

Study Program: Dental technicians – prosthodontists

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

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

Code	SECOND YEAR – 3 rd SEMESTER			
	COURSE	Credits	Hours	Overall workload
	Medical ethics	4	2+1+1	120
3MF154012	Anatomy of jaws and dental morphology	6	2+4+1	180
3MF150412	Introduction in dental prosthodontics	5	2+2+1	150
3MF151712	Appliances and instruments in dental laboratory	6	3+2+1	180
3MF154212	Oral health	4	2+1+1	120
3MF154112	Dental materials	5	2+2+1	150

Code	SECOND YEAR – 4 th SEMESTER			
	COURSE	Credits	Hours	Overall workload
3MF150512	Mobile prosthodontics total denture 1	7	2+4+1	210
3MF150612	Mobile prosthodontics - partial denture 1	7	2+4+1	210
3MF151212	Fixed prosthodontics 1	5	1+4+1	150
3MF150112	Orthopedics of teeth and jaws	5	2+2+1	150
3MF162312	Oral pathology and periodontology	4	2+1+1	120
	Elective course	2	1+1+1	60

Code	THIRD YEAR – 5 th SEMESTER			
	COURSE	Credits	Hours	Overall workload
3MF149912	Gnathology	5	2+2+1	150
3MF150712	Mobile prosthodontics total denture 2	6	1+4+1	180
3MF150812	Mobile prosthodontics - partial denture 2	7	1+5+1	210
3MF151312	Fixed prosthodontics 2	7	1+5+1	210
3MF150312	Esthetic dentistry	3	2+1+1	90
	Elective course	2	1+1+1	60

Code	THIRD YEAR – 6 th SEMESTER			
	COURSE	Credits	Hours	Overall workload
3MF157512	Skeleton denture	6	2+4+1	180
3MF157612	Craniofacial prostodontics	3	2+1+1	90
3MF154912	Dental Implantology	3	2+1+1	90
3MF151612	Dental ceramics	4	2+5+1	120
3MF157512	Oral surgery	4	2+1+1	120
	Final exam	8		240
	Elective course	2	2+0+1	60

LIST OF ELECTIVE COURSES

Code	SECOND YEAR – 4 th SEMESTER			
	COURSE	Credits	Hours	Overall workload
3MF160512	Dental health in community	2	1+1+1	60
3MF155512	Management in dentistry	2	1+1+1	60
3MF157712	Maxillofacial surgery	2	1+1+1	60

Code	THIRD YEAR – 5 th SEMESTER			
	COURSE	Credits	Hours	Overall workload
3MF161712	Oral hygiene	2	1+1+1	60
3MF108412	Restorative dentistry	2	1+1+1	60
3MF123112	Sociology of health and illness	2	1+1+1	60

Code	THIRD YEAR – 6 th SEMESTER			
	COURSE	Credits	Hours	Overall workload
3MF162212	Dental therapy	2	2+0+1	60
3MF162412	Paediatric dentistry	2	2+0+1	60
3MF155012	Emergency in dentistry	2	2+0+1	60

III Annex 3

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Anatomy			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Cycle (first, second and third cycle)	Faculty of Medical Sciences University "Goce Delchev" Stip			
5.	Organizer of the study program (unit or institute, Faculty, department)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	7
8.	Professor	Ass. professor Svetlana Jovevska, PhD			
9.	Requirements for enrollment the Course				
10.	Purposes of the curriculum (competencies): Objectives of the curriculum (competencies): Introduction to anatomy as morphological science, master of professional terminology, complete study of the locomotion system. Introduction to the anatomy of the thorax, abdomen and pelvis, and skeletotopical and holotopical relations of these organs in body cavities				
11.	Content of the course program: <u>Theoretical content:</u> 1. Introduction to anatomy and osteology, types of bones, bone components, technical terminology, bones of real and movable part of the upper limb bones of real and movable part of the lower limb bones of the thorax and the body 2. Introduction to <i>Syndesmology</i> , clue about joint, components of the joint, types of joints, <i>syndesmology</i> of the upper extremities, <i>syndesmology</i> of body and down extremities. 3. Myology, angiology and neurology of the upper extremities, myology, angiologu and neurology of the the lower extremities 4. Orientation of bone fracture, scapula, upper arm, forearm bones (radius and ulna) and parts of the thorax, breast structure, the system of organs for breathing, organs of the system for circulation. 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. Arteries of the head and the neck, veins and lymph vessels in the head and the neck 8. Cranial nerves-number of the nomenclature, correlations, cranial nerves - innervated areas 9. Organs of the head and neck-topography relations, endocrine glands 10. Organs of the digestive system in the head and neck organs of the respiratory system in the head and the neck 11. Sensory organ, eye and ear, nervous system, structure, types of nerve fibers division of the nervous system, ventricular system				

	<p>12th Spinal cord, medulla oblongata, cerebellum, midbrain, cerebrum, membranes of the brain</p> <p><u>Practical content:</u></p> <p>1.Orientation of bones: the clavicle, the scapula, the humerus, the forearm bones (the radius and the ulna); Hand skeleton: carpals, metacarpals and phalanges; the chest and the vertebral column; Skeleton of the pelvic girdle - coxae, sacrum and coccyx; Skeleton of the femur, the tibia, the fibula and the patella.</p> <p>2. Foot skeleton –tarsals, metatarsals and phalanges; Joints of the upper extremities, the chest and the 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 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, relations with other organs, vascularization and innervation; Female genital organs -orientation, relations with other organs; Male genital organs - orientation, relations with other organs</p> <p>9. Vascularization of the head and neck; 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, anatomy of orbit; Ear - anatomy, relations with 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.	<p>Learning methods:</p> <p>Interactive teaching, individual consultations with students</p>			
13.	Total available time		210	
14.	Distribution of available time		3+3+1	
15.	Forms of teaching / learning activities	15.1	Lectures / theoretical - contact teaching, e-teaching	45 hours
		15.2	theoretical and practical exercises, e-exams, preparation of independent seminar work	45 hours
16.	Other activities	16.1	Project tasks	15 hours

		16.2	Individual tasks	15 hours
		16.3	Home learning	90 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria(points /score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of instruction and won at least 42 points from preexame activities	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Selfevaluation	

22.	Literature					
22.1.		Required literature				
		No.	Author	Title	Publisher	Year
		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		
22.2.		Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Sinelnikov	AnatomicalAtlas ofman(I, II, IIIpart)	Springer	2008
		2.	F.N. Netter	Atlas of human anatomy	Springer	2011

		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Introduction to human genetics			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program (unit or institute, Faculty, department)	Faculty of Medical Sciences University "Goce Delchev" 'Stip			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	5
8.	Professor (s)	Prof. Darko Bosnakovski, PhD			
9.	Requirements for enrollment the Course	No requirements			
10.	Purposes of the curriculum (competencies): Introduction to basic scientific knowledge of cell biology and genetics.				
11.	Content of the course program: The content of the curriculum: 1. Morphology and physiology of the cell. 2. DNA, iRNK, rRNK, tRNA, 3. Transcription, translation, replication of the 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.	Learning methods: Lectures,exercises,seminars research and practical activities				
13.	Total available time	150			
14.	Distribution of available time	2+2+1			
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching		30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work		30 hours
16.	Other activities	16.1.	Project tasks		15 hours
		16.2.	Individual tasks		15 hours

		16.3.	Home learning	60 hours	
17.	Method of assessment				
	17.1.	Tests / oral exams		70 points	
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points	
	17.3.	Activity and participation		20 points	
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)	
51 to 60 points			6 (six) (E)		
61 to 70 points			7 (seven) (D)		
71 to 80 points			8 (eight) (C)		
81 to 90 points			9 (nine) (B)		
91 to 100 points			10 (ten) (A)		
19.	Signature requirement and passing the final exam		42 points acquired		
20.	Language of teaching / study		Macedonian		
21.	Method of monitoring the quality of teaching		Electronic self-evaluation		
22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Nada Miteva	General biology (cytology, genetics, embryology)	UKIM	2000
	2.	Marija Kaeva Pejkovska	Medical genetics	UGD	2008
	3.				
22.2.	Additional literature				
	No.	Author	Title	Publisher	Year
	1.	Essentials of Genetics	Klug, Cummings and Spencer	Benjamin Cummings	2012

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Histology and embryology			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Cycle (first, second and third cycle)	Faculty of Medical Sciences University "Goce Delchev" Stip			
5.	Organizer of the study program (unit or institute, Faculty, department)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	6
8.	Professor	Ass. professor Nevenka Velickova, PhD			
9.	Requirements for enrollment the Course	No requirements			
10.	Purposes of the curriculum (competencies): Introducing the histological structure, structure and function of all types of tissues, organs and organ systems in man.				
11.	Content of the course program: <u>Theoretical lectures</u> 1. Epithelial tissues 2. Conective tissue 3. Muscle tissue 4. Nervous tissue 5. Gastrointestinal system 6. RES 7. Respiratory system. urogenital system 8. Nervous system. Endocrine system 9. Spermatogenesis and oogenesis 10. Embryonic development 11. Organogenesis 12. Placentation <u>Practical activities</u> 1. Making permanent histological preparations 2. Epithelial tissues 3. Conective tissue 4. Muscle tissue 5. Nervous tissue 6. Gastrointestinal system 7. Glands in the gastrointestinal system 8. RES 9. Respiratory system. urogenital system 10. Nervous system. Endocrine system 11. Spermatogenesis and oogeneza 12. Placenta. embryonic leaves				
12.	Learning methods: Lectures, tutorials, seminars, research and practical activities				
13.	Total available time	180			
14.	Distribution of available time	2+3+1			
15.	Forms of teaching / learning activities	15.1	Lectures / theoretical - contact teaching.		30 hours

			e-teaching	
		15.2	theoretical and practical exercises, e-exams, preparation of independent seminar work	45 hours
16.	Other activities	16.1	Project tasks	15 hours
		16.2	Individual tasks	20 hours
		16.3	Home learning	70 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria(points /score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of instruction and scored at least 42 points from all pre-exam activities.	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Selfevaluation	

22.	Literature				
	22.1.	Required literature			
		No.	Author	Title	Publisher Year
		1.	Luis Carlos Zhunkveira Jose Carneiro	Basic histology	
		2.	Nada Mitewa	Histology and Embryology	
		3.	Nevena Kostovska Ljiljana Milenkova	Histology and Embryology	
	22.2.	Additional literature			
		No.	Author	Title	Publisher Year
		1.			

