

**Study Program: MEDICAL NURSES / MEDICAL TECHNICIANS**

<b>FIRST YEAR – 1<sup>st</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
<b>3MF100212</b>	<b>Anatomy</b>	<b>7</b>	<b>3+3+1</b>	<b>210</b>
	<b>Introduction to human genetics</b>	<b>5</b>	<b>2+2+1</b>	<b>150</b>
	<b>Histology and Embryology</b>	<b>6</b>	<b>2+3+1</b>	<b>180</b>
	<b>Communication skills</b>	<b>6</b>	<b>2+3+1</b>	<b>180</b>
	<b>Clinical psychology</b>	<b>2</b>	<b>1+1+1</b>	<b>60</b>
<b>UGD100112</b>	<b>1 Foreign Language – English 1 Foreign Language - Italian 1 Foreign Language - German 1 Foreign Language - French 1 Foreign Language - Spanish 1 Foreign Language - Russian</b>	<b>4</b>	<b>0+0+4</b>	<b>120</b>
<b>UGD102712</b>	<b>Sports and Recreation</b>	<b>0</b>	<b>0+0+2</b>	<b>0</b>

<b>FIRST YEAR – 2<sup>nd</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Physiology</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Biochemistry</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Microbiology with parasitology</b>	<b>6</b>	<b>2+3+1</b>	<b>180</b>
	<b>Nursing care</b>	<b>6</b>	<b>2+3+1</b>	<b>120</b>
	<b>Ecology and Hygiene</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>
	<b>Epidemiology</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Computer Science</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>

<b>SECOND YEAR – 3<sup>rd</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Pathophysiology</b>	<b>7</b>	<b>3+3+1</b>	<b>210</b>
	<b>Pathology</b>	<b>7</b>	<b>3+3+1</b>	<b>270</b>
	<b>Pharmacology</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Contemporary diagnostic methods in medicine</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Medical ethics</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Health care organization</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>

<b>SECOND YEAR – 4<sup>th</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Internal medicine with care</b>	<b>8</b>	<b>3+4+1</b>	<b>240</b>
	<b>Infective diseases with care</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Oncology with care</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Ophthalmology with care</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Neurology and psychiatry with care</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Family medicine</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Facultative course</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>

<b>THIRD YEAR – 5<sup>th</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Surgery with Care</b>	<b>8</b>	<b>3+4+1</b>	<b>240</b>
	<b>Gynecology and obstetrics with care</b>	<b>5</b>	<b>2+2+1</b>	<b>150</b>
	<b>Orthopedics and Traumatology with care</b>	<b>5</b>	<b>2+2+1</b>	<b>150</b>
	<b>Anaesthesiology and resuscitation with care</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Dermatovenerology with care</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>
	<b>Geriatric with care</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Facultative course</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>

<b>THIRD YEAR – 6<sup>th</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Pediatrics with care</b>	<b>6</b>	<b>3+2+1</b>	<b>180</b>
	<b>Otorhinolaryngology with care</b>	<b>5</b>	<b>2+2+1</b>	<b>150</b>
	<b>Physical medicine with rehabilitation</b>	<b>4</b>	<b>2+1+1</b>	<b>120</b>
	<b>Emergency medicine with care</b>	<b>5</b>	<b>2+2+1</b>	<b>150</b>
	<b>Facultative course</b>	<b>2</b>	<b>2+0+1</b>	<b>120</b>
	<b>Final exam</b>	<b>8</b>	<b>3+4+1</b>	<b>240</b>

SUPPLEMENTARY COURSES

<b>SECOND YEAR – 4<sup>th</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Nutrition and Dietetics</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>
	<b>Sociology of health and disease</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>
	<b>Intrahospital infections</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>

<b>THIRD YEAR – 5<sup>th</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>Healthcare management</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>
	<b>Nursing healthcare</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>

<b>THIRD YEAR – 6<sup>th</sup> SEMESTER</b>				
<b>Code</b>	<b>COURSE</b>	<b>Credits</b>	<b>Hours</b>	<b>Overall workload</b>
	<b>First Medical Aid</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>
	<b>Sexually transmitted diseases</b>	<b>2</b>	<b>2+0+1</b>	<b>60</b>

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Anatomy			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Level of studies (first, second, third cycle)	First cycle			
5.	Organizer of the study programme (faculty/ institute, department)	Faculty of Medical Sciences University "Goce Delchev" Stip			
6.	Academic year / semester	First semester	7.	Number of credits	7
8.	Lecturer/Instructor	Asst. Prof. Svetlana Jovevska			
9.	Required prerequisite courses				
10.	<b>Course objectives (competences):</b> Introduction to anatomy as morphological science, master the professional terminology, complete study of the locomotion system. Introduction to the anatomy of the thorax, abdomen and pelvis, skeletotopical and holotopical relations of these organs in the body cavities				
11.	<b>Course content:</b> <u>Theoretical content:</u> 1. Introduction to anatomy and osteology, types of bones, bone components, technical terminology, bones of fixed and movable parts of the upper limb, bones of fixed and movable parts of the lower limb, bones of the thorax and the body 2. Introduction to <i>Syndesmology</i> , joint, joint components, types of joints, <i>syndesmology</i> of the upper extremities, <i>syndesmology</i> of the body and the lower extremities. 3. Myology, angiology and neurology of the upper and the lower extremities 4. Bone fracture, scapula, upper arm, forearm bones (radius and ulna) and parts of the thorax, breast structure, the breathing organs, circulation organs. Abdominal wall - muscle, vasculature, innervation, ratios 5. Organs in the abdominal cavity-peritoneum, esophagus, stomach, organs in the abdominal cavity-small and large intestine, liver, gall tract, pancreas. 6. Spleen, kidney, adrenal gland, urinary tract, pelvic cavity-limits and structure; urinary organs, female reproductive organs, male reproductive organs 7. Head and neck arteries, veins and lymph vessels 8. Cranial nerves 9. Head and neck organs -topography relations, endocrine glands 10. Organs of the digestive system in the head and the neck, organs of the respiratory system in the head and the neck 11. Sensory organs, eye and ear, nervous system, structure, types of nerve fibers, division of the nerve system, ventricular system 12. Spinal cord, medulla oblongata, cerebellum, midbrain, cerebrum, brain membranes <u>Practical content:</u> 1. Bones orientation: clavicle, scapula, humerus, forearm bones (the radius and the ulna); Hand skeleton: carpals, metacarpals and phalanges; chest and vertebral column; Skeleton of the pelvic girdle - coxae, sacrum and coccyx; Skeleton of the femur, tibia, fibula and patella.				

	<p>2. Foot skeleton – tarsals, metatarsals and phalanges; Joints of the upper extremities, chest and vertebral column; Joints of the lower extremities</p> <p>3. Bones of the head (skull and face); Joints of the head (skull and face)</p> <p>4. Muscles and blood vessels of the upper extremities; Muscles and blood vessels of the lower extremities; Innervation of the upper and lower extremities</p> <p>5. Chest - wall structure, division of the mediastinum, boundaries, composition, topography; Mediastinal organs - relations; structure and topography of the respiratory system</p> <p>6. Structure of the bloodstream system and major blood vessels, topography and relations; Abdominal wall – structure, muscles, relations of the muscles and the organs, vascularization and innervation; Orientation in the abdominal cavity - peritoneum, esophagus, stomach, topography and relations</p> <p>7. Topography of organs in the abdominal cavity- structure and orientation of the small and the large intestine; Orientation patterns of liver, bile tract, pancreas; Orientation patterns of spleen, kidney, adrenal gland, urinary tract anatomy</p> <p>8. Pelvic wall – structure, topographic relations of organs, pelvic organs; Pelvic cavity – urinary tract organs, relation to other organs, vascularization and innervation; Female genital organs -orientation, relation to other organs; Male genital organs - orientation, relation to other organs</p> <p>9. Head and neck vascularization; Venous, lymphatic system of the head and neck; Cranial and spinal nerves</p> <p>10. Mouth cavity, Nasal cavity - anatomical parts, structure, function; Organs of the digestive system located in the head and neck; Organs of the respiratory system located in the head and neck</p> <p>11. Eye - anatomy, proportion, orbit anatomy; Ear - anatomy, relation to other organs; Sense organs of taste, smell, touch and balance</p> <p>12. Endocrine glands-topography, relations; Autonomic nervous system - anatomical division, function</p>			
12.	<b>Course methodology:</b> Interactive teaching, individual consultations with students			
13.	<b>Total available time</b>	210		
14.	<b>Distribution of available time</b>	3+3+1		
15.	<b>Forms of instruction</b>	15.1	Lectures / theoretical - contact teaching, e-teaching	45 hours
		15.2	theoretical and practical exercises, e-exams, independent seminar project	45 hours
16.	<b>Other activities</b>	16.1	Project tasks	15 hours
		16.2	Individual tasks	15 hours
		16.3	Home learning	90 hours
17.	<b>Course methodology</b>			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	<b>Grading system</b>	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self evaluation	

22.	<b>Literature</b>				
	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
22.1.	1.	Shumano G. and co.	Anatomy of human-script	Prosvetno delo	
	2.	Kargovska K.A., Gorgevik N., Lazarova D	Anatomy of human-Osteologija	Prosvetno delo	
	3.	Kargovska K.A.,	Anatomy of human-hand and chest		
	4.	Kargovska K.A.,	Anatomy of human-lower limb		
	5.	Kargovska K.A.,	Anatomy of human-Abdomen		
	6.	Dzidrova D., Strateska Z.A., Hristova G.N., Kargovska K.A	Anatomy of human - Pelvis		
	<b>Supplementary literature</b>				
22.2.	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1.	Sinelnikov	Anatomical Atlas of man(I, II, IIIpart)	Springer	2008
	2.	F.N. Netter	Atlas of human anatomy	Springer	2011

Annex No.3		Course Programme - first/second/third cycle studies			
1.	Course title	Introduction to human genetics			
2.	Code				
3.	Study Programme	Medical nurse/ medical technicians			
4.	Organizer of the study programme (faculty/ institute, department)	Faculty of Medical Sciences University "Goce Delchev" 'Stip			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	5
8.	Lecturer/Instructor(s)	PhD Darko Bosnakovski			
9.	Required prerequisite courses	None			
10.	Course objectives (competences): Introduction to basic scientific knowledge of cell biology and genetics.				
11.	Course content: 1. Morphology and physiology of cells. 2. DNA, iRNK, rRNK, tRNA, 3. Transcription, translation, replication of DNA. 4. Inheritance of properties-principles, gene interaction; Genes- structure and function genome, genotype, genetic code, alleles, and gene expression. 5. Structure and function of the chromosome. Mitosis and meiosis. 6. Autosomal, recessive inheritance, X linked inheritance, intermediate and codominant inheritance. 7. Numerical chromosomal aberrations: aneuploidy, heteroploidy, monosomy, nullisomy, trisomy. 8. Structural aberration: deletions, duplications, translocations, inversions. 9. Mutations. Mutagenic factors. 10. Autosomal and X-linked genetic diseases. 11. Genetic basis of malignancy (cancer). 12. Genetic engineering.				
12.	Course methodology: Lectures,exercises,Seminar research and practical activities				
13.	Total available time	150			
14.	Distribution of available time	2+2+1			
15.	Forms of instruction	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours	
		15.2.	theoretical and practical exercises, e-exams, independent seminar project	30 hours	
16.	Other activities	16.1.	Project tasks	15 hours	
		16.2.	Individual tasks	15 hours	
		16.3.	Home learning	60 hours	

<b>17.</b>	<b>Course methodology</b>		
<b>17.1.</b>	<b>Tests / oral exams</b>	<b>70 points</b>	
<b>17.2.</b>	<b>Seminar (paper / project - presentation: written and/or oral)</b>	<b>10 points</b>	
<b>17.3.</b>	<b>Activity and participation</b>	<b>20 points</b>	
<b>18.</b>	<b>Grading system</b>	<b>up 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Electronic self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Nada Miteva</b>	<b>General biology (cytology, genetics, embryology)</b>	<b>UKIM</b>	<b>2000</b>
	<b>2.</b>	<b>Marija Kaeva Pejkovska</b>	<b>Medical genetics</b>	<b>UGD</b>	<b>2008</b>
<b>3.</b>					
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Essentials of Genetics</b>	<b>Klug, Cummings and Spencer</b>	<b>Benjamin Cummings</b>	<b>2012</b>



<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Histology and Embryology</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>Faculty of Medical Sciences University "Goce Delchev" Stip</b>			
<b>5.</b>	<b>Organizer of the study programme (faculty/ institute, department)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>First semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>6</b>
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Asst. Prof. Nevenka Velickova</b>			
<b>9.</b>	<b>Required prerequisite courses</b>	<b>None</b>			
<b>10.</b>	<b>Course objectives (competences): Introducing the histological structure, structure and function of all types of tissues, organs and organ systems</b>				
<b>11.</b>	<b>Course content:</b> <u><b>Theoretical lectures</b></u> <b>Epithelial tissues</b> <b>Connective tissue</b> <b>Muscle tissue</b> <b>Nervous tissue</b> <b>Gastrointestinal system</b> <b>RES</b> <b>Respiratory system. urogenital system</b> <b>Nervous system. Endocrine system</b> <b>Spermatogenesis and oogenesis</b> <b>Embryonic development</b> <b>Organogenesis</b> <b>Placentation</b> <u><b>Practical activities</b></u> <b>Making permanent histological preparations</b> <b>Epithelial tissues</b> <b>Conective tissue</b> <b>Muscle tissue</b> <b>Nervous tissue</b> <b>Gastrointestinal system</b> <b>Glands in the gastrointestinal system</b> <b>RES</b> <b>Respiratory system. urogenital system</b> <b>Nervous system. Endocrine system</b> <b>Spermatogenesis and oogenesis</b> <b>Placenta, embryonic leaves</b>				
<b>12.</b>	<b>Course methodology: Lectures, tutorials, research paper and practical activities</b>				
<b>13.</b>	<b>Total available time</b>	<b>180</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+3+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1</b>	<b>Lectures / theoretical - contact teaching, e-teaching</b>		<b>30 hours</b>

		15.2	theoretical and practical exercises, e-exams, independent seminar project	45 hours		
16.	Other activities	16.1	Project tasks	15 hours		
		16.2	Individual tasks	20 hours		
		16.3	Home learning	70 hours		
17.	Course methodology					
	17.1.	Tests / oral exams		70 points		
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points		
	17.3.	Activity and participation		20 points		
18.	Grading system		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 and final exam prerequisites		60% achievement on all pre-exam activities			
20.	Language of instruction		Macedonian			
21.	Course evaluation		Self evaluation			
22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Luis Carlos Zhunkveira Jose Karneiro	Basic histology		
		2.	Nada Mitewa	Histology and Embryology		
		3.	Nevena Kostovska Ljiljana Milenkova	Histology and Embryology		
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.				

