Faculty, department)	Faculty of Medical Science						
5.		rst, second and third cycle)	Integrated First and Seco						
6.	Academ	ic year / semester	VII Semester - fourth	7.	Number of credits	5			
			year						
8.	Professo		Velo Markovski						
9.		ments for enrollment the Course	-						
10.		s of the curriculum (competencies):							
		ction to the basics of infectious diseases, the							
		otics, basics of immunology, viral hepatiti	s, basics of intestinal infect	ions, c	lehydration and rehydrati	ion			
11.		of the course program:							
12.		g methods:							
		s,exercises,seminars research and practic	al activities.						
	A)	Lectures							
	1.	Basic features of infectious diseases							
	2.	Infection and infectious disease							
	3.	Symptoms and Syndromes in Infectology	/						
	4.	Temperature							
	5.	Basics of Immunology							
	6.	Immunoprophylaxis							
	7.	Non-specific treatment of infectious dise	ases						

- **8.** Specific treatment of infectious diseases
- 9. Icteric syndrome
- 10. Viral hepatitis
- 11. Bacterial intestinal infections
- **12.** Viral intestinal infections
- 13. Dehydration and rehydration
- B) Exercises
 - Reception and isolation of one patient
 - Microbiological analysis
 - Anamnesis and examination of a patient with an infectious disease
 - Making a diagnosis
 - Serological tests and

clinical trials in infectious disease

- Reporting and registering an infectious disease
- •Hygienic diet treatment for entero-infections and Hygienic diet tretament for viral hepatitis

13.	Total available time		5 EKTS x 30 hours = 150 h	nours.	•	
14.	Distribution of available time		30+15+15+0+60=120 hou	rs.		
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	t	45 hours	
		15.2.	theoretical and practical exer e-exams, preparation of independent seminar work	30 hours		
16.	Other forms of activities	16.1.	Project tasks		15 hours	
		16.2.	Individual tasks		0 hours	
		16.3.	Home learning		60 hours	
17.	Method of assessment					
	17.1. Tests / oral exams			ints		
	17.2. Seminars (paper / project - presen	tation: w	ritten and/or oral)	ints		
	17.3. Activity and participation			20 poi	nts	
18.	Assessment Criteria (points / score)		up 50 points	5 ((five) (F)	
			51 to 60 points	6 ((six) (E)	
			61 to 70 points	7 ((seven) (D)	
			71 to 80 points	8 ((eight) (C)	
			81 to 90 points	9 ((nine) (B)	
			91 to 100 points	10	(ten) (A)	
19.	Signature requirement and passing the final	exam	42 points acquired			
20.	Language of teaching / study		English			
21.	Method of monitoring the quality of teaching	5	Self-evaluation			

22.	Literature											
		Require	Required literature									
		No. Author		Title	Publisher	Year						
	22.1.	1.	Mandell, Douglas, and Bennett's	Infectious disease essentials	Elsevier							
		2.	Velo Markovski	Authorized lectures	Faculty of Medical Sciences – UGD							

Ann	Annex 3 Program of the Course		se for Integrated First and	for Integrated First and Second cycle				
1.	1. Title of Course		DERMATOVENEROLOGY					
2.	Code		3MF106312					
3.	Study progra	m	General medicine					
4.	Organizer of	the Study program	Goce Delcev University – Stip Faculty of Medical Sciences					
5.	Level (first, sof studies)	econd or third cycle	Integrated First and Second cycle					
6.	Academic yea	ar/ semester	VII Semester – fourth 7. Number of ECTS 5					
8.	Professor (s)		Ass. Professor Andrej Petrov					

9.	Requirement course	its for enrollin	g the	None						
10.	Aims of the how to reco	gnize and trea	ıt skin dise	ases. Skin is the bigge	o achieve basic knowledge est organ. Connection wit Theoretical work is follow	h other system and the	e role of skin as			
					ology lab tests, tools and					
11.				s per semester):						
				gy, skin structure						
	_	in eflorescens		1.						
		stological feat		n diseases f skin diseases						
				ria and viruses						
		rasite and fun								
		ergy end urtic								
		rmatitis and a								
	-	ne end related								
				iamous diseases	involvement					
	 Systemic diseases of connective tissue with skin involvement Skin tumors 									
	_									
	■ ST									
12.	Methods of		·							
4.5				oatients, seminars						
13.	Total amour 150 hours	nt of available	time:							
14.	Distribution 2+2+1	of available t	ime:							
15.	Forms of tea		15.1		etical, contact teaching, 60 hours					
	learning act	ivities		e-learning Exercises (practic	val laboratory	60 hours				
			15.2	theoretical, semin		ou nours				
16.	Other forms	of activities	16.1	Projects	iars, team work)	10 hours				
			16.2	Individual work		10 hours				
			16.3	Home learning		10 hours				
17.	Method of a			•	,					
	17.1	Tests / Oral			70 scores					
	17.2		ork (prese	entation, projects,	10 scores					
	17.3	practical) Activity and	narticinat	ion	20 scores					
18.		Criteria (scor			up to 50 points 5 (five). (F)					
10.	71336331116116	Criteria (Scor	cs/ points)	51 to 60 points	6 (six) (E)				
					61 to 70 points	7 (seven) (D) 8 (eight) (C)				
					71 to 80 points					
					81 to 90 points	9 (nine) (B)				
					91 to 100 points	10 (ten) (A)				
19.				the final exam/ or	60% active participat	ion at the course				
20.		the next year teaching / st			English					
21.				the quality of	Standardized motor to	ests observation surve	-γ _V			
41.	teaching	cusui iiig / II	.omtoring	and quality of	Self-evaluation	.o.o, oooci vation, sul vi	~ 3			
22.	Literature									
	22.1	Basic	: literature	!						
		No	Autho		Title	Publisher	Year			
		1.	Brauı	n-Falco O.	Dermatology	Springer	2009			
		2.								
		3.								
	22.2		tional liter	ature						
		No	Autho	or	Title	Publisher	Year			
		1	171	Malf and District	Pitamatuis1	Може	2011			
		1.	Johns	Wolf and Richard	Fitzpatric color atlas of dermatology	Magor	2011			
		2.	Joinis	011	or derinatology					
		3.								
	1	٦.	l .			I	1			

Anne	vx 3	Program of	the Course	e for Integrated First a	and Second c	vcle			
1.	Title of Cour		the doubt	INTERNAL MEDICIN		yere			
2.	Code			3MF106712					
3.	Study progr	am		General medicine					
4.	Organizer of	f the Study pro	ogram	Goce Delce University – Stip					
				Faculty of Medical So	ciences				
5.		second or thir	d cycle	First cycle					
-	of studies)	/		VII Semester – fourtl		N	E CTC	1.0	
6.	Academic ye	ear/ semester		vii Semester – fourti	1 7.	Number of	ECIS	8	
8.	Professor (s	1		Andon Cibisev					
0.	110103301 (3	Biljana Ilievska							
				Ivica Smokovski					
				Valentina Velkovska Nakova					
				Gordana Kamceva					
				Ivana Trajkovska					
9.	Doguinomon	ta fan annallin	a the	Igor Nikolov Condition to be able	to onvoll to t	ha auhiaat ia	listaned anat	omri nhridiala	
9.	course	its for enrollin	ig the	basics of clinical pra					ogy,
	course			pathophysiology 1 a					and
				condition to take the					
				exams.			•		
10.		course (comp							
				nal clinical assessmen		nent of diseas	ses of the car	diovascular sy	rstem,
				l and rheumatic disea		nt based on	ationathagan	atia and alinia	al.
	• Ac		i rational d	liagnosis and therape	utic treatmei	nt, based on	etiopatnogen	euc and clinic	aı
			ional appli	cation of diagnostic ir	nvestigations	that togethe	er with clinica	ıl examination	ı lead
		osis of the dis							
	_			on the principles of ev	idence-based	d medicine a	nd guided by	disease treatr	nent
		commendatio							
11.				s per semester):					
		rdiovascular I		system (4 blocks)					
				tem (4 blocks)					
		eumatic Disea							
12.				ures, practical classes	, project wor	k			
13.		nt of available							
14.				es 60 hours per week	ζ,				
		ercises 60 hou		k,					
		k 15 hours per asks 15 hours	r week						
		45 hours per v	week						
15.	Forms of tea		15.1	Lectures / theoret	ical, contact 1	teaching,	60 hours		
	learning act			e-learning					
	_			Exercises (practical			60 hours		
	0.1 6		15.2	theoretical, semina	ars, team wo	rk)			
16.	Other forms	of activities	16.1	Projects			15 hours		
			16.2	Individual work			15 hours		
17.	Method of a	ssessment	16.3	Home learning			45 hours		
1/.	17.1	Tests / Oral	Exam		70 scores				
	17.2			ntation, projects,	10 scores				
		practical)							
	17.3	Activity and							
18.	Assessment	Criteria (scor	es/ points)		up to 50 p		5 (five).	(F)	
					51 to 60 p		6 (six)	(E)	
					61 to 70 p		7 (seven)	(D)	
					71 to 80 p		8 (eight) 9 (nine)	(C) (B)	
					91 to 100		9 (nine) 10 (ten)	(A)	
				1 0 1					
19.	Signature ar	proval and er	itrance to t	the final exam/ or	1 60% activ	e particinati	on at the cou	rse	
19.		oproval and er the next year		the final exam/ or	60% activ	e participati	on at the cou	rse	

21.	Methods of measuring / monitoring the quality of teaching Literature			Standardized motor tests, observation, survey Self-evaluation Minimum of 42 points gained through the attendance and active participation on the theoretical, practical work, individual activities and tests.			
	22.1 Basic literature			T	T		
		No	Author	Title	Publisher	Year	
		1.	J. Larry Jameson, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, Dan L. Longo, Joseph Loscalzo	Harrison's principles of internal medicine (20-th edition)	Mc Graw Hill	2019	
		2.					
	22.2	Additional literature					
		No	Author	Title	Publisher	Year	
		1.	Andon Cibisev Biljana Ilievska Ivica Smokovski Valentina Velkovska Nakova Gordana Kamceva Ivana Trajkovska Igor Nikolov	Professor Authorized lectures			

Anne			the Cours	se for Integrated First and Second cycle						
1.	Title of Course			NEUROLOGY						
2.	Code			3MF108512						
3.	Study program			General medicine						
4.	Organizer of the Study program				Goce Delce University – Stip					
				Faculty of Medical Sciences						
5.	Level (first, second or third cycle			Integrated First and	Second cyc	cle				
	of studies)									
6.		ear 2020/ sem	iester	VII Semester –	7. Number of E		ECTS	4		
	VII			fourth year						
8.	Professor (s)	,		Tatjana Chepregano	va Changov	vska				
9.	-	ts for enrollin	g the	None						
	course									
10.	Aims of the o	course (comp	etences): '	Teaching neurology le	ctures					
44	0	1 6	45 1							
11.				ks per semester):	-)					
					urs (theoretical hours)					
12.				urs (practical hours) g, practice with patient, assisting the physician during patient examination,						
12.				g, practice with patien stories, neurological ex				xammation,		
13.		it of available			<u> </u>	, periorining i	Dasic tests			
14.				5+15+30+15=120 (2+	1+1)					
15.	Forms of tea		15.1	Lectures / theoretical, contact teaching,			30 hours			
10.	learning acti		10.1	e-learning						
				Exercises (practical	al. laborato	rv.	15 hours			
			15.2	theoretical, semina			10 110415			
16.	Other forms	of activities	16.1	Projects Individual work			15 hours			
			16.2				30 hours			
			16.3	Home learning			30 hours			
17.	Method of as	ssessment					•			
	17.1	Tests / Oral	Exam		70 score	es .				
	17.2			entation, projects,	10 scores					
		practical)								
	17.3	Activity and	participat	ion	20 score	es				
18.	Assessment	Criteria (scor	es/ points) <u></u>	up to 50		5 (five).	(F)		
					51 to 60		6 (six)	(E)		
					61 to 70 points 7 (seven) (D)			(D)		

				71 00	0 (-:-1-1) (0)	
				71 to 80 points	8 (eight) (C)	
				81 to 90 points	9 (nine) (B)	
				91 to 100 points	10 (ten) (A))
19.			ance to the final exam/ or	60% active participat	ion at the course	
	transition in the ne					
20.	Language of teaching			English		
21.	Methods of measur	ing / mon	nitoring the quality of	Standardized motor te	ests, observation, surv	<i>r</i> ey
	teaching			Self-evaluation		
22.	Literature					
	22.1	Basic lit	terature	•		
		No	Author	Title	Publisher	Year
		1.	Allan Ropper, Martin	Adams and Victor's	Mc Graw Hill	2019
			Samuels,Joshua	Principles of	Education	
			Klein,Sashank Prasad.	Neurology,11 th		
				edition		
		2.	Elan D.Louis, Stphan	Merritt's Neurology	Wolters Kluwer	2015
			A.Mayers, Lwis P.	,		
			Rowland			
		3.	Geraint Fuller	Neurological	Elsevier	2013
				examination made	2.50 (101	2010
				Easy		
	22.2	Additio	nal literature	2403	1	1
		No	Author	Title	Publisher	Year
		140	nutioi	Title	1 ubiisiici	Tear
		1.	Robert B. Daroff, Joseph	Neurology in clinical	Elsevier	2016
			jankovic, John C. Mazziotta	Pracitice		
		2.	Osama O. Zaidat, J.ouglas	The little Black Book	Elsevier	2008
			miles, Alan J. Lerner	of Neurology		New
			, ,	0.5		edition
						2020
		3.				1
		, ,.	1	l	L	

Ann	ex 3 Program of the Cou	rse for Integrated First and Second cycle						
1.	Title of Course	RADIOLOGY						
2.	Code	3MF111412						
3.	Study program	General medicine						
4.	Organizer of the Study program	Goce Delchev University – Shtip						
		Faculty of Medical Sciences						
5.	Level (first, second or third cycle	Integrated First and Second cycle						
	of studies)							
6.	Academic year/ semester	VII Semester – fourth 7. Number of ECTS 4						
		year						
8.	Professor (s)	Ass. Prof.Dr. Jasminka Chabukovska Radulovska						
		Ass. Prof.Dr. Tanja Petrovska						
	D	N.						
9.	Requirements for enrolling the	None						
10.	course Aims of the course (competences)							
10.	Aims of the course (competences)							
	Acquire a basic knowledge of radio	ology and education for independent evaluation of normal and pathological						
	radiology findings	riogy and education for independent evaluation of normal and pacifological						
11.	Contents of the course (per 15 week	eks per semester):						
	Theoretical lectures : 15 weeks x 2							
	31 Theoretical part:							
	1. Introduction to Radiolog	y;						
	2. Obtaining x-rays and the	ir application in radio diagnostics;						
	3. X-ray image and its chara	acteristics;						
	4. Digital radiography;							
		o diagnostics/ultrasound, computed tomography and magnetic resonance						
	imaging;							
		diseases of the respiratory tract;						
	7. Radiological diagnosis of diseases of the cardiovascular system;							
	8. Radiological diagnosis of diseases of the digestive tract;							

- 9. Radiological diagnosis of biliary tract diseases;
- 10. Radiological diagnosis of diseases of the urogenital tract;
- 11. Radiological diagnosis of diseases of the musculoskeletal system;
- 12. Radiological diagnosis of diseases of the central and peripheral nervous system;
- 13. Radiological diagnosis of the breast diseases;
- 14. Radiological diagnosis of the life threatening condition;
- 15. Interventional radio diagnostic procedures
- 16. Combined imaging techniques, such as positron-emission tomography (PET)/CT, basic knowledge.

II Practical classes: 15 weeks x 1 hour = 15

- 1. Introduction to practical work in radiology department;
- 2. Introduction to practical work in conventional radiology;
- **3.** Demonstrated work with ultrasound (US);
- **4.** Demonstrated work with computed tomography (CT
- **5.** Uses of MRI in medical practices;
- 6. Radiology anatomy, radiology techniques, radiology of disease, interventional radiology, radiation protection, guidelines for appropriate use of radiology, and hands-on interpretation skills;
- 7. Developing a system for viewing chest radiographs;
- **8.** Developing a system for viewing abdominal radiographs;
- **9.** Developing a system for viewing bone and joint radiographs;
- 10. Distinguishing normal from abnormal structures on chest and abdominal radiographs;
- 11. Identifying gross bone or joint abnormalities in skeletal radiographs;
- **12.** Interpretation of routine basic imaging tests;
- **13.** Plain chest radiographs that demonstrated common conditions, some of which were life threatening and included total lung collaps, pneumoperitoneum, and multiple pulmonary metastases
- **14.** Imaging technique for viewing brain anomaly and diseases;
- **15.** Interventional radiology as a performance of usually minimally invasive medical procedures, with the guidance of imaging technologies;

16. Combined imaging techniques –basic knowledge (PET)/CT.

		time: 4 ECT	S v 20 -120 hours							
lictribution o		Total amount of available time: 4 ECTS x 30 =120 hours								
Distribution of available time: 30+15+15+15+45 =120 hours										
				ical, contact teaching,	30 hours					
earning activi	ties		U	111	451					
		450			15 not	ırs				
Other forms of activities										
	-									
1 - +1 1 - C		16.3	Home learning		45 nours					
				70 22222						
		ork (preser	itation, projects,	10 scores						
		participation	on	20 scores						
Assessment Criteria (scores/ points)			up to 50 points	5 (five). (F	")					
		, . ,		51 to 60 points	6 (six) (E)				
				61 to 70 points	7 (seven) (I))				
				71 to 80 points	8 (eight) (0	C)				
				81 to 90 points	9 (nine) (I	3)				
				91 to 100 points		A)				
Signature approval and entrance to the final exam/ or transition in the next year				60% active participat	ion at the course					
anguage of te	eaching / stu	ıdy		English						
Methods of measuring / monitoring the quality of				Standardized motor tests, observation, survey						
eaching				Self-evaluation						
iterature										
2.1	Basic	literature								
	No	Author	•	Title	Publisher	Year				
	1.	Fred A	. Mettler,JR	Essentials Of Radiology	Elsevier	2018				
i i a a i	ethod of asset 7.1 7.2 If 7.3 A seessment Crossessment Cr	cher forms of activities ethod of assessment 7.1 Tests / Oral 7.2 Individual w practical) 7.3 Activity and essessment Criteria (score ansition in the next year anguage of teaching / stuethods of measuring / maching terature 2.1 Basic No	ther forms of activities ther forms of activities ther forms of activities ther forms of activities 15.2 16.1 16.2 16.3 ethod of assessment 7.1 Tests / Oral Exam 7.2 Individual work (preser practical) 7.3 Activity and participation is seessment Criteria (scores/ points) gnature approval and entrance to the ansition in the next year anguage of teaching / study ethods of measuring / monitoring the aching terature 2.1 Basic literature No Author	orms of teaching / arning activities	ther forms of teaching / arning activities	ther forms of activities 15.1 Lectures / theoretical, contact teaching, e-learning 20 hours 15 hours 15.2 theoretical, seminars, team work) 15 hours 16.1 Projects 16.2 Individual work 15 hours 16.3 Home learning 45 hours 16.3 Home learning 45 hours 15 hours 16.3 Home learning 45 hours 15 hours 16.3 Home learning 45 hours 16.3 Home learning 16.3 Home learning 16.3 Home learning 16.3 Home learning 20 scores 10				

		2.	William Herring	Learning Radiology: Recognizing the Basics	Kindle Edition	2019				
		3.	GeorgeW. Estman, Christoph Wald , Jane Crossin	Getting Started in Clinical Radiology	Thieme	2017				
2	22.2	Additional literature								
		No	Author	Title	Publisher	Year				
		1.	Daniel Y.F. Chung, Dpanjali Mondal, Erskine J. Holmes, Rabesh Mara	Emergency Cross- sectional Radiology	Cambridge University Press	2012				
2.		Hariqubal Singh, Dinesh Prdesi	Radiology for undergraduates and general practicioners	Jaypee Brothers Medical Pub	2012					
		3.								