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Communication skills			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Cycle (first, second and third cycle)	Faculty of Medical Sciences University "Goce Delchev" Stip			
5.	Organizer of the study program (unit or institute, Faculty, department)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	6
8.	Professor	Ass. professor Gordana Panova, PhD			
9.	Requirements for enrollment the Course				
10.	Purposes of the curriculum (competencies): Students become familiar with the nature, structure, characteristics, principles of the communication. Learning of communication skills through training and exercises.				
11.	Content of the course program: 1. Introduction to communication skills 2. Skills of asking questions 3. Listening skills 4. Nonverbal behavior 5. Skills answering 6. Sharing of information models and methods 7. Skills for link building health worker-patient 8. Counseling skills 9. Skills of persuasion 10. Dissuasiveness of people for no reason take care of their health, Working with older people 11. Talk with parents 12. Communication of prognosis, hope and risk				
12.	Learning methods:				
13.	Total available time	180			
14.	Distribution of available time	2+3+1			
15.	Forms of teaching / learning activities	15.1	Lectures / theoretical - contact teaching, e-teaching		30 hours
		15.2	theoretical and practical exercises, e-exams, preparation of independent seminar work		45 hours
16.	Other activities	16.1	Project tasks		15 hours
		16.2	Individual tasks		20 hours

		16.3	Home learning	70 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria(points /score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of instruction and won at least 42 points from preexame activities	
20.	Language of teaching / study		Macedonian language	
21.	Method of monitoring the quality of teaching		Selfevaluation	

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	KR Seturaman	Communicational skill in clinical practice	Tabernakul	2010
		2.	Mandiñ, T	Communicology: Communication Psychology	Klio, Beograd	2003
		3.				
	22.2.	Additional 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

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	CLINICAL PSYCHOLOGY			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	2
8.	Professor (s)	Prof. Lence Mlloseva, Ph.D			
9.	Requirements for enrollment the Course				
10.	Objectives of the curriculum (competencies): <ul style="list-style-type: none">• To become familiar with basic concepts and tasks of clinical psychology and health psychology and their applicability in medical settings.• To gain knowledge and understanding of the concepts, structure, psychological processes and personality changes through different developmental periods.• Introduction to basic principles of psychological approach, preparation and implementation of psychological interventions with patients and/or inpatients; knowledge and understanding of human behavior in medical settings, the person’s reactions to illness.• To become familiar with biopsychosocial model of health, psychological aspects of somatic diseases, and some of the most common mental disorders; assessment of different approaches to diagnosis and treatment and understanding of the link of these different approaches to their potential impact on patients.• To gain knowledge and methods for maintaining an promoting mental health and well being .• To develop communication skills (doctor/patient).				
11.	The content of the curriculum: <u>General part</u> <ul style="list-style-type: none">• Introduction to Medical Psychology as a science (Clinical and Health psychology in medical settings).Biopsychosocial model of health and illness.• Human development. Child and adolescent psychology. Psychology of adulthood and aging.• Psychology of patients (Psychological aspects of hospitalization . Child as a patient. Adult as a patient. Geriatric patients. Psychological preparation for medical examinations and surgery interventions; intensive care).• Psychology of pain (Psychological aspects of pain and methods of coping).• Communication in medical settings. <u>Special part</u> <ul style="list-style-type: none">• Stress and coping.• Mental health and mental disorders.• Psychoneuroimmunology, AIDS and cancer; Psycho-oncology; Psychological aspects of chronic and terminal illness.				

	<ul style="list-style-type: none">• Psychosomatic illness; Psychological aspects of cardiovascular disease; brain injury; Brain stroke ; Psychological aspects in prevention of somatic illness; Psychological aspects of pregnancy.• Death and dying.• Positive health psychology.• Health promotion. Family, health and illness.					
12.	Learning methods: Seminars, interactive method: group work, reports, homework, seminar papers, discussion, debate, cooperative studying techniques, individual tasks, simulation of extra-curricular educational activities, individual studying					
13.	Total available time			60		
14.	Distribution of available time			1+1+1		
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		15 hours	
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment					
	17.1.	Tests			70 points	
	17.2.	Seminars (paper/project - presentation: written and/or oral)			10 points	
	17.3.	Activity and participation			20 points	
18.	Assessment Criteria (points /score)		up 50 points		5 (five) (F)	
			51 to 60 points		6 (six) (E)	
			61 to 70 points		7 (seven) (D)	
			71 to 80 points		8 (eight) (C)	
			81 to 90 points		9 (nine) (B)	
			91 to 100 points		10 (ten) (A)	
19.	Signature requirement and passing the final exam		60% 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 teaching / study		Macedonian			
21.	Method of monitoring the quality of teaching		Self-evaluation			
22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		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.	Additional literature				
		No.	Author	Title	Publisher	Year
		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 Publishing	2004

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Foreign Language1 (English 1)			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	first semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dusko Aleksovski Prof. Biljana Ivanovska Prof. Tole Belčev Senior Lecturer MA Snezana Kirova			
9.	Requirements for enrollment the Course	Enrolled first year			
10.	Objectives of the curriculum (competencies): - Training for oral communication in everyday situations and expressing their own views and opinions; - Understanding speech from various speakers and longer oral testimony and information; - Identification of general and specific information in longer texts; - Training for written expression (compile, letters, reports and other forms of academic writing); - Enrichment of vocabulary; - Mastering the various grammatical forms and structures; - Ability to receptive and productive use of English in spoken and written context; - Ability to understand and correct application of grammatical forms and structures (Members, times, indirect speech, passive voice, conditional sentences, ie, sentences, modal verbs, infinitive / gerund, idiomatically expressions frazalni verbs, prepositions, zboroobrazuvanje, comparison of adjectives, and etc.				
11.	The content of the curriculum: - Grammar: Articles, many / innumerable names, current times, word-formation - adjectives, indirect speech, comparison of adjectives, adverbs; - Vocabulary: ways to communicate, express feelings and emotions, description of job skills, money types, types of houses, electrical appliances, furniture, description of physical appearance and character, lifestyles, frazalni verbs suggestions; - Reading: various texts with exercises (multi-choice questions, determining the exact position of the omitted sentences and passages in the text, connecting passages with subheadings); - Listening: speech of various speakers and longer oral statements and information sessions (multiple-choice questions, writing notes, adding sentences); - Speaking: comparing, making suggestions, expressing emotions, expressing opinions, agreeing / disagreeing, requesting and providing clarification, expressing wishes, regrets, making suggestions; - Writing: letters, reports, essays.				
12.	Learning methods: seminars, interactivemethod: group work, lectures, homework, papers, discussion, debate, cooperativelearningtechniques, individual tasks, simulation extra curricular educationalactivities, independent learning.				
13.	Total available time	120			
14.	Distribution of available time	0+0+4			
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		

		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	60% of the written examination success		
20.	Language of teaching / study	English		
21.	Method of monitoring the quality of teaching	Self-evaluation		

22.	Literature					
	22.1.	Required literature				
		Ред. број	Author	Title	Publisher	Year
		1.	Virginia Evans and Jenny Dooley	Upstream -Intermediate	Express Publishing	2002
		2.				
		3.				
	22.2.	Additional literature				
		Ред. број	Author	Title	Publisher	Year
		1.	Oxford Practice Grammar	John Eastwood	OUP	2009
		2.	Practical English Usage	Michael Swan	OUP	2005

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Foreign Language1 (Italian language 1)			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	first semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dusko Aleksovski Prof. Biljana Ivanovska Prof. Tole Belčev Senior Lecturer MA Snezana Kirova			
9.	Requirements for enrollment the Course	Enrolled first year			
10.	Objectives of the curriculum (competencies): Aim of the course is to get the student basic knowledge of the vocabulary of Italian language, which is necessary in everyday situations into contact with the Italian language. That students will be able to seek and impart information, to greet, to represent, to describe the environment in which they live, to describe the physical appearance of a person to talk about their habits and interests, to communicate by phone to order the restaurant, etc..).				
11.	The content of the curriculum: Introduction to basic vocabulary, practicing reading skills, listening, speaking and writing. Mastering the rules of reading and writing and basic grammatical categories (gender and number of nouns and adjectives, personal pronouns, numbers, present tense, and certain indefinite article, suggestions, stories of a place, etc..).				
12.	Learning methods: seminars, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extra curricular educational activities, independent learning.				
13.	Total available time	120			
14.	Distribution of available time	0+0+4			
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment: Interactive method, group work, lectures, homework, papers, discussion, debate,				

	cooperative learning techniques, individual tasks, simulation extracurricular educational activities, self-study, etc..		
	17.1.	Tests	70 hours
	17.2.	Seminars (paper/project - presentation: written and/or oral)	10 hours
	17.3.	Activity and participation	20 hours
18.	Assessment Criteria (points /score)	up 50 points	5 (five) (F)
		51 to 60 points	6 (six) (E)
		61 to 70 points	7 (seven) (D)
		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	60% success out before testing activities ie 42 points from two colloquia, seminar, attendance at lectures and tutorials	
20.	Language of teaching / study	Italian and Macedonian languages	
21.	Method of monitoring the quality of teaching	Self-evaluation and evaluation by students	

22	Literature				
	22.1.	Required literature			
		No.	Author	Title	Publisher Year
		1.	MARIN,T. & MAGNELLI,S.	Progetto italiano 1, nuovo (Libro dello studente)	Edilingua
		2.	MARIN,T. & MAGNELLI,S.	Progetto italiano 1, nuovo (Quaderno degli esercizi)	Edilingua
	22.2.	Additional literature			
		No.	Author	Title	Publisher Year
		1.			

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Foreign language 1 (German language 1)			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	first semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dusko Aleksovski Prof. Biljana Ivanovska Prof. Tole Belčev Senior Lecturer MA Snezana Kirova			
9.	Requirements for enrollment the Course	Enrolled first year			
10.	Objectives of the curriculum (competencies): Aim of the course is to get the student basic knowledge of the vocabulary of the german language, which is necessary in everyday situations into contact with german language				
11.	The content of the curriculum: Introduction to basic german vocabulary, practicing reading skills, listening, speaking and writing.				
12.	Learning methods: Seminars, interactivemethod: group work, lectures, homework, papers, discussion, debate, cooperativelearningtechniques, individual tasks, simulation extra curricular educationalactivities, independent learning.				
13.	Total available time	120			
14.	Distribution of available time	0+0+4			
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment: Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, self-study, etc..				
17.1.	Tests			70 points	
17.2.	Seminars (paper/project - presentation: written and/or oral)			10 points	

	17.3.	Activity and participation	20 points
18.	Assessment Criteria (points /score)	up 50 points	5 (five) (F)
		51 to 60 points	6 (six) (E)
		61 to 70 points	7 (seven) (D)
		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	60% success out before testing activities ie 42 points from two colloquia, seminar, attendance at lectures and tutorials	
20.	Language of teaching / study	German and macedonian languages	
21.	Method of monitoring the quality of teaching	Self-evaluation and evaluation by students	

22.	Literature				
	22.1.	Required literature			
		No.	Author	Title	Publisher Year
		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.	Additional literature			
		No.	Author	Title	Publisher Year
		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