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Communication skills</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>Faculty of Medical Sciences University "Goce Delchev" Stip</b>				
<b>5.</b>	<b>Organizer of the study programme (faculty/ institute, department)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>First semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>6</b>	
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Asst. prof. Gordana Panova</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences): To become familiar with the nature, structure, characteristics, principles of communication. To learn communication skills through training and exercises</b>					
<b>11.</b>	<b>Course content:</b> 1. Introduction to communication skills 2. Skills of asking questions 3. Listening skills 4. Nonverbal behavior 5. Answering skills 6. Information sharing: models and methods 7. Medical worker-patient relationship 8. Counseling skills 9. Persuasion skills 10. Dealing with people with Generalized Anxiety Disorder 11. Communication with parents 12. Communication of prognosis, hope and risk					
<b>12.</b>	<b>Course methodology:</b>					
<b>13.</b>	<b>Total available time</b>	<b>180</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+3+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1</b>	<b>Lectures / theoretical - contact teaching, e-teaching</b>	<b>30 hours</b>		
		<b>15.2</b>	<b>theoretical and practical exercises, e-exams, independent seminar project</b>	<b>45 hours</b>		
<b>16.</b>	<b>Other activities</b>	<b>16.1</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2</b>	<b>Individual tasks</b>	<b>20 hours</b>		
		<b>16.3</b>	<b>Home learning</b>	<b>70 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests / oral exams</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>	
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 points</b>	

18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self evaluation	

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	KR Seturaman	Communicational skill in clinical practice	Tabernakul	2010
	2.	Mandiĥ, T	Communicology: Communication Psychology	Klio, Beograd	2003
	3.				
22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year
	1.	Rosenberg, M.	Language compassion	Institute for textbooks and teaching aids	2002
	2.	Goleman D.,	emotional Intelligence	Geopoetika , Beograd	1997

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>CLINICAL PSYCHOLOGY</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev Stip</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>First semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Asst. Prof. Lence Miloseva</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> <b>To become familiar with basic concepts, tasks and application of clinical and health psychology.</b> <b>To gain knowledge and understand the concepts, structure, psychological processes and personality changes through different developmental periods.</b> <b>Introduction to basic principles of psychological approach, preparation and implementation of psychological interventions with patients and/or inpatients;</b> <b>Human behavior in medical conditions, person's reactions to illness.</b> <b>To become familiar with biopsychosocial model of health, psychological aspects of somatic diseases and some of the most common mental disorders;</b> <b>To develop communication skills (doctor/patient).</b>				
<b>11.</b>	<b>Course content:</b> <u><b>General part</b></u> <b>Introduction to Medical Psychology. Biopsychosocial model of health and illness.</b> <b>Human development. Child and adolescent psychology. Psychology of adulthood and aging.</b> <b>Patients Psychology (Psychological aspects of hospitalization. Child as a patient. Adult as a patient. Geriatric patients.</b> <b>Pain Psychology</b> <b>Communication</b> <u><b>Special part</b></u> <b>Stress and coping with stress.</b> <b>Mental health and mental disorders.</b> <b>Psychoneuroimmunology, AIDS and cancer; Psycho-oncology; Psychological aspects of chronic and terminal illness.</b> <b>Psychosomatic illness; Psychological aspects of cardiovascular disease; brain injury; Appoplexy;</b> <b>Psychological aspects of pregnancy.</b> <b>Death and dying.</b> <b>Positive health psychology.</b> <b>Health promotion. Family, health and illness.</b>				
<b>12.</b>	<b>Course methodology:</b> <b>Seminar project, interactive method: group work, reports, homework, discussion, debate, cooperative studying techniques, individual tasks,</b>				

	<b>individual studying</b>			
13.	<b>Total available time</b>	<b>60</b>		
14.	<b>Distribution of available time</b>	<b>1+1+1</b>		
15.	<b>Forms of instruction</b>	15.1.	lectures - theoretical teaching	15 hours
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours
16.	<b>Other forms of activities</b>	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	5 hours
		16.3.	Home learning	10 hours
17.	<b>Course methodology</b>			
	17.1.	Tests	70 points	
	17.2.	Seminar (paper/project - presentation: written and/or oral)	10 points	
	17.3.	Activity and participation	20 points	
18.	<b>Grading system</b>	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.	<b>Signature and final exam prerequisites</b>	60% achievement on all pre-exam activities		
20.	<b>Language of instruction</b>	Macedonian		
21.	<b>Course evaluation</b>	Self-evaluation		

22	<b>Literature</b>					
	22.1.	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		1.	Milosheva, L.	Clinical psychology - course e-learning	Faculty of Medical Sciences UGD,	2013
		2.	Berger, J, & Mitic, M.	<i>Introduction to Clinical Psychology</i>	Beograd: Primenjena psihologija	2002
		3.	Milosheva, L.	Developmental Psychology	Stip,UGD	2013
		4.	Havelka, M.	Health psychology	Jastrebarsko: Naklada Slap	2002
	22.2.	<b>Supplementary literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		1.	Nietzel,M.T., Bernstein, D.A. & Milich, R.	<i>Introduction to Clinical Psychology</i>	Jastrebarsko: Naklada Slap	2002
		2.	Michie S. Abraham C.	<i>Health Psychology in Practice</i>	Oxford: BPS Blackwell	2004

					<b>Publishing</b>	
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<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Foreign Language1 (English 1)</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>first semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>PhD Dusko Aleksovski PhD Biljana Ivanovska PhD Tole Belčev MA Snezana Kirova</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives: Communication skills Expressing opinion Hearing skills Scanning and skimming Writing skills Vocabulary enhance Grammar skills Reception and production of English in spoken and written context</b>				
<b>11.</b>	<b>Course content: - Grammar: Articles, present tenses, word-formation - adjectives, indirect speech, adverbs; - Vocabulary: means of communication, expressing feelings and emotions, job description, electrical appliances, furniture, description of physical appearance and character, lifestyles, phrasal verbs; - Reading: multiple choice questions, gapped sentences - Listening - Speaking: making comparison, making suggestions, expressing emotions, expressing opinions, expressing wishes, regrets, making suggestions; - Writing: letters, reports, essays.</b>				
<b>12.</b>	<b>Course methodology: Seminar project, group work, lectures, homework, papers, discussion, debate, cooperativel earning techniques, individual tasks, independent learning.</b>				
<b>13.</b>	<b>Total available time</b>	<b>120</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>0+0+4</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>		
		<b>15.2.</b>	<b>Seminar project, teamwork</b>		
<b>16.</b>	<b>Other forms of</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>60 hours</b>	



	<b>activities</b>	<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>
		<b>16.3.</b>	<b>Home learning</b>	<b>45 hours</b>
<b>17.</b>	<b>Course methodology</b>			
	<b>17.1.</b>	<b>Tests</b>		<b>70 points</b>
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>		<b>10 points</b>
	<b>17.3.</b>	<b>Activity and participation</b>		<b>20 points</b>
<b>18.</b>	<b>Grading system</b>		<b>up to 50 points</b>	<b>5 (five) (F)</b>
			<b>51 to 60 points</b>	<b>6 (six) (E)</b>
			<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
			<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
			<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
			<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>		<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>		<b>English</b>	
<b>21.</b>	<b>Course evaluation</b>		<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Virginia Evans and Jenny Dooley</b>	<b>Upstream - Intermediate</b>	<b>Express Publishing</b>	<b>2002</b>
	<b>2.</b>				
	<b>3.</b>				
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Oxford Practice Grammar</b>	<b>John Eastwood</b>	<b>OUP</b>	<b>2009</b>
	<b>2.</b>	<b>Practical English Usage</b>	<b>Michael Swan</b>	<b>OUP</b>	<b>2005</b>

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Foreign Language1 (Italian language 1)</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev Stip</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>first semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>PhD Dusko Aleksovski PhD. Biljana Ivanovska PhD Tole Belčev MA Snezana Kirova</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competencies): Introduction to basic, everyday vocabulary, basic grammar rules and tenses</b>					
<b>11.</b>	<b>Course content: Introduction to basic vocabulary, practicing reading skills, listening, speaking and writing. Mastering the rules of reading and writing Basic grammatical categories (nouns, adjectives, personal pronouns, present tenses, definite and indefinite articles, prepositions).</b>					
<b>12.</b>	<b>Course methodology: Seminar project, interactive method: group work, lectures, homework, discussion, debate, cooperative learning techniques, individual tasks</b>					
<b>13.</b>	<b>Total available time</b>	<b>120</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>0+0+4</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>			
		<b>15.2.</b>	<b>Exercises (laboratory,theoretical), Seminar project, teamwork</b>			
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>60 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>45 hours</b>		
<b>17.</b>	<b>Course methodology: Interactive method, group work, lectures, homework, discussion, debate, cooperative learning techniques</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 hours</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 hours</b>	
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 hours</b>	

<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% of the written examination success</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Italian and Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation and evaluation by students</b>	

<b>22</b>	<b>Literature</b>					
	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>MARIN,T. &amp; MAGNELLI,S.</b>	<b>Progetto italiano 1, nuovo (Libro dello studente)</b>	<b>Edilingua</b>	
		<b>2.</b>	<b>MARIN,T. &amp; MAGNELLI,S.</b>	<b>Progetto italiano 1, nuovo (Quaderno degli esercizi)</b>	<b>Edilingua</b>	
		<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	
	<b>1.</b>					

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Foreign language 1 (German language 1)			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	first semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	PhD Dusko Aleksovski PhD Biljana Ivanovska PhD Tole Belčev MA Snezana Kirova			
9.	Required prerequisite courses	Enrolled first year			
10.	Course objectives (competences): To obtain basic knowledge of everyday vocabulary				
11.	Course content: Introduction to basic vocabulary, practicing reading skills, listening, speaking and writing.				
12.	Course methodology: Seminar project, interactivemethod: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, independent learning.				
13.	Total available time	120			
14.	Distribution of available time	0+0+4			
15.	Forms of instruction	15.1.	lectures - theoretical teaching		
		15.2.	Exercises(laboratory,theoretical), Seminar, teamwork		
16.	Other forms of activities	16.1.	Project tasks	60 hours	
		16.2.	Individual tasks	15 hours	
		16.3.	Home learning	45 hours	
17.	Course methodology: Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks etc				
	17.1.	Tests			70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)			10 points
	17.3.	Activity and participation			20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	German and Macedonian	
21.	Course evaluation	Self-evaluation	

22.	<b>Literature</b>					
22.1.	<b>Required literature</b>					
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	
	1.	Elke Günzel,	Ankommen in Deutschland, Lehrwerk für Deutsch als Fremdsprache	Verlag für Deutsch	1997	
	2.	Klett Verlag	Grammatik mit Sinn und Verstand	Klett Verlag, München	2000	
	3.	Engel, U	Deutsche Grammatik	Heidelberg: Gross.	1996	
	22.2.	<b>Supplementary literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
1.		DUDEN	Grammatik der deutschen Sprache	Mannheim/Wien/Zürich : Dudenverlag (=Der Duden in 12 Bänden Bd. 4).	1995	
	2.	Grčeva, R./Rau, P.	Golem makedonsko-germanski/germansko-makedonski rečnik	Skopje, Magor	2006	

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Foreign language 1 (French language 1)</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>first semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>PhD Dusko Aleksovski PhD Biljana Ivanovska PhD Tole Belčev MA Snezana Kirova</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences): Acquiring skills for oral and written comprehension and expression in given situations.</b>				
<b>11.</b>	<b>Course content:</b>  <b>Basic rules of pronunciation</b> <b>Verb groups and their variations</b> <b>Nouns (gender and number)</b> <b>Personal pronouns</b> <b>Adjectives</b> <b>Formation of negation</b> <b>Ordinal numbers</b> <b>Basic vocabulary</b>				
<b>12.</b>	<b>Course methodology:</b> <b>Seminar project, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks</b>				
<b>13.</b>	<b>Total available time</b>	<b>120</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>0+0+4</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>		
		<b>15.2.</b>	<b>Exercises (laboratory, theoretical), Seminar, teamwork</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>60 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>45 hours</b>	
<b>17.</b>	<b>Course methodology:</b> <b>Interactive method, group work, lectures, homework, papers, discussion,</b>				

	<b>debate, cooperative learning techniques, individual tasks</b>		
17.1.	Tests		<b>70 points</b>
17.2.	Seminar (paper/project - presentation: written and/or oral)		<b>10 points</b>
17.3.	Activity and participation		<b>20 points</b>
18.	Grading system	up to 50 points	<b>5 (five) (F)</b>
		51 to 60 points	<b>6 (six) (E)</b>
		61 to 70 points	<b>7 (seven) (D)</b>
		71 to 80 points	<b>8 (eight) (C)</b>
		81 to 90 points	<b>9 (nine) (B)</b>
		91 to 100 points	<b>10 (ten) (A)</b>
19.	Signature and final exam prerequisites	<b>60% achievement on all pre-exam activities</b>	
20.	Language of instruction	<b>French and Macedonian</b>	
21.	Course evaluation	<b>Self-evaluation</b>	

22.	<b>Literature</b>				
22.1.	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1.	Guy Capelle, Robert Menand	Taxi! 1 Méthode de français	Hachette	2002
	2.	Guy Capelle, Robert Menand	Taxi! 1 Méthode de français. Cahier d'exercices	Hachette	2002
	3.				
	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
1.	ATANASOV, POPOSKI, KALAJLIEVSKA	Francusko - makedonski rečnik	Prosvetno delo	1992	
2.	POPOSKI, ATANASOV	Makedonsko - francuski rečnik	Prosvetno delo	1992	

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Foreign language 1 (Spanish Language 1)</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>first semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>	
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>PhD Dusko Aleksovski PhD Biljana Ivanovska PhD Tole Belčev MA Snezana Kirova</b>				
<b>9.</b>	<b>Required prerequisite courses</b>	<b>none</b>				
<b>10.</b>	<b>Course objectives (competences) Basic everyday vocabulary</b>					
<b>11.</b>	<b>Course content: Reading and writing rules Basic grammatical structures Nouns Adjectives Present tense Past tense</b>					
<b>12.</b>	<b>Course methodology: Seminar project, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks</b>					
<b>13.</b>	<b>Total available time</b>	<b>120</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>0+0+4</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>			
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>			
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>60 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>45 hours</b>		
<b>17.</b>	<b>Course methodology: Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>	
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 points</b>	