Annex 3		0.			-		1	l	
Title of Course SURGICAL PROPEDEUTICS 1	Annes	x 3 Program of	the Cours	e for Integrated First :	and Seco	ond cycle			
2. Code 3MF126912 General medicine			. and dours						
Study program General medicine									
4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) Integrated First and Second cycle of studies) 6. Academic year/ semester VII Semester 7. Number of ECTS 5 8. Professor (s) Andreja Arsovski Aleksandar Mitevski 9. Requirements for enrolling the course None None 10. Aims of the course (competences): requiring basic theoretical and practical skills for clinical investigations in surgical patients 11. Contents of the course (per 15 weeks per semester): 1. Introduction in to surgical propedeutics 2. Diagnostic methods 3. Surgical anamnesis 4. Physical examination 5. Preparation for surgical intervention 6. Clinical investigation of the neck and thyroid gland 8. Clinical investigation of the neck and thyroid gland 8. Clinical investigation for thoracic surgical pathology (two parts) 10. Clinical investigations in cardio surgery 11. Clinical investigations in vascular surgery 12. Methods of learning: theoretical and practical learning 15.1 Lectures / theoretical, contact teaching, 15 weeks x 3 hours = 45h Porms of teaching / learning activities Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 learning 15.2 Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 learning 15.2 Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 learning 15.2 Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 learning 15.2 Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 learning 15.2 Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 learning 15 weeks x 2 ho									
Faculty of Medical Sciences		Organizer of the Study pro	ogram		v – Stin	1			
Level (first, second or third cycle of studies)	.	- 0							
Of studies Of	5.	Level (first, second or thir	d cvcle			cvcle			
Section Fourth year Fourth year Fourth year			,	O		,			
8. Professor (s) Andreja Arsovski Aleksandar Mitevski 9. Requirements for enrolling the course 10. Aims of the course (competences): requiring basic theoretical and practical skills for clinical investigations in surgical patients 11. Contents of the course (per 15 weeks per semester): 1. Introduction in to surgical propedeutics 2. Diagnostic methods 3. Surgical anamnesis 4. Physical examination 5. Preparation for surgical intervention 6. Clinical investigation in neurosurgical patients 7. Clinical examination of the neck and thyroid gland 8. Clinical investigation of the breast 9. Clinical investigation for thoracic surgical pathology (two parts) 10. Clinical investigations in cardio surgery 11. Clinical investigations in vascular surgery 12. Methods of learning: theoretical and practical learning 13. Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14. Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course 15 weeks x 2 hours = 30 from the course	6.	Academic year/ semester		VII Semester -	7.	Number of EC	ΓS	5	
Aleksandar Mitevski		- ,							
9. Requirements for enrolling the course 10. Aims of the course (competences): requiring basic theoretical and practical skills for clinical investigations in surgical patients 11. Contents of the course (per 15 weeks per semester): 1. Introduction in to surgical propedeutics 2. Diagnostic methods 3. Surgical anamnesis 4. Physical examination 5. Preparation for surgical intervention 6. Clinical investigation in neurosurgical patients 7. Clinical examination of the neck and thyroid gland 8. Clinical investigation of the breast 9. Clinical investigation for thoracic surgical pathology (two parts) 10. Clinical investigations in cardio surgery 11. Clinical investigations in vascular surgery 12. Methods of learning: theoretical and practical learning 13. Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14. Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15.	8.	Professor (s)							
course 10. Aims of the course (competences): requiring basic theoretical and practical skills for clinical investigations in surgical patients 11. Contents of the course (per 15 weeks per semester): 1. Introduction in to surgical propedeutics 2. Diagnostic methods 3. Surgical anamnesis 4. Physical examination 5. Preparation for surgical intervention 6. Clinical investigation in neurosurgical patients 7. Clinical examination of the neck and thyroid gland 8. Clinical investigation of the breast 9. Clinical investigations in cardio surgery 10. Clinical investigations in cardio surgery 11. Clinical investigations in vascular surgery 12. Methods of learning: theoretical and practical learning 13. Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14. Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning 15.1 Lectures / theoretical, contact teaching, e-learning 15. Exercises (practical, laboratory, learnings x 2 hours = 30 ft theoretical, seminars, team work)				Aleksandar Mitevski					
10. Aims of the course (competences): requiring basic theoretical and practical skills for clinical investigations in surgical patients 11. Contents of the course (per 15 weeks per semester): 1. Introduction in to surgical propedeutics 2. Diagnostic methods 3. Surgical anamnesis 4. Physical examination 5. Preparation for surgical intervention 6. Clinical investigation in neurosurgical patients 7. Clinical examination of the neck and thyroid gland 8. Clinical investigation of the breast 9. Clinical investigation for thoracic surgical pathology (two parts) 10. Clinical investigations in cardio surgery 11. Clinical investigations in vascular surgery 12. Methods of learning: theoretical and practical learning 13. Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14. Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15.2 Exercises (practical, laboratory, learning 15 weeks x 2 hours = 30 hearning 15 weeks x 2 hours = 30 h	9.	Requirements for enrollin	g the	None					
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10. Clinical investigations in cardio surgery 11. Clinical investigations in vascular surgery 12. Methods of learning: theoretical and practical learning 13. Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14. Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e-learning Exercises (practical, laboratory, 15 weeks x 2 hours = 30 hours) 15.2 theoretical, seminars, team work)					(h				
11. Clinical investigations in vascular surgery 12 Methods of learning: theoretical and practical learning 13 Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14 Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e-learning Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 hours					ogy (tw	o parts)			
12 Methods of learning: theoretical and practical learning 13 Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14 Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e-learning Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 hours									
Total amount of available time: 5 ECTS x 30 hours = 150 hours 2+3+0 / week 14 Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities Total amount of available time: 5 ECTS x 30 hours = 150 hours Lectures / theoretical, contact teaching, e-learning 15 weeks x 3 hours = 45h	12								
2+3+0 / week 14 Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities Exercises (practical, laboratory, theoretical, seminars, team work) 15 weeks x 2 hours = 30 h					ourc				
14 Distribution of available time: 45 + 30 + 15 + 30 + 30 = 150 hours 15. Forms of teaching / learning activities Total	10		unic. J EC	15 A 50 Hours - 150 H	ours				
15. Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e-learning Exercises (practical, laboratory, theoretical, seminars, team work) 15.1 Lectures / theoretical, contact teaching, e-learning 15 weeks x 3 hours = 45h 15 weeks x 2 hours = 30 h	14	/	ime: 45 + 3	30 + 15 + 30 + 30 = 15	0 hours				
learning activities e-learning Exercises (practical, laboratory, 15 weeks x 2 hours = 30 hours =		Forms of teaching /		Lectures / theoret	ical, con	ntact teaching.	15 weeks x 3	hours = 45hours	
Exercises (practical, laboratory, 15 weeks x 2 hours = 30 h			10.1				10comb A b		
15.2 theoretical, seminars, team work)					ıl. labor	atorv.	15 weeks x 2	hours = 30 hours	
			15.2					and the second	
	16.	Other forms of activities			2, 2242		15 hours		
16.2 Individual work 30 hours	- 1								
16.3 Home learning 30 hours									
17. Method of assessment	17.	Method of assessment					1		
17.1 Tests / Oral Exam 70 scores									
17.2 Individual work (presentation, projects, 10 scores		,		entation, projects.					
practical)			G	,1 -,,					
17.3 Activity and participation 20 scores	f		participat	ion	20 scores				
18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)	18.				up to	50 points	5 (five).	(F)	

	ı			T	_			
				51 to 60 points	6 (six)	(E)		
				61 to 70 points	7 (seven)	(D)		
				71 to 80 points	8 (eight)	(C)		
				81 to 90 points	9 (nine)	(B)		
				91 to 100 points	10 (ten)	(A)		
19.	Signature approval	and entra	ance to the final exam/ or	60% active participat	. ,			
	transition in the ne		,	l control production				
20.	Language of teaching		7	English				
21.			nitoring the quality of	Standardized motor to	ests. observation.	survev		
-	teaching	0,	3 : 11 :	Self-evaluation	,	·- J		
22.	Literature							
	22.1	Basic lit	erature					
	22.1	No	Author	Title	Publisher	Year		
		1.	Walker HK, Hall WD,	Clinical Methods:	Butterworths	1990		
			Hurst JW, editors.	The History,				
				Physical, and				
				Laboratory				
				Examinations				
	22.2	Additio	nal literature	•	•	•		
		No	Author	Title	Publisher	Year		
		1.	Арсовски А, Митев К,	Хируршка	УГД Штип	2020		
			Митевски А	пропедевтика				

Anne											
1.	Title of Course		TERNAL MEDICINE 2								
2.	Code		F106812								
3.	Study program		neral medicine								
4.	Organizer of the Study program		iversity Goce Delcev S								
			culty of Medical Science								
5.	Level (first, second or third cycle of studies)		egrated First and Seco				1 -				
6.	Academic year / semester	-	I Semester – fourth	7.	Number o	f ECTS	8				
		yea			credits						
8.	Professor (s)		oup of Professors:								
			of d-r Andon Cibisev		_						
			of d-r Biljana Ilievska I		rska						
			Prof d-r Igor Nikolov								
			Prof d-r Valentina Ve								
			Prof d-r Gordana Kar		Mihailova						
			Prof d-r Ivana Trajko								
_			Prof d-r Ivica Smoko								
9.	Requirements for enrolling the course		quirement for attending								
			attendance of Internal Medicine 1, and condition for taking exam of Internal Medicine 2 is attendance and passed exam of Internal								
				tenda	nce and pass	sed exam of In	iternal				
4.0	A: C:1	Me	dicine 1.								
10.	Aims of the course (competencies):	11	1.1			1					
	Acquiring skills and competencies for rate	tional d	lagnosis and therapeu	itic tre	eatment, bas	sed on etiopati	nogenesis				
	and principles of clinical pharmacology						1				
	Acquiring skills and competencies for rate and training and training and training and training are stated as a second second as a second			l treat	ment of end	locrine, hemat	cology,				
	gastroenterohepatology, and toxicology				1 1 1	. 1 1.					
	Acquiring skills and competencies in rational states and dispenses and dispenses.	ionai us	e of investigations tha	t in ac	iaition to ba	asic ciinicai inv	restigations				
	result in diagnosis of diseases	1 4			D I M	. 4: -: 4 : 4					
	Acquiring skills and competencies in rational Transfer and Children	ionai tre	eatment based upon E	viaen	ce Based Me	edicine and int	ternationally				
11.	accepted Treatment Guidelines Contents of the course (per 15 weeks per sem	voctor).									
11.			rratom (4 bloaks)								
	Disorders and diseases of gastrointe Disorders and diseases of hometales										
	Disorders and diseases of hematological system (4 blocks) Compared to the compared to										
	Disorders and diseases of endocrine system and metabolism (4 blocks) The state of the stat										
12	Toxicology disorders and diseases (in the second seco			l- l							
12.	Methods of learning: interactive lectures, exert Total amount of available time:	rcises, p				3					
13.			8 ECTS x 30 hours = 240 hours								
14.	Distribution of available time:	1 - 1		30+30+60+75 = 240 hours (3+2+2) cures / theoretical, contact							
15.	Forms of teaching / learning activities	15.1.			itact	45 hours					
			teaching, e-learning								

			15.2.	Exercises (practical, labora theoretical, seminars, team	-	30 hours	
16.	Other fo	orms of activities	16.1.	Projects		30 hours	
			16.2.	Individual work		60 hours	
			16.3.	Home learning		75 hours	
17.	Method	of assessment	I				
	17.1.	Tests / Oral Exam		70 score		es	
	17.2	Individual work (presentation, pro	jects, pr	practical) 10 score		es	
	17.3	Activity and participation		20 score		es	
18.	Assessr	nent Criteria (scores/ points)	l	up to 50 points 5 (five)		(F)	
			ŗ	51 to 60 points 6 (six) (E)	
			(61 to 70 points 7 (seven) (D)		n) (D)	
				71 to 80 points	1 to 80 points 8 (eight) (C)		
			8	31 to 90 points	9 (nine)	` /	
				91 to 100 points	10 (ten) (A)		
19.	Signature approval and entrance to the final exam / or transition in the next year			60% active participation at the course			
20.	Language of teaching / study			English			
21.	Method	s of measuring / monitoring the qua	- 1	Standardized motor tests, observation, survey			
	of teach	ning		Self-evaluation			

1.	Title of the Course	INFECTIOUS DISEASES	2								
2.	Code	3MF107112									
3.	Study Program	General medicine									
4.	Organizer of the study program (unit or	University Goce Delcev S	Stin								
	institute, Faculty, department)	Faculty of Medical Science									
5.	Cycle (first, second and third cycle)	Integrated First and Seco		cle							
6.	Academic year / semester	VIII Semester – fourth year	8.	Number of credits	5						
8.	Professor (s)	Velo Markovski		•	•						
9.	Requirements for enrollment the Course	-									
10.	Purposes of the curriculum (competencies): Introduction to the basics of infectious diseases, therapy of infectious diseases, antibiotics, anti-viral drugs, antimycotics, basics of immunology, viral hepatitis, basics of intestinal infections, dehydration and rehydration Content of the course program:										
11 12.	Learning methods:										
14.	Lectures, exercises, seminars research and pra	ctical activities.									
	C) Lectures										
	14. Respiratory infectious diseases										
	15. • Influenza; upper respiratory infecti	ions									
	16. • Pneumonia										
	17. • Streptococcal infections, staphyloco	occal infections;									
	18. • Sepsis, meningococcal infections										
	19. • Rash fever										
	20. • Hemorrhagic fever										
	21. • I CNS nfectious diseases										
	22. • Herpes Virus, Mononuclear Syndro	me,									
	23. • Parotitis epidemics										
	24. • Anthropo-zoonoses; Brucellosis, Le	eptospirosis,									
	25. • Parasitic diseases										
	26. • HIV - AIDS										
	D) Exercises										
	Treatment of a patient with a respira										
	Treatment of a patient with a staphy										
	Treatment of a patient with herpes v	rirus infection									

	Lumbar puncture CNS infections								
	Bacteremia and sepsis								
	Treatment of a patient with zoon	osis							
	Treatment of a patient with HIV								
10	m . 1		E DICTIC 201 450	1					
13.	Total available time		5 EKTS x 30 hours = 150	nours.					
14.	Distribution of available time	1454	30+30+15=150 hours.	201					
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - conta teaching,	ct	30 hours				
			e-teaching						
		15.2.	theoretical and practical exe	rcicoc	30 hours				
		13.2.	e-exams, preparation of	i cises,	30 110013				
			independent seminar work						
16.	Other forms of activities	16.1	Project tasks		15 hours				
		16.2	Individual tasks		0 hours				
		16.3	Home learning	Home learning					
17.	Method of assessment	<u>l</u>	- 1						
	17.1 Tests / oral exams			ints					
	17.2. Seminars (paper / project - prese	ntation: v	written and/or oral) 10 po		ints				
	17.3 Activity and participation			20 poi	nts				
18.	Assessment Criteria (points / score)		up 50 points	5	(five) (F)				
			51 to 60 points	6	(six) (E)				
			61 to 70 points		(seven) (D)				
			71 to 80 points	8	(eight) (C)				
			81 to 90 points	9	(nine) (B)				
			91 to 100 points	(ten) (A)					
19.	Signature requirement and passing the fina	l exam	42 points acquired						
20.	Language of teaching / study		English						
21.	Method of monitoring the quality of teaching	ng	Self-evaluation						

22.	Literatur	e										
		Require	Required literature									
		No. Author		Title	Publisher	Year						
	22.1.	1.	Mandell, Douglas, and Bennett's	Infectious disease essentials	Elsevier							
		2.	Velo Markovski	Authorized lectures	Faculty of Medical Sciences - UGD							
		3.										

Anne	ex 3	Program of the Cours	se for Integrated First and Second cycle						
1.	Title of Cours	se	PSYCHIATRY						
2.	Code		3MF111312						
3.	Study progra	ım	General medicine						
4.	Organizer of	the Study program	Goce Delce University – Stip						
			Faculty of Medical Sciences						
5.	Level (first, s of studies)	econd or third cycle	Integrated First and Second cycle						
6.	Academic yea	ar/ semester	VIII Semester – fourth year	7.	Number of ECTS	5			
8.	Professor (s)		Prof. Dr. Kneginja Richter						
9.	Requirement	ts for enrolling the	None						
	course								
10.	Aims of the c	ourse (competences):							
			hods of diagnosis, epidemiology pathoph	ysiology, diffe	erential diagnosis and				
	treatment of psychiatric diseases.								
	2. Prevention in mental health								
11.	. Contents of the course (per 15 weeks per semester):								

	1									
		cluding sympto								
				ie to psychoactive su	bstance use					
				sional disorders						
		ctive] disorder								
				orm disorders						
					turbances and physical fa	ictors				
		of adult person								
		lth of Childern	and Adole	scents						
12.	Methods of									
				es, group work, rolle	play, video presentations	s, and case analysis.				
13.		nt of available								
		0 hours = 150								
14.		n of available t								
		15+45 = 150 h				1				
15.	Forms of te		15.1		tical, contact teaching,	30 hours				
	learning ac	tivities		e-learning						
				Exercises (practic			30 hours			
			15.2	theoretical, semin	ars, team work)					
16.	Other form	s of activities	16.1	Projects			0 hours			
			16.2	Individual work			45 hours			
			16.3	Home learning			45 hours			
17.	Method of a	assessment				•				
	17.1	Tests / Oral	Exam		70 scores					
	17.2			ntation, projects,	10 scores					
	- 7 · -	practical)	. от п (рт оос	mation, projects,	10 000100					
	17.3	Activity and	participati	on	20 scores					
18.		t Criteria (scor			up to 50 points	5 (five). (F)				
10.	1100000111011	t differia (seoi	es, points,		51 to 60 points	6 (six) (E)				
					61 to 70 points	7 (seven) (D)				
					71 to 80 points	8 (eight) (C)				
					81 to 90 points	9 (nine) (B)				
					91 to 100 points	10 (ten) (A)				
19.	Cianatura	nnnorral and a	ntranga to t	he final exam/ or	60% active participat					
19.		n the next year		ile illiai exalli/ oi	00% active participat	ion at the course				
20		of teaching / st			English					
21		measuring / r		the quality of	English Standardized mater to	ata abanmatian aumi				
21		measuring / n	nonitoring	the quality of	Standardized motor tests, observation, survey Self-evaluation					
22.	teaching				Seir-evaluation					
22.	Literature	l D:	- 1:6 6							
	22.1		c literature		mu.1	D 11: 1	**			
		No	Autho		Title	Publisher	Year			
		1.	David Smyth	Semple, Roger	Oxford Handbook of Psychiatry	Oxford Handbooks	2019			
		2.	Thom		Neurobiology of	Elsevier	2012			
				epfer,Charles	Psychiatric					
			Neme		Disorders					
		Ĺ								
		3.	Higgir	1S	The Neuroscience of	Lippincott	2018			
					Clinical Psychiatry	Williams&Wilki.				
	22.2	Addi	tional liter	ature						
	·	No	Autho	r	Title	Publisher	Year			
		4	77 1	- 0 C-1 11	Council M vi 1 1 C	TAT-16 171	2017			
		1.	Kapla	n & Sadock's	Concise Textbook of	Wolters Kluwer	2017			
			7 **	Chadlein	Child 8 Adalasant	TAZ TAZ NIGOTE O	2015			
		2.	Jess H	. Shatkin	Child & Adolescent	W. W. Norton &	2015			
					Mental Health: A	Company				
					Practical, All-in-One					
					Guide					
		2								
l		3.								