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Foreign language 1 (French language 1)			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	first semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dusko Aleksovski Prof. Biljana Ivanovska Prof. Tole Belčev Senior Lecturer MA Snezana Kirova			
9.	Requirements for enrollment the Course	Enrolled first year			
10.	Objectives of the curriculum (competencies): Acquiring skills for oral and written comprehension and expression in given situations. Ability correct formulation of simple statements; Ability to convey in simple daily situations, knowledge of the most important characteristics of French civilization.				
11.	The content of the curriculum: <u>Grammar:</u> Mastering the basic rules of pronunciation (releasing vowels, phonetic bonding, adding consonants ...). Verb groups and their variations in the formation of present. And personal names, gender and number of nouns. Definite and indefinite article partitiven article uses the article, merging with suggestions. Personal pronouns, use of long proxy forms, binding of pronouns with suggestions. Gender and number of adjective, their place in relation to the noun. Descriptive, pointing, posvojni, prashalni, izvichni adjectives. Forgive and items. Ordered and conditional. Formation of negation. Types prashalni sentences. <u>Vocabulary:</u> Presentation of personalities, professions, hobbies, food, housing ... Culture and Civilization of France regions, holidays, cultural landmarks.				
12.	Learning methods: Seminars, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, independent learning.				
13.	Total available time	120			
14.	Distribution of available time	0+0+4			
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		
		15.2.	Exercises(laboratory,theoretical), seminars, teamwork		
16.	Other forms of	16.1.	Project tasks		60 hours

	activities	16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours
17.	Method of assessment: Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, self-study, etc..			
17.1.	Tests			70 points
17.2.	Seminars (paper/project - presentation: written and/or oral)			10 points
17.3.	Activity and participation			20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	60% success out before testing activities ie 42 points from two colloquia, seminar, attendance at lectures and tutorials		
20.	Language of teaching / study	French and macedonian languages		
21.	Method of monitoring the quality of teaching	Self-evaluation		

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		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.				
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	ATANASOV, POPOSKI, KALAJLIEVSKA	Francusko - makedonski rečnik	Prosvetno delo	1992
		2.	POPOSKI, ATANASOV	Makedonsko - francuski rečnik	Prosvetno delo	1992

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Foreign language 1 (Spanish Language 1)			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	first semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dusko Aleksovski Prof. Biljana Ivanovska Prof. Tole Belčev Senior Lecturer MA Snezana Kirova			
9.	Requirements for enrollment the Course	none			
10.	Objectives of the curriculum (competencies): Ability for oral and written expression and comprehension of simple situations of everyday life, the ability to transfer content to read simple language and style, the ability of students to give and seek information, to greet, to communicate by telephone, to discuss the topics of everyday life, to describe the environment in which they live, to talk about their habits and interests as well as determining the grammatical structures and contents etc..				
11.	The content of the curriculum: The basic features of the language. Rules for reading and writing. Master the basic grammatical content: specific and indefinite article, gender and number of nouns, descriptive adjectives, pointing, possessive, primes. Current and past tense. Types of sentences. Short dialogues from everyday life, seasons, writing short and simple compositions containing studied grammatical structures and terminology.				
12.	Learning methods: Seminars, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, independent learning.				
13.	Total available time	120			
14.	Distribution of available time	0+0+4			
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment:				

	Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, self-study, etc..		
	17.1.	Tests	70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)	10 points
	17.3.	Activity and participation	20 points
18.	Assessment Criteria (points /score)	up 50 points	5 (five) (F)
		51 to 60 points	6 (six) (E)
		61 to 70 points	7 (seven) (D)
		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	60% success out before testing activities ie 42 points from two colloquia, seminar, attendance at lectures and tutorials	
20.	Language of teaching / study	Spanish and Macedonian languages	
21.	Method of monitoring the quality of teaching	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”, Софрја	1998	
	2.	A. Jarvis, R. Lebrede, F. Mena-Ayllón	<i>“Basic Spanish Grammar”</i>	Houghton Mifflin Company - USA	2000	
	3.					
22.2.	Additional 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	

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Foreign language 1 (Russian languages 1)			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dusko Aleksovski Prof. Biljana Ivanovska Prof. Tole Belčev Senior Lecturer MA Snezana Kirova			
9.	Requirements for enrollment the Course	none			
10.	Objectives of the curriculum (competencies): The main objective of the course is to train students for practical governance Russian language characteristic of a basic level of proficiency in the Russian language, which will acquire the fund of Russian words - 700 - 1000 words, developed habits of perception of speech in the form of monologue and dialogue, developed habits of using oral-bit conversational speech, and developed habits of reading and writing.				
11.	The content of the curriculum: In basic training emphasis will be placed on mastering the Russian alphabet and grammatical categories in the Russian language: nouns, gender and number of nouns, personal pronouns, Possessive pronouns, Infinitivni structures with the words "possible" and "necessary" Pointing pronouns. The training will be used non-expert (household) subject to the cultural character: greetings, introducing, asking questions like "Who is this?" And "What is this?" Family, thank, "mine, mine, mine, mine" asking questions like "Who are you?" and "Who are you?".				
12.	Learning methods: Seminars, interactive method: group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, independent learning.				
13.	Total available time		120		
14.	Distribution of available time		0+0+4		
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment: Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, self-study, etc..			
17.1.	Tests			70 points
17.2.	Seminars (paper/project - presentation: written and/or oral)			10 points
17.3.	Activity and participation			20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	60% success out before testing activities ie 42 points from two colloquia, seminar, attendance at lectures and tutorials		
20.	Language of teaching / study	Macedonian and russian languages		
21.	Method of monitoring the quality of teaching	Self-evaluation		

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	L.V. Moskovkin	Russkiy yazyk – Uchebnik dlya inostrannykh studentov podgotovitel'nykh fakul'tetov	SMIO PRESS, St.Petersburg	2006
	2.				
	3.				
	Additional literature				
	No.	Author	Title	Publisher	Year
	1.				
	2.				

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Sport and recreation			
2.	Code	UGD102712			
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program (unit or institute, Faculty, department)	“Goce Delcev” University - Stip Faculty of Medical Sciences			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	First semester	7.	Number of credits	0
8.	Professor (s)	Associate Prof. Biljana Popeska, PhD			
9.	Requirements for enrollment the Course	Enrolled first year			
10.	Purposes of the curriculum (Competencies): Fulfillment of students’ needs for movement and physical activity. Maintenance and development of students’ motor abilities.				
11.	Content of the course program: 1.Basic physical preparation (introduction to fundamentals and basic principles of physical activity, exercise for strengthening of certain muscle groups) 2. Basic physical preparation (introduction to and application of different forms of warming, exercises for strengthening of certain muscle groups) 3. Aerobics, martial arts and artistic gymnastics (according to the structure of the group) 4. Outdoor activities - hiking and orientation 5. Basketball (practicing basic basketball elements - travelling, passing, dribbling, double dribbling) 6. Basketball (play) 7. Table tennis and badminton 8. Table tennis and badminton 9. Volleyball (play) 10. Handball (play) 11. Aerobics, martial arts, elementary games (according to the group structure) 12. Testing motor abilities, elementary games, modern and traditional dances				
12.	Learning methods: method of practical exercise, method of sport training				
13.	Total available time	30 hours			
14.	Distribution of available time	0+0+2/ per week			
15.	Forms of teaching / learning activities	15.1	lectures / theoretical - contact teaching, e-teaching	0	
		15.2	theoretical and practical exercises, e-exams, preparation of independent seminar work	20 hours	
16.	Other forms of activities	16.1	Project tasks	5 hours	

		16.2	Individual tasks	5 hours
		16.3	Home learning	
17.	Method of assessment /			
	17.1.	Tests / oral exams		0
	17.2.	Seminars (paper / project - presentation: written and/or oral)		0
	17.3.	Activity and participation		0
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7(seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		60% presence on the practical activities	
20.	Language of teaching / study		English	
21.	Method of monitoring the quality of teaching		Motor tests, observation, self-evaluation	

22	Literature					
·	22.1	Required literature				
		No	Author	Title	Publisher	Year
		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
	22.2	Additional literature				
		No	Author	Title	Publisher	Year
		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.

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Physiology			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	4
8.	Professor (s)	Assoc. Dr. Darko Boshnakovski, PhD			
9.	Requirements for enrollment the Course				
10.	Objectives of the curriculum (competencies): Introduction to the normal functioning of the human body and the basic mechanisms of normal functioning of individual organ systems. During the practical training the students their theoretical knowledge to check the performance of exercises and experiments in the laboratory and at the same you can see some reactions and mechanisms in in vitro conditions.				
11.	The content of the curriculum: <u>Theoretical instruction</u> 1. Introduction to Physiology-functional organization and general body cell organization 2. Bodily fluids and electrolytes, blood 3. Cardiovascular system 4. Nervous system 5. Muscle system 6. Respiratory system 7. Digestive system 8. Urinary system 9. Reproductive system 10. Endocrine system 11. Thermoregulation and metabolism 12. Sensory system <u>Practical instruction</u> 1. Basic elements and function of blood and the blood plasma 2. Neuro-muscular system, mioneural connection 3. Endocrine glands 4. Heart and automatically the heartbeat, factors that affect heart rate and its registration 5. System respiration and vital capacity 6. Resorption of nutrients and giving injections 7. Saliva, gastric juice, gall 8. Urinary system 9. Reproductive system - female 10. Reproductive system - male				

	11. Supply of materials and energy and determination of calorific value of nutrients 12. Thermometers, thermoregulation and getting hypothermia			
12.	Learning methods: <u>Theoretical instruction</u> Interactive teaching: lectures in large group discussions and engaging students. Multimedia teaching. E-learning. Continuous 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 exercise.			
13.	Total available time	120		
14.	Distribution of available time	2+1+1		
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	Scored at least 42 points		
20.	Language of teaching / study	Macedonian		
21.	Method of monitoring the quality of teaching	Electronic 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, Skopje.	2007
		3.	Icko Gorgoski, and Mitko I. Mladenov	Physiological practicum	Faculty of natural sciences and mathematics, Skopje	2006
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Trajkovski V, Rasic O	Practicum on physiology with functional anatomy	Faculty of Philosophy, Institute of Defectology, Skopje.	2008
		2.	Physiology	Linda Costanzo	Saunders	2006
		3.	Human Physiology: The Mechanisms of Body Function - 8th Edition	Arthur Vander and James Sherman and Dorothy Luciano	McGraw-Hill Education	2006