18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Spanish and Macedonian	
21.	Course evaluation	Self-evaluation	

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Ramon Sarmiento	<i>“Gramatica progresiva de español para extranjeros”</i>	”Colibri”, Софија	1998
	2.	A. Jarvis, R. Lebrede, F. Mena-Ayllón	<i>“Basic Spanish Grammar”</i>	Houghton Mifflin Company -USA	2000
3.					
22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year
	1.	A. Gonzales Hermoso, J. R. Cuenot, M. Sanchez Alfaro	<i>“Gramatica de español lengua extranjera”</i>	Madrid. Spanija	1999
	2.	Cristina Karpacheva	<i>“Manual de español”</i>	Sofija	1998

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Foreign language 1 (Russian language 1)</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>First semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>PhD Dusko Aleksovski PhD Biljana Ivanovska PhD Tole Belčev MA Snezana Kirova</b>			
<b>9.</b>	<b>Required prerequisite courses</b>	<b>none</b>			
<b>10.</b>	<b>Course objectives (competences)</b> To govern the Russian language at basic level of proficiency To become familiar with everyday vocabulary To develop reading and writing habits				
<b>11.</b>	<b>Course content:</b> The alphabet Basic grammatical categoris Nouns Personal pronouns Possesive pronouns Greetings Asking wuestions Kinshi terms				
<b>12.</b>	<b>Course methodology:</b> Seminar project, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks				
<b>13.</b>	<b>Total available time</b>	<b>120</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>0+0+4</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>60 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>45 hours</b>	
<b>17.</b>	<b>Course methodology:</b>				

	<b>Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks</b>		
17.1.	<b>Tests</b>	<b>70 points</b>	
17.2.	<b>Seminar (paper/project - presentation: written and/or oral)</b>	<b>10 points</b>	
17.3.	<b>Activity and participation</b>	<b>20 points</b>	
18.	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
19.	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
20.	<b>Language of instruction</b>	<b>Macedonian and Russian</b>	
21.	<b>Course evaluation</b>	<b>Self-evaluation</b>	

22.	<b>Literature</b>				
22.1.	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1.	L.V. Moskovkin	Russkiy yazyk – Uchebnik dlya inostrannykh studentov podgotovitel'nykh fakul'tetov	SMIO PRESS, St.Petersburg	2006
22.2.	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Sport and recreation</b>			
<b>2.</b>	<b>Code</b>	<b>UGD102712</b>			
<b>3.</b>	<b>Study Programme</b>	<b>General Medicine</b>			
<b>4.</b>	<b>Organizer of the study programme (faculty/ institute, department)</b>	<b>University Goce Delcev - Stip Faculty of Medical Sciences</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>First semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>0</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Associate Prof. Biljana Popeska</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences): Development of students motor abilities</b>				
<b>11.</b>	<b>Course content: Basic physical preparation Aerobics, martial arts and gymnastics Outdoor activities - hiking and orientation Basketball Table tennis and badminton Volleyball Testing motor abilities, modern and traditional dances</b>				
<b>12.</b>	<b>Course methodology: practical exercise, sport training</b>				
<b>13.</b>	<b>Total available time</b>	<b>30 hours</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>0+0+2/ per week</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1</b>	<b>lectures / theoretical - contact teaching, e-teaching</b>	<b>0</b>	
		<b>15.2</b>	<b>theoretical and practical exercises, e-exams, independent seminar project</b>	<b>20 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1</b>	<b>Project tasks</b>	<b>5 hours</b>	
		<b>16.2</b>	<b>Individual tasks</b>	<b>5 hours</b>	
		<b>16.3</b>	<b>Home learning</b>		
<b>17.</b>	<b>Course methodology</b> /				
	<b>17.1.</b>	<b>Tests / oral exams</b>	<b>0</b>		
	<b>17.2.</b>	<b>Seminar (paper / project - presentation: written and/or oral)</b>	<b>0</b>		
	<b>17.3.</b>	<b>Activity and participation</b>	<b>0</b>		
<b>18.</b>	<b>Grading system</b>	<b>up 50 points</b>	<b>5 (five) (F)</b>		
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>		
		<b>61 to 70 points</b>	<b>7(seven) (D)</b>		

		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Signature and final exam prerequisites	60% presence on the practical activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation		

22	<b>Literature</b>				
22.1	<b>Required literature</b>				
	<b>No</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1	Kukolj.M	Antropomotorika	Faculty of sport and physical education, Belgrade	2006
	2	Wilmore, J. & Costill, D.	Physiology of sport and exercise, (Third edition),	Champaign: Human Kinetic, Illinois.	2002
	3	Malacko,J.	Bases of sports training (Osnove sportskog treninga)	Sports academy, Belgrade	2000
	<b>Supplementary literature</b>				
22.2	<b>No</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1	Haywood, K., & Getchell, N.	Life span motor development	Champaign: IL. Human Kinetics.	2004
	2	Magill, R. & Rouge.B	Motor Learning	Broun Publishers, Louisiana	1989
	3	Malina, R., Bouchard, C. & Bar – Or, O	. Growth, Maturation and Physical Activity (Second Edition).	Champaign: IL. Human Kinetics.	Malina, R., Bouchard

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Physiology</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Second semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Asst. Prof. Darko Boshnakovski</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences): Principals of normal functioning of the human body and basic mechanisms of normal functioning of individual organ systems.</b>				
<b>11.</b>	<b>Course content:</b> <u><b>Theoretical instruction</b></u> <b>1. Introduction to Physiology-functional organization and general body cell organization</b> <b>2. Body fluids and electrolytes, blood</b> <b>3. Cardiovascular system</b> <b>4. Nervous system</b> <b>5. Muscle system</b> <b>6. Respiratory system</b> <b>7. Digestive system</b> <b>8. Urinary system</b> <b>9. Reproductive system</b> <b>10. Endocrine system</b> <b>11. Thermoregulation and metabolism</b> <b>12. Sensory system</b> <u><b>Practical instruction</b></u> <b>1. Basic elements and function of blood and blood plasma</b> <b>2. Neuro-muscular system, mioneural connection</b> <b>3. Endocrine glands</b> <b>4. Heart and heartbeat, factors that affect heart rate and its registration</b> <b>5. System respiration and vital capacity</b> <b>6. Resorption of nutrients and injection shots</b> <b>7. Saliva, gastric juice, gall</b> <b>8. Urinary system</b> <b>9. Female reproductive system</b> <b>10. Male reproductive system</b> <b>11. Determination of calorific value of nutrients</b> <b>12. Thermometers, thermoregulation and hypothermia</b>				
<b>12.</b>	<b>Course methodology:</b>				

	<u>Theoretical instruction</u> Interactive teaching: lectures in large groups, discussions and engaging students. Multimedia teaching. E-learning. On-line contact with students. Individual consultations with students and consultation groups. <u>Practical instruction</u> Practical laboratory exercises in small groups. Auditorium exercises. Final exercises.			
13.	Total available time		120	
14.	Distribution of available time		2+1+1	
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites		60% achievement on all pre-exam activities	
20.	Language of instruction		Macedonian	
21.	Course evaluation		Self-evaluation	

22	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Gayton C.A. Medical naklada, Zagreb.	Physiology of man and disease mechanisms.	Medicinska naklada, Zagreb	1995
2.		Trajkovski V.	Physiology with Functional Anatomy	of Philosophy, Institute of Defectology,	2007	

					<b>Skopje.</b>	
		<b>3.</b>	<b>Icko Gorgoski, and Mitko I. Mladenov</b>	<b>Physiological practicum</b>	<b>Faculty of natural sciences and mathematics , Skopje</b>	<b>2006</b>
		<b>Supplementary literature</b>				
	<b>22.2.</b>	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>Trajkovski V, Rasic O</b>	<b>Practicum on physiology with functional anatomy</b>	<b>Faculty of Philosophy, Institute of Defectology, Skopje.</b>	<b>2008</b>
		<b>2.</b>	<b>Physiology</b>	<b>Linda Costanzo</b>	<b>Saunders</b>	<b>2006</b>
		<b>3.</b>	<b>Human Physiology: The Mechanisms of Body Function - 8th Edition</b>	<b>Arthur Vander and James Sherman and Dorothy Luciano</b>	<b>McGraw-Hill Education</b>	<b>2006</b>



Annex No.3		Course Programme - first cycle studies			
1.	Course title	Biochemistry			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	Asst. Prof.Tatjana Ruskovska			
9.	Required prerequisite courses	No requirements			
10.	<b>Course objectives (competences)</b> To obtain knowledge about chemical composition of the human body and basic biochemical reactions within it. To gain knowledge about the diagnostic significance of some of the most common clinical-biochemistry parameters. During the practical education, students will learn the basic principles of the work in biochemical laboratories and learn how to perform some of the qualitative and quantitative biochemical analyses.				
11.	<b>Course content:</b> Definition of biochemistry Water and minerals: Sodium, potassium, chlorides, bicarbonates. Acid-based balance Proteins1: Amino acids. Peptides. Proteins. Basics of metabolism of proteins. Urea Proteins 2: Proteins in blood plasma. Hemoglobin: role, chemical structure and catabolism. Bilirubin Enzymes 1: Enzymes properties. Nomenclature and classification. Active center. Kinetics of the enzyme reactions Enzymes 2: Basics of clinical enzymology. Diagnostic significance of certain enzymes Lipids 1: Properties and classification of lipids Lipids 2: Basics of lipids metabolism. Lipoproteins in blood plasma Carbohydrates 1: Monosaccharides. Oligosaccharides. Polysaccharides. Carbohydrates 2: Basics of carbohydrates metabolism. GTT and glycosylated <i>haemoglobin</i> Nucleic acids Vitamins: Properties and classification  Basic protection principles in biochemistry laboratories Collecting venous and capillary blood sample. Prevention of errors in pre-analytic phase. Pipetting technique. Photometry technique. Proteins 1: Precipitation and denaturation of proteins. Proteins 2: Qualitative and quantitative determination of proteins with biuret reaction. Albumins.				

	<p><b>Enzymes: Influence of activators and inhibitors on the activity of the amylase in the saliva.</b></p> <p><b>Lipids 1: Solubility of the lipids. Determination of cholesterol according to the Salkowski method.</b></p> <p><b>Lipids 2: Determination of cholesterol concentration in serum (enzyme quantitative method).</b></p> <p><b>Lipids 3: Determination of triacylglycerols concentration in serum (enzyme quantitative method).</b></p> <p><b>Carbohydrates 1: Fehling reaction. Determination of glucose concentration in serum (GOD-PAP method).</b></p> <p><b>Carbohydrates 2: Determination of glucose concentration (hexokinase).</b></p> <p><b>Carbohydrates 3: Glucose meter. Determination of glucose concentration and ketone bodies in urine.</b></p>			
12.	<p><b>Course methodology:</b></p> <p><b><u>Theoretical tuition</u></b>  <b>Interactive teaching: Lectures in large groups</b>  <b>Multimedia teaching.</b>  <b>E-teaching.</b>  <b>Consultation in groups and individually.</b></p> <p><b><u>Practical tuition</u></b>  <b>Laboratory experiments in small groups.</b>  <b>Final experiments.</b></p>			
13.	<b>Total available time</b>	<b>120</b>		
14.	<b>Distribution of available time</b>	<b>2+1+1</b>		
15.	<b>Forms of instruction</b>	15.1.	<b>lectures - theoretical teaching</b>	<b>30 hours</b>
		15.2.	<b>Exercises(laboratory, theoretical), Seminar project, teamwork</b>	<b>15 hours</b>
16.	<b>Other forms of activities</b>	16.1.	<b>Project tasks</b>	<b>15 hours</b>
		16.2.	<b>Individual tasks</b>	<b>15 hours</b>
		16.3.	<b>Home learning</b>	<b>45 hours</b>
17.	<b>Course methodology:</b>			
	<b>Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks</b>			
	17.1.	<b>Tests</b>		<b>70 points</b>
	17.2.	<b>Seminar (paper/project - presentation: written and/or oral)</b>		<b>10 points</b>
17.3.	<b>Activity and participation</b>		<b>20 points</b>	
18.	<b>Grading system</b>	<b>up to 50 points</b>		<b>5 (five) (F)</b>
		<b>51 to 60 points</b>		<b>6 (six) (E)</b>
		<b>61 to 70 points</b>		<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>		<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>		<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>		<b>10 (ten) (A)</b>
19.	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>		
20.	<b>Language of instruction</b>	<b>Macedonian</b>		

21.	Course evaluation	Self-evaluation
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22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Tatjana Ruskovska	Basics of Biochemistry - lectures	UGD Stip, Faculty of Medical Sciences	2012
		2.	Tatjana Ruskovska	Basics of Biochemistry - practicum	UGD Stip, Faculty of Medical Sciences	2012
		3.	S. Dzekova Stojkova et al.	Biochemistry	Medical Faculty, UKIM, Skopje	1999
		4.	Dave Nelson and Nike Cox	Lehninger, Principles of Biochemistry, 5 <sup>th</sup> edition	“Mikena” Bitola, Translated book – Project of the Government - Republic of Macedonia	
		5.	Кетрин Џ. Денистон, Џозеф Џ. Топинг, Роберт Л. Карет	General, organic and biochemistry	Translated book – Project of the Government - Republic of Macedonia	
		6.	Маргарет, М. Гингрич, Пени Овербај и Мери Џин Ричи	Fluids, electrolytes and acid-base balance	Translated book – Project of the Government - Republic of Macedonia	
7.		Мајкл Л. Бишоп, Едвард П. Фоди, Лари Е. Шоеф	Clinical chemistry (principles, procedures and correlations) – Fifth edition	Prosvetno delo, Skopje Translated book – Project of the Government	2009	

					t - Republic of Macedonia	
		8.	Александар К. Брауни, Џон К. Керноан	Medical biochemistry	Translated book – Project of the Government - Republic of Macedonia	
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.	J. Koolman and K.H. Roehm	Color Atlas of Biochemistry, Second edition, revised and enlarged	Thieme, Stuttgart – New York	2005
		2.	Peter Karlson	BIOKEMIJA, za studente kemije i medicine	Školska knjiga, Zagreb	1993