Anne	ex 3	Program of	the Cours	e for Integrated First	and Second cycle						
1.	Title of Cou		. and dours	SURGICAL PROPER							
2.	Code	·		3MF127012							
3.	Study progr	ram		General medicine							
4.		of the Study pr	ogram	Goce Delce Universi	ty – Stip						
				Faculty of Medical S	ciences						
5.		second or thir	d cycle	Integrated First and	Second cycle						
	of studies)				r	1	r				
6.		ear/ semester		VIII Semester – four	th year 7.	Number	of ECTS 4				
8.	Professor (s)		Andreja Arsovski	_						
_	ъ .	, C 11:	.1	Aleksandar Mitevsk	l						
9.	course	nts for enrollir	ig the	None							
10.		course (comp	atancas). r	l Paguiring basic theore	tical and practical skills f	or clinical investigation	ne in curgical				
10.	patients	course (comp	etences). i	equiling basic theore	tical and practical skins i	or chincal hivestigatio	iis iii surgicar				
11.		the course (pe	er 15 week	s per semester):							
				bdominal surgery (fo	ur parts)						
	2. Cl	inical investig	ations in u	rology							
				eripheral vascular dis							
				comothory system tr							
				noracic and abdomina	i trauma						
12.				gery (two pars) I practical learning							
12.	Methous of	rear ming: theo	i etitai aiit	i practical lear lillig							
13.	Total amou	nt of available	time: 4 F.C	TS x 30 hours = 120 h	nours						
14.											
15.	Forms of te		15.1		tical, contact teaching,	15 weeks x 2 hours = 30hours					
	learning act	tivities		e-learning		1					
			15.0	Exercises (practic		15 weeks x 1 hours	= 15 hours				
1.0	O+l C	a a f a a tita i i i	15.2	theoretical, semin	ars, team work)	15 hav					
16.	Otner form:	s of activities	16.1 16.2	Projects Individual work		15 hours 30 hours					
			16.2		Home learning 30 hours						
17.	Method of a	ssessment	10.3	Trome learning		JO HOULS					
<u> </u>	17.1	Tests / Oral	Exam		70 scores						
	17.2			entation, projects,	10 scores						
		practical)									
	17.3	Activity and			20 scores						
18.	Assessment	t Criteria (scor	es/ points)	up to 50 points	5 (five). (F)					
					51 to 60 points	6 (six) (E)					
					61 to 70 points	7 (seven) (D)					
					71 to 80 points	8 (eight) (C)					
					81 to 90 points 91 to 100 points	9 (nine) (B) 10 (ten) (A)					
19.	Signatura	nnroval and o	ntrance to	the final exam/ or	60% active participat						
19.		pprovarand ei n the next year		uic iiiai exaiii/ Ul	oo /o active participat	ion at the course					
20.		f teaching / st			English						
21.	Methods of	measuring / n	nonitoring	the quality of	Standardized motor to	ests, observation, surv	ey				
	teaching				Self-evaluation	<u> </u>					
22.	Literature										
	22.1		c literature								
		No	Autho		Title	Publisher	Year				
				er HK, Hall WD,	Clinical Methods:	Butterworths	1990				
			Hurst	t JW, editors.	The History,						
					Physical, and Laboratory						
					Examinations						
	22.2	Addi	tional liter	rature		1	1				
		No	Autho		Title	Publisher Year					
		1.		вски А, Митев К, евски А	Хируршка пропедевтика	УГД Штип	2020				
	<u> </u>		MINITE	יחלעגו ע	пропедевтика	1	1				

Anne	ex 3	Program of	the Cours	e for Integrated First a	and Second cycle						
1.	Title of Cou	rse		NUCLEAR MEDICIN	E						
2.	Code			3MF109412							
3.	Study progr			General medicine							
4.	Organizer o	f the Study pro	ogram	Goce Delcev Univers							
				Faculty of Medical Sc							
5.		second or thir	d cycle	Integrated First and	Second cycle						
	of studies)				1 -	N 1 C	1.				
6.	Academic y	ear/ semester		VIII Semester -	7.	Number of ECTS	4				
8.	Professor (s	.)		fourth year Professor Marina Vla	uilrovia	ECIS					
0.	Trolessor (s	•)		Professor Emilija Jan							
				Professor Zdenka Sto							
9.	Requiremen	nts for enrollin	g the	None	.,,						
	course		Ö								
10.	Aims of the	course (comp	etences):								
				c theoretical knowledg	ge of physics and its a	pplication in 1	medical sciei	nce.			
11.			er 15 week	s per semester):							
	Course cont				T	-t 11 · · ·		Data C			
				w of Radioactive Deca							
				osimetry. Biological o	enects of ionizing rad	iation. Kadiop	marmaceutic	cais - definition,			
				ng of blood cells inations in cardiology	Annlying Nuclear M	edical Evamir	ation to Nor	hrology			
				s - Diseases of the Gas							
				disease. Application o							
	Positron emission tomography - PET. Basics of radionuclide therapy										
12.	Methods of learning:										
	Discussions	, laboratory ar		al exercises <u>, interpret</u>	ation the pictures of t	the nuclear m	edicine proc	<u>edures-normal</u>			
				ome learning.							
13		nt of available									
14				5+15+30+15=120 hou		Г					
15.	Forms of tea		15.1		theoretical, contact teaching, e- 30 hours						
	learning act	ivities		learning	l labousteres (l	and 451					
			15.2	seminars, team wo	ll, laboratory, theoreti	ical, 15 hou	rs				
16.	Other forms	of activities	16.1	Projects	ikj	15 hou	ırc				
10.	Other forms	o or activities	16.2	Individual work		30 hou					
			16.3	Home learning	30 hours						
17.	Method of a	ssessment	10.0	Trome icar iiiig	50 nours						
	17.1	Tests / Oral	Exam		70 scores						
	17.2			ntation, projects,	10 scores						
		practical)									
	17.3	Activity and			20 scores						
18.	Assessment	Criteria (scor	es/ points		up to 50 points	5 (fiv					
					51 to 60 points	6 (six					
					61 to 70 points		ven) (D)				
					71 to 80 points	8 (eig					
					81 to 90 points	9 (nir					
10	C: :			1 C:1 /	91 to 100 points	10 (te)			
19.				the final exam/ or	60% active particij	pation at the c	ourse				
20		n the next year f teaching / stu			English						
21.	Methods of	measuring / n	auy nonitoring	the quality of		r tests observ	ration surve	v			
	teaching	cusui iiig / II	.ocoi iiig	and quanty of	Standardized motor tests, observation, survey Self-evaluation						
22.	Literature				222 274444011						
	22.1	Basio	literature		1						
		No	Author		Title	Publish	ner	Year			
		1.	1	onal Atomic Energy	Appropriate use of			2010			
			Agency,		FDG-PET for the	Atomic	Energy				
					management of can	icer Agency	, Vienna				
			1 _		patients.						
		2		onal Atomic Energy	Clinical PET/CT atla			2015			
			Agency,	/ienna.	a casebook of imagi		Energy				
1	1		Ì		in oncology.	Agency	, Vienna.				

		•			
	3	Volterrani D, Erba, PA, Carrio I, Strauss HW, Mariani G.	. Nuclear Medicine Textbook.	Springer Nature Switzerland	2019
	4.	Zdenka Stojanovska	Lecture notes	UGD	
	5.	Gopal B. Saha	Physics and radiobiology of Nuclear medicine, Fourth edition	Springer	2013
22.2	Addi	tional literature			
	No	Author	Title	Publisher	Year
	1.	Vlajković Marina	Osnovi kliničke nuklearne medicine sa praktikumom	Medicinski fakultet u Nišu	2020
	2.	IAEA	Nuclear cardiology: guidance on the implementation of SPECT myocardial perfusion imaging	International Atomic Energy Agency	2016
	3.	Jerrold T. Bushberg, J. Anthony Seibert, Edwin M Leidholdt, John M Boone	The Essential Physics of Medical Imaging; Third edition;	Lippincott Williams & Wilkins;	2012

Anne	ex 3 Program of the Course for I	ntegrated First and Second cycle					
1.	Title of Course	CLINICAL BIOCHEMISTRY					
2.	Code	3MF110612					
3.	Study program	General medicine					
4.	Organizer of the Study program	Goce Delcev University – Stip Faculty of Medical Sciences					
5.	Level (first, second or third cycle of studies)	Integrated First and Second cycl	е				
6.	Academic year/ semester	VIII Semester – fourth year	7.	Number of ECTS	4		
8.	Professor (s)	Prof. Dr. Tatjana Ruskovska Assistant Prof. Dr. Aleksandra Atanasova - Bosku					
9.	Requirements for enrolling the course	None					
10.	Aims of the course (competences):						
	Within this course students will gain knowledge about the specificities in organization of the work process in clinical						

Within this course students will gain knowledge about the specificities in organization of the work process in clinical biochemistry laboratories, and the most common clinical biochemistry tests. The students will learn the analytical methods and techniques, as well as diagnostic significance, advantages and limitations, and most common interferences for each particular method. They will learn how to perform most of the analyses manually, but they will also learn about the advantages of automatization of the clinical biochemistry laboratories, which allows fast and accurate laboratory diagnostics.

- 11. Contents of the course (per 15 weeks per semester):
 - Lectures
 - Definition of Clinical biochemistry. Organization of the work in a clinical biochemistry laboratory.
 - Laboratory methods for diagnostics and monitoring of the treatment in Diabetes mellitus, part 1 blood glucose, glucose and ketones in urine, oGTT.
 - Laboratory methods for diagnostics and monitoring of the treatment in Diabetes mellitus, part 2 -0 HbA1c, microalbuminuria, C-peptide, insulin.
 - Blood lipids and lipoproteins. Total cholesterol, triglycerides, HDL- and LDL-cholesterol. Apolipoproteins.
 - Interferences and quality control in Clinical biochemistry. 0
 - Plasma proteins diagnostic significance and methods for determination.
 - Specific proteins diagnostic significance and methods for determination.
 - First colloquium
 - Urea and creatinine diagnostic significance and methods for determination. 0
 - Bilirubin and uric acid diagnostic significance and methods for determination. 0
 - Clinical enzymology general concept and basic principles. Determination of enzymatic activity.
 - Diagnostic significance of the most common enzymes in clinical practice. 0 Electrolytes, calcium, magnesium and phosphor. Iron, TIBC, transferrin and ferritin.
 - 0
 - Enzyme-immunochemistry methods in clinical biochemistry. Second colloquium
 - Laboratory work

	0		collection sy fugation.	ystems. Pipettes and	techniques of pipetting.	Spectro	ohotometry an	d	
	0	Detern		serum glucose with (GOD-PAP method. Detern	nination	of glucose and	l ketones in	
	0	urine. Deterr	nination of	serum glucose with l	nevokinase method				
	0				rol and triglycerides with	ı enzvm	atic methods.		
	0	Detern	nination of	HDL- and LDL-chole:	sterol with precipitation				
	0		Determination of serum total protein and albumin.						
	0	Specifi	pecific proteins – determination with immuno- turbidimetric and nephelometric methods. • First colloquium						
	0	Creatii	eatinine in serum and urine. Creatinine clearance.						
	0			bilirubin in serum ar					
	0			serum AST and ALT.					
	0	Detern	nination of	amylase in serum an	d urine.				
	0			iron and TIBC in seruserum cortisol with l					
		■ Determ	Practical		ani ussay.				
12.	Methods of learn	ning:							
	■ <u>Lecture</u>			C . 1 .					
	0	Lectur Multin		e group of students.					
		E-leari							
	0		dual consult	ations					
	0			n small groups of stu	dents				
		tory wor		aal wayle with amall	anoung of students				
	0			cal work, with small ger groups of studer					
	0		cal exam.	ger groups or studer	165				
13.				dits x 30 hours = 120					
14.				+15+30+15 = 120 h		T			
15.	Forms of teachir		15.1	Lectures / theoret	cal, contact teaching, 30 hours				
	learning activitie	es		e-learning Exercises (practical	al laboratory	15 hou	ırs		
			15.2	theoretical, semina		15 1100			
16.	Other forms of		16.1	Projects	,		15 hours		
	activities	-	16.2	Individual work		30 hou			
17	Mathad of again		16.3	Home learning	30 hours				
17.	Method of assess	ts / Oral	Fvam		70 scores				
				tation, projects,	10 scores				
		ctical)	- CF	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
			participatio		20 scores				
18.	Assessment Crit	eria (scoi	res/ points)		up to 50 points	5 (fiv			
					51 to 60 points 61 to 70 points	6 (six 7 (se	(E) ven) (D)		
					71 to 80 points		ght) (C)		
					81 to 90 points	9 (ni			
					91 to 100 points	10 (te	en) (A)		
	Signature approval and entrance to the final exam/ or				60% active participati	ion at th	e course		
19.			transition in the next year			00% active participation at the course			
	transition in the	next year	r		English				
20.	transition in the	next year	r udy		English Standardized tests ob	carvatio	n curvey		
	transition in the Language of tead Methods of meas	next year	r udy		English Standardized tests, obs	servatio	n, survey		
20.	transition in the	next year	r udy		Standardized tests, ob	servatio	n, survey		
20. 21.	transition in the Language of tead Methods of meas teaching	next year ching / st suring / r Basic	r udy nonitoring t	the quality of	Standardized tests, obs Self-evaluation	servatio			
20. 21.	transition in the Language of tead Methods of measteaching Literature	next year ching / st suring / r Basic	r udy monitoring t : literature Author	the quality of	Standardized tests, obs Self-evaluation		Publisher	Year	
20. 21.	transition in the Language of tead Methods of measteaching Literature	next year ching / st suring / r Basic	r udy monitoring t : literature Author Carl A.	the quality of Burtis, Edward R.	Standardized tests, obs Self-evaluation Title TIETZ, Fundamentals of	of	Publisher Saunders,	Year 2008	
20. 21.	transition in the Language of tead Methods of measteaching Literature	next year ching / st suring / r Basic	r udy monitoring t : literature Author Carl A.	the quality of	Standardized tests, obs Self-evaluation Title TIETZ, Fundamentals of Clinical Chemistry, 6th	of	Publisher		
20. 21.	transition in the Language of tead Methods of measteaching Literature	next year ching / st suring / r Basic No 1.	r udy monitoring t : literature Author Carl A.	Burtis, Edward R. od, David E. Bruns	Standardized tests, obs Self-evaluation Title TIETZ, Fundamentals of	of	Publisher Saunders,		
20. 21.	transition in the Language of teac Methods of meas teaching Literature 22.1	next year ching / st suring / r Basic No 1.	r udy monitoring t : literature Author Carl A. Ashwo	Burtis, Edward R. od, David E. Bruns	Standardized tests, obs Self-evaluation Title TIETZ, Fundamentals of Clinical Chemistry, 6th	of	Publisher Saunders, Elsevier		
20. 21.	transition in the Language of teac Methods of meas teaching Literature 22.1	next year ching / st suring / r Basic No 1.	r udy monitoring to the literature Author Carl A. Ashwortional literature Author	Burtis, Edward R. od, David E. Bruns	Standardized tests, observed Self-evaluation Title TIETZ, Fundamentals of Clinical Chemistry, 6th edition	of	Publisher Saunders, Elsevier	2008	

Anne	Drogram of the Course	o for Integrated First and	Socond	gralo			
1.	Title of Course	e for Integrated First and S GYNECOLOGY AND OBS					
2.	Code	3MF115912	ILIM	GD 1			
3.	Study program	General medicine					
4.	Organizer of the Study program	Goce Delce University - S	Stip				
		Faculty of Medical Science					
5.	Level (first, second or third cycle	Integrated First and Seco	nd cyc	le			
	of studies)						
6.	Academic year/ semester	IX Semester – fourth	7.	Number of ECTS	8		
		year					
8.	Professor (s)	Prof. D-r Gligor Dimitrov					
9.	Requirements for enrolling the course	Enrolled fifth year					
10.	Aims of the course (competences): A	Loguiring knowlodgo, ckille	and				
10.				dispasse			
	in women, through theoretical inter	nosis and treatment of gynecologic diseases					
	training under supervision.	active lectures and hands	on prac	cticui			
	Predicted outcome of the course:Me	dical student-future MD w	ill be fu	ılly			
	trained to work in the primary level						
	family practice), to prevent, diagnos		ain nur	nber of gynecologic disease	es and conditions in		
	women, to provide competent first a						
	emergency situations in gynecology						
	for referral to a specialist obstetricia		rlevel)T			
11.	healthcare (for consultation or hosp Contents of the course (per 15 week						
11.	Theoretical lectures:	is per semester):					
	1. introduction to gynecology, clinic	al anatomy and embryolog	v of the	e genital			
	tract in women, periods in life of wo						
	2. clinical aspects of evolution and n						
	premenstrual syndrome, sexual hor		•				
	3. symptoms and signs of gynecolog						
	evaluation of a gynecology patient, §						
		clinical examination of breasts (breast					
	ultrasound)	. (lah awatawa hi adhawiatwa	!	الماما مصد			
	4. diagnostic methods in gynecology cytopathology, cytogenetics, as well						
	ultrasound, colposcopy, endoscopy-						
	5. functional and psychosomatic dis						
	gynecology	8) e 8), F	.,				
	6. precancerous, benign and maligna	ant diseases of female geni	tals and	d breasts			
	7. inflammatory and sexually-transr		enitals,	i			
	urogynecologic diseases and conditi						
	8. infertility, human reproduction, fo						
	9. emergency in gynecology, first aid		ice, ma	lpractice,			
	medical malpractice and profession 10. gynecologic surgery (operative of		ology c	nd			
	minimally invasive gynecologic surg						
	postoperative depressive syndrome		0000]	יננד			
	11. diseases of the breasts in women		in prin	nary level			
	of healthcare	. 5, 6,		•			
	12. guidelines of general and reprod			nporary			
	societies, unfavourable environmen	tal influences on women's	health				
	Practical training:	1 . 1	1	1 . 1			
	1. taking and interpretation of gyne						
	2. pelvic exam under vaginal specular evaluation of all female genital orga		ic exan	ı aiiu			
	3. recto-vaginal and rectal examinat		minina				
	inguinal/femoral hernias, palpation						
	4. catheterization (with Nelaton's ar		enema	1			
	5. taking cervical and vaginal bacter						
	mycoplasma / ureaplasma, perineal	/perianal swab for group I					
	6. taking Pap-smears (classical and						
	7. recognition of cervical pathology						
	colposcopy-normal and pathologica	I colposcopic findings, colp	oscope	e as an			
	instrument 8. evaluation of the extent of genital	blooding (distinction hate	man ar	otting			
	o. evaluation of the extent of genital	piecuing (distinction betw	een sp	otalig,			

12.	slugging, medium and profuse bleeding) and determining the level of emergency, vaginal tamponade, observation of demonstration of uterine tamponade 9. patient preparation for gynecologic surgery 10. recognizing instruments and devices for gynecologic surgery, recognizing the most frequent devices and instruments in gynecology, sterilization of instruments 11. education about preventive monthly breast self-exam in women, performance of preventive annual clinical breast examination in women, breast ultrasound 12. education and psychological support of infertile couple, education and psychological support in post-operative depression syndrome in gyn patients Methods of learning: Theoretical Interactive lectures, problem-solving cases, practical exercises on						
	phantom-dolla individual pro	s, simulatior ojects with m	ns, practical nentor, rese		ts under supervision,		
13.	Total amount			,			
	8 ECTS x 30 h		5				
	3+4+1 / per w						
14.	Distribution o						
15.	90+120+10+			Loctures / theoret	ical contact toaching	90 hours	
15.	Forms of teach		15.1	e-learning	ical, contact teaching,	ou nours	
	icai iiiig activ	10100		Exercises (practical	al, laboratory.	120 hours	
			15.2	theoretical, semina		120 110410	
16.	Other forms o	f activities	16.1	Projects	<u> </u>		10 hours
			16.2	Individual work			10 hours
			16.3	Home learning			10 hours
17.	Method of ass				1		
		Tests / Oral			70 scores		
			ork (presei	ntation, projects,	10 scores		
		practical) Activity and	narticinati	n .	20 scores		
18.	Assessment C			JII	up to 50 points	5 (five). (F)	1
10.	rissessificate d	riceria (scor	es, points,		51 to 60 points	6 (six) (E)	
					61 to 70 points	7 (seven) (D	
					71 to 80 points	8 (eight) (C	•
					81 to 90 points	9 (nine) (B)
					91 to 100 points	10 (ten) (A	.)
19.				ne final exam/ or	60% active participat	ion at the course	
20	transition in t	•			Postellala		
20	Language of to Methods of m			ho quality of	English Standardized motor to	ote obcompation see	way
41.	teaching	casui ilig / Il	ioiiitoi iiig t	ne quanty of	Self-evaluation	esis, observation, sur	vey
22.	Literature				Jen evaluation		
	22.1	Basic	literature		1		
		No	Author		Title	Publisher	Year
		1.	Prof.G	igor Dimitrov,	Authorized lectures		2017
					in Gynecology		
		2.	Mlade	novic D. et al	Gynecology and	Institution	2015
					Obstetrics	For University manuals, Belgrade	
<u> </u>	22.2	Δddi	 tional litera	ture		manuais, beigiade	1
	44.4	No	Author		Title	Publisher	Year
		1.		and Novak and Creasman	Gynecology Clinical Gynecologic	•	2014
		۷.	טוסמומ	anu Gredsiiidii	Oncology		2013
		3.			The Johns Hopkins		2015
] .			Manual of		-525
					Gynecology and		
					Obstetrics		

Anne	Annex 3 Program of the Course for Integrated First and Second cycle									
1.	Title of Cou		the dourse	SURGERY 1	a i ii se a	na occona	cycle			
2.	Code			3MF117412						
3.	Study progr	am		General Medi	cine					
4.	Organizer o	f the Study pro	gram	Goce Delce U						
				Faculty of Me						
5.		second or thir	d cycle	Integrated Fi	rst and S	Second cycl	e			
	of studies)	,		IX Semester – fourth 7. Number of ECTS 8						
6.	Academic ye	ear/ semester			- fourth	7.	Number of	ECTS	8	
8.	Professor (s)		year Andreja Arso	velzi					
0.	Fiblessoi (s	J		Alleksandar M						
				Aleksandar N						
				Konstantin M	litev					
				Kiril Lozance						
9.	Requiremen	its for enrollin	g the	None						
	course									
10.						ring knowle	edge of the ba	asic surgical princ	iples	
11.		the course (pe			·):					
		Introduction and history of surgery Philipfortion and studies there								
		3. Surgical infections 4. Trauma								
		echanical traur	na							
	6. Th	ermal trauma								
	_	emical trauma								
			ck and reanimation							
		3. 7								
		eeding and her								
		ansfusion in su rrent and cont		diagnostic m	athode i	n curcory				
12	Methods of	learning: theor	retical and	nractical lear	ing	ıı suigeiy				
13		nt of available				urs				
14		of available ti								
15.	Forms of tea		15.1	Lectures /			teaching,	15 weeks x 3 ho	urs =	45hours
	learning act			e-learning						
				Exercises (15 weeks x 2 ho	urs =	30 hours
4.5	0.1 0	C	15.2	theoretical	, semina	rs, team wo	ork)	201		
16.	Other forms	of activities	16.1	Projects				30 hours		
		}	16.2	Individual				60 hours		
17.	Method of a	ccoccmont	16.3	Home learn	ııng	75 hours				
1/.	17.1	Tests / Oral l	Fyam			70 scores				
	17.1			ntation, projec	rts.	10 scores				
	17.0	practical)	ork (brese	inacion, projet	,	10 300163				
	17.3	Activity and	participation	on		20 scores				
18.		Criteria (score				up to 50 p		5 (five).	(F)	
		-	,			51 to 60 p			(E)	
						61 to 70 p		7 (seven)	(D)	-
						71 to 80 p		8 (eight)	(C)	
						81 to 90 p		9 (nine)	(B)	
4.0	21				,	91 to 100		10 (ten)	(A)	
19.		oproval and en		he final exam,	or or	60% acti	ve participat	ion at the course		
20	transition in the next year									
20 21.	Language of teaching / studyEnglishMethods of measuring / monitoring the quality ofStandardized motor tests, observation, survey									
41.	teaching	measuring / III	ionitoring (are quality of		Self-evalu		ais, observation, s	oui vey	'
22.	Literature					Jen-evalu	1411011			
	22.1	Basic	literature			1				
		No	Author	r	Title			Publisher		Year
		1.		d Doherty		nt Diagnosis	s and	McGraw-Hill		2015
						nent Surgei				
		2.	F. Brui	nicardi et al.		rtz's Princi	ples of	McGraw-Hill		2014
Ì					Surger	y				