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Biochemistry			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	4
8.	Professor (s)	Assistant Professor Tatjana Ruskovska, PhD			
9.	Requirements for enrollment the Course	No requirements			
10.	<p>Objectives of the curriculum (competencies):</p> <p>During the course the students will learn about the chemical composition of the human body and the basic biochemical reactions within it. They will learn about the diagnostic significance of some of the most common clinical-biochemistry parameters.</p> <p>During the practical education, students will learn the basic principles of the work in biochemical laboratory and how to perform some of the qualitative and quantitative biochemical analyses.</p>				
11.	<p>The content of the curriculum:</p> <p><u>Theoretical tuition</u></p> <ol style="list-style-type: none">1. Definition of the biochemistry. Phases of the work process in a clinical-biochemistry laboratory.2. Water and minerals: Sodium, potassium, chlorides, bicarbonates. Acid-base balance.3. Proteins1: Amino acids. Peptides. Proteins. Basics of the metabolism of the proteins. Urea.4. Proteins 2: Proteins in blood plasma. Hemoglobin: role, chemical structure and catabolism. Bilirubin.5. Enzymes 1: Properties of the enzymes. Nomenclature and classification. Active center. Kinetics of the enzyme reactions.6. Enzymes 2: Basics of the clinical enzymology. Diagnostic significance of some enzymes.7. Lipids 1: Properties and classification of the lipids.8. Lipids 2: Basics of the metabolism of the lipids. Lipoproteins in the blood plasma.9. Carbohydrates 1: Monosaccharides. Oligosaccharides. Polysaccharides.10. Carbohydrates 2: Basics of the metabolism of the carbohydrates. oGTT and glycosylated <i>haemoglobin</i>.11. Nucleic acids.12. Vitamins: Properties and classification. <p><u>Practical tuition</u></p> <ol style="list-style-type: none">1. Basic principles of protection during the work in biochemistry laboratory.2. Collecting of venous and capillary blood sample. Prevention of errors in the pre-analytic phase.3. Pipetting technique. Photometry technique.4. Proteins 1: Precipitation and denaturation of the proteins.5. Proteins 2: Qualitative and quantitative determination of the total proteins by the biuret reaction. Albumins.6. Enzymes: Influence of the activators and inhibitors on the activity of the amylaze in the				

	saliva.			
	7. Lipids 1: Solubility of the lipids. Determination of cholesterol according to the method of Salkowski.			
	8. Lipids 2: Determination of the concentration of the total cholesterol in serum (enzyme quantitative method).			
	9. Lipids 3: Determination of the concentration of the triacylglycerols in serum (enzyme quantitative method).			
	10. Carbohydrates 1: Fehling reaction. Determination of the concentration of glucose in serum by GOD-PAP method.			
	11. Carbohydrates 2: Determination of the concentration of the glucose by the method of hexokinase.			
	12. Carbohydrates 3: Glucose meter. Determining of the concentration of glucose and ketone bodies in urine.			
12.	Learning methods: <u>Theoretical tuition</u> Interactive teaching: Lectures in large groups, and discussion and involvement of the students. Multimedia teaching. E-teaching. Consultation in groups and individually. <u>Practical tuition</u> Laboratory experiments in small groups. Final experiment.			
13.	Total available time	120		
14.	Distribution of available time	2+1+1		
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory, theoretical), seminars, 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.	Method of assessment: Interactive method, group work, lectures, homework, papers, discussion, debate, cooperative learning techniques, individual tasks, simulation extracurricular educational activities, self-study, etc.			
	17.1.	Tests	70 points	
	17.2.	Seminars (paper/project - presentation: written and/or oral)	10 points	
	17.3.	Activity and participation	20 points	
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)

		91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Presence of instruction and scored at least 42 points from all pre-exam activities.	
20.	Language of teaching / study	Macedonian	
21.	Method of monitoring the quality of teaching	Self-evaluation	

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 th 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	Prosvetno delo, Skopje Translated	2009

				edition	book – Project of the Government - Republic of Macedonia	
		8.	Александар К. Брауни, Џон К. Керноан	Medical biochemistry	Translated book – Project of the Government - Republic of Macedonia	
	22.2.	Additional 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

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Microbiology with parasitology			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	6
8.	Professor (s)	Assoc. Dr. Vaso Taleski, PhD			
9.	Requirements for enrollment the Course				
10.	Objectives of the curriculum (competencies): The main objective of the course is students to learn and acquired solid theoretical and practical knowledge in the field of the microbiology.				
11.	<p>The content of the curriculum:</p> <p>1. The theoretical part is divided into two parts: a general part and a special part . The general part students are introduced to the history , development of microbiology as a science , with important breakthroughs , the importance of microorganisms , bacteria classification , construction , distribution, chemical composition , growth and reproduction, metabolism , genetics , pathogenicity , virulence , immune reactions , Immune and immunotherapy , sterilization , disinfection , resistance , anti biogrammi most important antimicrobial drugs .</p> <p>In part Special part students are introduced to the most important bacteria, viruses, fungi and parasites. Are introduced to methods of diagnosis, through classical methods of isolation and identification of the most modern methods of molecular diagnostics.</p> <p>2. Practical training includes familiarization on:</p> <p>Behavior in the microbiology laboratory, microscopes and microscopic studies of microorganisms, sampling, packaging and dispatch of material for microbiological examination; Staining of microorganisms (Gram, Giemsa, Ziehl-Neelsen); foodstuffs substrates and cultivation of microorganisms, biochemical examination of bacteria test susceptibility of bacteria to outlaw therapeutic support (classical and automatic), sterilization and disinfection, Immunological methods in microbiology, speed test, Blood cultures; Microbiological diagnosis of respiratory infections, urinary and sexually transmitted infections, bacterial enteropathogens; virological diagnostic methods (Markers of hepatitis, a diagnosis of HIV infection), mycological and parasitic diseases.</p>				
12.	Learning methods: Oral exposure method and method of practical work				
13.	Total available time	180			
14.	Distribution of available time	2+3+1			
15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching		30 hours
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	Presence of instruction and scored at least 42 points from all pre-exam activities.		
20.	Language of teaching / study	Macedonian		
21.	Method of monitoring the quality of teaching	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

	22.2.	Additional literature				
		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		Program of the Course - first cycle studies			
1.	Title of the Course	Care of sick			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	7
8.	Professor (s)	Associate Prof. Dr. Gordana Panova, PhD			
9.	Requirements for enrollment the Course	Verified first semester			
10.	<p>Objectives of the curriculum (competencies):</p> <p>The teaching unit contributes primarily to the development of the following general and specific competences:</p> <p>Understanding the role of the nurse not only as a duty but carrying mandatory input of love and compassion in dealing with patients, procedures for admission to the sick bed hospital setting and changing of bed by bed cover made, perform physical measurements, procedures for emergency knowledge of different types of diets applied to various diseases, measuring temperature and distinguish temperature curves, measurement of pulse and blood pressure, to prepare the patient for diagnostic tests and knowledge of them, and klistiranje catheterization, giving parenteral and intravenous injection, knowledge sources of infection and measures for personal protection, mode of treatment for anaphylactic shock, collapse and coma, placement and care of surgery patients, nourishing terminally ill and recognizing signs of death and determination of death.</p>				
11.	<p>The content of the curriculum:</p> <p>Introduction to the content and importance of the subject of sick care;</p> <p>Organization of hospitals and hospital service;</p> <p>Hospital room, hospital bed and hospital cover made;</p> <p>Reception of sick (new sick and emergency);</p> <p>Diet of sick purity of the body of the patient and care for mental mood of the patient;</p> <p>Observation of sick, vital signs and the relationship between them;</p> <p>Diagnostic tests on sick;</p> <p>Control of defecation, urination and vomiting in care;</p> <p>Storage and giving medications;</p> <p>Importing drugs into the body by injection;</p> <p>Prevention and protection against infection;</p> <p>Medical - technical operations in which the nurse assists the physician;</p> <p>Procedure for anaphylactic shock, collapse, coma and acute respiratory insufficiency (ARI);</p> <p>Care of surgical patients;</p> <p>Care of elderly, chronically ill and before death;</p>				
12.	Learning methods: Interactive teaching in lectures and tutorials, practical exercises.				
13.	Total available time	120			
14.	Distribution of available time	2+3+1			

15.	Forms of teaching / learning activities	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	Presence of instruction and scored at least 42 points from all pre-exam activities.		
20.	Language of teaching / study	Macedonian		
21.	Method of monitoring the quality of teaching	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.	Additional 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
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Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Ecology and Hygiene			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program (unit or institute, Faculty, department)	University “Goce Delcev” - Stip Faculty of medical science			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	2
8.	Professor (s)	Assistant professor Nevenka Velickova PhD			
9.	Requirements for enrollment the Course	Enrolled second semester of studies			
10.	Purposes of the curriculum (competencies): The purpose of this subject is for the students to gain basic knowledge from the area of medical ecology, the protection of the environment and hygiene.				
11.	Content of the course program: 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				
12.	Learning methods: Lectures,exercises,seminars research and practical activities				
13.	Total available time	60			
14.	Distribution of available time	2+0+1			
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching		30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work		0hours
16.	Други форми на активности	16.1.	Project tasks		15 hours
		16.2.	Individual tasks		5 hours
		16.3.	Home learning		10 hours

17.	Method of assessment		
17.1.	Tests / oral exams		70 points
17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)	up 50 points	5 (five) (F)
		51 to 60 points	6 (six) (E)
		61 to 70 points	7 (seven)(D)
		71 to 80 points	8(eight) (C)
		81 to 90 points	9 (nine)(B)
		91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Presence of instruction and scored at least 42 points from all pre-exam activities.	
20.	Language of teaching / study	Macedonian	
21.	Method of monitoring the quality of teaching	Self-evaluation	

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

Annex No.3		Program of the Course - first cycle studies			
1.	Title of the Course	Epidemiology			
2.	Code				
3.	Study Program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of Medical Sciences University Goce Delcev			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dr. Gorgi Shumanov, PhD			
9.	Requirements for enrollment the Course	Verified first semester			
10.	Objectives of the curriculum (competencies): Acquiring a basic knowledge of epidemiology and public health. Introduction to measures of prevention and combat diseases and health deterioration. The study of this subject will gain knowledge of the epidemiological characteristics of infectious (intestinal, respiratory, transmissible infectious diseases, zoonoses and other diseases) and non-communicable (cardiovascular disease, cancer, diabetes, traumatism) disease.				
11.	The content of the curriculum: <u>Theoretical instruction</u> 1. epidemic process 2. epidemiological methods 3. Types outbreaks. 4. Forms of epidemic process 5. The occurrence of infection and communicable diseases and ways of transmitting infectious diseases. 6. Prevention of disease and ill-health. 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-communicable diseases and damage health. <u>Practical teaching units:</u> 1. Epidemiological methods and design studies 2. Methods of collecting information, epidemiological survey, sample 3. Epidemic process, forms the epidemic process, epidemiological models of disease occurrence 4. Epidemiological characteristics and examples of alimentary, drip-aerogeni, contact and transmissible epidemic 5. Immunization: compulsory vaccination and vaccination on 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-communicable diseases 12. Epidemiological features of malignant neoplasm, diabetes, addictions.			
12.	Learning methods: 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 teaching / learning activities	15.1.	lectures - theoretical teaching	30 hours
		15.2.	Exercises(laboratory,theoretical), seminars, 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.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points /score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of instruction and scored at least 42 points from all pre-exam activities.	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		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,	Health education	Bitola	2006

			Doncho Donev, Ilija Gligorov			
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Blaze Nikolovski	Epidemiology	"Progress", Tetovo	2003