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Microbiology with parasitology</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Second semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>6</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>PhD Vaso Taleski</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> To learn and acquire solid theoretical and practical knowledge in the field of microbiology.				
<b>11.</b>	<b>Course content:</b> History and development of microbiology, important breakthroughs, importance of microorganisms, bacteria classification, construction, distribution, chemical composition, growth and reproduction, metabolism, genetics , pathogenicity , virulence , immune reactions, Immune and immunotherapy, sterilization, disinfection , resistance, important antimicrobial drugs The most important bacteria, viruses, fungi and parasites.  Behavior in microbiological laboratory, microscopes and microscopic studies of microorganisms, sampling, packaging and dispatch of material for microbiological examination; Microbiological diagnosis of respiratory infections, urinary and sexually transmitted infections, bacterial enteropathogens; virological diagnostic methods (Hepatitis, HIV infection), mycological and parasitic diseases.				
<b>12.</b>	<b>Course methodology:</b>				
<b>13.</b>	<b>Total available time</b>	<b>180</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+3+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>	<b>45 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>75 hours</b>	
<b>17.</b>	<b>Course methodology</b>				
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written</b>			<b>10 points</b>

		and/or oral)	
	17.3.	Activity and participation	20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation	

22	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	D. Greenwood. and co.	Medical Microbiology	Project of the Government of the R.Macedonia	17th edition, 2006 translation of books 2011
	2.	Panovski Nichola and co., Guest author: Vaso Taleski	Medical Microbiology-general part	Department of Microbiology and parasitology, FM, Skopje	2011
	3.	Panovski Nichola and co., Guest author: Vaso Taleski	Medical Microbiology-special part	Department of Microbiology and parasitology, FM, Skopje	2011
	Supplementary literature				
22.2.	No.	Author	Title	Publisher	Year
	1.	Vaso Taleski	Microbiology	Authorized lectures	2008
	2.	Milena Petrovska and co.	"Practicum in Medical Microbiology and Parasitology "	Department of Microbiology and Parasitology, FM, Skopje fifth edition	2010

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Nursing care			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	7
8.	Lecturer/Instructor(s)	Associate Prof. Gordana Panova			
9.	Required prerequisite courses				
10.	<b>Course objectives (competences)</b> Nurse`s role Nurse-patient relationship Emergency cases Taking temperature Taking blood pressure Anaphylactic shock, collapse and coma Post surgical care etc				
11.	<b>Course content:</b> Introduction; Organization of hospitals and hospital service; Hospital room, hospital bed and hospital beddings; Emergency cases; Patients` diet; Mental health care Recognising vital signs; Diagnostic tests on patients; Control of defecation, urination and vomiting; Medication storage; Injection shots; Prevention and protection from infection; Medical - technical operations; Procedure for anaphylactic shock, collapse, coma and acute respiratory insufficiency (ARI); Post surgical care;				
12.	<b>Course methodology:</b> Interactive teaching in lectures and tutorials, practical exercises.				
13.	Total available time	120			
14.	Distribution of available time	2+3+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours	
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	45 hours	

16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	75 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self evaluation		

22	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	G.Panova	Medical ethics deontology	UGD	2010
	2.	Likar Dusan	General and special care of sick	Tabernakul Skopje	2000
	3.	Barham. P.A.	Care of sick and medical equipment	Tabernakul Skopje	2010
22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year
	1.	Fuchkar G.	Process of health care	Zagreb Medical School	2007
	2.	Krstic A.	New contents of nursing work	Medical Faculty, Belgrade	2005
	3.		Preventive health care	Tabernakul Skopje	2011



<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Ecology and Hygiene</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses/Medical technicians</b>				
<b>4.</b>	<b>Organizer of the study programme (faculty/ institute, department)</b>	<b>University "Goce Delcev" - Stip Faculty of medical science</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Second semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Asst, Prof. Nevenka Velickova PhD</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences): To gain basic knowledge in the field of medical ecology, environment protection and hygiene.</b>					
<b>11.</b>	<b>Course content: Introduction to ecology Air pollution Water pollution Waste materials Chemical components of the environment Climate and Microclimate Radiation, Noise Introduction to hygiene Hygiene in public and communal facilities Education facilities hygiene Health facilities hygiene Personal hygiene</b>					
<b>12.</b>	<b>Course methodology: Lectures, exercises, seminar research and practical activities</b>					
<b>13.</b>	<b>Total available time</b>	<b>60</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures / theoretical - contact teaching, e-teaching</b>	<b>30 hours</b>		
		<b>15.2.</b>	<b>theoretical and practical exercises, e-exams, independent seminar project</b>	<b>0hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests / oral exams</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper / project - presentation: written and/or oral)</b>			<b>10 points</b>	

	<b>17.3. Activity and participation</b>	<b>20 points</b>	
<b>18.</b>	<b>Grading system</b>	<b>up 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven)(D)</b>
		<b>71 to 80 points</b>	<b>8(eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine)(B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Michail Kocubovski</b>	<b>Hygiene whit medical ecology</b>	<b>University of Goce Delcev - Stip</b>	<b>2011</b>
	<b>2.</b>	<b>R. Čosic</b>	<b>Udzbenik Higijene</b>		<b>1983</b>
	<b>3.</b>	<b>Milto Mulev</b>	<b>Protection of the environment</b>		<b>1997</b>
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Kocijancic Radojka</b>	<b>Higijena</b>	<b>Zavod za udzbenike I nastavna sredstva, Beograd</b>	<b>2002</b>

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Epidemiology</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Second semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Dr. Gorgi Shumanov, PhD</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> Acquiring of basic knowledge of epidemiology and public health. Introduction to measures of prevention, combat diseases and health deterioration. To gain knowledge of epidemiological characteristics of infectious and uninfected diseases.				
<b>11.</b>	<b>Course content:</b> <u><b>Theoretical instruction</b></u> 1. Epidemic process 2. Epidemiological methods 3. Outbreak types 4. Forms of epidemic process 5. Infection. Contagious diseases 6. Prevention of disease and health disorder 7. Preventive medical care in military and emergency conditions 8. Epidemiological features of intestinal infectious diseases 9. Epidemiological characteristics of infectious respiratory diseases 10. Epidemiological characteristics of infectious disease transmission 11. Epidemiological features of zoonoses 12. Epidemiological characteristics of non contagious diseases and health disorder <u><b>Practical teaching units:</b></u> 1. Epidemiological methods and design studies 2. Methods of collecting information, epidemiological survey, samples 3. Epidemic process, forms of epidemic process, epidemiological models of disease occurrence 4. Epidemiological characteristics and examples of alimentary, aerogenic, contact and transmissible outbreaks 5. Immunization: compulsory vaccination and vaccination after epidemiological indications 6. Prevention of occupational exposure 7. Epidemiological features of intestinal infectious diseases 8. Epidemiological characteristics of infectious respiratory diseases 9. Epidemiological features of contact diseases 10. Epidemiological features of transmissible infectious diseases				

	11. Epidemiological features of chronic, non contagious diseases 12. Epidemiological features of malignant neoplasm, diabetes, addictions.			
12.	Course methodology: Lectures, exercises, methods of group discussions, individual assignments, seminar papers, presentation of a scientific work			
13.	Total available time	120		
14.	Distribution of available time	2+1+1		
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology			
	17.1.	Tests	70 points	
	17.2.	Seminar (paper/project - presentation: written and/or oral)	10 points	
	17.3.	Activity and participation	20 points	
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self evaluation		

22	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Gorgi Shumanov, Blaze Nikolovski	Epidemiology and Public Health	"Progress", Tetovo	2009
	2.	Theodor H.Tulchinski Elena A.Varavikova	New Public Health	Student word "Skopje"	2003
	3.	Lence Mircevska, Doncho Donev, Ilija Gligorov	Health education	Bitola	2006
22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year
	1.	Blaze Nikolovski	Epidemiology	"Progress", Tetovo	2003

Appendix No. 3		Course Programme - first cycle studies			
1.	Course title	Computer Science			
2.	Code	3FI110112			
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme (unit or institute, Faculty, department)	University "Goce Delcev" Faculty of Computer Sciences			
5.	Cycle (first, second, or third study cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	2
8.	Lecturer/Instructor(s)	Ass. Lecturer/Instructor Zoran Zdravev, PhD			
9.	Required prerequisite courses				
10	Course objectives (competences): Adopting the basic concepts of computer science, using computers for communication, research and office work				
11	Contents of the course Programme: Introduction to informatics: algorithms, abstraction, history, Computer hardware: introduction, types, architecture of computer systems, Murau law Computer hardware: Peripherals, Computer Memory, digital identification; Computer software: applicative software, open source software licenses; Computer software: system software, Programmeming languages; Computer software: web services, online document storage and editing systems, Computer networks: LAN, MAN, WAN, topologies, applications that run on network components, connectivity; Computer networks: Internet, intranet, extranet, Internet services; Computer security: concept, security risk, malicious software, unauthorized access, cryptography; Information systems: introduction, types, ERP, CRM, HR, SCM; Content Management Systems CMS: DMS, DAMS, WCM, ECP, ERS; Databases: fundamentals, types, use				
12	Course methodology: Lectures, Laboratory exercises, e-learning, individual and team projects, consultations.				
13	Total available time	4 ECTS x 30 h = 120 hours			
14	Distribution of available time	30+15+15+10 +50 = 120 hours			
15	Forms of instruction	15.1	lectures / theoretical - contact teaching, e-teaching	30 hours	
		15.2	theoretical and practical exercises, e-exams, independent seminar project	15 hours	
16	Other forms of studying activities	16.1	Project tasks	15 hours	
		16.2	Individual tasks	10 hours	
		16.3	Home learning	50 hours	

<b>17</b>	<b>Course methodology</b>		
	<b>17.1</b>	<b>Tests / oral exams</b>	<b>70 points</b>
	<b>17.2</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>	<b>10 points</b>
	<b>17.3</b>	<b>Activity and participation</b>	<b>20 points</b>
<b>18</b>	<b>Grading system</b>	<b>Up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Zoran Zdravev etc..</b>	<b>Informatics - script</b>	<b>UGD</b>	<b>2012</b>
	<b>2.</b>	<b>Zoran Zdravev etc.. Practicum in Informatics UGD 2012</b>	<b>Practicum in Informatics</b>	<b>UGD</b>	<b>2012</b>
	<b>3.</b>				
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Glenn Brookshear</b>	<b>„Computer Science – an overview“</b>	<b>Pearson International edition</b>	<b>2009</b>
	<b>2.</b>	<b>Carl Reynolds and Paul Tymann</b>	<b>„Principles of Computer Science“</b>	<b>McGraw Hill</b>	<b>2008</b>
	<b>3.</b>	<b>James O'Brien</b>	<b>„Introduction to Information Systems “</b>	<b>McGraw Hill</b>	<b>2008</b>

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Pathophysiology</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Third semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>7</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Associate Prof. Dr. Milka Klincheva,PhD</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences) To introduce the general malfunctions and pathophysiological processes of the body.</b>				
<b>11.</b>	<b>Course content:</b> <b>Theoretical study units:</b> 1. Disorder of the structure and function of macromolecules 2. Malfunctions of subcellular structures 3. Disorder of energy metabolism and metabolism of essential nutrients 4. Disorder of circulation of specific metabolic compounds 5. Disruptions of water supply and electrolytes. 6. Acid based balance disorders 7. Biologically active endogenous compounds in the pathophysiological processes 8. Regulation disorder. Pathophysiological pain basis. 9. Thermoregulation disorder. Immunopathophysiology 10. Inflammation 11. Circulatory shock. Consciousness disorder. 12. Development and growth disorders. Malignant transformation and growth. <b>Practical teaching units:</b> 1. Pathophysiological basis of inheritance of diseases and syndromes 2. Cell death 3. Substrate hypoenerygozi - starvation 4. Disorders of protein metabolism 6. Disruptions of calcium supply, phosphate and magnesium 7. Gastrointestinal hormones and neuropeptides 8. Reactions of tissues transplantation 9. Pathophysiology of Aging				
<b>12.</b>	<b>Course methodology:Interactive teaching in lectures and tutorials, practical exercises.</b>				
<b>13.</b>	<b>Total available time</b>	<b>210</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>3+3+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>45 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical),</b>	<b>45 hours</b>	

			<b>Seminar project, teamwork</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>
		<b>16.3.</b>	<b>Home learning</b>	<b>90 hours</b>
<b>17.</b>	<b>Course methodology</b>			
	<b>17.1.</b>	<b>Tests</b>		<b>70 points</b>
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>		<b>10 points</b>
	<b>17.3.</b>	<b>Activity and participation</b>		<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>		<b>5 (five) (F)</b>
		<b>51 to 60 points</b>		<b>6 (six) (E)</b>
		<b>61 to 70 points</b>		<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>		<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>		<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>		<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>		
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>		
<b>21.</b>	<b>Course evaluation</b>	<b>Self evaluation</b>		

<b>22</b>	<b>Literature</b>					
·	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>Gamulin S., M Marushich., Z. Kovacs.and co.</b>	<b>Pathophysiology</b>	<b>Sixth Edition - Medicnska naklada, Zagreb</b>	<b>2005</b>
		<b>2.</b>	<b>Stephen DZH.Mek Fi and William Genong</b>	<b>Pathophysiology of Disease Introduction to Clinical Medicine</b>	<b>Project of the Government of Macedonia translation of technical and scientific books</b>	<b>4th Edition, September 2002, translated 2011</b>
		<b>3.</b>	<b>Vaskova O., Miceva S. Ristevska, Pop Gjorcheva D., D Miladinovska., S. Loparska., Ivanovska J.E.</b>	<b>Practicum in general and special pathological physiology</b>	<b>Skopje</b>	
		<b>Supplementary literature</b>				
	<b>22.2.</b>	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>Isak Tadzher and co</b>	<b>General pathological physiology ,</b>	<b>Medical Book, Belgrade</b>	



<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Pathology</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Third semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>7</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Dr. Gordana Petrushevska</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences) Introduction to etiology, pathogenesis and morphological changes in cells and tissues of the body under the influence of pathological agents and their diagnostics</b>					
<b>11.</b>	<b>Course content: Cell Pathology; Inflammation; Regeneration and repair; Disruption of circulation; Pathology of the immune system; Neoplasms; Systemic Pathology;</b>					
<b>12.</b>	<b>Course methodology: Theoretical instruction, practical exercises, seminar works</b>					
<b>13.</b>	<b>Total available time</b>	<b>210</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>3+3+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>45 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>45 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>90 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>	
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 points</b>	
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>		<b>5 (five) (F)</b>		
		<b>51 to 60 points</b>		<b>6 (six) (E)</b>		

		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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation, tests, oral and written examination	

22.	Literature				
	Required literature				
	No.	Author	Title	Publisher	Year
22.1.	1.	Kumar, Abbas, Fausto, Mitchell	Principles of pathology according to Robbins	Tabernakul	2012
	2.	Edward K.Klat	Robbins and Kotran Pathologic Atlas	Academic Press	2012
	3.	Authorized lectures			
	Supplementary literature				
22.2.	No.	Author	Title	Publisher	Year
	1.				