1. Title of Course 3MF110812 2. Code 3MF110812 3. Study program General medicine 4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester IX Semester – fourth year 8. Professor (s) Prof. Elizabeta Zisovska 9. Requirements for enrolling the course 10. Aims of the course (competences): Introduction to the General Pediatrics as a clinical discipline, approach to the child as a pathophysiology of the diseases in childhood 11. Contents of the course (per 15 weeks per semester): • Introduction to the Pediatrics, deontology, ethics and approach to the child as a pathophysiology of the pediatrics and epidemiology of the pediatric diseases • The importance and mode of taking history of the disease, examination, diag • Developmental phases of the childhood, specificity • Transition to the extra uterine life, neonatal resuscitation, newborn child • Admission to the nursery, the first examination, birth injuries • Genetics in children's diseases, congenital anomalies • Nutrition in childhood • Immunity of the child, immunization, and immunological diseases • Allergy in childhood • Homeostatic disturbances in childhood • Specificity of pharmacotherapy in childhood • Practical educational units: discussion and work out (completition): • Taking the history of the pediatric disease, specificities and geneology • Admission examination • Integrative approach: history and examination of the sick child • Addmission and examination: approach to the patient and the family (comm • Primary resuscitation-steps and order of the steps									
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Addmission and examination: approach to the patient and the family (comm									
	unication)								
Jr	,								
Breastfeeding, advantages of the breasmilk, indication for supplementation									
Introduction to the principles of the Baby friendly hospitals									
Calculation of the nutritional needs of the children of different ages									
Calendar of immunization, indications and contraindications									
Rickets-etiology, clinical signs, prevention and treatment									
Diagnostic methods in pediatrics Management of the pediatric theorem, does and formulation									
Management of the pediatric therapy, dose and formulation Methods of learning:									
-lectures (presentations),									
	-problem based learning,								
-consultation,	-computer learning,								
-practical exercises (taking history and physical examination of the child, understandi	ng the results interpreting V								
ray pictures, CT scans, ECG)	is the results, litter pretting 7								
3. Total amount of available time:									
6 ECTS x 30 hours = 180 hours									
4. Distribution of available time:									
30+30+15+45+60 = 240 hours (2+2+1)									
) hours								
	iioui 5								
learning activities e-learning									
) la coord								
15.2 theoretical, seminars, team work)) hours								
	5 hours								
	5 hours 5 hours								
7. Method of assessment	5 hours								
17.1 Tests / Oral Exam 70 scores	5 hours 5 hours								

	17.2	Individual wor	k (presentation, projects,	10 scores				
	17.3	Activity and pa	rticipation	20 scores				
18.		t Criteria (scores		up to 50 points	5 (five). (F)			
		,		51 to 60 points	6 (six) (E)			
				61 to 70 points	7 (seven) (D)			
				71 to 80 points 8 (eight) (C)				
				81 to 90 points 9 (nine) (B)				
				91 to 100 points	10 (ten) (A)			
19.	Signature a	npproval and entra	ance to the final exam/ or	60% active participation at the course				
		n the next year	and to the imai cham, or	o o 70 de cive par cierpas				
20		of teaching / study	,	English				
21.	Methods of measuring / monitoring the quality of			Standardized motor te	sts. observation. surve	v		
	teaching	87	8 4 4	Self-evaluation	,	J		
22.	Literature							
	22.1	Basic lit	terature					
	_	No	Author	Title	Publisher	Year		
1		1.	Zitelli B.G and Davis H. V	Atlas for pediatric	Elsevier	2017		
				physical diagnostics	eBook			
				1 7	ISBN: 9780323511			
					841			
					Hardcover			
					ISBN: 9780323393			
					034			
		2.	Robert Kliegman Joseph	Nelson Textbook of	Elsevier	2019		
			St. Geme.	Pediatrics, 2-Volume	Hardcover			
				Set	ISBN: 9780323568			
				21st Edition.	906			
					Hardcover			
					ISBN: 9780323529			
					501			
					eBook			
					ISBN: 9780323568			
					890			
					eBook			
					ISBN: 9780323568			
					883			
		3.	Tricia Gomella, M.	Neonatology 7th	McGraw-Hill	2013		
			Cunningham and Fabien	Edition	Education /			
			Eyal	(Neonatology	Medical;			
				(Gomella)) 7th	ISBN: 978-			
	20.7		177	Edition	0071768016			
	22.2		nal literature	mul	D 11: 7	7.7		
		No	Author	Title	Publisher	Year		
		1.	McInernyT.K, AdamH.M, C	AAP Textbook of	American	2016		
		1.	ampbell D.E, Foy	Pediatric Care, 2nd	Academy of	2010		
			J.M, Kamat, D.M,	Ed	Pediatrics			
			july manage party		978-1-61002-047-			
					3			
					ISBN paper:			
					978-1-58110-966-			
					5			
		2.	Internet based resources	www.aap.org				
		2.	interfice based resources	www.aap.org www.who.int				
				www.unicef.org				
		3.		vv vv vv.uiiiceliui g				
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1. Title of Course	Anne	nnex 3 Program of the Course for Integrated First and Second cycle							
3. Study program General medicine Faculty of Medical Sciences Faculty of Medical Sciences Faculty of Medical Sciences Integrated First and Second cycle of studies) Forestory (s) Requirements for enrolling the Course Requirements for enrolling the Requirements Requirements for enrolling t						,			
Comparison of the Study program Facility of Medical Sciences						· · · · · · · · · · · · · · · · · · ·			
Faculty of Medical Sciences									
Academic year / semester D. Semester - fourth 7. Number of ECTS 4	4.	Organizer of the Study pro	ogram						
of studies] of studies] for Adamic year/ semester pear pear pear pear pear Assistant professor Dr. Jasmin Ciriviri None course 10. Aims of the course (competences): Basic diagnosis and treatment of orthopedics desease and muskulosceletal ratuma. 11. Contents of the course (per 15 weeks per semester): Theoretical study units 12. Imaging of the musculoskeletal system 3. Bone and joint infection 4. Rheumatic Diseases diagnosis and management 5. Neuromuscular diseases 6. Idiopathic and heritable disorders 7. Musculosceletal Neoplasms 8. Osteoarthrosis 9. Osteoporosis 10. Pediatric leg and knee 11. Pediatric foot 12. Scollosis and kiphosis 13. The shoulder, arm and hand 14. Soft tissue injuries of the knee 15. Musculosceletal traumatology Practical study units 1. Plain radiography.CT and MRI 2. Phisical examination 3. Imohilisation and splinting 4. Measuring in orthopaedics 5. Ultrasonography in children 6. Ultrasonography in children 6. Ultrasonography in children 10. Surgical management 11. Surgical management 12. Treatures management 13. Fractures management 14. Fractures management 15. Punction and biopsy in orthopaedics 12. Practures management 15. Punction and biopsy in orthopaedics 16. Other forms of activities 16. Other forms of activities 16. Other forms of activities 17. Implication and biopsy in children 18. Other forms of activities 19. Method of assessment 19. Method o	_	7 160	, ,	•					
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Professor (s)	0.	Academic year / semester			7.	Nulliber of	ECIS	4	
Requirements for enrolling the course None	8	Professor (s)							
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15. Forms of teaching / learning activities Forms of teaching / learning activities 15.1 Lectures / theoretical, contact teaching, e-learning	12	Methods of learning: Lecti	ures,Exerci:	ses, Projects,Individua		me learning			
15. Forms of teaching / learning activities Forms of teaching / learning activities					ours				
learning activities e-learning Exercises (practical, laboratory, 15 hours 15 hours 15.2 theoretical, seminars, team work) 16.							T = = =		
Exercises (practical, laboratory, theoretical, seminars, team work) 16. Other forms of activities 16.1	15.		15.1		cal, contact	t teaching,	30 hours		
15.2 theoretical, seminars, team work) 16.1 Projects 15 hours 16.2 Individual work 30 hours 16.3 Home learning 30 hours 17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) Up to 50 points 5 (five). (F)		learning activities			111 :		45.		
16. Other forms of activities 16.1 Projects 15 hours 16.2 Individual work 30 hours 17. Method of assessment 30 hours 17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 10 scores 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)			152			•	15 hour	S	
16.2 Individual work 16.3 Home learning 17. Method of assessment 17.1 Tests / Oral Exam 17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 18. Assessment Criteria (scores/ points) 18. Individual work 19. Joscores 19. Josco	16	Other forms of activities			irs, team w	orkj	15 hours		
16.3 Home learning 30 hours 17. Method of assessment 70 scores 17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 10 scores 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)	10.	other forms of activities							
17. Method of assessment 17.1 Tests / Oral Exam 17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)									
17.1 Tests / Oral Exam 70 scores 17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)	17	Method of assessment	10.3	110me tearming			JO HOUIS		
17.2 Individual work (presentation, projects, practical) 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)	-/-		Exam		70 scores	<u> </u>			
practical) 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)				ntation, projects.					
17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)			(I- 120)	, _F - , ,					
18. Assessment Criteria (scores/ points) up to 50 points 5 (five). (F)		1 ,	participation	on	20 scores	3			
	18.							(F)	
							6 (six)	(E)	

	I			1	T	
				61 to 70 points	7 (seven) (D)
				71 to 80 points	8 (eight) (C	()
				81 to 90 points	9 (nine) (B	5)
				91 to 100 points	10 (ten) (A	v)
19.	Signature approval	and entr	ance to the final exam/ or	60% active participat	ion at the course	
	transition in the ne		•			
20	Language of teaching / study			English		
21.	Methods of measuring / monitoring the quality of			Standardized motor to	sts, observation, sur	vev
	teaching			Self-evaluation	,	,
22.	Literature					
	22.1 Basic literature			•		
		No	Author	Title	Publisher	Year
		1.	Weinstein,	TUREKS	J.B. LIPPINCOTT	2015
			Buckwalter	Orthopaedics	Company	
				Principles and their	Philadelphia	
				application	•	
		2.	Riutz/Cicero	Emergenency	Mosby	2019
			,	Management		
				of skeletal trauma		
	22.2	Additio	nal literature	•	•	•
		No	Author	Title	Publisher	Year
		1.	A.H.Crenshaw	Campbells operative	Mosby	2014
				orthopaedics		

		or	thopaedi	CS			
A	Drogram of the Cour	as for Interreted First and	d	-ala			
Annex	Title of Course	se for Integrated First and S TRANSFUSIOLOGY	secona cy	/cie			
2.	Code	3MF112012					
3.		General medicine					
	Study program		`***				
4.	Organizer of the Study program		Goce Delce University – Stip				
5.	Lovel (first second on third	Faculty of Medical Science Integrated first and second					
5.	Level (first, second or third cycle of studies)	integrated first and seco.	na cycle				
	Academic year/ semester	IX Semester – fourth	7.	Number of ECTS			
6.	Academic year/ semester		7.	Number of EC15	4		
0	Duefeese (e)	year Assist. Prof. Rada M. Gru	annia Daa	.			
8. 9.	Professor (s)		DOVIC Ras	stvorceva			
9.	Requirements for enrolling the	None					
10.	course Aims of the course (competences	3-					
10.	Gaining of theoretical and practic		ftrancfuc	ion modicino which w	rill halp the students to		
	learn the principles of voluntary blood donation, special types of blood donation – autologous and apheresis, blood processing and production of blood products, immunohematology testing and testing for transfusion						
	transmissible infections, clinical use of blood, basic principles of hemostasis, laboratory and clinical diagnostic of						
	hemorrhagic and thrombotic disc						
	transplantation of organ and cell		or upy, us	won as transfasion as	poots III		
11.	Contents of the course (per 15 w						
	Theoretical classes	1					
	 History of transfusion r 	nedicine					
	 Blood supply, recruitment 	ent of blood donors and blo	od donat	ion			
		onation - autologous dona					
		ABO, RhD, Kell, MNS and ot	her blood	d group systems – biolo	ogy and clinical		
	significance						
	 HLA system in transfus 						
		logy, types and therapeutic					
		transplantation of organ an	d cells				
	 Immunohematology tes 						
	Transfusion transmitte						
	Blood components and Climinal ways of blood or						
	 Clinical uses of blood co Transfusion therapy in 	specific clinical situations					
		transfusion and Quality m	nagama	nt in transfusion modi	cina		
		verse reactions of blood training			_1111C		
		it of hemorrhagic and thror					
	Diagnosis and treatmen	ic or memorrhagic and throi	iibotic ui.	50000			
	Practical classes						
	1 factival classes						

Promotion of blood donation and organization of blood drive Blood donor medical assessment Blood collection and possible adverse events Types of blood bags, anticoagulants and equipment used for blood donation Laboratory testing of donated blood - laboratory techniques of ABO and RhD typing and techniques for testing of transfusion transmissible infections Laboratory methods of detection of irregular antierithrocyte antibodies - with indirect and direct antiglobulin test (IAT and DAT) and with enzyme tests Laboratory techniques of pretransfusion testing - Cross-matching, Selectogen I and II, confirmatory ABO and RhD blood typing Characteristics of blood products and preparation of blood products Storage and transportation of blood products Basic and specific tests of hemostatic system Laboratory support of anticoagulation 12. Methods of learning: Total amount of available time: 4 EKTS x 30 hours = 120 13. Distribution of available time: 30+15+15+30+15 = 120(2+1+1)14. 15. Forms of teaching / 15.1 Lectures / theoretical, contact teaching, 30 hours learning activities e-learning Exercises (practical, laboratory, 15 hours theoretical, seminars, team work) 15.2 Other forms of 16. 16.1 **Projects** 15 hours activities Individual work 16.2 30 hours Home learning 16.3 30 hours 17. Method of assessment 70 scores 17.1 Tests / Oral Exam Individual work (presentation, projects, 17.2 10 scores practical) 17.3 Activity and participation 20 scores 18. Assessment Criteria (scores/points) up to 50 points 5 (five) (F) 51 to 60 points 6 (six) (E) 61 to 70 points 7 (seven) (D) 71 to 80 points 8 (eight) (C) 81 to 90 points 9 (nine) (B) 91 to 100 points 10 (ten) (A) 19. Signature approval and entrance to the final exam/ 60% active participation at the course or transition in the next year 20. Language of teaching / study English Standardized motor tests, observation, survey 21. Methods of measuring / monitoring the quality of Self-evaluation teaching 22. Literature 22.1 Basic literature Author Title Publisher Year No 1. Jeffrey McCullough Transfusion Medicine, Wiley-Blackwell 2016 4th ed. Derek Norfolk Handbook of United Kingdom 2. 2013 Transfusion Medicine, **Blood Service** 5th ed. Beth Shaz, Christopher Transfusion Medicine 3. Elsevier Science 2018 D. Hillyer, Morayama and Hemostasis, 3rd ed. Gill Additional literature 22.2 Nο Author Title **Publisher** Year 1. Mark K. Fung, Brenda J. AABB Technical 2014 American Grossman, Christopher Manual, 18th ed. Association of D. Hillver, Connie M. **Blood Banks** Westhoff Willey-Blackwell 2. Geoff Daniels, Imelda Essential Guide to 2010 **Bromilow** Blood Groups, 2nd ed. 3. Harvey G. Klein, David J. Wiley-Blackwell Mollisin's Blood 2014 Transfusion in Clinical Anstee Medicine,12thed.

Anne	Drogram of the Cours	se for Integrated First and Second cycle				
1.	Title of Course	GYNECOLOGY AND OBSTETRICS 2				
2.	Code	3MF116012				
3.	Study program	General medicine				
4.	Organizer of the Study program	Goce Delce University – Stip				
		Faculty of Medical Sciences				
5.	Level (first, second or third cycle	Integrated First and Second cycle				
	of studies)	X Semester – fourth 7. Number of ECTS 8				
6.	Academic year/ semester	X Semester – fourth 7. Number of ECTS 8				
8.	Professor (s)	Prof. D-r Gligor Dimitrov				
9.	Requirements for enrolling the	Enrolled fifth year, Professor's signature for finished course in Gynecology 1				
	course	3 / 3				
10.	Aims of the course (competences):					
		osis and treatment of obstetrical conditions				
		rough theoretical interactive lectures and				
	hands-on practical training under some Predicted outcome of the course: M					
		fully trained to work in the primary level of				
		al family practice), to prevent, diagnose,				
		of obstetrical diseases and conditions in				
		tal follow up of normal pregnancy, to perform				
		elivery and primary resuscitation of the taid in emergency obstetrical situations as				
	well as to be able to recognize the n					
		er level of healthcare (for consultation or				
	hospitalization).					
11.	Contents of the course (per 15 week	ss per semester):				
	Theoretical lectures:					
		opment of obstetrics, physiology of human				
	reproduction, conception, diagnosti	cs of pregnancy relopment of the embryo and fetus, placenta				
	and fetal membranes, placental hor					
	pregnancy, normal and abnormal fe					
	3. normal: pregnancy, labor, deliver					
		egnancy, abnormal labor, delivery and				
		al and breech delivery, multiple gestation				
		eening and diagnostics in pregnancy placenta and fetal membranes, diseases				
	and abnormalities of the fetus and r					
		and breastfeeding, hygiene, nutrition and				
	dietetics in pregnancy, oral health in					
		y, examination and clinical evaluation of a				
	pregnant woman and parturient wo 9. obstetric preventative programs,					
		of normal and breech labor and delivery in				
	primary level of healthcare					
	10. indications for cesarean section	and other obstetrical operations and				
		delivery, repair of tears of the lower genital				
	tract, episiotomy, sutures	Contail and management of				
	11. types and techniques of abortion complications and emergency obste					
		ences on the health of the pregnant woman				
		and reproductive health of women in				
	contemporary societies, maternal a	nd perinatal mortality rate, health education				
		co-legal aspects of pregnancy and delivery				
	Practical training:	ntampating of shotatrical history				
	1. complete and proper taking and i	nterpreting of obstetrical history bstetrical exam, antenatal follow ups of				
		i, different follow up in each lunar month,				
		of the pregnant woman about hygiene and				
	nutrition in pregnancy					
		recommendations and education of the				
		t of the life in pregnancy, education of the				
		acation and psychological support in preastfeeding and taking care for the				
	preparation for labor and delivery,	oreasuceumg and taking care 101 the				