Appendix No. 3		Program of the Course - first cycle studies			
1.	Title of the Course	Informatics			
2.	Code	3FI110112			
3.	Study program	Graduated dental technician – prosthodontist			
4.	Organizer of the study program (unit or institute, Faculty, department)	University “Goce Delcev” Faculty of Computer Science			
5.	Cycle (first, second, or third study cycle)	First cycle			
6.	Academic year / semester	Second semester	7.	Number of credits	2
8.	Professor (s)	Ass. Professor Zoran Zdravev, PhD			
9.	Requirements for enrollment the Course	Enrolled first year			
10.	Purposes of the curriculum (competencies): Adopting the basic concepts of computer science and concepts for using computers for communication, research and office work				
11.	Contents of the course program: Introduction to computer science: 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, programming 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: a concept, a 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.	Learning methods: 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 teaching / learning activities	15.1	lectures / theoretical - contact teaching, e- teaching		30 hours
		15.2	theoretical and practical exercises, e-exams, preparation of independent seminar work		15 hours
16.	Other forms of studying	16.1	Project tasks		15 hours

.	activities	16.2	Individual tasks	10 hours
		16.3	Home learning	50 hours
17	Method of assessment			
	17.1	Tests / oral exams		70 points
	17.2	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3	Activity and participation		20 points
18	Assessment Criteria (points /score)		Up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19	Signature requirement and passing the final exam		60% of term activities or minimum 42 points from 2 midterm exams, project activities and attending to lectures and discussions	
20	Language of teaching / study		Macedonian	
21	Method of monitoring the quality of teaching		Self-evaluation	

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

3th semester

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Medical ethics			
2.	Code				
3.	Study Program	Graduated dental technician - prosthodontist			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical sciences			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	2 nd year / 3 th semester	7.	Number of credits	4
8.	Professor (s)	Ass.Prof. Gordana Panova			
9.	Requirements for enrollment the Course	Enrolled 2 nd year of study			
10.	Purposes of the curriculum (competencies): Adoption of the basic ethical and sociological knowledge of medicine and work in medical field, training of future professional nurses / technicians for observation, treatment and care of the patient as a complex bio-psychosocial unit				
11.	Content of the course program: Theoretical teaching unit Conceptual frame of medicine, historical overview of medicine as a science and practice. Clinical Medicine and ethical problems of 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, iatrogenation, euthanasia, ethical and legal responsibility of the physician, the ethics of medical research, medical law: basic issues and aspects.				
12.	Learning methods: Lecture, discussion, debate, cooperative learning techniques, individual tasks, simulation of outside teaching character activities, self-study.				
13.	Total available time		4ECTSx30hours=120hours		
14.	Distribution of available time		30+15+15+30+30=120 hours		
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30classes	
		15.2.	theoretical and practical exercises, e-exams, preparation of	15classes	

			independent seminar work	
16.	Други форми на активности	16.1.	Project tasks	15hours
		16.2.	Individual tasks	30hours
		16.3.	Home learning	30hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Self-evaluation	

22.	Literature				
	22.1.	Required literature			
		No.	Author	Title	Publisher Year
		1.	Doc.dr.G.Panova Medical Ethics deontology	Medical Ethics deontology	UGD-Stip 2010
		2.	K.R.Seturman	Communication skills in clinical practice	Tabernakul 2010
		3.	Pop-Jordanova Nada	Medical Ethics	Faculty of Medicine, Skopje 2006
	22.2.	Additional literature			
		No.	Author	Title	Publisher Year
		1.	Marcia Lewis Carroll	Tamparo Medical Law, Ethics and Bioethics Academic Press,	Tabernakul- Skopje 2010
		2.	Marich John Medical	Ethics,	Faculty of Medicine, 2005

					Belgrade,	
		3.	Otashevich C. Pejakovich S.	Medical ethics and deontology,	Faculty of Medicine, Nis	2005

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Anatomy of jaws and dental morphology			
2.	Code	3MF154012			
3.	Study Program	Graduated dental technician – prosthodontist – vocational studies			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical sciences Department of oral and maxillofacial surgery and dental implantology			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	2 nd year / 3 th semester	7.	Number of credits	6
8.	Professor (s)	Prof. Dr. Erol Sabanov			
9.	Requirements for enrollment the Course	Enrolled 2nd year of study			
10.	Purposes of the curriculum (competencies): To learn the basic anatomical and morphological characteristics of the parts of the oro-facial system.				
11.	Content of the course program: Theoretical units 1.Teeth and dental arch, milk and permanent dentition, anatomical characteristics of the teeth, Dental notation systems 2. Teeth histology. Periodontal tissues and their functions. 3.Intercanine teeth – upper and lower incisors				

	<p>4. Intercanine teeth – upper and lower canines</p> <p>5. Transcanine teeth –upper and lower premolars</p> <p>6. Transcanine teeth – upper molars</p> <p>7. Transcanine teeth –lower molars. Selbah phenomena.</p> <p>8. Anatomy of upper jaw (maxilla) and palatinal bone(os palatimnum)</p> <p>9. Anatomy of lower jaw (mandibula) and TMZ temporo-mandibular joint</p> <p>10. Anatomy and topography of the orofacial muscles.</p> <p>11. Occlusions and articulation of the teeth.</p> <p>12. Orientation dots, lines, plates and face dividing in thirds.</p> <p>Practical units.</p> <ol style="list-style-type: none"> Teeth and dental arch, milk and permanent dentition, anatomical characteristics of the teeth, Dental notation systems Drawing and molding upper central incisor in gypsum. Drawing and molding upper lateral incisor in gypsum Drawing and molding lower incisors in gypsum Drawing and molding upper and lower canines in gypsum Drawing and molding upper premolars in gypsum Drawing and molding lower premolars in gypsum Drawing and molding upper first molar in gypsum Drawing and molding lower first molar in gypsum Molding upper and lower incisors in wax Molding canines and premolars in wax Molding molars in wax 	
12.	<p>Learning methods:</p> <p>Lecture, discussion, debate, cooperative learning techniques, individual tasks, simulation of outside teaching character activities, self-study.</p>	
13.	Total available time	6 ECTS X 30= 180

14.	Distribution of available time		30+60+15+15+30=180		
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 classes	
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	60classes	
16.	Other forms of activities	16.1.	Project tasks	15 classes	
		16.2.	Individual tasks	15 classes	
		16.3.	Home learning	30classes	
17.	Method of assessment				
	17.1.	Tests / oral exams		70 points	
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points	
	17.3.	Activity and participation		20 points	
18.	Assessment Criteria (points / score)		up 50 points	5	(five) (F)
			51 to 60 points	6	(six) (E)
			61 to 70 points	7	(seven) (D)
			71 to 80 points	8	(eight) (C)
			81 to 90 points	9	(nine) (B)
			91 to 100 points	10	(ten) (A)
19.	Signature requirement and passing the final exam				
20.	Language of teaching / study		Macedonian		
21.	Method of monitoring the quality of teaching		Continuous: reflection and evaluation of students. In phases: self-evaluation internal and external evaluation		

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Sabanov E	Authorized lectures	E-learning	
	2.	Jankulovska E.	Anatomija i morfologija na vilicite i zabite	Stomatološk i fakultet Skopje	2001
	3.				

	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Jarned,FullerA/Gerald E.Denehy/Thomas M. Schulein	Concise Dental Anatomy and Morphology	University of Iowa	2001
		2.	Stanley J. Nelson DDS 9	Wheeler's Dental Anatomy, Physiology and Occlusion(9 th edition)	Elsevier Inc.	2010
		3.				

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Introduction in dental prosthodontics			
2.	Code	3MF150412			
3.	Study Program	Graduated dental technician - prosthodontist			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical sciences Department of prostohodontics and orthopaedics of teeth and jaws			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	2 nd year / 3 th semester	7.	Number of credits	5
8.	Professor (s)	Prof. Dr. Erol Sabanov			
9.	Requirements for enrollment the Course	Enrolled 2 year of study			
10.	Purposes of the curriculum (competencies): Basic principles, problems, concepts in dental prosthodontics, functional anatomy, gnathology, phases of fabrication.				
11.	Content of the course program: Theoretical units				

1. Introduction and historically development of prosthodontics.
2. Functional anatomy of orofacial system.
3. Oral cavity.
4. Muscles of masticatory system.
5. TMJ – anatomy and basic movements.
6. Periodontal tissues, basic anatomo morphological characteristics.
7. Orientation lines and planes.
8. Basic functions of masticatory system.
9. Basic of occlusion and articulation.
10. Biomechanical forces.
11. Changes in orofacial system due to partial and total loss of teeth.
12. Basic prosthodontics constructions.

Practical units

1. Equipment and instruments.
2. Functional anatomy of orofacial system.
3. TMJ – anatomy and basic movements.
4. Teeth and periodontal tissues
5. Orientation lines and planes.
6. Mandibular movements.
7. Ocludators, articulators, facebows, basic mandibular positions.
8. Basic of occlusion and articulation.
9. Basic and biological functions of orofacial system.
10. Changes and complications in orofacial system due to partial and total loss of teeth.
11. Technology of fabrication dentures, classifications, indications, different types of constructions.
12. Phases of fabrication of dentures, basic knowledge in practice work.

12.	Learning methods: Lecture, discussion, debate, cooperative learning techniques, individual tasks, simulation of outside teaching character activities, self-study.			
13.	Total available time		5ECTS X 30=150 hours	
14.	Distribution of available time		30+30+15+15+60=150 hours	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 classes
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	30classes
16.	Other forms of activities	16.1.	Project tasks	15 classes
		16.2.	Individual tasks	15 classes
		16.3.	Home learning	60 classes
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam			

20.	Language of teaching / study	Macedonian
21.	Method of monitoring the quality of teaching	Continuous: reflection and evaluation of students. In phases: self-evaluation internal and external evaluation

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Maric D	Uvod u stomatolosku protetiku	Beograd	1966
	2.	Jankulovska E	Anatomija I morfologija na vilicite I zabite	Skopje	2001
	3.				
22.2.	Additional literature				
	No.	Author	Title	Publisher	Year
	1.				
	2.				
	3.				