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Pharmacology</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Third semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Ass. Lecturer/Instructor Trajan Balkanov, PhD</b>			
<b>9.</b>	<b>Required prerequisite courses</b>	<b>None</b>			
<b>10.</b>	<b>Course objectives (competences)</b> To introduce basic pharmacokinetic (absorption, distribution, metabolism and elimination of drugs) and pharmacodynamic processes in the human organism, mechanism of drugs action, factors that determine safety and efficacy, dosing and factors affecting drugs dosing, interactions and side effects of medications				
<b>11.</b>	<b>Course content:</b> 1. Basic pharmacology, Pharmacodynamic (drugs effect on the human organism) 2. The mechanism of drugs action; Character of action, specificity and selectivity 3. Types of therapy, etiology, symptomatic; Quantitative aspects of the drugs effects 4. Correlation among drugs structure and pharmacological response; strength and effectiveness of drugs 5. Notion of accumulation and tolerance; mutual effect between drugs; Side effects of drugs. Drug addiction 6. Drugs that act through the peripheral nervous system, 7. Pharmacology of drugs that act through the central nervous system, 8. Treatment of cardiovascular disease, Haemostasis and Thrombosis, drugs that are used in treatments of anemia, 9. Treatment of respiratory diseases, 10. Treatment of the digestive tract diseases, 11. Use of vitamins and hormones in daily therapy practice 12. Anti-infective drugs				
<b>12.</b>	<b>Course methodology:</b> Research, working in small groups, homework, practical work, independent seminar work, discussion, debate, individual tasks				
<b>13.</b>	<b>Total available time</b>	<b>120</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+1+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>15 hours</b>	

16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self evaluation		

22	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Balkanov T., Pesic S.	Pharmacology for dentists - general part	Authorized lectures, script	2013
		2.	Balkanov T., Pesic S.	Pharmacology for dentists - a special part	Authorized lectures, script	2013
		3.				
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.				

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Contemporary diagnostic methods in medicine			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Third semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	Prof. Dr. Tane Markovski			
9.	Required prerequisite courses				
10.	Course objectives (competences) Introduction to modern diagnostic methods and procedures in diagnosis of diseases.				
11.	Course content: Classic and digital diagnostic methods. <ul style="list-style-type: none"> <li>• Getting analog and digital recording.</li> <li>• Basic digital methods of investigation.</li> <li>• Basic principle of ultrasonic diagnosis</li> <li>• Basic principles of CT diagnosis</li> <li>• Magnetic resonance imaging and its application in diagnosis of diseases</li> <li>• Contemporary diagnosis of respiratory tract</li> <li>• Contemporary diagnosis of cardiovascular system</li> <li>• Contemporary diagnosis of gastrointestinal tract</li> <li>• Contemporary diagnostic methods of the urogenital tract.</li> <li>• Contemporary diagnostic methods in gynecology.</li> <li>• Diagnostic methods in neuroradiology</li> </ul>				
12.	Course methodology:lectures, exercises, seminar project				
13.	Total available time	120			
14.	Distribution of available time	2+1+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours	
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours	
16.	Other forms of activities	16.1.	Project tasks	15 hours	
		16.2.	Individual tasks	15 hours	
		16.3.	Home learning	45 hours	
17.	Course methodology				
	17.1.	Tests			70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)			10 points
	17.3.	Activity and participation			20 points

<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
<b>1.</b>	<b>Authorized lectures by the teacher</b>				
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
<b>1.</b>	<b>/</b>				

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Medical ethics			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Third semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	Ass. Lecturer/Instructor Darko Boshnakovski, PhD			
9.	Required prerequisite courses				
10.	Course objectives (competences) Introduction to basic ethical and sociological knowledge of medicine, training of future professional nurses / technicians, observation, treatment and care of patients as complex bio unit.				
11.	Course content: Conceptual and historical overview of medicine. Clinical Medicine and ethical issues in clinical work. History of Medical Ethics: Hippocratic Oath and its historical implications, Geneva revision of the Hippocratic oath and ethical codes. Medical Ethics in Practice: specificities of medical ethics, deontology, medical secret, shared secret, euthanasia, moral and criminal responsibility of the physician, medical research ethic, medical law: basic aspects and problems.				
12.	Course methodology: Lectures, exercises, methods of group discussions, individual assignments, seminar papers, presentation of a scientific work				
13.	Total available time	120			
14.	Distribution of available time	2+1+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours	
		15.2.	Exercises(laboratory,theoretical), Seminar, teamwork	15 hours	
16.	Other forms of activities	16.1.	Project tasks	15 hours	
		16.2.	Individual tasks	15 hours	
		16.3.	Home learning	45 hours	
17.	Course methodology				
	17.1.	Tests			70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)			10 points
	17.3.	Activity and participation			20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Written and oral presentation of learning content	

22	Literature					
·	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Panova G.	Medical ethics deontology	UGD-Stip	2010
		2.	Seturman K.R.	Communication skills in clinical practice	Tabernakul	
		3.	Pop-Jordanova N.	Medical Ethics	Medical Faculty, Skopje	2006
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.	Marcia Lewis Carroll Tamparo	Medical Law, Ethics and Bioethics	Academic Press-Skopje	2010
		2.	Marich J.	Medical Ethics	Faculty of Medicine, Belgrade,	2005
		3.	Otashevich C, Pejakovich S.	Medical Ethics and deontology	Faculty of Medicine, Nis	2005



<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Health care organization</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Third semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Prof. Dr. Gorgi Shumanov</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> Introduction to the basic principles of health planning, types of plans, adoption, development and evaluation of health plans.				
<b>11.</b>	<b>Course content:</b> 1.Planning and development of health care 2. Basic principles of planning in the health sector 3. Types of care plans 4. Defining priorities, development and adoption of plan 5. Evaluation of achievement of health care plan 6. Evaluation of achievement of health care plan 7. Organization of health care and health service 8. Levels in health care system-1 9. Levels in health care system-2 10. Health and social care of elderly, disabled and physically challenged people 11. Health and social care of workers, agricultural population 12. Human resources in health care				
<b>12.</b>	<b>Course methodology:Interactive teaching: lectures in large group, discussions and engaging to students. Multimedia teaching. E-learning. Individual consultations with students and consultations in the groups.</b>				
<b>13.</b>	<b>Total available time</b>	<b>120</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+1+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>15 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>45 hours</b>	
<b>17.</b>	<b>Course methodology</b>				
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written</b>			<b>10 points</b>

		and/or oral)	
	17.3.	Activity and participation	20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self evaluation	

22	Literature					
·	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Shumanov, George et al. 2003	"Authoritative teaching"	UGD,Shtip	2012
		2.	Tulchinski, TH, Varavikova, E.A	New Public Health	NIP "Student word" Skopje,	2003
	3.					
	22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year	
	1.					

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Internal medicine with care			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth semester	7.	Number of credits	8
8.	Lecturer/Instructor(s)	Ass. Lecturer/Instructor Dr.Marija Valvukis, PhD			
9.	Required prerequisite courses				
10.	Course objectives (competences)	To acquire basic knowledge about basic internal diseases Acquiring skills for practical application of theoretical knowledge			
11.	Course content:	Diseases and disorders of cardiovascular system and health care characteristics Diseases and disorders of the respiratory system and specifics of health care Rheumatological, inflammatory and degenerative diseases and health care specification Diseases and disorders of urinary system and health care specification Diseases of gastrointestinal system and health care specification Hematologic diseases and characteristics of health care Endocrinological disorders and health care specification			
12.	Course methodology:	Research paper, group work, homework, practice, discussion, debate, individual tasks.			
13.	Total available time	240			
14.	Distribution of available time	3+4+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	45 hours	
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	60 hours	
16.	Other forms of activities	16.1.	Project tasks	15 hours	
		16.2.	Individual tasks	15 hours	
		16.3.	Home learning	105 hours	
17.	Course methodology				
	17.1.	Tests			70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)			10 points
	17.3.	Activity and participation			20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self evaluation	

22	Literature					
·	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Serafimovski V. and co.	INTERNAL MEDICINE (selected chapters)	Macedonian treasury, Kumanovo	2003
		2.	Forbes Ch., William J.	Clinical Medicine (Color Atlas and texts), Third Edition	Magor, Skopje	2012
		3.				
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
	1.		Authorized lectures by teachers			

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Infective diseases with care</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Fourth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Ass. Lecturer/Instructor Dr.Velo Markovski, PhD</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> To learn the basic elements of diagnosis, therapy and prophylaxis of the infective diseases				
<b>11.</b>	<b>Course content:</b> <u>Theoretical instruction:</u> Infection, an infective disease (basic features), temperature, types and regulation Principles of diagnosis, treatment and prevention of the infective diseases Fundamentals of immunology of the infective diseases Fundamentals of gastrointestinal infections, dehydration Epidemiological and clinical features of hepatitis Rash Viral Diseases: Varicella, Measles, Rubeola Mumps epidemic. Mononucleosis Respiratory infections Characteristics of tetanus Characteristics of zoonoses Infectious diseases of CNS HIV infection <u>Practical instruction:</u> Appropriate protection of the medical personnel and removal of the infectious waste Sampling of biological material for examination Diagnostic and therapeutic protocol for infective diseases Login and registration of infective herbaceous Application of oral therapy Application of parenteral therapy Anti tetanus and anti rabies prophylaxis Lumbar puncture Treatment for viral fevers and rashes. Mucous membrane Hygiene dietary regime in infections and viral hepatitis				
<b>12.</b>	<b>Course methodology: Theoretical and practical instruction</b>				
<b>13.</b>	<b>Total available time</b>	<b>120</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+1+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	

		15.2.	Exercises(laboratory,theoretical), seminar project, teamwork	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self evaluation		

22	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.		Authorized lectures	UGD, Shtip	
		2.		Infectious diseases (selected chapters)	Faculty of Medicine Skopje	
		3.				
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.				

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Ophthalmology with care</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Fourth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>4</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Dr.Karolina Blazevska Buzarovska</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences) Introduction to basic procedures for detection of eye diseases and their treatment</b>					
<b>11.</b>	<b>Course content: Diagnosis and treatment of eye diseases Inflammation of the anterior segment of the eye Degenerative processes and tumors of the anterior segment Glaucoma Cataracts Vascular diseases of the retina Diabetic retinopathy Eye tumor Ablation of retina Diseases of the optic nerve -Eye injuries</b>					
<b>12.</b>	<b>Course methodology:Lectures, exercises, seminar papers with oral presentation</b>					
<b>13.</b>	<b>Total available time</b>	<b>120</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+1+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>15 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>5 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>5 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>	

	<b>17.3.</b>	<b>Activity and participation</b>	<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Kanski J.K.</b>	<b>Clinical ophthalmology</b>		<b>2012</b>
	<b>2.</b>	<b>Brathfort S.</b>	<b>Fundamentals of Ophthalmology</b>		<b>2010</b>
	<b>3.</b>	<b>Spalton S.</b>	<b>Ophthalmic Atlas</b>		<b>2010</b>
	<b>22.2.</b>	<b>Supplementary literature</b>			
<b>No.</b>		<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
<b>1.</b>		<b>Janev K,</b>	<b>General Ophthalmology</b>		<b>2012</b>



Annex No.3		Course Programme - first cycle studies			
1.	Course title	Neurology and psychiatry with care			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	Prof Dr.Liljana Ilievska			
9.	Required prerequisite courses	Verified third semester			
10.	Course objectives (competences) To obtain basic knowledge of diagnosis, therapy and prophylaxis of neurological and psychiatric patients.				
11.	<p>Course content:</p> <p><u>Theoretical instruction:</u>  Classification of mental disorders, Social Psychiatry  Addiction diseases  Neurodegenerative diseases  Affective disorders  Psychotic disorders  Neurotic and psychosomatic disorders  Personality Disorders  Community mental health, stigma  Central nerve deseases  Neuro-muscular disease, extrapyramidal disorders  Neuro-muscular disease, extrapyramidal disorders  Cerebrovascular Diseases</p> <p><u>Practical instruction:</u>  Psychiatric anamnesis and interview  Psychosis-schizophrenia, paranoia  Alcoholism and drug addiction-pharmacotherapy, psychotherapy  Dementia-Alzheimer's disease  Epilepsy and status, epilepticus therapy  Neurological history and status-motion, reflexes, sensibility  Cranial nerves  Cerebrovascular diseases-stroke  Parkinson's disease  Lumbar puncture  Diagnostic methods. CT, MRI-preparation of patients</p>				
12.	Course methodology:Theoretical and practical instruction				
13.	Total available time	120			
14.	Distribution of available time	2+1+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours	

		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology:			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self evaluation		

22	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Rihter K, Ortakov V, Belevska D.	Community mental health		2006
		2.	Chadlovski	Psychiatry	Prosvetno delo	2004
		3.	Group of authors	Neurology	Prosvetno delo	2008
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.	Ilievska L. Petrova V.	Evoked potentials in clinical practice	Prosvetno delo	2007

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Family medicine			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	Ass. Lecturer/Instructor Biljana Ilievska Popovska, PhD			
9.	Required prerequisite courses				
10.	Course objectives (competences)	To become familiar with primary health care - the role and importance of the family doctor in prevention, diagnosis and treatment of diseases in all age groups			
11.	Course content:	<p><b><u>Theoretical instruction:</u></b></p> <ol style="list-style-type: none"> <li>1. Introduction. medical documentation</li> <li>2. History and physical examination in all age groups.</li> <li>3. Diseases of respiratory system - symptoms, diagnosis, differential diagnosis, therapy.</li> <li>4. Diseases of cardiovascular system-symptomatology, diagnosis, differential diagnosis, therapy.</li> <li>5. Diseases of gastrointestinal system-symptomatology, diagnosis, differential diagnosis, therapy.</li> <li>6. Musculoskeletal diseases and injuries.</li> <li>7. Urinary symptoms</li> <li>8. Headache</li> <li>9. The most common conditions in the pediatric population.</li> <li>10. Reproductive health - family planning and contraception.</li> <li>11. Reproductive health - prenatal and postpartum care.</li> <li>12. Preventive measures, counseling, genetic counseling.</li> </ol> <p><b><u>Practical instruction:</u></b></p> <ol style="list-style-type: none"> <li>13. Physical examination.</li> <li>14. Upper - respiratory disease - symptoms and treatment.</li> <li>15. Assessment of patients with COPD.</li> <li>16. Assessment and treatment of patients with arterial hypertension.</li> <li>17. Assessment and treatment of patients with cardiac arrhythmias.</li> <li>18. Assessment and treatment of patients with coronary artery disease.</li> <li>19. Assessment and treatment of patients with diarrhea and vomiting. Analysis of abdominal symptoms.</li> <li>20. Treatment of muscle tension and distortions. Osteoporosis - risk assessment and counseling.</li> <li>21. Assessment of urinary symptoms - urinary incontinence versus anuria. Dysuria.</li> </ol>			

	22. Treatment of acute illnesses during pregnancy. 23. Headache - differential diagnosis. 24. Amenorrhea. Metrorragia. Contraception			
12.	Course methodology: Theoretical and practical instruction			
13.	Total available time	120		
14.	Distribution of available time	2+1+1		
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises (laboratory, theoretical), Seminar project, teamwork	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology			
	17.1.	Tests	70 points	
	17.2.	Seminar (paper/project - presentation: written and/or oral)	10 points	
	17.3.	Activity and participation	20 points	
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self evaluation		

22.	Literature					
	Required literature					
		No.	Author	Title	Publisher	Year
	22.1.	1.	Mengel M. et al.	Family Medicine: Ambulatory Care and Prevention	Fifth Edition (LANGE Clinical Medicine)	
	Supplementary literature					
	22.2.	No.	Author	Title	Publisher	Year
		1.				