12.	delivery, UI 4.Leopold r cardiotocog between no of the need 5. preparat: measureme and Foley's 6. contempo 7. first care assessment up vital par 8. breech do 9. education medical nur 10. prepara instrument 11. instrum operation/s 12. education depressive	NICEF concept naneuvers, list graphy for feta ormal, non-rea for urgency ion of the part ent, manageme catheter, givin orary active m and primary n of the detouc ameters and t elivery (manual of for breastfeet rese home patration for obste- al vaginal deli- uents and devi- surgery/intervon and psycho syndrome and e, preterm pre	:: Hospitals tening to fe Il heart / ui ssuring an urient wor ent of norm ng enema anagemen resuscitation hment of p he amount al help-Bra eding, meth onage tric operat very ces for abo vention logical sup I situations	lacenta in the third plot bleeding in the foucht maneuver, manual ods for management on: caesarean section rtion, obstetrical port of an infertile coafter artificial aborti	nd babies nnard's fetoscope, acing, differentiation ress test, assessment very, pelvic ion with Nelathon's delivery mediately after delivery, hase of delivery, follow arth phase of delivery al extractionMauriceau-S of plugged milk duct, n, cerclage, uple, for postoperative	mellie-Veit maneuver)				
12.	Theoretical Interactive lectures, problem-solving cases, practical exercises on phantom-dolls, simulations, practical training with patients under supervision, individual projects with mentor, research studies, practice in various environments (medical office, hospital, clinic, outdoors)									
13.		nt of available		tai, ciiiie, outdoorsj						
10.) h = 240 hour								
	3+4+1 / we		-							
14.		n of available t	ime:							
		0+10+10 = 24								
15.	Forms of te	aching /	15.1	Lectures / theore	tical, contact teaching,		90 hours			
	learning ac	tivities		e-learning	_					
				Exercises (practic	al, laboratory,		120 hours			
			15.2	theoretical, semin	ars, team work)					
16.	Other form	s of activities	16.1	Projects			10 hours			
			16.2	Individual work			10 hours			
			16.3	Home learning			10 hours			
17.	Method of a									
	17.1	Tests / Oral			70 scores					
	17.2		vork (prese	entation, projects,	10 scores					
	17.0	practical)		·	20					
10	17.3	Activity and			20 scores	[(C) (F)				
18.	Assessmen	t Criteria (scoi	es/ points	J	up to 50 points 51 to 60 points	5 (five). (F) 6 (six) (E)				
					61 to 70 points	7 (seven) (D)				
					71 to 80 points	8 (eight) (C)				
					81 to 90 points	9 (nine) (B)				
					91 to 100 points	10 (ten) (A)				
19.	Signature a	nnroval and e	ntrance to	the final exam/ or	60% active participat					
		n the next year		Jimur Chullij Ol	oo, o active participat	ar ar are course				
20		f teaching / st			English					
21.				the quality of	Standardized motor to	ests, observation. surv	ey			
	teaching			1 -7	Self-evaluation	,	-			
22.	Literature									
	22.1	Basi	c literature	!						
		No	Autho		Title	Publisher	Year			
		1.	Prof.0	Gligor Dimitrov,	Authorized lectures		2017			
					in Gynecology					
		2.	Mlade	enovic D. et al	Gynecology and Obstetrics	Institution For University manuals,	2015			

				Belgrade	
	3.	Pshyrembel W	Practical Obstetrics		2012
22.2	Addit	onal literature			
	No	Author	Title	Publisher	Year
	1.	Gabbe et al	Obstetrics:Normal and problem pregnancies		2014
	2.	Cunningham et al	William's Obstetrics		2015
	3.		The Johns Hopkins Manual of Gynecology and Obstetrics		2011

Anne	?	Duo guana o 6	the Cours	e for Integrated Firs	امد ما	Consul avalo			
1.	Title of Cou		the Cours	SURGERY 2	tanu	Second cycle			
2.	Code	156		3MF117512					
3.		iam.		General medicine					
4.	Study progr	am f the Study pro		Goce Delce University – Stip					
4.	Organizer o	i the Study pro	ogram						
5.	Lovel (first	second or thir	ed cyclo	Faculty of Medical Sciences Integrated First and Second cycle					
	of studies)		u cycle	,					
6.	Academic ye	ear/ semester		X Semester – fifth year	7.	Number of ECTS		8	
8.	Professor (s	s)		Andreja Arsovski Aleksandar Mitevski Aleksandar Nikoloc Konstantin Mitev Kiril Lozance					
9.	Requirement course	nts for enrollin	g the	None					
10.		course (comp	etences): a	cquiring knowledge	and	surgical approach to	the diseases	s that are of interest in	
11. 12 13 14 15.	Contents of 1. Ne 2. Dis 3. Su 4. Su 5. Ac 6. Ab 7. Stc 8. Sr 9. Su 10. Tr. 11. Ca 12. Tr. Methods of	surosurgery seases of the brgical diseases of the brgical diseases ute abdomen adominal wall brach and parall and large rgery of the spauma of the extra disease auma of the ablearning: theout of available taching /	oreast and sof the lundernia and nereas bowel oleen and hetermities surgery odomen and retical and time: 8ECT	bowel obstruction d torax practical learning S x 30 hours = 240 0+30+60+75 = 240h	hours ours etical	, contact teaching,		s x 3 hours = 45hours s x 2 hours = 30 hours	
1.0	0.1				nars,	team work)	221		
16.	Other forms	of activities	16.1	Projects			30 hours		
			16.2	Individual work			60 hours		
			16.3	Home learning			75 hours		
17.	Method of a				- 1	-			
	17.1	Tests / Oral				0 scores			
	17.2		ork (prese	ntation, projects,	1	0 scores			
	450	practical)				•			
1.0	17.3	Activity and				0 scores		(77)	
18.	Assessment	Criteria (scor	es/ points			p to 50 points	5 (five).		
						1 to 60 points	6 (six)	(E)	
						1 to 70 points	7 (sever		
					7	1 to 80 points	8 (eight	(C)	

				81 to 90 points	9 (nine)	(B)			
				91 to 100 points	10 (ten)	(A)			
19.	Signature approval transition in the ne		ance to the final exam/ or	60% active participat	ion at the course				
20	Language of teaching	ng / study	7	English					
21.	Methods of measur teaching	ing / mor	nitoring the quality of	Standardized motor te Self-evaluation	ests, observation,	survey			
22.	Literature								
	22.1	Basic lit	terature						
		No	Author	Title	Publisher	Year			
		1.	Gerard Doherty	Current Diagnosis and Treatment Surgery	McGraw-Hill	2015			
		2. F. Brunicardi et al.		Schwartz's Principles of Surgery	McGraw-Hill	2014			
	22.2	Additio	nal literature						
		No	Author	Title	Publisher	Year			
		1.							
		2.							
		3.							

Ann	ex 3	Program of the Cour	se for Integrated Fir	st and	Second cycle				
1.	Title of Cours	e	PEDIATRICS 2						
2.	Code	Code							
3.	Study progra	m	General medicine						
4.	Organizer of	the Study program		Goce Delce University – Stip Faculty of Medical Sciences					
5.	Level (first, so of studies)	econd or third cycle	Integrated First and Second cycle						
6.	Academic yea	ar/ semester	X Semester – fifth year	7.	Number of ECTS	6			
8.	Professor (s)		Prof. Elizabeta Zis	sovska		·			
9.	Requirement	s for enrolling the	None						
	course								
10.	Aims of the course (competences): Introduction to the specific Pediatrics, and the diseases of the particular systems in the pediatric age, diagnosis,								

- Introduction to the specific Pediatrics, and the diseases of the particular systems in the pediatric age, diagnosis, therapy and prognosis
- 11. Contents of the course (per 15 weeks per semester):
 - diseases of the respiratory system in childhood
 - diseases of the cardiovascular system in childhood
 - diseases of the gastrointestinal system in childhood
 - diseases of the nervous system in childhood
 - diseases of the endocrine system and rheumatic diseases in childhood
 - · diseases of the urinary system in childhood
 - diseases of the metabolism and nutrition in childhood
 - diseases of the locomotor system in childhood
 - · hemato oncologic diseases in childhood
 - infections in children
 - · surgical problems in childhood
 - emergency in childhood; psychological and mental diseases

Practical educational units: discussion and work out (completition):

- case scenarios/patients with respiratory diseases (history, physical examination, therapy)
- case scenarios/patients with cardiovascular diseases (history, physical examination)
- case scenarios/patients with gastrointestinal diseases (history, physical examination)
- case scenarios/patients with nervous diseases (history, physical examination)
- case scenarios/patients with endocrine or rheumatic diseases (history, physical examination)
- case scenarios/patients with urinary diseases (history, physical examination)
- case scenarios/patients with nutrition disturbances
- case scenarios/patients with hemato-oncologic diseases (history, physical examination)
- case scenarios/patients with infections (history, physical examination, therapy)
- admission and management of a child in emergency
- rational use of medicines in childhood
- management of children with special needs

12.	-probler	s (presei n based	ntations), learning,							
	-comput	ter learn								
	-consult		6. 3.	1	, ,		0.7	101 :	. 10 .1 20	.,
	-practica	al exerci	ses (taking	g history a	and phy	ysical examination	on of th	e child, unde	rstanding the results, inter	preting X-
13.			scans, ECG available t							
13.			rs = 180 h							
14.			vailable ti							
			60 = 240 h							
15.	Forms o			15.1		ctures / theoreti		tact	30 hours	
	learning	gactivitie	es			teaching, e-learning			201	
				15.2		ercises (practica oretical, semina			30 hours	
16.	Other fo	rms of a	ctivities	16.1		oreticai, semina ojects	is, teall	ı WUIKJ	15 hours	
10.	other forms of activities			16.2		lividual work			45 hours	
			F	16.3		me learning			60 hours	
17.	Method	of asses:	sment	10.5 Home learning						
	17.1	Tes	sts / Oral I				70 scc	ores		
	17.2 Individual v			ork (pres	entatio	n, projects,	10 scc	ores		
	4= -		actical)				0.5			
10	17.3		tivity and j				20 scc		f (C) (F)	
18.	Assessm	ient Crit	eria (score	es/ points	ij			50 points 60 points	5 (five). (F) 6 (six) (E)	
							61 to 70 points 7 (seven) (D) 71 to 80 points 8 (eight) (C)			
								90 points	9 (nine) (B)	
								100 points	10 (ten) (A)	
19.	Signatur	re appro	val and en	trance to	the fina	al exam/ or			pation at the course	
	transitio	n in the	next year							
20			ching / stu			11. 2	Englis			
21.			suring / m	onitoring	the qu	uality of Standardized motor tests, observation, survey Self-evaluation				
22.	teaching Literatu						sen-e	vaiudliUII		
22.	22.1		iterature				I			
		No	Author		Title			Publisher		Year
		1.	Zitelli B.	G and	Atlas	for pediatric phy	ysical	Elsevier		2017
			Davis H.	V	diagn	ostics			N: 9780323511841	
			D 1		37.7	m .1 .1			ISBN: 9780323393034	2016
		2.	Robert	n Iosan	110100	n Textbook of trics, 2-Volume	Sot	Elsevier	ISBN: 9780323568906	2019
			Kliegma h St. Gen			trics, 2-volume . Edition.	JEL		ISBN: 9780323568906 ISBN: 9780323529501	
			II ou den		213(1	24.000			V: 9780323568890	
									N: 9780323568883	
		3.	Tricia			atology 7th Edit	ion		ill Education / Medical;	2013
			Gomella			natology		ISBN: 978-0	0071768016	
			Cunning d Fabien		(Gom	ella)) 7th Editio	n			
	22.2	Additi	onal litera							
	22.2	No	Author	cui C		Title			Publisher	Year
		1.		yT.K, Ada	amH.	AAP Textbook	of Pedia	atric Care.	American Academy of	2016
				bell D.E,		2nd Ed	, out		Pediatrics	
			J.M, Kam		,				978-1-61002-047-3	
									ISBN paper:	
		2	T	1 1					978-1-58110-966-5	
		2.	Internet			www.aap.org				
			resource	:5		www.who.int www.unicef.or	'σ			
		L	I .			** ** ** anicci.01	-		1	l .

Ann	Annex 3 Program of the Course		se for Integrated Fi	rst and	Second cycle					
1.	Title of Cours	se	ONCOLOGY							
2.	Code		3MF110012							
3.	Study progra	m	General medicine	<u>, </u>						
4.	Organizer of	the Study program		Goce Delcev University – Stip Faculty of Medical Sciences						
5.	Level (first, s of studies)	econd or third cycle	Integrated First	Integrated First and Second cycle						
6.	Academic yea	ar/ semester	X Semester – fifth year	7.	Number of ECTS	4				
8.	Professor (s)		Ass. Professor Deva Petrova							
9.	Requirement course	s for enrolling the	None							

10. Aims of the course (competences):

Cancer is now the leading cause of death in world. As a consequence, most physicians will be involved in the management of patients with problems related to cancer or its treatment. Medical students who go on to pursue careers in family medicine or other specialties will frequently be involved in managing patients with cancer. Despite this, there is a deficiency of focused oncology teaching during medical school. My personal opinion is that medical students lack adequate knowledge to assist cancer patients even after completion of their training. Because of that development of adequate goals and objectives is very important.

Goals in our process of studying oncology will be:

- Goal 1: By graduation, medical students should understand the basic concepts of the science of oncology relevant to molecular biology, pathology and anatomy.
- Goal 2: By graduation, medical students should understand that cancer is a significant healthissue. Medical students should also understand the risk factors for cancer and be able toidentify opportunities for prevention and screening.
- Goal 3: By graduation medical students should know common presentations of cancer and how to make a diagnosis of cancer
- Goal 4: By graduation, medical students should know how cancer is managed from a multidisciplinary perspective. This will facilitate appropriate referral and care patterns for cancer treatment.
- Goal 5: By graduation, medical students should know the prognosis of common cancers.
- 11. Contents of the course (per 15 weeks per semester):
 - 1 Basic Science Of Oncology
 - 1.1 Molecular Biology
 - 1.1.1 Describe in general terms how cancers develop and be able to describe the hallmarks of
 - 1.1.2. Describe the step-wise progression from normal to pre-malignant to malignant histology and how this relates to the principles of screening and early detection.
 - 1.1.3. Demonstrate an understanding of how hormones influence development of certain cancers and how this may help direct management.
 - 1.1.4. Describe the important genetic/familial syndromes related to cancer development, identify their mode of inheritance and impact on cancer development.
 - 1.1.5. Describe how common carcinogens can cause cancer (e.g. cigarette
 - 1.2 Pathology
 - 1.2.1 Describe the histologic differences between benign and malignant tumors.
 - 1.2.2 Demonstrate an understanding of common pathological terminology used in cancer diagnosis (e.g. stage, grade).
 - 1.2.3 Describe the importance of tissue sampling for diagnosis of malignancy and for identification of molecular predictive factors.
 - 1.2.4 Demonstrate an understanding of the differences between fine needle aspiration biopsy, core biopsy, and surgical excision.
 - 1.2.5 Demonstrate an understanding of the role of different specialists in obtaining a tissue diagnosis of cancer (e.g. family physician, hematologist, radiologist, surgeon, oncologist).
 - 1.3 Anatomy
 - 1.3.1 Describe the most common patterns by which cancer spreads (i.e. direct extension, lymphatic, hematogeneous, transcelomic).
 - 1.3.2 Demonstrate an understanding of relevant anatomy for common cancers (i.e. prostate, breast, lung and colorectal cancers) in terms of how they invade and metastasize, with an emphasis on invading adjacent structures, spread through the lymphatic and vascular systems.
 - 2 Public Health
 - 2.1. Epidemiology
 - 2.1.1. Demonstrate an understanding of basic cancer statistics in terms of incidence, prevalence,

mortality and survival.

- 2.1.2. Describe the incidence rate and mortality rates of the most common cancers diagnosed in Canada
- 2.1.3. List the most common childhood cancers
- 2.2. Risk Factors
- 2.2.1. Identify common environmental hazards that can cause cancer (i.e. chemical, biological, physical, radiation).
- 2.2.2. Identify common diseases and biological characteristics that can predispose a person to developing cancer (e.g. infectious and inflammatory diseases, genetics/family history, obesity).
- 2.2 3. Identify occupational and social risk factors for cancer (e.g. asbestos, smoking, alcohol).
- 2.3 Prevention
- 2.3.1. Distinguish between primary, secondary and tertiary prevention.
- 2.3.2 Describe important lifestyle and behavioural modifications that can prevent cancer (e.g. dietary habits, ideal body weight, regular physical activity, sun exposure/sunscreen, alcohol abuse, sexual behavior, smoking cessation).
- 2.4 Screening
- 2.4.1. List the criteria for an effective population-level screening program.
- 2.4.2 List cancers which are screened for in the periodic health exam and the specific investigations that are utilized (i.e. cervical, breast, colon, prostate).
- 2.4.3. Demonstrate an understanding of the impact of cancer screening investigations on the patient 3 Diagnosis
- 3.1 Clinical Presentations of Cancer
- 3.1.1 Describe non-specific physical symptoms and signs associated with common cancers (e.g. unexplained weight loss, pain, lymphadenopathy, palpable mass, bleeding, thrombosis, change in bowel habit and biliary tract obstruction).
- 3.1.2. Describe common and characteristic cancer presentations/syndromes (e.g. iron deficiency anemia, cough, breast lump, hypercalcemia, painless jaundice, paraneoplastic syndromes, superior vena cava obstruction).
- 3.1.3 Demonstrate an understanding of presentations of cancer that represent emergencies (e.g. superior vena cava obstruction, cardiac tamponade, spinal cord compression, pulmonary embolism, symptomatic brain metastases, cancer-related bleeding).
- 3.2 Diagnostic Tests
- 3.2.1. Describe and interpret appropriate lab tests, including hematology, chemistry and tumour markers, in a patient with a suspected diagnosis of cancer.
- 3.2.2 Demonstrate an understanding of how serum tumour markers are used in the diagnosis and management of cancer.
- 3.2.3 Describe diagnostic imaging studies used in the work-up of patients with suspected cancer and characteristic radiologic findings associated with cancer (e.g. pulmonary nodules, masses, pleural effusions on chest x-rays; lytic lesions, fractures on bone x-rays; nodules and masses on CT scans; masses on mammograms; PET-avid lesions on PET scan).
- 3.2.4. Demonstrate an understanding that a diagnosis of cancer commonly involves a biopsy and/or surgical resection, and understand that there are exceptions where other tests can be used.
- 3.2.5 Identify appropriate diagnostic and treatment referrals for patients with various common cancers 3.3 Cancer Staging
- 3.3.1. Demonstrate an understanding of the general principles and purpose of cancer staging.
- 3.3.2. Identify basic principles of the TNM staging system with respect to common cancers (e.g. prostate, breast, lung, colorectal) and recognize that there are alternative staging systems for difference tumour types.
- 3.4 Performance Status Assessment
- 3.4.1. Describe the components of commonly used performance status assessment tools such as the ECOG and Karnofsky performance status scales.
- 4.Treatment
- 4.1 General Principles of Cancer Treatment
- 4.1.1 Demonstrate an understanding of the concepts of curative, neoadjuvant, adjuvant and palliative treatments.
- 4.1.2 Demonstrate an understanding of the concepts of localized treatments versus systemic treatments.
- 4.1.2 Identify factors that would affect the formulation of a treatment plan for a cancer patient (i.e. tumour, treatment and patient-related factors).
- 4.2 Principles of Surgical Treatments for Cancer
- 4.2.1Demonstrate an understanding of the role of surgery in the treatment of cancer (i.e. surgery is

usually reserved for patients with potentially curable localized cancer, but there are palliative indications for surgery as well).

- 4.2.2 Demonstrate an understanding of common complications of cancer surgeries, such as bleeding, infection, and also impact on body image.
- 4.2.3. Demonstrate an understanding of the rationale for using radiation and systemic therapy pre and post-operatively
- 4.3 Principles of Radiation Treatments for Cancer
- 4.3.1. Demonstrate an understanding of the general principles of how radiation is used to treat cancer and different types of radiation (e.g. external beam, brachytherapy, stereotactic radiation).
- 4.3.2. Demonstrate an understanding of the difference between, and the clinical indications for, radiotherapy with curative and palliative intent.
- 4.3.3 List the common acute, subacute, and late adverse effects of radiation.
- 4.4 Principles of Systemic Treatments for Cancer
- 4.4.1. Demonstrate an understanding of the general principles of chemotherapy in the treatment of cancer.
- 4.4.2. List factors that would make a cancer patient a good candidate for chemotherapy.
- 4.4.3. Know the general differences between traditional chemotherapy and targeted biological therapy
- 4.4.4. List common acute and chronic toxicities of chemotherapy (e.g. alopecia, nausea, vomiting, neutropenia, mucositis, weight loss, neuropathy, secondary cancers), as well as potential life threatening toxicities (e.g. febrile neutropenia).
- 5. Management of Cancer Complications and Treatment Complications
- 5.1 . Demonstrate an understanding of how to diagnose and manage common complications of cancer (e.g. bone metastasis pain, hypercalcemia, pulmonary embolism, deep vein thrombosis).
- 5.2. Demonstrate an understanding of how to diagnose and manage common complications of cancer treatment (e.g. febrile neutropenia, nausea, vomiting, diarrhea, hypertension, acute renal failure).
- 5.3. Demonstrate an understanding of the emergency management of severe complications of cancer and its treatment (e.g. superior vena-cava syndrome, spinal cord compression, tumorlysis syndrome, symptomatic brain metastases, cancer-related bleeding).
- 6. Knowledge Of Common Cancers
- 6.1 Demonstrate an understanding of the epidemiology, risk factors, prevention, screening, presentation, diagnosis, staging, basics of treatment, prognosis and follow-up/survivorship care for common cancers including:
- Prostate cancer
- Lung cancer
- Breast cancer
- Colorectal cancer
- Skin cancers (Non-melanoma & melanoma)
- -Brain tumors
- 7. Survivorship Care And Follow Up
- 7.1. Define survivorship in relation to cancer patients.
- 7.2. Describe the appropriate investigations and follow-up plans for surveillance of patients who have had curative treatments for common cancers (i.e. prostate, breast, lung, colorectal).
- 7.3. Demonstrate an understanding of the differences between locally recurrent and metastatic disease
- 8. Principles Of Palliative Care
- 8.1. Demonstrate an understanding of the role of the palliative care physician/team in the care of cancer patients.

e-learning

Methods of learning:
Lectures, practical exercises with a patients, seminars
Total amount of available time:
120 hours (30+30+0+30+30)
Distribution of available time:
2+1+1/week
Forms of teaching / 15.1 Lectures / theoretical, contact teaching, 30 hours

learning activities

				Farancia a Constitution	1 1-1	201			
			450	Exercises (practi		30 hours			
4.5	0.1 6		15.2	theoretical, semi	nars, team work)				
16.	Other forms	of activities	16.1	Projects		0 hours			
			16.2	Individual work		30 hours			
			16.3	Home learning		30 hours			
17.	Method of a								
	17.1	Tests / Oral			70 scores				
	17.2	Individual w	vork (prese	ntation, projects,	10 scores				
		practical)							
	17.3	Activity and	participati	on	20 scores				
18.	Assessment	Criteria (scor	es/ points)		up to 50 points	5 (five). (F)			
					51 to 60 points	6 (six) (E)			
					61 to 70 points	7 (seven) (D)			
					71 to 80 points	8 (eight) (C)			
					81 to 90 points	9 (nine) (B)			
					91 to 100 points	10 (ten) (A))		
19.	Signature ap	pproval and e	ntrance to t	the final exam/ or	60% active participa	tion at the course			
		the next year		,					
20.	Language of	f teaching / st	udy		English				
21.		measuring / n		the quality of	Standardized motor tests, observation, survey				
	teaching	0,	Ü	1 2	Self-evaluation				
22.	Literature								
	22.1	Basi	c literature		•				
		No	Autho	r	Title	Publisher	Year		
		1.	Vincer	nt T. DeVita	Principals and	Wolters Kuwer	2018		
					practice of oncology				
		2.			0,0				
		3.							
	22.2		tional litera						
		No	Autho	r	Title	Publisher	Year		
		1.				+	+		
		2.				+	+		
		3.					+		
		3.							