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Appliances and instruments in dental laboratory			
2.	Code	3MF151712			
3.	Study program	Graduated dental technician – prosthodontist			
4.	Holder of the study programme (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	2 nd year / 3 th semester	7.	Number of ECTS credits	6

8.	Professor (s)	Prof.Dr.Stipica Popovski
9.	Requirements for course enrolment	Enrolled second year of study
10.	<p>Aims of the study programme (competencies):</p> <p>Student should learn the basics of commonly used dental appliances and instruments in dental technicians laboratory, their use and compound.</p>	
11.	<p>Content of the study programme:</p> <p>Theoretical course units</p> <ul style="list-style-type: none"> -Development through the history of cameras and instruments in dental technique - Standards for technical equipment of dental laboratory, and their space. - Standards for Dental work place. - Instruments for working with plaster and investing mass - Apparatus and instruments for the preparation and development of models of mobile dental Nag - Instruments for working with wax - Instruments for investing and casting - Instruments solder and puncture - Instruments for metal , acrylic , composite and ceramic masses . - Apparatus and instruments for polishing and veneering - Apparatus and instruments for polymerization and doubling. - Milling machines. Basic paralelometars and principles for operation of modern dental laboratory <p><i>Practical course programs</i></p> <ul style="list-style-type: none"> -Development through the history of cameras and instruments in dental technique - Standards for technical equipment of dental laboratory, and their space. - Standards for Dental work place. - Instruments for working with plaster and investing mass - Apparatus and instruments for the preparation and development of models of mobile dental nag - Instruments for working with wax - Instruments for investing and casting - Instruments solder and puncture - Instruments for metal , acrylic , composite and ceramic masses . - Apparatus and instruments for polishing and veneering - Apparatus and instruments for polymerization and doubling. - Milling machines. Basic paralelometars and principles for operation of modern dental laboratory 	

12.	Methods of learning:					
13.	Total available time		6ECTSx30=180 hours			
14.	Distribution of available time		45+30+15+10+80=180 hours			
15.	Forms of teaching activities	15.1.	Lectures - theory	45 hours		
		15.2.	Exercise of laboratory, seminar papers, team work	30 hours		
16.	Other forms of activities	16.1.	Project tasks	15 hours		
		16.2.	Individual tasks	10 hours		
		16.3.	Home learning	80 hours		
17.	Method of assessment					
	17.1.	Tests		20 points		
	17.2.	Paper work/project (presentation: written and oral)		10 points		
	17.3.	Activity and participation		7 points		
18.	Assessment Criteria (points / score)		up to 50 points	5	(five)	(F)
			from 51 to 60 points	6	(six)	(E)
			from 61 to 70 points	7	(seven)	(D)
			from 71 to 80 points	8	(eight)	(C)
			from 81 to 90 points	9	(nine)	(B)
			from 91 to 100 points	10	(ten)	(A)
19.	Signature requirement and passing the final exam					
20.	Language of conducting the lecturers		Macedonian			
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures			
22.	Literature					
	22.1.	Obligatory literature				
		No.	Author	Title	Publisher	Year
		1.	Kovachevska I.	Dentistry materials and technology (script)	UGD	2012

		2.	Stamenkovikj D. et all.	Constructive dentistry materials	Kucha shtampe Zemun	2007
		3.	Jerolimov V. et all.	Foundations of dentistry materials	Zagreb	2005
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Mirchev Eftim	Dentistry technology	Skopje	1993
		2.				
		3.				

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Oral health			
2.	Code	3MF154212			
3.	Study Program	Stomatology			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical science Department of oral and maxillofacial surgery and dental implantology			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	2 nd year / 3 th semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dr. Cena Dimova			
9.	Requirements for enrollment the Course	Enrolled in second year of studies			
10.	Purposes of the curriculum (competencies): - Prevention periodontal and other diseases among groups of patients - Prevention periodontal and other diseases in patients at high risk, - Oral hygiene, oral health and nutrition in patients. - Training patients to maintain oral hygiene. - The role of health professionals in the prevention of oral health. - Working in the office of the patient's admission, rob realized, diagnosis, therapy plan				

	to regular checks.			
11.	Content of the course program: 1. Theory: - Introduction to the subject - Biological mechanism of protection of the oral mucosa - Factors that cause disruption of the oral health - Epidemiology of periodontal and oral mucosal diseases - Prevention of periodontal disease - Prevention of periodontal in groups at high risk for the occurrence of the disease - Prevention of oral mucosal disease - Oral health of the population in advanced age - Oral hygiene in order to preserve oral health - Nutrition and oral health - Promotion of oral health and educational programs 2. Work in practice: - Admission of patients, review and identification of risk factors for oral health disorder - Determining the state of oral hygiene - Motivation to maintain oral hygiene - Training of the patient to maintain oral hygiene - Oral health and oral hygiene - Types of oral hygiene techniques - Nutrition and oral health - Dental caries dental plaque, tartar - Gingivitis - classification gravitas gingivitis - Types of dental interventions - Removal of soft and hard plaque, pigmentation teeth - Educational programs for oral health - Dental and orthodontic cardboard and medical documentation			
12.	Learning methods: Lectures, auditoria exercises, consultations.			
13.	Total available time		4ECTS X 30=120 hours	
14.	Distribution of available time		30+15+15+15+45	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	15 hours
16.	Други форми на активности	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	45 hours

17.	Method of assessment				
	17.1.	Tests / oral exams			(20+20+30)=70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)			10 points
	17.3.	Activity and participation			20 points
18.	Assessment Criteria (points / score)		up 50 points	5	(five) (F)
			51 to 60 points	6	(six) (E)
			61 to 70 points	7	(seven) (D)
			71 to 80 points	8	(eight) (C)
			81 to 90 points	9	(nine) (B)
			91 to 100 points	10	(ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity theoretical and practical instruction, independent project work, project task group First Requirement for signature - regularity of theoretical and practical instruction, Second Requirement for passing the final exam - achieved 42 points (or 60%). (Rating is obtained after passing the final examination which may be oral or written)		
20.	Language of teaching / study		macedonian		
21.	Method of monitoring the quality of teaching		Supporting the evaluation of students and Self-evaluation		

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Ivanovski K, Pandilova M.	Oral health	Faculty of Dentistry Skopje	2008
		2.	Murray JJ, Nunn JH, Steele JG.	The Prevention of Oral Disease	Fourth Edition, Oxford University Press Inc., New York	2003
		3.				
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Minovska A et al.	Oral hygienic	Faculty of	2004

					Dentistry Skopje	
		2.	Dimova Cena	Prophylaxis of oral diseases	UGD, FMN	2013
		3.	Carcev M.	Preventive dentistry	Faculty of Dentistry Skopje	2006

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Dental materials			
2.	Code	3MF154112			
3.	Study programme	Graduated dental technician – prosthodontist			
4.	Holder of the study programme (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	2 nd year / 3 th semester	7.	Number of ECTS credits	5
8.	Professor (s)	Prof.Dr. Ivona Kovachevska			
9.	Requirements for course enrolment				
10.	Aims of the study programme (competencies): Student should learn the contents and to obtain general and vocational knowledge about dental materials, their classification and use.				
11.	Content of the study programme: Theoretical course units 1. Introduction, classification of dentistry materials, standards and technologies.				

	<ol style="list-style-type: none"> 2. Metals, physical and chemical properties, technology and getting. 3. Plaster cast, types of plaster cast, quantitative and qualitative features, usage 4. Wax, thermoplastic materials, materials for modelling 5. Metal alloys. Ceramic works. 6. Inlay tables, thermo-resistant materials 7. Acrylates. Materials for preparation and scrape 8. Ceramics. Cad-cam and other moderate ceramics 9. Metals and alloys 10. Dental alloys. Alloys for metal ceramics 11. Corrosion of metals and alloys 12. Biocompatibility and protection of dental team <p><i>Practical course programs</i></p> <ol style="list-style-type: none"> 1. Classification and usage of dental materials and technologies. 2. Dental materials - non-metals. Plaster cast (Application and methods of preparation) 3. Inlay table, tables for moulding and soldering (Application and methods of preparation) 4. Materials for modelling. Plastics. Wax 5. Materials for printing. Classification. Rigid plastic and elastic printing masses 6. Materials for doubling. Materials for isolation 7. Metals and alloys 8. Materials for preparation, scrape, drilling and polishing 9. Plastics - artificially masses and acrylates 10. Ceramics masses - porcelain 11. Materials for oral surgery and implantation 			
12.	Methods of learning:			
13.	Total available time		5ECTS X 30= 150	
14.	Distribution of available time		30+30+15+15+30	
15.	Forms of teaching activities	15.1.	Lectures - theory	30 hours
		15.2.	Exercise of laboratory, seminar papers, team	30 hours

			work			
16.	Other forms of activities	16.1.	Project tasks	15 hours		
		16.2.	Individual tasks	15 hours		
		16.3.	Home learning	15 hours		
17.	Method of assessment					
	17.1.	Tests		20 points		
	17.2.	Paper work/project (presentation: written and oral)		10 points		
	17.3.	Activity and participation		7 points		
18.	Assessment Criteria (points / score)		up to 50 points	5 (five) (F)		
			from 51 to 60 points	6 (six) (E)		
			from 61 to 70 points	7 (seven) (D)		
			from 71 to 80 points	8 (eight) (C)		
			from 81 to 90 points	9 (nine) (B)		
			from 91 to 100 points	10 (ten) (A)		
19.	Signature requirement and passing the final exam					
20.	Language of conducting the lecturers		Macedonian			
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures			
22.	Literature					
	22.1.	Obligatory literature				
		No.	Author	Title	Publisher	Year
		1.	Kovachevska I.	Dentistry materials and technology (script)	UGD	2012
		2.	Stamenkovikj D. et all.	Constructive dentistry materials	Kucha shtampe Zemun	2007
		3.	Jerolimov V. et all.	Foundations of dentistry materials	Zagreb	2005
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Mirchev Eftim	Dentistry technology	Skopje	1993
		2.				
		3.				

4th semester

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Mobile prosthodontics total denture 1			
2.	Code	3MF150512			
3.	Study Program	Graduated dental technician - prosthodontics'			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical sciences			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	2 nd / 4 th semester	7.	Number of credits	7
8.	Professor (s)	Prf. Dr. Erol Sabanov			
9.	Requirements for enrollment the Course	Enrolment in 2 nd semester			
10.	Purposes of the curriculum (competencies): Biological basis and meaning of the complete denture in patient treatment. Procedure for producing complete dentures.				
11.	Content of the course program: Theoretical teaching unit <ol style="list-style-type: none">1. Anatomy and physiology of oro facial system from prosthetic aspect2. Anthropology in dentistry3. Changes in the orofacial system due to total loss of teeth4. Diagnosis, planning, preparing and therapy of total anodontia5. Taking anatomical impressions for total dentures and casting6. Importance of functional impressions and technics for taking impresions7. Making individual trays. Casting functional impressions and generating a functional stone model.8. Intermaxillar relations.9. Making wax basis.10. Fixation of the models in articulator.11. Characteristics of working with standard articulators, semi individual and individual.12. Errors in determining intermaxilliary relations and their correction. Practical teaching units <ol style="list-style-type: none">1. Introduction to the dental technicians work environment.2. Changes in the orofacial system due to total loss of teeth3. Impressions materials and their application4. Taking impressions from phantoms with hydrocolloid material and casting.5. Analysis of the working models and diagnostics.6. Producing occlusion rims (adapting base)7. Producing occlusion rims (wax)8. Analysis and fixation of the rims9. Articulators an ocludators (main parts)				

	10. Fixing the models in articulator 11. Transferring the orientation line onto the models. 12. Analysis of the error when taking intermaxillary relations and their corrections.			
12.	Learning methods: Lecture, discussion, debate, cooperative learning techniques, individual tasks, simulation of outside teaching character activities, self-study.			
13.	Total available time		7EKTs×30hours=210hours	
14.	Distribution of available time		30+60+15+15+90=210hours	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30classes
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	60classes
16.	Други форми на активности	16.1.	Project tasks	15hours
		16.2.	Individual tasks	15hours
		16.3.	Home learning	90hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Self-evaluation	

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Sabanov E	Authorized lectures		
	2.	Mircev E	Totale dentures -	NIP,,Students	2000.

				preclinic	ki zbor „ Skopje	
		3.	Jankulovska E.	Mobile prosthodontics - preclinic	Stomatoloski fakultet Skopje	2003
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Gugucevski Lj. Dejanovski K. Veleviski D	Clinic of totale dentures	Ein-Sof Skopje	
		2.				