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Surgery with Care</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Fifth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>8</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof.Andreja Arsovski</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences) Learning of general surgical principles, abdomen and thorax.</b>					
<b>11.</b>	<b>Course content:</b> <b>1. Introduction and background in surgery. Asepsis and anti-sepsis. Infections in surgery</b> <b>2.Injuries - General, Injuries - mechanical injuries - heat</b> <b>3. Shock and reanimation</b> <b>4. Anesthesia</b> <b>5. Bleeding and hemostasis. transfusion</b> <b>6. Contemporary diagnosis in surgery</b> <b>7. Acute abdomen. Ileus. hernia</b> <b>8. Stomach. Small and large intestine. Hepatic pancreatic tract.</b> <b>9. Breast Surgery</b> <b>10. Thyroid surgery</b> <b>11. Pleura surgery. Echinococcus lung</b> <b>12. Chest surgery. Injuries to the thorax and abdomen</b>					
<b>12.</b>	<b>Course methodology: Theoretical lectures, group work, practical exercises, project work</b>					
<b>13.</b>	<b>Total available time</b>	<b>240</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>3+4+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>45 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>60 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>90 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>	
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 points</b>	

<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self evaluation</b>	

<b>22</b>	<b>Literature</b>					
·	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>J.Panovski</b>	<b>General Surgery</b>		
	<b>2.</b>	<b>J.Panovski</b>	<b>Special Surgery</b>			
	<b>3.</b>					
	<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	
<b>1.</b>						

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Gynecology and Obstetrics with care</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Fifth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>5</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Dr.Gligor Dimitrov</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> <b>The theoretical instruction:</b> <b>To gain knowledge in the field of gynecology and obstetrics. To understand working principles of the nurses and their responsibilities.</b> <b>Practical instruction:</b> <b>To acquire practical skills and knowledge in gynecology - basic diagnostic and therapeutic procedures, preoperative preparation and postoperative care.</b>				
<b>11.</b>	<b>Course content:</b> <u><b>Theoretical instruction:</b></u> <b>1. Anatomy of the external genital organs, anatomy of the internal genital organs</b> <b>2. Physiology of external and internal genitalia. Physiology of menstrual cycle</b> <b>3. Conception, embryogenesis, growth and development of fetus, placenta and membranes</b> <b>4. Fundamentals of correctly family planning, contraception, unwanted pregnancy, termination of pregnancy</b> <b>5. Early and late gestosi, illness during pregnancy, chronic disease and infections during pregnancy, bleeding during pregnancy</b> <b>6. Before conceptual counseling, sequence and frequency of antepartum controls</b> <b>7. Mechanism of normal childbirth, beginning, maternity time, pelvis childbirth mechanism, first care and reanimation of the newborn.</b> <b>Birth complications, breastfeeding-physiological complications in nursing, postpartum depression</b> <b>8. Vulva-vaginitis, cervicitis, parametritis, Salpingo-ooforitis, the most common sexually-transmitted diseases</b> <b>9. Benign neoplastic and non-neoplastic diseases: vagina, cervix body of uterus, adnexa</b> <b>10. Definition of infertility, diagnosis and modern treatment of infertility, amenorrhoea-diagnosis and therapeutic procedures</b> <b>11. Bleeding types associated with menstrual cycle, metroragia, basic principles of diagnosis and treatment of bleeding, dysmenorrhea</b> <b>12. Diagnosis and therapy of cancers: vulva, vagina, cervix Body of uterus, tubes and Ovary</b>				

12.	<b>Course methodology:</b> Interactive lectures, methods of group discussions, practical exercises, gynecological and obstetric phantoms, clinical exercises with patients under supervision, resolving gynecological-obstetric cases-clinical problems, individual assignments, seminar paper presentations.			
13.	<b>Total available time</b>		150	
14.	<b>Distribution of available time</b>		2+2+1	
15.	<b>Forms of instruction</b>	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	30 hours
16.	<b>Other forms of activities</b>	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	60 hours
17.	<b>Course methodology</b>			
	17.1.	Tests		70 hours
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 hours
	17.3.	Activity and participation		20 hours
18.	<b>Grading system</b>		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.	<b>Signature and final exam prerequisites</b>		60% achievement on all pre-exam activities	
20.	<b>Language of instruction</b>		Macedonian	
21.	<b>Course evaluation</b>		Self-evaluation	

22.	<b>Literature</b>					
	22.1.	<b>Required literature</b>				
		No.	Author	Title	Publisher	Year
		1.	Dimitrov G., Shterjovska-A. A.	Authorized lectures	UGD. Shtip	2013
		2.	Mladenovik and co.	Gynecology and Obstetrics	Zavod za udzbenike, Beograd	2008
	3.	Fraser, Cooper	Myles Textbook for Midwives, 15 <sup>th</sup> ed.	Churchill-Livingstone, Elsevier, Oxford-London-New York	2009	
	22.2.	<b>Supplementary literature</b>				
		No.	Author	Title	Publisher	Year
		1.	Ristik	Practical	Freemental,	2006



				<b>gynecology</b>	<b>Белград</b>	
		<b>2.</b>	<b>Ristik</b>	<b>Practical childbirth</b>	<b>Freemental, Белград</b>	<b>2001</b>
		<b>3.</b>	<b>Shirimbal</b>	<b>practical obstetric</b>	<b>Medicinska kniga, Beograd- Zagreb</b>	<b>1985</b>
		<b>4.</b>	<b>Henderson C., Macdonald S.</b>	<b>Mayes' Midwifery: A Textbook for Midwives 13ed.</b>	<b>Bailliere- Tindall, Oxford- London-New York</b>	<b>2004</b>

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Orthopedics and Traumatology with care</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Fifth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>5</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. George Zafiroski</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences) Introduction to the basics of orthopedics and traumatology of Medical nurses / medical technicians from general practice</b>					
<b>11.</b>	<b>Course content:</b> 1. Congenital underdevelopment of the hips 2. Inherent crooked foot and other congenital deformities of feet 3. Congenital torticollis and other congenital anomalies of the neck 4. Tuberculosis of OAS 5. Osteomyelitis 6. Scoliosis and kyphosis 7. Degenerative diseases of the joints 8. Musculoskeletal tumors 9. Traumatology of the locomotor system and pseudoartrozi 10. Juvenile osteonecrosis 11. Reumatoid arthritis and orthopedic problems 12. Orthoses and prostheses					
<b>12.</b>	<b>Course methodology: Theoretical lectures, group work, practical exercises, project work, e-learning</b>					
<b>13.</b>	<b>Total available time</b>	<b>150</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+2+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar roject, teamwork</b>	<b>30 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>60 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>	

	<b>17.3.</b>	<b>Activity and participation</b>	<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self evaluation</b>	

<b>22</b>	<b>Literature</b>					
·	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>Zafirovski, G. et al.</b>	<b>Pediatric Orthopedics</b>	<b>Culture</b>	<b>2003</b>
		<b>2.</b>	<b>Greenslan, A.</b>	<b>Orthopedic report</b>	<b>Tabernakul</b>	<b>2011</b>
		<b>3.</b>				
	<b>22.2.</b>	<b>Supplementary literature</b>				
<b>No.</b>		<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	
<b>1.</b>		<b>Tadzhdijan, M.</b>	<b>Clinical pediatric orthopedics</b>	<b>Apleton Lange</b>	<b>1997</b>	

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
1.	<b>Course title</b>	<b>Anaesthesiology and Resuscitation with care</b>			
2.	<b>Code</b>				
3.	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
4.	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
5.	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
6.	<b>Academic year / semester</b>	<b>Fifth semester</b>	7.	<b>Number of credits</b>	<b>4</b>
8.	<b>Lecturer/Instructor(s)</b>	<b>Prof. Dr.Jordan Nojkov</b>			
9.	<b>Required prerequisite courses</b>				
10.	<b>Course objectives (competences)</b> Students are introduced to basic and modern methods in anesthesiology practice and the basic principles and procedures of reanimation.				
11.	<b>Course content:</b> <u>Theoretical study units</u> 1. Introduction. Types of anesthesia 2. Drugs used in anesthesia and their influence on the organism 3. Anesthesiology examination and preparation for anesthesia 4. Perioperative monitoring of patients 5. Post anesthetic recovery and complications 6. Regional anesthesia 7. Escort and local anesthesia 8. Reanimation, basic life support 9. Reanimation, advanced life support 10. Intensive treatment of comatose sick 11. Intensive treatment of sick with respiratory insufficiency 12. Intensive treatment of sick with electrolyte disbalance and shock <u>Practical teaching units</u> 1. Anesthesiology Review - Classification by ASA 2. Anesthesia machines, components, methods of functioning 3. Local anesthesia 4. Regional anesthesia - spinal anesthesia 5. Artificial respiration and heart massage 6. Providing airway - AMBU, airway 7. Providing airway - endotracheal intubation, laryngeal massage 8. Defibrillation - indications and procedure 9. Application of drugs 10. Therapy with crystalloid and colloid in shock 11. Transfusion therapy 12. Tracheostomy				
12.	<b>Course methodology:</b> Theoretical instruction Interactive teaching: lectures in large group, discussions, engaging students. Multimedia teaching. E-learning.				

	Individual consultations with students and consultations in groups. Practical instruction Practical laboratory exercises in small groups. Final practice.			
13.	Total available time		120	
14.	Distribution of available time		2+1+1	
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites		60% achievement on all pre-exam activities	
20.	Language of instruction		Macedonian	
21.	Course evaluation		Self-evaluation	

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Lalevich P.	Anaesthesiology	Zavod za udzbenike, Beograd	1999
		2.	Vuchkovik D.	Intensive therapy	Zavod za udzbenike I nastavne sredstva	1998
	3.					
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.	Robert K. Stoelting Ronald D. Miller	<a href="#">Basics of Anesthesia: with Evolve Website, 5e</a>	Churchill livingstone, Elsevier	2007

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Dermatovenerology with care</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Fifth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Dr.Vesna Grivcheva Panova</b>			
<b>9.</b>	<b>Required prerequisite courses</b>	<b>none</b>			
<b>10.</b>	<b>Course objectives (competences) To learn the theoretical foundations of skin and Venereal diseases as well their diagnosis and treatment in clinical practice.</b>				
<b>11.</b>	<b>Course content:</b> 1. Fundamentals and principles of dermatological diagnosis 2. Viral, bacterial and rickettsial diseases of the skin and mucous membrane 3. Sexually transmitted diseases of the skin and mucous membrane 4. Protozoan and fungal diseases of the skin and mucous membrane 5. Diseases caused by arthropods and worms with skin changes 6. Urticaria, angioedema and anaphylaxis. Skin changes as a reaction to drugs 7. Erythema-papules-squamous diseases. Bullous dermatoses. Pustular diseases 8. Keratinisation disorders. Disorders of connective tissue. 9. Pruritus, prurigo and neuro-psychiatric disorders. 10. Pigmentation disorders, benign and malignant tumors of the skin. 11. Disorders of hair and nails. 12. Venereal diseases of male and female sexual organs.				
<b>12.</b>	<b>Course methodology: Theoretical lectures, group work, practical exercises, project assignments</b>				
<b>13.</b>	<b>Total available time</b>	<b>60</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>0 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>	
<b>17.</b>	<b>Course methodology</b>				
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written</b>			<b>10 points</b>

		and/or oral)	
	17.3.	Activity and participation	20 points
18.	Grading system	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 and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation	

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Blichkova-Lashoska M., Starova A.	Clinical Dermatology with practicum for students and practitioners, 2 revised edition	HIB, Drestzo, Skopje	2000
	2.	Anchevski A., Gocev G., Pavlova Lj., Petrova N.	Dermatovenerology	Cultura, Skopje	2005
	3.				
22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year
	1.				