Anne	ex 3	Program of the Cours	se for Integrated Fir	st and	Second cycle				
1.	Title of Cours	·		ANESTHESIOLOGY					
2.	Code		3MF127212	3MF127212					
3.	Study progra	m	General medicine						
4.	Organizer of	the Study program	Goce Delce Univer						
			Faculty of Medical						
5.	Level (first, so of studies)	econd or third cycle	Integrated First ar	id Sec	ond cycle				
6.	Academic yea	ar/ semester	X Semester – fifth year	7.	Number of ECTS	4			
8.	Professor (s)		Ass.Prof.Dr.Biljana	ı Eftin	nova				
9.	Requirement course	s for enrolling the	None						
10.	Aims of the co	ourse							
	Students are	introduced to basic an	d modern methods i	n ane	sthesiology practice and the	e basic and advance			
			nation and resuscitation						
11.		he course (per 15 weel	ks per semester):						
		oretical study units:							
		ntroduction . types of a							
		rugs used in anesthesi							
		nesthesiology examina							
		erioperative monitorir			ients in anestnesia				
		ostanesthisology recov egional anesthesia	ery and complication	ns					
		egional anesthesia scort and local anesthe	agia						
		esuscitation , basic life							
		esuscitation , advance							
		Intensive treatment of							
	10.	intensity of the definitions of	comatoco m						

				ick with respiratory				
	12			•	imbalance and shock			
			cal teaching					
				Classification by ASA				
				nponents, method of	f operation			
		local anesthes						
				nal, epidural anesth	esia			
				heart massage				
		Providing air						
				racheal intubation , l	laryngeal masc			
				is and procedure				
		Application o			_			
				d and colloid in shoc	k			
		l. transfusion						
		2. tracheotomy	7					
12		B.BLS,ALS						
12.	Methods of			. i launa manu diam		1		
					ussions and engaging stud	ients.		
		presentation.		ts and consultation g				
				is and consultation g all groups in ICU and				
	Final exam	sti uction:exer	cises iii siii	an groups in ico and	UK			
13		nt of available	timo: 4 FC	ΓSx30 hours=120hoι	urc			
14				+15+30+15=120hoi				
15.	Forms of te		15.1		tical, contact teaching,	30 hours		
13.	learning act		13.1	e-learning	ucai, contact teatining,	30 110013		
	learning act	uvities		Exercises (practic	ral laboratory	15 hours		
			15.2	theoretical, semin		13 110015		
16.	Other form	s of activities	16.1	Projects	iais, tealli workj	15 hours		
10.	Other forms	s of activities	16.1	Individual work		30 hours		
			16.3	Home learning		30 hours		
17.	Method of a	ccoccmont	10.5	nome learning		30 Hours		
17.	17.1	Tests / Oral	Evam		70 scores			
	17.1			ntation, projects,	10 scores			
	17.2	practical)	voik (piese	intation, projects,	10 300163			
	17.3	Activity and	narticinati	on	20 scores			
18.		t Criteria (sco			up to 50 points	5 (five). (F)		
10.	71336331116111	t Ciricina (Scoi	cs/ points)		51 to 60 points	6 (six) (E)		
					61 to 70 points	7 (seven) (D)		
					71 to 80 points	8 (eight) (C)		
					81 to 90 points	9 (nine) (B)		
					91 to 100 points	10 (ten) (A)		
19.	Signaturo a	nnroval and o	ntranco to t	he final exam/ or	60% active participat			
17.	trancition in	n the next yea	nciance to t r	iie iiiiai exdiii/ Ul	ou 70 active participat	ion at the course		
20		f teaching / st			English			
21.		measuring / st		the quality of		ests, observation, surve	71/	
41.	teaching	measuring / I	nomicoi mg	inc quanty or	Self-evaluation	ooo, oosei valioii, sui vi	- y	
22.	Literature				Jon Cyanaanon			
	22.1	Raci	c literature					
	22.1	No	Autho	r	Title	Publisher	Year	
		1.	P.Lale		Anestesiologija	Zavod za	1999	
		1.	1 .Late		Timestesiologija	udzbenike,		
						Beograd	1	
		2.	I.Vuck	ovic	Intenzivna terapija	Zavod za	1998	
			,	- · ·		Udzbenike I		
						dogledna sredstva		
						Beograd		
	22.2	Add	itional litera	ature				
		No	Autho		Title	Publisher	Year	
		1.		t K. Stoelting	Basics of anesthesia	. Churchill-	Fifth	
		1.		d D. Miller	Daoiso of aneomicola	Livingstone/	edition	
			1.0	· - -		Elsavier		
L						1		

Anne	Drogram of	the Course	e for Integrated Firs	t and Cacand	crelo			
1.	Title of Course	the Course	OTORHINOLARYN			EVCIVI CIID	CEDV	
2.	Code		3MF127312	IGULUGI AN	D MAXILLUI	TACIAL SUR	KGEK I	
3.	Study program		General medicine					
4.				itan Chin				
4.	Organizer of the Study pro	ogram	Goce Delce Univers Faculty of Medical					
5.	Level (first, second or thir	d cycle	Integrated First an		e			
	of studies)							
6.	Academic year/ semester		XI Semester -	7. Numbe	er of ECTS		4	
			fifth year					
8.	Professor (s)		Ass.Professor d-r. \	lesna Petresk	a -Dukovska			
9.	Requirements for enrollin	g the	None	00114 1 001 0011	u Builovoliu			
,	course	.8						
10.	Aims of the course (comp	etences): S	tudents to acquire b	asic knowledg	ge in the field	d of otorhine	olaryngology head	
11.	and neck surgery Contents of the course (pe	n 1E rizoole	non comocton).					
11.	Theoretical teaching units		s per semester):					
			∩D1					
	1. Introduction, basi							
	2. Physiology of hear							
		3. Disorders of the vestibular apparatus.						
	4. Inborn Deafness.		315					
	5.Paralysis of n.							
	6. Ear infections		tomataloge diagra-	ia and treat	ont of dias -	200		
			tomatology, diagnos seases of the salivary		ieni oi alsea:	ses.		
				y gianus.				
	9. Oral carcinom							
	10. Diseases of the		na vocai corus.					
	11. Laryngeal ca							
	12. Upper airway							
	Practical teachin		with because and be	lawaa diaawda				
		n a patient	with hearing and ba	nance disorde	ers.			
	2. Audiometry.	.f	th Manianala Cun dua					
			th Meniere's Syndro th middle ear infect					
	5. Presentation of			on.				
		n the patie	nt with upper respir	atory tract dis	sease, orai ca	avity and		
	the larynx. 7. Case presenta	tion with d	hronic cinucitic					
			salivary gland neopl	acm				
			ign polyps on vocal					
	10. Laryngeal ca			corus.				
			it with airway obstri	action with a	foreign hody	•		
			f white paralysis.	action with a	ioreign body	•		
12	Methods of learning: Inter							
13	Total amount of available			uirs				
14	Distribution of available to							
15.	Forms of teaching /	15.1	Lectures / theore		teaching	30 hour	rc	
13.	learning activities	13.1	e-learning	.c.cai, comact	ccaciiiig,	Jo 110u1	. 9	
	icai iiiig activities		Exercises (practi	cal laborator	i7	15 ho	ırç	
		15.2	theoretical, semi			13 1100	ui J	
16.	Other forms of activities	16.1	Projects	iais, team wo		15 ho	nurc	
10.	other forms of activities	16.2	Individual work			15 ho		
		16.3	Home learning			45 h		
17.	Method of assessment	10.3	110me leaf ming			13 II	.0013	
1/.		Evam		10 25275				
	17.1 Tests / Oral		ntation projects	40 scores				
		ork (prese	ntation, projects,	10 scores				
	practical)	manuti -! ·!		20				
10	17.3 Activity and			20 scores		F (C)	(E)	
18.	Assessment Criteria (scor	es/ points)		up to 50 p		5 (five).	(F)	
				51 to 60 p		6 (six)	(E)	
				61 to 70 p		7 (seven		
				71 to 80 p		8 (eight)		
				81 to 90 p		9 (nine)	(B)	
				91 to 100	nointa	10 (ten)	(A)	

19.	Signature approval transition in the ne		ance to the final exam/ or	60% active participa	tion at the course	
20.	Language of teaching		7	English		
21.	Methods of measur teaching	ing / mon	nitoring the quality of	Standardized motor t Self-evaluation	ests, observation, surv	vey
22.	Literature	,				
	22.1	Basic lit	erature			
		No	Author	Title	Publisher	Year
		1.				
		2.				
		3.				
	22.2	Additio	nal literature			
		No	Author	Title	Publisher	Year
		1.	M.Kosanoivik	Basic ENT		
		2.	R.Probst et al	Basic ENT	Thieme	2007
		3.				

							·
Anne		the Cours	se for Integrated Firs	t and	Second cycle		
1. 2.	Title of Course		RADIOTHERAPY 3MF110012				
3.	Code Study program		General medicine				
4.	Organizer of the Study pro	anom	Goce Delcev Unive	noitre	Ctin		
4.	organizer of the Study pro	gram	Faculty of Medical				
5.	Level (first, second or third	d cycle	Integrated First an				
5.	of studies)	a cycle	integrated i iist an	iu occ	ond cycle		
6.	Academic year/ semester		XI Semester –	7.	Number of ECTS		4
			fifth year				
8.	Professor (s)		Ass. Professor Dev	a Peti	ova		
9.	Requirements for enrolling course	g the	None				
11.	introduction to cancer treat consultations are discusse which treatment modality brief introduction to how including different imaging instructed on how to partimachine. Lastly, potential adverse et a radiation physics (introduction) and contouring of function accounting for motion accounting for motion a. Contouring, plan general 4. Introduction of different 4. potential adverse effects	d extensive to use. The radiation of modalitic cipate in the feets of reduction to the nuance tion and the technique.	wely with an emphas ne treatment plannir works, followed by a lies, immobilization, a contouring, plan gen adiation are discussed how radiation world near accelerator, coles of simulation (incovaluation es for radiotherapy)	is on ing aspose detained and accept the control of	now to formulate an ects of radiation oncolled explanation of the ecounting for motion and evaluation, and haparticular focus and evaluation and explanation focus and explanation focus and the explanation focus and expla	assessment cology are the nuances of the medical the deliver on the on-transcolor.	and plan including en discussed with a of simulation, al student is then ry of radiation on the eatment patient.
12	Methods of learning: Lectures, practical exercise	es with a	patients, seminars				
13.	Total amount of available 120 hours (30+30+0+30+						
14.	Distribution of available ti						
17.	2+1+1 / week						
15.	Forms of teaching / learning activities	15.1	e-learning		contact teaching,	30 hours	
		15.2	Exercises (practitude theoretical, semi			30 hours	
16.	Other forms of activities	16.1	Projects			0 hours	
		16.2	Individual work			30 hours	
		16.3	Home learning			30 hours	

17.	Method of a	ssessment						
	17.1	Tests / Oral Ex	am	70 scores				
	17.2	Individual wor	k (presentation, projects,	10 scores				
		practical)	-					
	17.3	Activity and pa	articipation	20 scores	scores			
18.	Assessment	Criteria (scores	/ points)	up to 50 points	5 (five). ((F)		
				51 to 60 points	6 (six) (E)		
				61 to 70 points	(D)		
				71 to 80 points	8 (eight)	(C)		
				81 to 90 points	9 (nine)	(B)		
				91 to 100 points	()	(A)		
19.			rance to the final exam/ or	60% active participa	tion at the course			
		n the next year						
20.		f teaching / stud		English				
21.		measuring / mo	nitoring the quality of	Standardized motor t	ests, observation, s	ırvey		
	teaching			Self-evaluation				
22.	Literature	1						
	22.1		terature	Τ	T =	1		
		No	Author	Title	Publisher	Year		
		1.	Vincent T. DeVita	Principals and	Wolters Kuwer	2018		
				practice of oncology				
		2.						
		3.						
	22.2	Additio	onal literature	<u> </u>		1		
	No Author		Title	Publisher	Year			
		1.						
		2.						
		3.						

Anne	x No 3 Program of the Course for Integra	ited First and Second cycle					
1.	Title of Course	OCCUPATIONAL HEALT	Н				
2.	Code	3MF121612					
3.	Study program	General medicine					
4.	Organizer of the Study program	University Goce Delcev St Faculty of Medical Science	•				
5.	Level (first, second or third cycle of studies)	First					
6.	Academic year / semester	XI Semester – fifth year	7. Number of ECTS 4 credits				
8.	Professor (s)	Group of Professors: Ass Prof Andrej Petrov Prof d-r Biljana Ilievska P Ass Prof d-r Ivica Smokov	<i>r</i> ski				
9.	Requirements for enrolling the course	Requirement for attending the subject of Occupational Health is enrolment of 11 th semester.					
10.	Aims of the course (competencies): • Acquiring theoretical and practical knowledge from the area of Occupational Health						
11.							
12.	 Allergic alveolitis. Occupational derma Methods of learning: interactive lectures, exerc 		rk, home learning				
13.	Total amount of available time:	4 ECTS x 30 hours =	120 hours				
14.	Distribution of available time:	30+15+15+30+30 =	120 hours (2+1+1)				

15.	Forms o	of teaching / learning activities	15.1.	Lectures / theoretical, con teaching, e-learning	tact	30 hours		
			15.2.	Exercises (practical, labora theoretical, seminars, team	-	15 hours		
16.	Other fo	orms of activities	16.1.	Projects		15 hours		
			16.2.	Individual work		30 hours		
			16.3.	Home learning		30 hours es		
17.	Method	of assessment						
	17.1.	Tests / Oral Exam			70 scores			
	17.2	Individual work (presentation, p	rojects, p	ractical)	10 scores			
	17.3	Activity and participation			20 score	es		
18.	Assessn	ment Criteria (scores/ points)		up to 50 points 5 (fiv		(F)		
				51 to 60 points 6 (six) (E)		
				61 to 70 points	7 (sever	n) (D)		
				71 to 80 points	8 (eight)) (C)		
				81 to 90 points	9 (nine)	(B)		
				91 to 100 points	10 (ten)	(A)		
19.		re approval and entrance to the finor transition in the next year	al	60% active participation at the	ne course			
20.	Langua	ge of teaching / study		English				
21.	Method of teach	s of measuring / monitoring the quaing	ality	Standardized motor tests, observation, survey Self-evaluation				

Annex	Program of the Course for Integr	ated First and Second cycle					
1.	Title of Course	PHYSICAL MEDICINE AND REHABILITATION					
2.	Code	3MF126612					
3.	Study program	General medicine					
4.	Organizer of the Study program	Goce Delce University – Stip					
		Faculty of Medical Sciences					
5.	Level (first, second or third cycle of studies)	Integrated First and Second cycle					
6.	Academic year / semester	XI Semester – fifth year 7. Number of ECTS 4					
		credits					
8.	Professor	Assistant Professor Lence Nikolovska					
9.	Requirements for enrolling the course	None					
10.	Aims of the course (competences):						
	Theoretical teaching:						
		theoretical source for the means and methods of physical therapy					
		their physiological and therapeutic activities, as well as specific					
	methods of working with them.						
	Practical teaching:						
		oly their theoretical knowledge in practice in the Physical Medicine					
		rectly acquainted with all types of physical therapy, their					
		l as specific methods of working with them in specific diseases.					
11.	Contents of the course (per 15 weeks per seme	ester):					
	1. Basic principles of physiotherapy;						
	2. Rules for determining the physiotherapy pro						
	3. Physical therapy and rehabilitation in diseas						
	4. Physical therapy and rehabilitation in disease						
	5. Physical therapy and rehabilitation in degen6. Physical therapy and rehabilitation of rheum						
	7. Physical therapy and rehabilitation of intern						
	8. Physical therapy and rehabilitation in orthogonal						
	9. Physical therapy and rehabilitation for injuri						
	10. Physical Therapy and rehabilitation in surg						
	11. Physical therapy and rehabilitation in cong						
	12. Physical therapy and rehabilitation in gyne						
	13. Physical Therapy and rehabilitation in nerv						
	20.1 Morean Thorapy and rendomination in field	one and mental infleeded;					
	(methods, techniques, dosage)						
	(memous, teeninques, absuge)						

12.		ls of learning: Interactive teaching l			eaching ai	ds, practical exercises,		
13.		nops, group discussions and individed mount of available time:	uai metn	4 ECTS x 30=120 hours				
14.		ution of available time		30+15+15+30+15 = 120 hours (2+1+1)				
15.		of teaching / learning activities	15.1.	Lectures/ theoretical, contact teaching, e-learning		30 hours		
			15.2.	Exercises (practical, labor theoretical, seminars, tear		15 hours		
16.	Other forms of activities		16.1.	Projects		15 hours		
			16.2.	Individual work		30 hours		
			16.3.	Home learning		15 hours		
17.	Method	Method of assessment						
	17.1.	Tests / Oral Exam			70 scc	ores		
	17.2.	Individual work (presentation, p	rojects, _l	oractical)	10 scc	ores		
	17.3.	Activity and participation		20 score		ores		
18.	Assessi	nent Criteria (scores/points)		up to 50 points 5 (f		ive) (F)		
			-	51 to 60 points	6 (six			
			-	61 to 70 points	7 (sev	ren) D)		
			-	71 to 80 points	8 (eig	ht) (C)		
				81 to 90 points	9 (nin	e) (B)		
				91 to 100 points	10 (te	n) (A)		
19.		ire approval and entrance to the fin	al	60% active participation at the	ne course			
		or transition in the next year						
20.	Langua	ge of instruction		English				
21.	Method of teach	ds of measuring / monitoring the qu	ıality	Standardized motor tests, ob	servation	survey Self-evaluation		
	or teach	ııııg		Standardized inotor tests, 003	sei vauoli,	sui vey, seii-evaiuatioi		

Anne	ex 3	Program of the Cour	se for Integrated Firs	st and	Second cycle			
1.	Title of Course		OPHTHALMOLOG					
2.	Code		3MF130512					
3.	Study program	1	General medicine					
4.	Organizer of th	ne Study program	Goce Delce Univer	sity –	Stip			
			Faculty of Medical					
5.	Level (first, see of studies)	cond or third cycle	Integrated First ar	id Sec	ond cycle			
6.	Academic year	/ semester	XI Semester –	7.	Number of ECTS	4		
			fifth year					
8.	Professor (s)	Nevenka Laban Gu	ıcheva	l				
			Vesna Cheleva					
9.	-	for enrolling the	None	None				
	course Aims of the course (competences): Getting acquainted with the eye diseases and their treatment							
10.				vith th	e eye diseases and their treat	ment		
11.		e course (per 15 wee	ks per semester):					
	Courses:	1.1						
		ne eye lids and orbit	. 1					
		ne lacrimal drainage s ne cornea and sclera	system and conjuncti	va				
	Uveitis	ie cornea and sciera						
	Tumors of the	0110						
	Glaucoma	eye						
	Disorders of th	na lanc						
		ar disorders and deta	chment					
		and dystrophies of th						
	Strabismus and		e runaus					
	Neuro-ophthal							
	Injuries of the eye							
	Practice:							
	Basic eye exan	nination x2						

		scopy of the ar	iterior segm	ient x2					
	Ophthalmo								
	Refraction	x2							
	Skijaskopy	1 1							
		and pleoptics							
	Urgent first								
12.				tical, contact teachir			_		
					am work, projects, individ	lual work, home le	earning		
13		ınt of available							
14				+15+10+50=120		1			
15.	Forms of te		15.1		tical, contact teaching,	30 hours			
	learning ac	tivities		e-learning					
				(15 weeks X 2 sch	,				
				Exercises (praction		15 hours			
			15.2	theoretical, semir					
				15 weeks' x 1 sch	ool class-hour)				
16.	Other form	s of activities	16.1	Projects		15 hours			
			16.2	Individual work		30 hours			
			16.3	Home learning		30 hours			
17.	Method of a	assessment							
	17.1	Tests / Ora			70 scores				
	17.2	Individual v	vork (prese	ntation, projects,	10 scores				
		practical)							
	17.3	Activity and	l participati	on	20 scores				
18.	Assessmen	t Criteria (sco	res/ points)		up to 50 points	5 (five).	(F)		
		•	,		51 to 60 points	6 (six)	(E)		
					61 to 70 points	7 (seven)	(D)		
					71 to 80 points	8 (eight)	(C)		
					81 to 90 points	9 (nine) (B)			
					91 to 100 points	10 (ten)	(A)		
19.	Signature a	pproval and e	ntrance to t	he final exam/ or		icipation at the course			
		n the next yea		,	a contraction of the contraction				
20		of teaching / st			English				
21.		measuring /		the quality of	Standardized motor tests, observation, survey				
-1.	teaching	measuring /	nomicoi ing	are quarry or	Self-evaluation				
22.	Literature								
	22.1	Rasi	c literature						
	22.1	No	Autho	r	Title	Publisher	Year		
		1.	0.Litri		Oftalmologija	1 dononer	2004		
		1.	M.Blag	•	Ortamiologija		2001		
			D Cvet						
		2.		goevic, O.Litrichin	Oftalmologija		1993		
		2.	IVI.DIA	goevie, O.Litti tellilli	Ortannologija		1773		
		3.	Sintija	Bredford	Basic ophthalmology	Tabernakul	2010		
	22.2	Add	itional litera	ature					
		No	Autho		Title	Publisher	Year		
		<u> </u>				B	2017		
		1.	Kansk	1	Clinical	Butterworth-	2015		
			7. 6	D. II.	Ophthalmology	Heimann.	2012		
		2.	N.Carl	son, D.Kurtz	Clinical Procedures	Tabernakul	2010		
					for Ocular				
					Examination				
		3.							