Annex No.3		Program of the Course - first/second/third cycle studies				
1.	Title of the Course	Mobile prosthodontics - partial denture 1				
2.	Code	3MF150612				
3.	Study Program	Graduated dental technician - prosthodontics				
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical science				
5.	Cycle (first, second and third cycle)	First cycle				
6.	Academic year / semester	2 nd / 4 th semester	7.	Number of credits	7	
8.	Professor (s)	Prof d-r Dragoljub Veleski				
9.	Requirements for enrollment the Course					
10.	Purposes of the curriculum (competencies): Diagnosis, planning, indications and contraindications for producing partial dentures.					
11.	Content of the course program: Theory: 1. Anatomy and physiology of orofacial system from prosthetic aspect. 2. Changes in the orofacial system due to partial loss of teeth. 3. Classification of partial edentulism and partial dentures. 4. Components of partial dentures 5. Base shapes of upper and lower denture. 6. Gingival part of partial dentures. 7. How do use parallelometer and to make analysis. 8. Retention and retention elements in classic partial dentures. 9. Wire hooks, components. 10. Wire hooks, technical production. 11. Planning, preparation and implementation of partial dentures. 12. Clinical procedures for making removable partial dentures. Practical teaching units:					

	<ol style="list-style-type: none"> 1. Introduction to the dental technicians work environment. 2. Analysis of the working models and diagnose changes in the orofacial system due to partial loss of teeth. 3. Classification of partial edentulism and partial dentures. 4. Taking impressions from phantoms and casting. 5. Producing occlusion rims (adapting base). 6. Producing occlusion rims (wax) 7. To determine the entering direction of partial denture. 8. Marking models with parallelometer. 9. Bending one hand wire hook. 10. Bending comprehensive wire hook. 11. Fixing the models in articulator 12. Selections of artificial teeth for partial dentures, type, classifications, and methods for selection. 			
12.	Learning methods: Lecture, discussion, debate, cooperative learning techniques, individual tasks, simulation of outside teaching character activities, self-study			
13.	Total available time		7EKTsx30hours=210hours	
14.	Distribution of available time		30+60+15+15+90=210hours	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	60 hours
16.	Други форми на активности	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	15 hours
		16.3.	Home learning	90 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		(20+20+30)=70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity of theoretical and practical classes, independent project assignment, passed the	

		practical exam
20.	Language of teaching / study	Macedonian
21.	Method of monitoring the quality of teaching	Self-evaluation

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Dragoljub Veleski	Clinic and techniques of partial denture book first (acrylate partial denture)	Stomatoloski fakultet, Skopje	2010
	2.	Guguvcevski Lj.	Partial dentures - preclinic	Stomatoloski fakultet, Skopje	2008
	3.				
	Additional literature				
	No.	Author	Title	Publisher	Year
22.2.	1.	Maric, Kosovcevic	Partial denture	Beograd	1978
	2.	Suvin	Partial denture	Zagreb	1977
	3.				

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Fixed prosthodontics 1			
2.	Code	3MF151212			
3.	Study program	Graduated dental technician - prosthodontist - vocational studies			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	University Goce Delcev Faculty of medical science			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	2 nd / 4 th semester	7.	Number of ECTS credits	5
8.	Professor (s)	Ass.prof. d-r Nikola Gigovski			
9.	Requirements for course enrolment				
10.	Goals of the subject: -Introduction in the fabrication of fixed constructions, crowns -Working in phases for fabrication of fixed constructions				

11.	<p>Content of the study programme:</p> <ul style="list-style-type: none"> • Introduction in the fabrication of fixed prosthetic constructions • Preparation of the teeth for fabrication of artificial crowns, impressions for fabrication of crowns • Pouring impressions and fabrication of working casts with separate dies • Definition and types of articulators and fixation of the working casts • Coping fabrication and different protocols for fabrication • Wax pattern of full metal crown • Wax pattern of veneer metal crown on die with spacing • Wax pattern of veneer metal crown with vestibular veneer • Spruing and investing of the crown wax pattern • Casting of the crown wax pattern • Try-in and adjustment of the metal cast • Composite veneering of esthetic crown <p>Practical units:</p> <ul style="list-style-type: none"> • Запознавање со работното место во заботехничката лабораторија • Impressions and fabrication of working cast with separate dies • Fixation of the working casts in articulator • Different techniques for coping fabrication • Wax pattern of full metal crown • Wax pattern of metal crown with vestibular veneer • Wax pattern of porcelain fused to metal crown • Spruing and investing of the wax pattern • Casting of wax pattern • Try-in and adjustment of the metal cast • Veneering of esthetic crown with composites • Polishing of the esthetic crown with composites 			
12.	<p>Methods of learning: Lectures, preclinical laboratory exercises, consultations.</p>			
13.	Total available time		5EKTs×30hours=150hours	
14.	Distribution of available time		15+60+15+15+45=150hours	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	15 hours
		15.2.	Exercise of laboratory, seminar papers, team work	60 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.	Method of assessment Lectures, preclinical laboratory exercises, consultations.			
	17.1.	Tests		40 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		10 points
18.	Assessment Criteria (points / score)	up to 50 points		5 (five) (F)
		from 51 to 60 points		6 (six) (E)

		from 61 to 70 points	7 (seven) (D)
		from 71 to 80 points	8 (eight) (C)
		from 81 to 90 points	9 (nine) (B)
		from 91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of conducting the lectures	Macedonian	
21.	Method of monitoring the quality of the lectures	Self-evaluation	

22.	Literature				
	Obligatory literature				
	No	Autors	Title	Editor	Year
22.1.	1.	Eftim Mircev	Preclinical Fixed prosthodontics	Faculty of dentistry	2001, Skopje
	2.				
	Additional literature				
22.2.	No	Autors	Title	Editor	Year
	1.				

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Orthopedics of teeth and jaws			
2.	Code	3MF150112			
3.	Study program	Graduated dental technician - prosthodontist			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	University Goce Delcev Faculty of medical science			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	2 nd / 4 th semester	7.	Number of ECTS credits	5
8.	Professor (s)	Prof. dr. Stipica Popovski			
9.	Requirements for course enrolment	Enrolled second year			
10.	Aims of the study programme (competencies): Understanding basic knowledge and expertise in the field of orthodontics.				
11.	Content of the study programme: Theory: 1. Introduction to orthodontics. Growth and development of the orofacial system. Etiological factors - general and local. 2. Orthodontic appliances and their classification. Making study models. 3. Making an inclined plane. Making vestibular plate.				

	4. Brad handle. Space keeper. 5. Treatment with removable plate apparatus. Treatment with functional appliances. 6. Treatment of irregularities of individual teeth. Organization of work in the orthodontic lab. 7. Planning on mobile devices to correct dento- facial deformities. 8. Pre-surgical therapy. Surgical correction of a dent-facial deformities. 9. Principles of surgical management. Correction of maxilla and mandibula. 10. Bimaksilarna surgery. Cosmetic surgery. Post-surgical orthodontic treatment. 11. Retention of the achieved results and the possibility of recurrence. Special approach in the therapy of dentofacial deformities. 12. Physiological response to treatment and post-surgical stability. Practical classes 1. Introduction to orthodontics. Growth and development of the orofacial system. Etiological factors - general and local. 2. Orthodontic appliances and their classification. Making study models. 3. Making an inclined plane. Making vestibular plate. 4. Brad handle. Space keeper. 5. Treatment with removable plate apparatus. Treatment with functional appliances. 6. Treatment of irregularities of individual teeth. Organization of work in the orthodontic lab. 7. Planning on mobile devices to correct dento- facial deformities. 8. Pre-surgical therapy. Surgical correction of a dent-facial deformities. 9. Principles of surgical management. Correction of maxilla and mandibula. 10. Bimaksilarna surgery. Cosmetic surgery. Post-surgical orthodontic treatment. 11. Retention of the achieved results and the possibility of recurrence. Special approach in the therapy of dentofacial deformities. 12. Physiological response to treatment and post-surgical stability.		
12.	Methods of learning: Lectures, preclinical laboratory exercises, consultations.		
13.	Total available time		5EKTСх30часа=150часа
14.	Distribution of available time		30+30+15+10+65=150часа
15.	Forms of teaching activities	15.1.	Lectures - theoretical 30 часови
		15.2.	Exercise of laboratory, seminar papers, team work 30 часови
16.	Other forms of activities	16.1.	Project tasks 15 часови
		16.2.	Individual tasks 10 часови
		16.3.	Home learning 65 часови
17.	Method of assessment Lectures, preclinical laboratory exercises, consultations.		
	17.1.	Tests	70 points

	17.2.	Paper work/project (presentation: written and oral)	10 points
	17.3.	Activity and participation	20 points
18.	Assessment Criteria (points / score)	up to 50 points	5 (five) (F)
		from 51 to 60 points	6 (six) (E)
		from 61 to 70 points	7 (seven) (D)
		from 71 to 80 points	8 (eight) (C)
		from 81 to 90 points	9 (nine) (B)
		from 91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of conducting the lecturers	Macedonian	
21.	Method of monitoring the quality of the lectures	Self-evaluation	

22.	Literature				
	22.1.	Obligatory literature			
		No	Autors	Title	Editor Year
		1.	Markovik M. i sor	Orthodontics	Medical book Beograd - Zagreb 1989
		2.	William R. Proffit, Raymond P. White, David M. Sarver	Contemporary Treatment of DentofacialDeformity	Mosby, London 2003
		3.			
	22.2.	Additional literature			
		No	Autors	Title	Editor Year
		1.			