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Geriatric with care			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fifth semester	7.	Number of credits	4
8.	Lecturer/Instructor(s)	Prof. Dr.Biljana Ilievska Popovska			
9.	Required prerequisite courses	None			
10.	<b>Course objectives (competences)</b> Students to gain knowledge of pathogenesis, clinical presentation and treatment of the most common diseases. Special attention is paid to preventive measures and medical procedures. Acquisition of skills in the process of health care, triage, health care planning, preventive medical measures, measures of rehabilitation.				
11.	<b>Course content:</b> 1. AGE AND AGEING (causes of aging, mechanisms of aging). 2. Old age is not a disease but LIFE THIRD AGE (childhood, mature age and third age). 3. AGEING, successfully ("normal") AGEING (characteristics of diseases of geriatric medicine completeness). 4. OLDER PATIENTS (ethics, elimination of age discrimination) 5. Taste and smell, gray hair, type 6. Eye diseases at older age (normal changes, more common diseases, glaucoma, senile cataract, diabetic retinopathy) 7. Ears and nose diseases at older age (presbycusis, nasal obstruction, olfactory disturbances, epistaxis, neoplasms of the nose) 8. Mouth diseases at older age (oral cavity and nutrition, taste and smell, sores, candidiasis, epidermoiden cancer) 9. Skin changes at older age 10. Falls at old age (factors that affect, reason, predisposition, prevention) 11. Urinary tract at old age, physiological mechanisms of micturition 12. Pathophysiology and Types of Incontinence (transient, permanent, emergency, stress, mixed, functional, Reflex, diagnosis, treatment) 13. Diseases of the digestive tract at older age, 14. Constipation and incontinence, irritable bowel syndrome 15. Ageing and osteoporosis (factors, menopause, diagnosis, treatment, prevention, recommendations) 16. Psychological changes at older age (depression, delirium, Alzheimer, prevention) 17. Regulation of appetite, physiological anorexia, malnutrition (reasons, nutritional therapy) 18. Pressure sores (prevention, treatment) 19. Drugs at older age (required, side effects)				



12.	<b>Course methodology:</b> Theoretical lectures, group work, practical exercises, project assignments			
13.	<b>Total available time</b>	120		
14.	<b>Distribution of available time</b>	2+1+1		
15.	<b>Forms of instruction</b>	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	15 hours
16.	<b>Other forms of activities</b>	16.1.	Project tasks	5 hours
		16.2.	Individual tasks	5 hours
		16.3.	Home learning	5 hours
17.	<b>Course methodology</b>			
	17.1.	Tests	70 points	
	17.2.	Seminar (paper/project - presentation: written and/or oral)	10 points	
	17.3.	Activity and participation	20 points	
18.	<b>Grading system</b>	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.	<b>Signature and final exam prerequisites</b>	60% achievement on all pre-exam activities		
20.	<b>Language of instruction</b>	Macedonian		
21.	<b>Course evaluation</b>	Self-evaluation		

22.	<b>Literature</b>				
22.1.	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1.	Vukadinov J. and co.	Geriatrics for students of medicine	Faculty of Medicine, University in Novi Sad	2006.
	2.				
	3.				
22.2.	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	1.	Davidovich and co..	Geriatrics	Faculty of Medicine, Beograd	1998.
	2.	Mezey DM, FulmerT, Abraham I, Zwicker DA.	Geriatric Nursing Protocols for Best Practice.	Springer Publishing Comp	

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Pediatrics with care</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Sixth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>6</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Elizabeta Zizovska</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences)</b> To learn how to recognise the most common diseases at young age and how to treat young patients.				
<b>11.</b>	<b>Course content:</b> Pathogenetic mechanism of disease, relationship and treatment of pediatric patients, motor-skeletal development, most common diseases at young age, nurses role, deviations of growth and development, detection of disabilities, methods of treatment				
<b>12.</b>	<b>Course methodology:</b> Theoretical lectures Determining generations tree Read the X-ray images Making short professional project on an individual problem				
<b>13.</b>	<b>Total available time</b>	<b>180</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>3+2+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>45 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>30 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>15 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>75 hours</b>	
<b>17.</b>	<b>Course methodology</b>				
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>
	<b>17.2.</b>	<b>Seminar (paper/project - presentation: written and/or oral)</b>			<b>10 points</b>
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>		<b>5 (five) (F)</b>	
		<b>51 to 60 points</b>		<b>6 (six) (E)</b>	
		<b>61 to 70 points</b>		<b>7 (seven) (D)</b>	

		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Signature and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation	

22.	<b>Literature</b>				
	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
22.1.	1.	Ziteli B.Dz, Dejvis H.V	Atlas of Pediatric Physical diagnosis.	Tabernakul	2011
	2.	Mardeshik D. and co.	Pediatrics 6th edition	Skolska kniga, Zagreb	2003
	3.	Peova S., Zizovska E.	For your baby with love	P&G ISBN 9989-2257-1-0	2004
	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
22.2.	1.	Kiproska Nikanda	Advice for pregnant women, recommendations for successful breastfeeding.	UNICEF	1999
	2.	Working group	Course for successful breastfeeding	UNICEF	1991
	3.	Internet based resources	<a href="http://www.who.int">www.who.int</a> <a href="http://www.unicef.org">www.unicef.org</a>		

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Otorhinolaryngology with care			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Sixth semester	7.	Number of credits	5
8.	Lecturer/Instructor(s)	Prof. Marina Davcheva Chakar			
9.	Required prerequisite courses				
10.	Course objectives (competences)	Introduction to the basics of otorhinolaryngology			
11.	Course content:	<p>Introduction, basic terms in ORL  Physiology of hearing and hearing devices  Congenital deafness.  Paralysis.  Ear infections.  Para nasal sinuses - symptoms, diagnosis and treatment of diseases  Benign and malignant diseases of the salivary glands.  Carcinoma of the oral cavity and pharynx  Diseases of the larynx and vocal cords  Carcinoma of the larynx  Injuries of the upper respiratory tract</p>			
12.	Course methodology:	Lectures, laboratory exercises, e-learning, seminar paper, teamwork, consultation.			
13.	Total available time	150			
14.	Distribution of available time	2+2+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	30 hours	
		15.2.	Exercises(laboratory,theoretical), Seminar project, teamwork	30 hours	
16.	Other forms of activities	16.1.	Project tasks	15 hours	
		16.2.	Individual tasks	15 hours	
		16.3.	Home learning	60 hours	
17.	Course methodology				
	17.1.	Tests	70 points		
	17.2.	Seminar (paper/project - presentation: written and/or oral)	10 points		
	17.3.	Activity and participation	20 points		

<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Kosanovik M.</b>	<b>Otorhinolaryngology</b>		
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>				

Anex No.3		Course programme			
1.	Subject title	Physical medicine with rehabilitation			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study programme (faculty/ institute, department)	Faculty of Medical Sciences, Physical Medicine and kinesytherapy University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Sixth semester	7.	Number of ECTS credits	4
8.	Lecturer/Instructor	Sen. Lect. Lenche Nikolovska, MA			
9.	Required prerequisite courses	/			
10.	<b>Course objectives (competences)</b> <u>Theoretical instruction:</u> To become familiar with the theoretical part of physiotherapy and rehabilitation and their application. <u>Practical instruction:</u> To become familiar with all types of physical therapy, their physiological and therapeutic effects.				
11.	<b>Course content</b> Basic principles and mechanisms of physiotherapy Physiotherapeutic Programme; PT. and rehabilitation of rheumatic diseases; PT. and rehabilitation in degenerative diseases PT. and rehabilitation, orthopedic diseases PT. and rehabilitation of LMS injuries PT. and rehabilitation of neurological diseases; PT. and rehabilitation of internal diseases PT. and rehabilitation: distorsio, luxatio, fracturae PT. and rehabilitation: peripheral nervous system				
12.	<b>Course methodology:</b> Interactive teaching lectures and tutorials, practical exercises, workshops, group discussions and individual tasks				
13.	Total available time	120			
14.	Distribution of available time	2+1+1			
15.	Forms of instruction	15.1.	Lectures - Theory	30 hours	
		15.2.	Exercises, seminar project, teamwork	15 hours	
16.	Other forms of activities	16.1.	Project work	15 hours	
		16.2.	Individual work	15 hours	
		16.3.	Homework	45 hours	
17.	<b>Course methodology</b>				
	17.1.	Tests			70 points
	17.2.	Seminar paper / project (presentation: written and oral)			10 points
	17.3.	Activity and participation			20 points
18.	Grading system	Up to 50 points	5 (five) (F)		

		51 - 60	6 (six) (E)
		61 - 70	7 (seven) (D)
		71 - 80	8 (eight) (C)
		81 - 90	9 (nine) (B)
		91 - 100	10 (ten) (A)
19.	Signature and final exam prerequisites	60% achievement on all pre-exam activities	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation	

22.	<b>Literature</b>				
	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
22.1.	1.	Nikolovska L., Stratorska T.	Physical Medicine and Rehabilitation	(Internal script) UGD - Stip	2009
	2.				
	3.				
	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
22.2.	1.	Колева, В	Physical Therapy For Healthy Body	Sofija	2005
	2.	Reskova M., Koleva I.	Physical therapy (general and special part)	Sofija	2001
	3.	Koleva I.	Fundamentals of the physical therapy and rehabilitation	FM-Pleven	2011

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Emergency medicine with care</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Sixth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>5</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Jordan Nojkov</b>			
<b>9.</b>	<b>Required prerequisite courses</b>				
<b>10.</b>	<b>Course objectives (competences) To learn how to apply the learnt theoretical material in practice</b>				
<b>11.</b>	<b>Course content:</b> <b>1. Definition of emergency. Basic principles of treatment.</b> <b>2. Shock (hemorrhagic, traumatic,, cardiac, septic, anaphylactic)</b> <b>3. Emergencies in cardiology (acute heart failure, rhythm disorders, coronary syndrome, acute myocardial infarction)</b> <b>4. Emergencies in pulmology (acute respiratory failure, asthmatic status, pneumothorax, pulmonary embolism)</b> <b>5. Emergencies in GEH ("upper" and "lower" digestive bleeding, mesenteric thrombosis, pancreatitis, acute hepatic insufficiency)</b> <b>6. Emergencies in nephrology (acute renal insufficiency uremic syndrome, renal colic, hypertensive crisis)</b> <b>7. Emergencies in endocrinology (diabetic ketoacidosis, hypo and hyperglycaemic coma, thyrotoxic crisis)</b> <b>8. Toxicology (intoxications with drugs, pesticides, corrosive substances, ideological poisons, mushrooms. Basic principles of treatment and antidotes)</b> <b>9. Emergency situations in neurology (cerebrovascular stroke, status epilepticus, myasthenic crisis, headache)</b> <b>10. Emergency situations in psychiatry (depression, psychomotor agitation, psychotic conditions, forced hospitalization)</b> <b>11. Emergency situations in gynecology (bleeding in the first three months of pregnancy, placenta previa, abruptio placentae, ruptura uteri, etc..)</b> <b>12. Emergency situations in paediatrics (convulsive syndrome, acute dehydration, neonatal asphyxia, premature newborn care)</b>				
<b>12.</b>	<b>Course methodology: Lectures, seminar project</b>				
<b>13.</b>	<b>Total available time</b>	<b>150</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+2+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar project, teamwork</b>	<b>30 hours</b>	



16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	60 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system		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 and final exam prerequisites	60% achievement on all pre-exam activities		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self-evaluation		

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Jukic M et al.	Intensive Care	Medicinska naklada, Zagreb	2008
	2.	Gjoric L et al.	Emergencies in Internal Medicine	Grafostig, Belgrad	1991
	3.	Bay Lorens	Diagnosis and treatment in surgery		
22.2.	Supplementary literature				
	No.	Author	Title	Publisher	Year
	1.	Marx J et al.	Rosen's Emergency Medicine	MOSBY, Elsevier	2011
	2.	Soljakova et al.	Anesthesiology with Reanimation (shock)	Cultura, Skopje	2006

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Nutrition and Dietetics</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study Programme(unit or institute, Faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Fourth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>	
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Prof. Nako Tashkov, PhD</b>				
<b>9.</b>	<b>Required prerequisite courses</b>	<b>/</b>				
<b>10.</b>	<b>Course objectives (competences) To become familiar with different methods and strategies connected with diet.</b>					
<b>11.</b>	<b>Course content:</b> 1. Basic ingredients 2. Factors that affect diet 3. Management of daily meals 4. Energetical metabolism 5. Food digestibility 6. Diet quality 7. Food quality 8. Food losses that can not be reused 9. Thermal processing of food 10. Diet according to age and physical activity 11. Nutrition as prevention 12. Cooked food qualities, features and organoleptic characteristics					
<b>12.</b>	<b>Course methodology:</b> Interactive lectures, individual and group work, Power Point presentations, project work, individual assignments, home learning, seminar projects					
<b>13.</b>	<b>Total available time</b>	<b>60</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>	<b>0 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar paper/project (presentation: written and/or oral)</b>			<b>10 points</b>	

	<b>17.3.</b>	<b>Activity and participation</b>	<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>60% achievement on all pre-exam activities</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22.</b>	<b>Literature</b>				
<b>22.1.</b>	<b>Required literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Tashkov N.</b>	<b>Nutrition and dietetics "</b> <b>internal script</b>		
	<b>2.</b>				
<b>3.</b>					
<b>22.2.</b>	<b>Supplementary literature</b>				
	<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
	<b>1.</b>	<b>Garrow S. J., Ralph A., William Philip Trehearne James,</b>	<b>„Human Nutrition and Dietet“</b>	<b>Elsevier</b>	<b>2000</b>
	<b>2.</b>	<b>Rosic M., Rosic G., Angelkovic I.,</b>	<b>Nutrition Principles and recreation</b>	<b>Singidunum University, Belgrade</b>	<b>2009</b>
<b>3.</b>					

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Sociology of health and disease			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study Programme(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth semester	7.	Number of credits	2
8.	Lecturer/Instructor(s)	Prof. Vlado Petrovski, Ph.D			
9.	Required prerequisite courses	/			
10.	<b>Course objectives (competences)</b> Students to gain knowledge of basic sociology of health and illness; to be introduced to health and disease as a subject of the sociology of medicine; To gain knowledge about mental health and mental illness; Students will learn about the relationship between the patient-doctor; To gain knowledge of alternative medicine.				
11.	<b>Course content:</b> Sociology of Health and Disease, objectives and development The relationship between the sociology of health and illness and other related sciences; Origin and development of the sociology of health and disease; Basic content and categories of sociology of health and illness; Concepts of disease; Mental health and mental disease; Doctor-patient relationship; Professions and professionalization of medical practice; Alternative Medicine;				
12.	<b>Course methodology:</b> Lectures, exercises, debates, discussions, essays, consultation, individual and group work, seminar paper and presentations				
13.	Total available time	60			
14.	Distribution of available time	1+1+1			
15.	Forms of instruction	15.1.	lectures - theoretical teaching	15 hours	
		15.2.	Exercises(laboratory,theoretical), Seminar, teamwork	15 hours	
16.	Other forms of activities	16.1.	Project tasks	15 hours	
		16.2.	Individual tasks	5 hours	
		16.3.	Home learning	10 hours	
17.	Course methodology				

	17.1.	Tests	70 points
	17.2.	Seminar paper/project (presentation: written and/or oral)	10 points
	17.3.	Activity and participation	20 points
18.	Grading system	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 and final exam prerequisites	60% success from all pre-exam activities or 42 points from the mid-term tests and the seminar paper as well as attendance and participation in class	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation	

22	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Kostovski S., Sarkanyac B.	Sociology of medicine	Skopje	1999
		2.	Tasheva M.	Sociology	Faculty of Philosophy - Skopje	2003
		3.	Petrovski V.	Sociology	Faculty of Pedagogy - Stip	2006
		4.				
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.	Markovik D.	General Sociology	Nis	2011
		2.				