Anne	ex 3	Program of the Cours	e for Integrated Firs	t and	Second cycle			
1.	Title of Course		FORENSIC MEDICINE					
2.	Code		3MF117212	3MF117212				
3.	3. Study program		General medicine					
4.	4. Organizer of the Study program		Goce Delcev University – Stip Faculty of Medical Sciences					
5.	Level (first, so of studies)	econd or third cycle	Integrated First and Second cycle					
6.	Academic yea	ar/ semester	XI Semester – fifth year	7.	Number of ECTS	4		

8.	Professor (s)			Ass. Prof Natasha Da	vcheva		
9.	Requirements fo	r enrollin	g the	None			
	course						
10.					asic principles and topic	cs of forensic medicine s	science.
11.	Contents of the c				.1 .1 . 1	C 1 . 1 . 1 . 1	C
		ic patnoio position.	gy: forensi	c autopsy, signs of de	ath, thanatology, cause o	or death and the process	ses or
			ical fiscal	chemical, psychical e	tc		
				igulation, bolus death			
					nd exit wounds, gun sho	t powder detection, vic	inity of
	shootin				, 8	· p · · · · · · · · · · · · · · · · · ·	
			sed head	injuries, intracranial l	nemorrhages, contusion	of the brain, diffuse bra	ain injuries.
	Concus	sion of the	e brain.		-		-
					ation of bodily injuries;	rape cases and other ty	pes of
				of medical document			
					s, ethyl alcohol, pesticid		.1 1.
					ns of humans body; of bo	ones; DNA fingerprint m	iethod in
			e practice.		vestigation, methods for	hiological traces	
12.				etical, contact teaching		biological traces.	
14.					g, e-ieai iiiig m work, projects, individ	dual work, home learni	ng
13				=120 hours (2+1+1)	- , p , , mary n	,	J
14				+15+30+15=120 hou	rs (2+1+1)		
15.	Forms of teachin	g/	15.1		ical, contact teaching,	30 hours	
	learning activitie	es		e-learning			
				Exercises (practical		15 hours	
			15.2	theoretical, semina	ars, team work)		
16.	Other forms of a	ctivities	16.1	Projects		15 hours	
		-	16.2	Individual work		30 hours	
17	Method of assess	mont	16.3	Home learning		30 hours	
17.		sment sts / Oral l	Evam		70 scores		
				ntation, projects,	10 scores		
		ividuai w ictical)	orv (hrese	manon, projects,	10 300103		
	1		participati	on	20 scores		
18.	Assessment Crite				up to 50 points	5 (five). (F)	
			, ,		51 to 60 points	6 (six) (E)	
					61 to 70 points	7 (seven) (D)	
					71 to 80 points	8 (eight) (C)	
					81 to 90 points	9 (nine) (B)	
					91 to 100 points	10 (ten) (A)	
19.			trance to t	he final exam/ or	60% active participat	tion at the course	
2.0	transition in the		1		P 1: 1		
20	Language of teac			the anality of	English	age alegamenting	
21.	Methods of meas teaching	suring / m	onicoring	uie quality of	Standardized motor to Self-evaluation	ests, observation, surve	У
22.	Literature				Jen-evaluati011		
22.	22.1	Rasic	literature		1		
		No	Autho	r	Title	Publisher	Year
		1.		Saukko, Bernard	Knight's Forensic	CRC Press Boca	2016
			Knigh		pathology Fourth	Raton London New	
					Edition	York	
		2.	Natas	na Davcheva	Практикум по	UGD Shtip	2019
					судска медицина -		
					Practical guide for		
					forensic medicine -		
					translation on		
		3.	Vincer	nt J. DiMaio	English Forensic pathology	CRC Press	2002
		٥.		nick DiMaio	i of elisic patifology	GRG 1 1635	2002
	22.2	Addit	ional liter		1	1	1
		No	Autho		Title	Publisher	Year

	1.	Zecevic D.	Sudska medicina	Medicinska naklada Zagreb	
	2.	Milos Tasic I saradnici	Sudska medicina	Zmaj Novi Sad	
	3.				

					1		<u> </u>			
Anne	x 3	Program o	f the Cours	e for Integrated First	and Second cycle					
1.	Title of Cour		. and dours	SPORTS MEDICINE						
2.	Code	.30		3MF100612						
3.	Study progr	am		General medicine						
4.		f the Study pr	ogram		re Delcev University – Stip					
**	organizer of	c ocuay pr	~B		culty of Medical Sciences					
5.	Level (first.	second or thi	rd cycle	Integrated First and						
	of studies)		-7		-					
6.		ear/ semester	•	XI Semester -	7. Number of ECTS	2				
	,	,		fifth year						
8.	Professor (s)		Ass prof Eli Handjiska						
9.		its for enrollii	ng the	None						
	course									
10.		course (comp								
					sports medicine and ac	quisition of basic	knowledge			
11.				s per semester):						
				physiology and cond	itioning					
		trition in spo								
			ements in s	port - basic principles	3					
		ping in sport	norte mod!	cine in regulation of b	ody composition					
					oay composition gh monitoring of heart r	ate				
		boratory and			511 momentum gu meatt f	acc				
		eparticipation								
		orts injuries	i caummati	0113						
			ng process	- main prevention of	sports injuries					
				sports medicine	-p					
					rt performance and prev	enting the athlete	e health			
					sing the exercise in prev					
12.					d learning, participating	g in handwork of t	heme,			
13				$TS \times 30 \text{ hours} = 60 \text{ ho}$						
14			ime: 30 + 0) + 15 + 5 + 10 = 60 ho		<u>.</u>				
15.	Forms of tea		15.1		ical, contact teaching,	30	hours			
	learning act	ivities		e-learning (15 wee	eks x 2 hours)					
				Exercises		0 h	ours			
			15.2							
16.	Other forms	of activities	16.1	Projects			hours			
			16.2	Individual work			ours			
4.5	N 1 1 C		16.3	Home learning		10	hours			
17.	Method of a		1 2	0	40					
	17.1	Tests (2 col			40 scores					
	17.2	practical)	vork (prese	ntation, projects,	10 scores					
	17.3	Activity and	narticinat	on	20 scores					
	17.3			ıl and practical)	30 scores					
18.		Criteria (scoi			up to 50 points	5 (five).	(F)			
10.	Assessineill	GIRCHA (SCOI	cs/ points	1	51 to 60 points	6 (six)	(E)			
					61 to 70 points	7 (seven)	(D)			
					71 to 80 points	8 (eight)	(C)			
					81 to 90 points	9 (nine)	(B)			
					91 to 100 points	10 (ten)	(A)			
19.	Signature ar	proval and e	ntrance to t	he final exam/ or	60% active participa	. ,	` '			
1/.	2. Signature approval and entrance to the final exam/ or transition in the next year 60% active participation at the course									
20.		teaching / st			English					
21.	Methods of	measuring / r	nonitoring	the quality of	Standardized motor t	ests, observation.	survev			
	teaching	, , , , , , , , , ,	, <u>,</u>	1	Self-evaluation		· - · - · - y			
22.	Literature									
	22.1	Basi	c literature							
		No	Autho		Title	Publisher	Year			
							1			

	1.	Brukner P., Khan K	Clinical Sports Medicine	McGrawHill Companies, Icn Australia	2012				
	2.	Walter Frontera, PA:	Clinical Sports Medicine: Medical Management and Rehabilitation	Saunders/Elsevier Philadelphia	2007				
	3.	Kolt.S.G., Mackler L.S.	Physical Therapies in Sports and Exercise,	Churrchill Livingston e Elsevier Philadelphia	2009				
22.2	Additio	nal literature							
	No	Author	Title	Publisher	Year				
	1.	International Federation of Sports Medicine (FIMS),	Team Physician Manual	Routledge Abingdon Oxon	2013				
	2.	Ehrman J.K.,Bisich Γ.S. Keteyian S.J.	Clinical Exercise Physiology	Human Kinetics	2009				
	3.								

Annex 3	to deal with					
 2. Code 3MF115312 3. Study program General medicine 4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester XI Semester – 7. Number of ECTS 3 8. Professor (s) Ass. Prof. Dr. Biljana Eftimova 9. Requirements for enrolling the course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units: 	to deal with					
3. Study program General medicine 4. Organizer of the Study program Goce Delce University – Stip Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) Integrated First and Second cycle 6. Academic year/ semester XI Semester – 7. Number of ECTS 3 8. Professor (s) Ass. Prof. Dr. Biljana Eftimova 9. Requirements for enrolling the course None 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): • Theoretical study units:	to deal with					
 4. Organizer of the Study program	to deal with					
Faculty of Medical Sciences 5. Level (first, second or third cycle of studies) 6. Academic year/ semester 8. Professor (s) 9. Requirements for enrolling the course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:	to deal with					
5. Level (first, second or third cycle of studies) 6. Academic year/ semester 7. Number of ECTS 3 fifth year 8. Professor (s) 8. Requirements for enrolling the course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): ■ Theoretical study units:	to deal with					
of studies) 6. Academic year/ semester XI Semester 7. Number of ECTS 3 8. Professor (s) Ass. Prof. Dr. Biljana Eftimova 9. Requirements for enrolling the course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): • Theoretical study units:	to deal with					
8. Professor (s) 9. Requirements for enrolling the course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): • Theoretical study units:	to deal with					
9. Requirements for enrolling the course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:	to deal with					
course 10. Aims of the course :Students who have already studied this content in other courses, need to learn to them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:	to deal with					
them in the practice of emergency aspect. We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:	to deal with					
We will emphasize the provision of vital functions through general resuscitative measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:						
measures, and then providing specific therapy. In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:						
In practical instruction through elaborate clinical scenarios student should learn the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:						
the procedure for dealing with various emergency situations 11. Contents of the course (per 15 weeks per semester): Theoretical study units:						
11. Contents of the course (per 15 weeks per semester): Theoretical study units:						
Theoretical study units:						
4 5 6 11 6 1 11 5 1 1 1 6 1						
1. Definition of emergency in medicine. Basic principles of treatment.						
2. Shock (hemorrhagic, traumatic, cardiac, septic, anaphylactic) 3 Emergencies in cardiology (acute heart failure , rhythm disorders , coronary						
syndrome, acute myocardial infarction)						
4 Pulmology emergencies (acute respiratory failure, asthmatic status,						
pneumothorax,pulmonary embolism)						
5 Emergencies in GIT (" upper " and " lower " digestive bleeding , mesenteric						
thrombosis , pancreatitis , acute liver failure)						
6 Emergencies in nephrology (acute renal failure, uremic syndrome , renal						
colic, hypertensive crisis)						
7 Emergencies in endocrinology (diabetic ketoacidosis , hypo and						
hyperglycaemic coma , thyrotoxic crisis)						
8 Toxicology (poisoning by drugs, pesticides, corrosive substances,						
ideological poisons mushrooms . Basic principles of treatment and antidotes)						
9 Emergency situations in neurology (cerebrovascular stroke , status						
epilepticus , miastenia crisis , headache)						
10 Emergency situations in psychiatry (depression, psychomotor agitation ,						
psychotic conditions , forced hospitalization)						
11 Emergency conditions in gynecology and obstetricijata (bleeding in the first trimester	r of pregnancy ,					
placenta previa, abruptio placentae, ruptura uteri , etc.)						
12 Emergency situations in pediatrics (convulsive syndrome , acute						
dehydration , neonatal asphyxia , premature newborn care)						

		D .:	1. 1.	••				
	A 11		al teaching		and and ICII			
12	Methods of		tuations the	nt we have on the wa	ira ana ico			
12.			nai locturos	in large group discu	ssions and engaging stud	onts		
	Multimodia	presentation.	ilg: lectules	ili large group discu	ssions and engaging stud	ients.		
				s and consultation g	nouna			
				s and consultation g ll groups in ICU	roups.			
	Final exam	sti uctioni.exer	cises ili silia	ii groups iii ico				
13		nt of available	time: 3 FCT	Sx30 hours=90hour	c			
14				+0+30+15=90 hours				
15.	Forms of tea		15.1		ical, contact teaching,	30 hours		
13.	learning act		13.1	e-learning	ical, contact teaching,	30 110013		
	lear fillig act	ivides		Exercises (practic	al laboratory	15 hours		
			15.2	theoretical, semin		13 110015		
16.	Other forms	of activities	16.1	Projects	ars, team workj	0 hours		
10.	Other forms	of activities	16.2	Individual work		30 hours		
	16.3 Home learning			15 hours				
17.	Method of a	ccoccmont	10.5	Home learning		13 110013		
17.	17.1	Tests / Oral	Fvam		2x20/30=70 scores			
	17.2			ntation, projects,	10 scores			
	17.2	practical)	ork (preser	itation, projects,	10 300163			
	17.3	Activity and participation 20 scores						
18.	Assessment Criteria (scores/ points)				up to 50 points	5 (five). (F)		
10.	71336331116116	dineria (scoi	es, points,		51 to 60 points	6 (six) (E)		
					61 to 70 points	7 (seven) (D)		
					71 to 80 points	8 (eight) (C)		
					81 to 90 points	9 (nine) (B)		
					91 to 100 points	10 (ten) (A)		
19.	Signature a	nnroval and er	ntrance to th	ne final exam/ or	60% active participati			
17.		i the next year		ic illiai chaili, oi	00 70 active participati	on at the course		
20		f teaching / st			English			
21.		measuring / n		he quality of	Standardized motor te	ests observation surv	ev	
	teaching	measuring / n	iointoi ing t	ne quanty of	Self-evaluation	ous, observation, sarv	c y	
22.	Literature							
	22.1	Basic	cliterature		_L			
		No	Author	•	Title	Publisher	Year	
		1.	Marx I	et al. Rosen's	Emergency Medicine	MOSBY, Elsevier	2011	
		2.						
		3.						
	22.2		tional litera		T	T =	T	
		No	Author	•	Title	Publisher	Year	
		1	Mari	-+ -1 D/-	Emergency Medicine	MOCDY Fland	2011	
		1.	Marx J	et al. Rosen's	Emergency Medicine	MOSBY, Elsevier	2011	
		2.						
		3.					1	

Anne	ex 3	Program of the Course for Integr	ated First and Second cycle					
1.	Title of the	Course	GENERAL PRACTICE	GENERAL PRACTICE				
2.	Code		3MF127412	3MF127412				
3.	Study Progr	ram	General medicine					
4.	Organizer o	of the study program (unit or	University Goce Delcev					
institute, Faculty, department)			Faculty of Medical Scien	ces				
5.	Cycle (first,	second and third cycle)	Integrated study progra	m – fir	rst and second cycle			
6.	Academic y	ear / semester	XII Semester – sixth	7.	Number of credits			
			year			8		
8.	Professor (s)	Engaged professors/pro hospitals with university			e teaching		
9.	Requiremen	nts for enrollment the Course	None					
10.	Purposes of	f the curriculum (competencies):						
	Introducing	g students to all areas how to achiev	ve essential or 'core' compet	ences	for general practitioner	(GP). GP is		
	a person-ce	entred scientific discipline with thre	ee essential features of the c	ore co	mpetences: contextual, a	ittitudinal		
	and scientif	îc.						
11.	Content of t	the course program:						

The content of the course contains 6 core competences of GP

- (1) Primary care management
- (2) Person-centred care
- (3) Specific problem solving skills
- (4) Comprehensive approach
- (5) Community orientation
- (6) Holistic modelling

The course contains also 12 central characteristics of the discipline of GP

- first medical contact within the healthcare system, providing open and unlimited access to its users, dealing with all health problems regardless of the age, sex or any other characteristic of the person concerned.
- makes efficient use of healthcare resources through co-ordinating care, working with other professionals in the primary care setting, and by managing the interface with other specialities taking an advocacy role for the patient when needed.
- develops a person-centred approach, orientated to the individual, his/her family and their community.
- promotes patient empowerment.
- has a unique consultation process, which establishes a relationship over time, through effective communication between doctor and patient.
- is responsible for the provision of longitudinal continuity of care as determined by the needs of the patient.
- has a specific decision making process determined by the prevalence and incidence of illness in the community.
- manages simultaneously both acute and chronic health problems of individual patients.
- manages illness which presents in an undifferentiated way at an early stage in its development, which may require urgent intervention.
- promotes health and well-being both by appropriate and effective intervention.
- has a specific responsibility for the health of the
- deals with health problems in their physical, psychological, social, cultural and existential dimensions.
- 12. Learning methods:
 - lectures contact teaching,
 - e-teaching,
 - theoretical and practical exercises,
 - assignments,
 - consultations,
 - preparation of independent seminar work,
 - home learning,
 - preparatory classes for exams,
 - consultations,
 - colloquia,
 - practical final exercise,
 - e-exams

13.	Total a	vailable time		8 hours / week		
				240 hours / semester		
14.	Distrib	ution of available time		0+0+8 / per week		
15.	Forms	Forms of teaching / learning activities		lectures / theoretical - cont teaching, e-teaching	act	0 hours/week
			15.2.	theoretical and practical ex e-exams, preparation of independent seminar work		0 hours/week
16.	Други	форми на активности	16.1.	Project tasks		0 hours
				Individual tasks		8 hours
			16.3.	Home learning		0 hours
17.	Method	d of assessment	1			
	17.1.	Tests / oral exams			70 pc	oints
	17.2.	Seminars (paper / project - prese	vritten and/or oral)	10 pc	pints	
	17.3.	Activity and participation			20 po	ints
18.	Assessi	ment Criteria (points / score)	_	ıp 50 points	5	(five) (F)
				51 to 60 points	6	(six) (E)
			6	61 to 70 points	7	(seven) (D)

		71 to 80 points	8	(eight)	(C)
		81 to 90 points	9	(nine)	(B)
		91 to 100 points	10	(ten)	(A)
19.	Signature requirement and passing the final exam	60% active participation at the	cours	e	
20.	Language of teaching / study	English			
21.	Method of monitoring the quality of teaching	Self-evaluation	•	•	