Annex No.3		Course Programme - first cycle studies			
1.	Course title	Intrahospital infections			
2.	Code				
3.	Study Programme	Medical nurses / Medical Technicians			
4.	Organizer of the study programme(unit or institute, faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Level of studies (first, second, third cycle)	First cycle			
6.	Academic year / semester	Fourth semester	7.	Number of credits	2
8.	Lecturer/Instructor	Prof. Milka Zdravkovska, Ph.D			
9.	Required prerequisite courses	None			
10.	<b>Course objectives (competences)</b> The student to recognize the importance of intrahospital infections as a public health problem and to understand the importance of the control of intrahospital infections, to know how to define and recognize intrahospital infections and risk factors that influence or are the dominant; To acquire knowledge and skills for the control, suppression and prevention of intrahospital infections;				
11.	<b>Course content:</b> <b>Theoretical lectures :</b> 1. Definition and importance of intra-hospital infections 2. Need for epidemiological approach to control intra-hospital infections 3. Etiology of intra-hospital infections 4. Occurrence and pathways of transmission of intra-hospital infections 5. Separation of intra-hospital infections 6. Disinfection and Sterilization 7. Medical waste and intrahospital infections 8. Prevention of intrahospital infections 9. Types of epidemiological observation and control of intra-hospital infections 10. Organizational structure and regulation in the control of intra-hospital infections 11. The importance of teamwork and the interdisciplinary access control of intrahospital infections 12. Elements of control of intra-hospital infections <b>Skills for control of intra-hospital infections:</b> 1. Proper hand hygiene, control of hand hygiene of healthcare workers; 2. Proper disinfection of work surfaces and objects in the hospital environment; 3. Correctly taking a swabs from the nose, throat and wound 4. Proper processing / taking a material for microbiological diagnosis from patients with intrahospital infections. 5. Criticality in the determination and the taking of material for microbiological diagnosis 6. Properly packaging and transportation of the samples for microbiological diagnosis				

	<b>7. Procedures of emergence / isolation of MRSA</b> <b>8. Proper sampling of material for air control in the hospital environment (operating rooms, intensive care units)</b> <b>9. Group discussion - procedures and suggested measures for the suppression and control of IHI in certain situations.</b> <b>10. Working in small groups / teams - procedures and suggested measures for the suppression and control of IHI in certain situations (as examples for IHI)</b> <b>11. Filing of a unified application for each patient with IHI</b> <b>12. Determination of incidence and prevalence rates of IHI</b>				
<b>12.</b>	<b>Course methodology:</b> Lectures, methods of group discussions, individual assignments, seminar paper;				
<b>13.</b>	<b>Total available time</b>	<b>60</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>	<b>0 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>	
<b>17.</b>	<b>Course methodology</b>				
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>
	<b>17.2.</b>	<b>Seminar paper/project (presentation: written and/or oral)</b>			<b>10 points</b>
	<b>17.3.</b>	<b>Activity and participation</b>			<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>			<b>5 (five) (F)</b>
		<b>51 to 60 points</b>			<b>6 (six) (E)</b>
		<b>61 to 70 points</b>			<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>			<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>			<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>			<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>Attendance and scored at least 42 points from all pre-exam activities.</b>			
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>			
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>			

<b>22</b>	<b>Literature</b>					
	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>Zdravkovska M.</b>	<b>Authorized lectures</b>		
		<b>2.</b>	<b>K.. Popovska-Jovanovska</b>	<b>Nosocomial infections</b>	<b>Skopje</b>	<b>2003</b>
		<b>3.</b>	<b>C. Glen Mayhall</b>	<b>Hospital Epidemiology and Infection Control,</b>	<b>Philadelphia, USA</b>	<b>2004</b>

				<b>Third Edition,</b>		
		<b>4.</b>				
	<b>22.2.</b>	<b>Supplementary literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>				



<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>Healthcare Management</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study programme(unit or institute, faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Fifth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>	
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Prof. Tajko Micevski</b>				
<b>9.</b>	<b>Required prerequisite courses</b>					
<b>10.</b>	<b>Course objectives (competences)</b> Students become familiar with the basics of health economics and practical application of acquired knowledge in the practice further.					
<b>11.</b>	<b>Course content:</b> <b>Theoretical lectures:</b> <ul style="list-style-type: none"> <li>• Introduction to health economics</li> <li>• Costs in Healthcare</li> <li>• Claims of health care markets</li> <li>• Economic Research</li> <li>• Distribution of medicines</li> <li>• Promotion of drugs</li> <li>• Creating a positive list of medicines</li> <li>• Management of public health facilities</li> <li>• Management of private healthcare facilities</li> <li>• Funding of the Ministry of Health and Health Care</li> <li>• Health Fund</li> <li>• Economic efficiency of health care</li> </ul> <b><u>Practical instruction</u></b> Practical exercises in accordance with theoretical lectures					
<b>12.</b>	<b>Course methodology:</b>					
<b>13.</b>	<b>Total available time</b>	<b>60</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>	<b>0 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar paper/project (presentation: written and/or oral)</b>			<b>10 points</b>	

	<b>17.3.</b>	<b>Activity and participation</b>	<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>Attendance and scored at least 42 points before the test activities.</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22</b>	<b>Literature</b>					
	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		<b>1.</b>	<b>Gladiolov, St., Evg. Delcheva S</b>	<b>Healthcare economics</b>	<b>"Princeps"</b>	
		<b>2.</b>	<b>Authorized lectures</b>			
		<b>3.</b>				
	<b>22.2.</b>	<b>Supplementary literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Nursing healthcare</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study programme(unit or institute, faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Fifth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>
<b>8.</b>	<b>Lecturer/Instructor(s)</b>	<b>Ass. Lecturer/Instructor Gordana Panova, PhD</b>			
<b>9.</b>	<b>Required prerequisite courses</b>	<b>None</b>			
<b>10.</b>	<b>Course objectives (competences)</b> The course contributes primarily to the development of the following general and specific competences: Understanding the role of the nurse not only as the performance of duty but rather mandatory input of love and compassion in working with patients. The protection of health is an issue for any society, even today. Health protection should include prevention, to prevent diseases. You need to prevent what could increase health culture ie how to protect health. If the person does not accept our advice, it takes nothing into account such as obligations set by the nurse, then there is nothing from prevention. The prevention depends on the awareness, knowledge, health culture of the population.				
<b>11.</b>	<b>Course content:</b> Introduction to the content and importance of the subject Nursing health care. Polyvalent and monovalent health care. Plan and Programme of work. Protection of women in prenatal, postnatal period; Protection of infant, young child; Protecting the pre-school, school and youth; Protection of workers, protection of retiree; Prevention of contagious and venereal Diseases; Protection of physical damage to the person; Protecting disease addiction; Rendering of house care patients; Protection of chronic diseases and non-communicable diseases; Gerontology prophylaxis; Visits by the nurse are a manner or technique of work to fulfill their tasks. A method is the way in which the nurse will perform its duties. The basic method of work of the nurse is an interview and group discussions can and usually work in small groups. The method can be used on field work.				
<b>12.</b>	<b>Course methodology: Lecture, exercises, consultations,</b>				
<b>13.</b>	<b>Total available time</b>	<b>60</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	

		15.2.	Exercises(laboratory,theoretical), Seminar, teamwork	0 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	5 hours
		16.3.	Home learning	10 hours
17.	Course methodology			
	17.1.	Tests		70 points
	17.2.	Seminar paper/project (presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Grading system	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 and final exam prerequisites	Attendance and scored at least 42 points from all pre-exam activities.		
20.	Language of instruction	Macedonian		
21.	Course evaluation	Self-evaluation		

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Panova G.	Nursing healthcare	UGD-Stip	2010
		2.	Likar D.	General and special care of sick;	Prosvetno delo, Skopje	2000
	3.	P. Barhash. A.	Care of sick and medical equipment;	Tabenakul, Skopje	2010	
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.	Fuchkar G.	Process of nursing health care; Medical School-Zagreb	Medical School-Zagreb	2007
		2.	Krstik A.	New contents of nursing work;	Faculty of Medicine, Beograd	2005
3.			Preventive health care	Tabernakul, Skopje	2011	

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>				
<b>1.</b>	<b>Course title</b>	<b>First Medical Aid</b>				
<b>2.</b>	<b>Code</b>					
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>				
<b>4.</b>	<b>Organizer of the study programme(unit or institute, faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>				
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>				
<b>6.</b>	<b>Academic year / semester</b>	<b>Sixth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>	
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Prof. Dr. Jordan Nojkov</b>				
<b>9.</b>	<b>Required prerequisite courses</b>	<b>none</b>				
<b>10.</b>	<b>Course objectives (competences)</b> Acquireing skills to save the life of wounded, and prevent further injury and complications, perform triage and provide first aid in mass disasters, learning of skills of cardio pulmonary and brain resuscitation.					
<b>11.</b>	<b>Course content:</b> 1.Introduction in cardiac pulmonary and brain resuscitation 2. Acute respiratory failure 3. Acute cessation of the heart (CA) 4. Basic life support 5. Advanced life support 6. Extended life support 7. First aid and poly-trauma fracture 8. First aid for bleeding 9. First aid for burns, strike from the electricity 10. First aid for frostbite, drowning 11. First aid for impairment from acid 12. First aid and triage in massive disasters					
<b>12.</b>	<b>Course methodology:</b>					
<b>13.</b>	<b>Total available time</b>	<b>60</b>				
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>				
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>		
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>	<b>0 hours</b>		
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>		
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>		
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>		
<b>17.</b>	<b>Course methodology</b>					
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>	
	<b>17.2.</b>	<b>Seminar paper/project (presentation: written and/or oral)</b>			<b>10 points</b>	

	<b>17.3.</b>	<b>Activity and participation</b>	<b>20 points</b>
<b>18.</b>	<b>Grading system</b>	<b>up to 50 points</b>	<b>5 (five) (F)</b>
		<b>51 to 60 points</b>	<b>6 (six) (E)</b>
		<b>61 to 70 points</b>	<b>7 (seven) (D)</b>
		<b>71 to 80 points</b>	<b>8 (eight) (C)</b>
		<b>81 to 90 points</b>	<b>9 (nine) (B)</b>
		<b>91 to 100 points</b>	<b>10 (ten) (A)</b>
<b>19.</b>	<b>Signature and final exam prerequisites</b>	<b>Attendance and scored at least 42 points before the test activities.</b>	
<b>20.</b>	<b>Language of instruction</b>	<b>Macedonian</b>	
<b>21.</b>	<b>Course evaluation</b>	<b>Self-evaluation</b>	

<b>22</b>	<b>Literature</b>					
	<b>22.1.</b>	<b>Required literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		1.	Nojkov, J. faculty	Authorized lectures	Medical Sciences - UGD	
		2.	Mary Shosholcheva	Cardiac Pulmonary Brain Resuscitation	Department of anesthesiology-resuscitation, Faculty of Medicine, Skopje	
		3.				
	<b>22.2.</b>	<b>Supplementary literature</b>				
		<b>No.</b>	<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>
		1.				

<b>Annex No.3</b>		<b>Course Programme - first cycle studies</b>			
<b>1.</b>	<b>Course title</b>	<b>Sexually Transmitted Diseases</b>			
<b>2.</b>	<b>Code</b>				
<b>3.</b>	<b>Study Programme</b>	<b>Medical nurses / Medical Technicians</b>			
<b>4.</b>	<b>Organizer of the study programme(unit or institute, faculty, department)</b>	<b>Faculty of Medical Sciences University Goce Delcev</b>			
<b>5.</b>	<b>Level of studies (first, second, third cycle)</b>	<b>First cycle</b>			
<b>6.</b>	<b>Academic year / semester</b>	<b>Sixth semester</b>	<b>7.</b>	<b>Number of credits</b>	<b>2</b>
<b>8.</b>	<b>Lecturer/Instructor</b>	<b>Assoc. prof. Dr. Velo Markovski, PhD</b>			
<b>9.</b>	<b>Required prerequisite courses</b>	<b>none</b>			
<b>10.</b>	<b>Course objectives (competences) Etiology, epidemiology and significance for human pathology, social psychological and economic effects of sexually transmitted diseases, the prevention of sexually transmitted diseases, diagnosis and treatment</b>				
<b>11.</b>	<b>Course content:</b> <b>1. Meaning of sexually transmitted diseases, identification, protection, diagnosis and treatment</b> <b>2. Urinary infections</b> <b>3. Genital and anorectal infections</b> <b>4. HPV infections</b> <b>5. HIV</b> <b>6. Hepatitis B</b> <b>7. Herpes virus infections</b> <b>8. Syphilis</b> <b>9. Gonorrhoea</b> <b>10. Ureaplasmas and chlamydia</b> <b>11. Genital warts</b> <b>12. Fungal and parasitic infections of genital</b>				
<b>12.</b>	<b>Course methodology: theoretical method and method of practical work</b>				
<b>13.</b>	<b>Total available time</b>	<b>60</b>			
<b>14.</b>	<b>Distribution of available time</b>	<b>2+0+1</b>			
<b>15.</b>	<b>Forms of instruction</b>	<b>15.1.</b>	<b>lectures - theoretical teaching</b>	<b>30 hours</b>	
		<b>15.2.</b>	<b>Exercises(laboratory,theoretical), Seminar, teamwork</b>	<b>0 hours</b>	
<b>16.</b>	<b>Other forms of activities</b>	<b>16.1.</b>	<b>Project tasks</b>	<b>15 hours</b>	
		<b>16.2.</b>	<b>Individual tasks</b>	<b>5 hours</b>	
		<b>16.3.</b>	<b>Home learning</b>	<b>10 hours</b>	
<b>17.</b>	<b>Course methodology</b>				
	<b>17.1.</b>	<b>Tests</b>			<b>70 points</b>
	<b>17.2.</b>	<b>Seminar paper/project (presentation: written</b>			<b>10 points</b>

		and/or oral)	
	17.3.	Activity and participation	20 points
18.	Grading system	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 and final exam prerequisites	Attendance and scored at least 42 points before the test activities.	
20.	Language of instruction	Macedonian	
21.	Course evaluation	Self-evaluation	

	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
	1.	Markovski V.	Authorised lectures	UGD		
	22.2.	Supplementary literature				
		No.	Author	Title	Publisher	Year
		1.				