_		D (1) () ()	1	D 10 1 1				
Annex		Program of the Course for Ir				ami on		
1.	Title of the C	ourse		TERNAL MEDICINE -	CLINICAL PRAC	TICE		
2.	Code			1F127512				
3.	Study Progra			neral medicine				
4.		the study program (unit or culty, department)		niversity Goce Delcev culty of Medical Scienc	200			
	mstitute, rat	cuity, department)	Га	cuity of Medical Science	.62			
5.	Cycle (first s	second and third cycle)	In	tegrated study program	n – first and seco	and cycle		
6.		ear / semester		Integrated study program – first and second cycle XII Semester – sixth 7. Number of credits				
0.	11000011110 90	ar , comescor		year 5				
8.	Professor (s))	En	gaged professors/prof	fessionals/specia	alists from the t	eaching	
			ho	spitals with university	agreement of co	llaboration		
9.		ts for enrollment the Course		one				
10.		the curriculum (competencies						
		for the students is to provide						
44		ined through the regular cour	ses relate	d to the diagniosis, trea	atment and moni	itoring patients	<u> </u>	
11.		ne course program:	ovaminat	ion of a nationt				
		g medical history and clinical gnition of the relevant syndro			's conditions			
		patients correctly to appropri				er to correctly e	establish a	
	different dia		are aragin	process and importatory pr		01 00 0011 00019 0	, , , , , , , , , , , , , , , , , , ,	
		erpret laboratory and clinical	trials					
		e therapy or refer the patient		ropriate therapeutic pi	rocedure			
		thical and legal principles rele		inical practice				
		te in a teamwork netwoerking	g 5					
12.	Learning me							
		 lectures - contact teach 	ing,					
		 e-teaching, 						
		 theoretical and practical 	al exercise	es,				
		- assignments,						
		 consultations, 	dont com	non ruroult				
		preparation of indepenhome learning,	ideiit seiii	iliai work,				
		preparatory classes for	avame					
		preparatory classes forconsultations,	exams,					
		colloquia,						
		 practical final exercise, 						
		e-exams	'					
13.	Total availab			8 hours / week				
13.	- otal availab			240 hours / sem	iester			
14.	Distribution	of available time		0+0+5 / per wee				
15.		ching / learning activities	15.1.	lectures / theoretic		0 hours/wee	ek	
			1	teaching,				
			<u> </u>	e-teaching				
			15.2.	theoretical and pra		0 hours/wee	ek	
			1	e-exams, preparation				
1.0	Прити		16.1	independent semin	iar work	0 hours		
16.	други форм	и на активности	16.1.	Project tasks		0 hours		
			16.2	In dissipated to the		T have		
			16.2.	Individual tasks		5 hours		
			16.2	Home lai		0 h a		
			16.3.	Home learning		0 hours		
17	Math. J.C	22222222	1					
17.	Method of as	ssessment						

	17.1.	Tests / oral exams		70 p	oints		
	17.2.	Seminars (paper / project - presentatio	1 /1 / 1		10 points 20 points		
	17.3.	Activity and participation					
18.	18. Assessment Criteria (points / score)		up 50 points	5	(five)	(F)	
			51 to 60 points	6	(six)	(E)	
			61 to 70 points	7	(seven)	(D)	
			71 to 80 points	8	(eight)	(C)	
			81 to 90 points	9	(nine)	(B)	
			91 to 100 points	10	(ten)	(A)	
19.	Signatur exam	re requirement and passing the final	60% active participation at the course				
20.	Languag	ge of teaching / study	English				
21.	Method	of monitoring the quality of teaching	Self-evaluation				

Anne	ex 3	Program of the Course for Integral	rated First and Second cycle					
1.	Title of the	Course	SURGERY - CLINICAL	SURGERY - CLINICAL PRACTICE				
2.	Code		3MF127612					
3.	Study Prog	ram	General medicine					
4.		of the study program (unit or aculty, department)		University Goce Delcev Faculty of Medical Sciences				
5.	Cycle (first,	second and third cycle)	Integrated study progra	ated study program – first and second cycle				
6.	Academic y	ear / semester	XII Semester – sixth year	7.	Number of credits	5		
8.	Professor (s)	Engaged professors/professionals/specialists from the teaching hospitals with university agreement of collaboration					
9.	Requireme	nts for enrollment the Course	None					

10. Purposes of the curriculum (competencies):

The aim of active clinical practice instruction in surgical wards and outpatient surgery is to enable future medical doctors to rationally and systematically apply the knowledge gained during their studies in order to timely diagnose the diseases, clinical syndromes and conditions, correct therapeutic approach and professional ethical attitude towards patients, colleagues and collaborators.

After completing professional clinical practice, future medical doctors will be train ed for following knowledge, skills and attitude:

- Correct history taking and clinical examination of a patient
- Identification and early detection of diseases, clinical syndromes and conditions of patients with an emphasis on urgent life-threatening situation
- Implementation and /or directing patients to certain appropriate diagnostic procedures (laboratory or clinical) for a correct interpretation of their results and establishing different diagnosis
- Determining therapy and / or referring to appropriate therapeutic procedure or to another more appropriate level or heath care
- Providing assistance in emergency situations and in the terminal stage of a disease
- Treatment of chronically ill patients
- Responsible approach to work in accordance with the medical doctrine
- Respect of ethical and legal principles relevant to medical practice
- Participation in a medical team, which is imperative in modern medical practice

11. Content of the course program:

1. Admission clinic

Individual taking history (surgical history). Physical examination of systems, using basic methods (inspection, palpation, auscultation and percussion) and their systematic and rational use depending on the case.

2. Surgical ward

Students become familiar with the surgical ward, manner of behavior and basic methods for aseptic operation in a hospital room. Keeping records of a surgical patient and presenting these to other colleagues and participating in a daily visit.

3. Surgical hall

Students become familiar with the principles of entry, behaviour and aseptic work in the surgery. They will learn the basic position of a doctor (assistant) who participates in a surgical procedure. Active participation in surgical procedures and getting knowledge of basic surgical principles of work.

Methods of clinical practice: Practical exercises on various surgical phantoms, simulation, work with patients under supervision.

10	T								
12.	Learnin	ng methods:							
		 lectures - contact teachi 	ng,						
		e-teaching,							
		 theoretical and practical 	l exercis	es,					
		 assignments, 							
		consultations,							
	 preparation of independent seminar work, 								
		 home learning, 							
		 preparatory classes for exams, 							
		 consultations, 							
		– colloquia,							
		 practical final exercise, 							
		– e-exams							
13.	Total av	vailable time		8 hours / week					
				240 hours / semester					
14.	Distrib	ution of available time		0+0+8 / per week					
15.	9, 9			lectures / theoretical - conta	ct	0 hours/week			
	teaching,								
			15.2.	e-teaching					
			theoretical and practical exe	rcises,	0 hours/week				
	e-exams, preparation of								
		_		independent seminar work					
16.	Други	форми на активности	16.1.	Project tasks		0 hours			
			16.2.	Individual tasks		8 hours			
			16.3.	Home learning		0 hours			
17.		of assessment							
	17.1.	Tests / oral exams			70 po	ints			
	17.2.	Seminars (paper / project - prese	ntation:	written and/or oral)	10 po	ints			
	17.3.	Activity and participation			20 poi	nto			
					_				
18.	Assessr	nent Criteria (points / score)	-	up 50 points		(five) (F)			
			-	51 to 60 points		(six) (E)			
			-	61 to 70 points		(seven) (D)			
				71 to 80 points		(eight) (C)			
				81 to 90 points		(nine) (B)			
10	C: ·		,	91 to 100 points	10	(ten) (A)			
19.	exam	re requirement and passing the fina	al	60% active participation at the	course				
20.	Langua	ge of teaching / study		English					
21.	Method	of monitoring the quality of teaching	ng	Self-evaluation					

Anne	ex 3	Program of the Course for Integra	ted First and Second cycle				
1.	Title of the	Course	GYNECOLOGY AND OBSTETRICS - CLINICAL PRACTICE				
2.	Code		3MF127712				
3.	Study Progr	am	General medicine				
4.		f the study program (unit or culty, department)	University Goce Delcev Faculty of Medical Sciences				
5.	Cycle (first,	second and third cycle)	Integrated study program – first and second cycle				
6.	Academic ye	ear / semester	XII Semester – sixth year	7.	Number of credits	4	
8.	Professor (s	5)	Engaged professors/pro hospitals with university		nals/specialists from the ement of collaboration	teaching	
9.	Requiremen	nts for enrollment the Course	None				
10.	Purpose of t doctors to r the diseases	the curriculum (competencies): the active clinical practice instructio ationally and systematically apply the s, clinical syndromes and conditions tients, colleagues and collaborators.	ne knowledge gained durin	g thei	r studies in order to time	ly diagnose	

After completing professional clinical practice, future medical doctors will be train ed for following knowledge, skills and attitude:

- Correct history taking and clinical examination of a patient
- Identification and early detection of diseases, clinical syndromes and conditions of patients with an emphasis on urgent life-threatening situation
- Implementation and /or directing patients to certain appropriate diagnostic procedures (laboratory or clinical) for a correct interpretation of their results and establishing different diagnosis
- Determining therapy and / or referring to appropriate therapeutic procedure or to another more appropriate level or heath care
- Providing assistance in emergency situations and in the terminal stage of a disease
- Treatment of chronically ill patients
- Responsible approach to work in accordance with the medical doctrine
- Respect of ethical and legal principles relevant to medical practice
- Participation in a medical team, which is imperative in modern medical practice

11. Content of the course program:

Proper taking medical history and clinical examination of a patient

Timely recognition of the relevant syndrome and evaluation of the condition of a patient

To refer the patient correctly to appropriate diagnostic and laboratory procedures in order to correctly establish a different diagnosis

Properly interpret laboratory and clinical results

Determine therapy or refer the patient to an appropriate therapeutic procedure

To respect ethical and legal principles relevant to clinical practice

To engage student in a teamwork

- 12. Learning methods:
 - lectures contact teaching,
 - e-teaching,
 - theoretical and practical exercises,
 - assignments,
 - consultations,
 - preparation of independent seminar work,
 - home learning,
 - preparatory classes for exams,
 - consultations,
 - colloquia,
 - practical final exercise,
 - e-exams

13.	Total av	vailable time		4 hours / week 120 hours / semester				
14.	Distribu	ution of available time		0+0+4 / per week				
15.	15. Forms of teaching / learning activities		15.1.	lectures / theoretical - contact teaching, e-teaching		0 hours/week		
			15.2.	theoretical and practical exe e-exams, preparation of independent seminar work		0 hours/week		
16.	Други	форми на активности	16.1.	Project tasks		0 hours		
			16.2.	Individual tasks		4 hours		
			16.3.	Home learning		0 hours		
17.	Method	of assessment		•		•		
	17.1. Tests / oral exams				70 pc	oints		
	17.2. Seminars (paper / project - presentation			written and/or oral)	10 pc	oints		
	17.3.	Activity and participation	tivity and participation			oints		
18.	Assessn	nent Criteria (points / score)		up 50 points	5	(five) (F)		
				51 to 60 points	6	(six) (E)		
				61 to 70 points	7	(seven) (D)		
				71 to 80 points	8	(eight) (C)		
				81 to 90 points	9	(nine) (B)		
				91 to 100 points	10	(ten) (A)		
19.	Signature requirement and passing the final exam			60% active participation at the	e course			
20.	Langua	ge of teaching / study		English				
21.	Method	of monitoring the quality of teach	ing	Self-evaluation				

1.			First and Second cycle	DD 4 CT	CE								
	Title of the Course		PEDIATRICS - CLINICAL PRACTICE										
2.	Code		3MF127812										
3.	Study Program		General medicine										
4.	Organizer of the study program (un		University Goce Delcev										
	institute, Faculty, department)		Faculty of Medical Science	es									
5.	Cycle (first, second and third cycle)		Integrated study program										
6.	Academic year / semester		XII Semester – sixth	7. Nı	ımber o	f credits							
			year				4						
8.	Professor (s)		Engaged professors/professionals/specialists from the teaching										
			hospitals with university agreement of collaboration										
9.	Requirements for enrollment the Co	urse	None										
10.	Purposes of the curriculum (compet												
	To correctly implement the knowledge acquired during their regular studies in diagnosis, therapy and monitoring												
	of pediatric patients at different ages.												
11.	Content of the course program:												
	Proper taking of medical history and	l clinical exam	ination of a natient										
	Timely recognition of the relevant s			ondition									
	To refer the patient correctly to app					to correctly o	stahlich -						
	different diagnosis	opriate diagli	oscie ana iaboratory prott	cuui CS II	i oruti l	to correctly t	.5taD11511 6						
	Properly interpret laboratory and cl	inical regults											
	To determine therapy or refer the p		nronriato thoranoutic are	coduro									
	To respect ethical and legal principl			ceuure									
		es reievant to	cimical practice										
12.	To engage student in a teamwork												
12.	Learning methods:	. 1:											
		 lectures - contact teaching, 											
	 e-teaching, 												
	 theoretical and p 	ractical exerci	ses,										
	 assignments, 												
	 consultations, 												
	 preparation of in 	dependent ser	ninar work,										
	 home learning, 	•	•				preparation of independent seminar work,home learning.						
	 consultations 	ses for exams,											
	consultations,colloquia	ses for exams,											
	– colloquia,												
	colloquia,practical final exe												
1.0	colloquia,practical final exee-exams												
13.	colloquia,practical final exe		4 hours / week										
	colloquia, practical final exc e-exams Total available time		1200 hours / seme	ester									
13. 14.	colloquia, practical final exc e-exams Total available time Distribution of available time	ercise,	1200 hours / seme 0+0+4 / per week										
14.	colloquia, practical final exc e-exams Total available time	ercise,	1200 hours / seme 0+0+4 / per week lectures / theoretical		t	0 hours/we	ek						
l4.	colloquia, practical final exc e-exams Total available time Distribution of available time	ercise,	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching,		t	0 hours/we	ek						
14.	colloquia, practical final exc e-exams Total available time Distribution of available time	es 15.1.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching	- contac		,							
14.	colloquia, practical final exc e-exams Total available time Distribution of available time	ercise,	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi	- contac		0 hours/we							
14.	colloquia, practical final exc e-exams Total available time Distribution of available time	es 15.1.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching	- contac		,							
14.	colloquia, practical final exc e-exams Total available time Distribution of available time	es 15.1.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi	- contactical exer		,							
14.	colloquia, practical final execution of available time Porms of teaching / learning activition of available time	es 15.1.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar	- contactical exer		,							
14.	colloquia, practical final exc e-exams Total available time Distribution of available time	es 15.1.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar	- contactical exer		0 hours/we							
14.	colloquia, practical final execution of available time Porms of teaching / learning activition of available time	es 15.1. 15.2.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks	- contactical exer		0 hours/we							
14.	colloquia, practical final execution of available time Porms of teaching / learning activition of available time	es 15.1.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar	- contactical exer		0 hours/we							
4. 5.	colloquia, practical final execution of available time Porms of teaching / learning activition of available time	es 15.1. 15.2. 16.1. 16.2.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks	- contactical exer		0 hours/we 0 hours 4 hours							
4. 5.	colloquia, practical final execution of available time Porms of teaching / learning activition of available time	es 15.1. 15.2.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks	- contactical exer		0 hours/we							
4. 5.	colloquia, practical final execution of available time Porms of teaching / learning activition of available time	es 15.1. 15.2. 16.1. 16.2.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks	- contactical exer		0 hours/we 0 hours 4 hours							
4. 5.	— colloquia, — practical final exe- — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности	es 15.1. 15.2. 16.1. 16.2.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks	- contactical exer		0 hours/we 0 hours 4 hours							
16.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment	es 15.1. 15.2. 16.1. 16.2.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks	- contactical exer	cises,	0 hours/we 0 hours 4 hours]0 hours							
14. 15.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning	- contactical exer	cises,	0 hours/we 0 hours 4 hours]0 hours							
14. 15.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning	- contactical exer	cises,	0 hours/we 0 hours 4 hours]0 hours							
14. 15.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams 17.2. Seminars (paper / project	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning	- contactical exer	70 poin	0 hours/we 0 hours 4 hours]0 hours nts							
16.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning	- contactical exer	cises,	0 hours/we 0 hours 4 hours]0 hours nts							
14. 15.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams 17.2. Seminars (paper / project 17.3. Activity and participation	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning	- contactical exer	70 poin 10 poin 20 poin	0 hours/we 0 hours 4 hours]0 hours nts	ek						
14. 15.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams 17.2. Seminars (paper / project	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning written and/or oral)	- contactical exer	70 poin 10 poin 20 poin 5 (i	0 hours/we 0 hours 4 hours 10 hours nts nts five) (F	ek)						
14. 15.	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams 17.2. Seminars (paper / project 17.3. Activity and participation	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning written and/or oral)	- contactical exer	70 poin 10 poin 20 poin 5 (i	0 hours/we 0 hours 4 hours 10 hours nts nts five) (F) six) (E)	ek 						
	— colloquia, — practical final exe — e-exams Total available time Distribution of available time Forms of teaching / learning activiti Други форми на активности Method of assessment 17.1. Tests / oral exams 17.2. Seminars (paper / project 17.3. Activity and participation	es 15.1. 15.2. 16.1. 16.2. 16.3.	1200 hours / seme 0+0+4 / per week lectures / theoretical teaching, e-teaching theoretical and practi e-exams, preparation independent seminar Project tasks Individual tasks Home learning written and/or oral)	- contactical exer	70 poin 10 poin 5 (i 6 (: 7 (:	0 hours/we 0 hours 4 hours 10 hours nts nts five) (F	ek)						

		81 to 90 points	9	(nine)	(B)	
		91 to 100 points	10	(ten)	(A)	
19.	Signature requirement and passing the final	60% active participation at the course				
	exam					
20.	Language of teaching / study	English				
21.	Method of monitoring the quality of teaching	Self-evaluation				

Anne	y 2 Program of the Course for Integ	matad Ein	at and Casand avala					
1.	x 3 Program of the Course for Integ Title of the Course		CCTIVE CLINICAL COL	IDCE				
2.	Code		3MF127912					
3.	Study Program		General medicine					
4.	Organizer of the study program (unit or							
1.	institute, Faculty, department)	Faculty of Medical Sciences						
	mountain, radardy, adparements	1 440	arey or recarear pereir					
5.	Cycle (first, second and third cycle)	Inte	egrated study prograi	m – first and seco	ond cycle			
6.	Academic year / semester		Semester – sixth		of credits			
	,	yea	r			4		
8.	Professor (s)		gaged professors/pro			teaching		
			pitals with university	agreement of co	ollaboration			
9.	Requirements for enrollment the Course	Noi	ne					
10.	Purposes of the curriculum (competencies):							
	The aim of active clinical practice instruction							
	future medical doctors to rationally and syste							
	timely diagnose the diseases, clinical syndron			erapeutic appro	ach and profes	sional		
	ethical attitude towards patients, colleagues a After completing professional clinical practice			ho train ad for fo	allowing knowl	odgo		
	skills and attitude:	e, ruture	medicai doctors win	be train eu ioi it	Jilowilig Kilowi	euge,		
	- Correct history taking and clinical examination of a patient							
	- Identification and early detection of diseases, clinical syndromes and conditions of patients with an							
	emphasis on urgent life-threatening situation							
	- Implementation and /or directing patients to certain appropriate diagnostic procedures (laboratory or							
	clinical) for a correct interpretation of their results and establishing different diagnosis or to another more							
	appropriate level or heath care							
	- Providing assistance in emergency situations and in the terminal stage of a disease							
- Treatment of chronically ill patients								
	 Responsible approach to work in accordance with the medical doctrine Respect of ethical and legal principles relevant to medical practice Participation in a medical team, which is imperative in modern medical practice 							
	Determining therapy and / or referring to app							
11.		propriac	e therapeutic procedi	uie				
11.	Content of the course program: Practical exercises in a elected clinical discipline, simulation of the problems that occur patients, used suitable							
	diagnostic procedures, give the opinion about the therapy and treatment and work with patients under supervision.							
12.	Learning methods:		apy and dreadiness a	ра	erenes unaer se	.perviorein		
	- lectures - contact teaching,							
	e-teaching,							
	 theoretical and practical exercises, assignments, 							
- consultations,								
	 preparation of independer 	nt semin	ar work,					
	home learning,							
	 preparatory classes for example 	ams,						
	– consultations,							
	– colloquia,							
	 practical final exercise, 							
	– e-exams							
13.	Total available time		4 hours / week					
			120 hours / seme	ester				
14.	Distribution of available time		0+0+4 / per weel					
15.	Forms of teaching / learning activities	15.1.	lectures / theoretica	al - contact	0 hours/wee	ek		

teaching, e-teaching

theoretical and practical exercises,

15.2.

0 hours/week

				e-exams, preparation of independent seminar work			
16.	16		16.1.	Project tasks	Project tasks		
			16.2.	Individual tasks		4 hours	
			16.3.	Home learning		0 hours	
17.	Method of assessment						
	17.1.	Tests / oral exams			ints		
	17.2.	Seminars (paper / project - pres	sentation: v	written and/or oral)	pints		
	17.3.	Activity and participation				20 points	
18.	Assessment Criteria (points / score)			up 50 points	5	(five) (F)	
				51 to 60 points	6	(six) (E)	
				61 to 70 points	7	(seven) (D)	
				71 to 80 points	8	(eight) (C)	
				81 to 90 points	9	(nine) (B)	
				91 to 100 points	10	(ten) (A)	
19.	Signature requirement and passing the final exam			60% active participation at the course			
20.	Language of teaching / study			English			
21.	Method of monitoring the quality of teaching			Self-evaluation			