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course		Oral pathology and periodontology		
2.	Code		3MF162312		
3.	Study Program		Graduated dental technician - prosthodontist		
4.	Organizer of the study program (unit or institute , Faculty, department)		University Goce Delcev Faculty of medical science		
5.	Cycle (first , second and third cycle)		First cycle		
6.	Academic year / semester		2 nd / 4 th semester	7. Number of credits	4

8.	Professor (s)	Prof. Minovska Ana		
9.	Requirements for enrollment the Course	Enroled second year		
10.	Purposes of the curriculum (competencies): Students to learn to recognize normal and pathological changes in the oral and periodontal tissues associated with the wearing of prosthetic devices			
11.	Content of the course program: <div>Theory<ul style="list-style-type: none">• Oral Pathology and Medicine• Introduction and definition of the subject• Oral-pathogenic microflora• Periodontal - structure and function• Clinical forms of periodontal disease• Prophylaxis of periodontal disease• Ratio of fixed-prosthetic devices and periodontal status• Ratio of mobile prosthetic devices and periodontal status• Morphology of the oral mucosa• Stomatitis• Chronic intoxication with metals and their oral manifestations</div> <div>Practical classes<ul style="list-style-type: none">• Introduction to object definition and termonologija• Structure and function of the periodontal• Clinical forms periodontits• Fixed-prosthetic devices and periodontal status• mobile prosthetic devices and periodontal status• Morphology of the oral mucosa• Clinical stomatitis• Chronic intoxication by metals and their oral manifestations</div>			
12.	Learning methods: Lectures Clinical practice Theoretical exercises			
13.	Total available time		4EKTsx30hours=120hours	
14.	Distribution of available time		30+15+15+15+45=120hours	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	15 hours

16.	Други форми на активности	16.1.	Project tasks	15hours
		16.2.	Individual tasks	15hours
		16.3.	Home learning	45hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Self-evaluation	

22.	Literature					
	22.1.	Obligatory literature				
		No	Autors	Title	Editor	Year
		1.	Authorised lectures			
		2.	Belazelkoska Z, Nakova M.	Oral pathology	Facuty of dentistry, Skopje	2003
		3.	Dimitrovski V., Popovska – Spasovska M.	Basics of oral propaedeutics	Facuty of dentistry, Skopje	2002
		4.	Minovska A.	Parodontopathy	Facuty of dentistry, Skopje	2008
	22.2.	Aditional literature				
		No	Autors	Title	Editor	Year
		1.	Nakova M., Popovska – Spasovska M.	Diagnosis of oral lesions	Facuty of dentistry, Skopje	2006
		2.	Stavrevska Minovska Ana, Pandilova Maja, Ivanovski Kire	Oral hygiene	Facuty of dentistry, Skopje	2005

Optional subjects

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Dental health in community			
2.	Code	3MF160512			
3.	Study program	Graduated dental technician - prosthodontist -			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	University Goce Delcev Faculty of medical science			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	2 nd / 4 th semester	7.	Number of ECTS credits	2
8.	Professor (s)	Prof dr Stipica Popovski			
9.	Requirements for course enrolment	Enrolled second year			
10.	Aims of the study programme (competencies): The purpose of this course is that students gain the basic knowledge area of health organization of dental services in the community.				
11.	Content of the study programme: Theory: - Organization of dental service. Dental protection law. - Registration and establishment of health organizations. - The organization of dental services by groups of ages. - Medical administration. - Indexes for registration of caries findings, changes of the soft parts of the oral cavity. - Organization of systematic dental care. - Planning the distribution of the service (as preventive and therapeutic purposes). - Regulations for records and statistics in the field of Education of dental health in children. - Content of dental enlightenment - purpose tasks. - Content of dental enlightenment by age groups. - Difficulties in conducting dental enlightenment. - Applying knowledge of the dental service organization. - Practical instruction: - Organization of dental service. Dental protection law. - Registration and establishment of health organizations. - The organization of dental services by groups of ages. - Medical administration. - Indexes for registration of caries findings, changes of the soft parts of the oral cavity. - Organization of systematic dental care. - Planning the distribution of the service (as preventive and therapeutic purposes). - Regulations for records and statistics in the field of Education of dental health in children. - Content of dental enlightenment - purpose tasks. - Content of dental enlightenment by age groups.				

	<ul style="list-style-type: none"> - Difficulties in conducting dental enlightenment. - Applying knowledge of the dental service organization. 			
12.	Methods of learning: Lectures, preclinical laboratory exercises, consultations.			
13.	Total available time		2EKTsx30hours=60hours	
14.	Distribution of available time		15+15+15+10+5=60hours	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	15 hours
		15.2.	Exercise of laboratory, seminar papers, team work	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours
		16.3.	Home learning	5 hours
17.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)	up to 50 points		5 (five) (F)
		from 51 to 60 points		6 (six) (E)
		from 61 to 70 points		7 (seven) (D)
		from 71 to 80 points		8 (eight) (C)
		from 81 to 90 points		9 (nine) (B)
		from 91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of conducting the lecturers		Macedonian	
21.	Method of monitoring the quality of the lectures		Self evaluation	

22.	Literature				
	22.1.	Obligatory literature			
		No	Autors	Title	Editor Year
		1.		Dental health in community	
		2.			
	22.2.	Additional literature			
		No	Autors	Title	Editor Year

		1.				
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Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Management in dentistry			
2.	Code	3MF155512			
3.	Study program	Graduated dental technician - prosthodontist - vocational studies			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	University Goce Delcev Faculty of medical science			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	2 nd / 4 th semester	7.	Number of ECTS credits	2
8.	Professor (s)				
9.	Requirements for course enrolment	Enrolled second year			
10.	Aims of the study programme (competencies): Understanding of the role of management in the activities and development of health care subjects				
11.	Content of the study programme: Theory: - The content and methodology of the subject area - Recognition of the role of management in activities and development health subjects - Promoting and developing a sense of active involvement in the area - Ability for communication, collaboration and teamwork - Flexible use of knowledge in the scientific and practical activities - Creating principle of autonomy (self-) critical (self-) assessment - Developing feelings for clear and open communication - Improving the quality of all activities - Raise awareness of joint operation and concern for others - Develop a sense of creative thinking - Solving problems - Proficiency with content and methodology of the subject area Practical instruction: - The content and methodology of the subject area - Recognition of the role of management in activities and development health subjects - Promoting and developing a sense of active involvement in the area - Ability for communication, collaboration and teamwork - Flexible use of knowledge in the scientific and practical activities - Creating principle of autonomy (self-) critical (self-) assessment - Developing feelings for clear and open communication				

	<ul style="list-style-type: none"> - Improving the quality of all activities - Raise awareness of joint operation and concern for others - Develop a sense of creative thinking - Solving problems - Proficiency with content and methodology of the subject area 			
12.	Methods of learning: Lectures, preclinical laboratory exercises, consultations.			
13.	Total available time		2EKTs×30hours=60hours	
14.	Distribution of available time		15+15+15+10+5=60hours	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	15 hours
		15.2.	Exercise of laboratory, seminar papers, team work	15 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours
		16.3.	Home learning	5 hours
17.	Method of assessment			
	17.1.	Tests		70 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)	up to 50 points		5 (five) (F)
		from 51 to 60 points		6 (six) (E)
		from 61 to 70 points		7 (seven) (D)
		from 71 to 80 points		8 (eight) (C)
		from 81 to 90 points		9 (nine) (B)
		from 91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam	Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam		
20.	Language of conducting the lectures	Macedonian		
21.	Method of monitoring the quality of the lectures	Self evaluation		

22.	Literature				
22.1.	Obligatory literature				
	No	Autors	Title	Editor	Year
	1.	Petkovski Konstantin, Simonovska Valentina	Management in dentistry		2008
	2.				

	22.2.	Additional literature				
		No	Autors	Title	Editor	Year
		1.				

Annex no.3		First, second and third cycle study programme				
1.	Title of the course		Maxillofacial surgery			
2.	Code		3MF155612			
3.	Study program		Graduated dental technician - prosthodontist			
4.	Holder of the study program (unit, i.e. institute, faculty, department)		University Goce Delcev Faculty of medical science			
5.	Cycle (first, second, third cycle)		First cycle			
6.	Academic year / semester		2 nd / 4 th semester	7.	Number of ECTS credits	2
8.	Professor (s)		Prof. Vladimir Popovski			
9.	Requirements for course enrolment		Enrolled second year			
10.	Aims of the study programme (competencies): Setting indications for face - jaw restorations diagnosis and differential diagnosis in maxillofacial surgery.					
11.	Content of the study programme: Theory: - Introduction and scope in maxillofacial surgery - Emergency situations in oral and maxilloacial surgery. - Acute and chronic inflammation in the maxillofacial region. - Sinusitis, osteomyelitis of the jaw bones - Preprosthetics operational treatments - Inflammatory and tumors salivary glands. - Injuries in the maxillofacial region, face and neck. Fractures of the jaws. - Injuries to the head, Lefort fractures, fractures of the cranium base.Haemoraghia types, separation, treatment. - Tumors in the maxillofacial region - Deformities of the jaws. - Aesthetic hirugija. - Neuritis and neuralgia in the maxillofacial region.					
12.	Methods of learning: Lectures, preclinical laboratory exercises, consultations.					
13.	Total available time		2EKTs×30hours=60hours			
14.	Distribution of available time		15+15+15+10+5=60hours			
15.	Forms of teaching activities	15.1.	Lectures - theoretical			15 hours
		15.2.	Exercise of laboratory, seminar papers, team work			15 hours

16.	Other forms of activities		16.1.	Project tasks	15 hours
			16.2.	Individual tasks	10 hours
			16.3.	Home learning	5 hours
17.	Method of assessment Lectures, preclinical laboratory exercises, consultations.				
	17.1.	Tests			70 points
	17.2.	Paper work/project (presentation: written and oral)			10 points
	17.3.	Activity and participation			20 points
18.	Assessment Criteria (points / score)		up to 50 points		5 (five) (F)
			from 51 to 60 points		6 (six) (E)
			from 61 to 70 points		7 (seven) (D)
			from 71 to 80 points		8 (eight) (C)
			from 81 to 90 points		9 (nine) (B)
			from 91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam		
20.	Language of conducting the lectures		Macedonian		
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures		

22.	Literature				
	22.1.	Obligatory literature			
		No	Autors	Title	Editor Year
		1.	Markovik A.	Oral Surgery - Practicum	Beograd 2005
		2.	Jojik, Perovik	Oral Surgery	
		3.	Todorovik I sor.	Oral Surgery	Beograd 2000
		4.	Mise I.	Oral Surgery	
		5.	Peterson	Principles of oral and maxillofacial surgery	
	22.2.	Additional literature			
		No	Autors	Title	Editor Year
		1.	Todorovik Lj.	Anaesthesia in Dentistry	
		2.	V. Petrovik, M. Gavrik	Emergencies in dental practice	IK Draganik, Beograd 2001.
		3.	M. Gavrik i sor.	Maxillofacial surgery	IK Draganik, Beograd 2005
		4.	Lotrik	Conduction anesthesia	

				in upper and lower jaw		
		5.	Perovik	Haemostasis and its disorders in dental practice		

Fifth semester

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Gnathology			
2.	Code	3MF149912			
3.	Study program	Graduated dental technician - prosthodontist			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of ECTS credits	5
8.	Professor (s)	Doc. Stipica Popovski			
9.	Requirements for course enrolment	Enrolled third year			
10.	Aims of the study programme (competencies): Technical part of making and adaptation apparatus that will provide the planned formation of the maxillary bones.				
11.	Content of the study programme: Theory: - Introduction to gnathology, objectives and targets. - Gnathological aspects of occlusion - Components of occlusion. - Occlusion and articulation. Mandibular border movements. - Physiological resting and central occlusion.				

	<ul style="list-style-type: none"> - Articulatory.Facial arc. - Functional analysis stomatognathic system. - Prerequisites for providing optimal occlusal conditions. - Functions stomatognathic system. - Obstacles and irregularities in function stomatognathic system. - Treatment of obstacles and irregularities in function stomatognathic system. - Procedures of selectively scraping -modern occlusal schemes <p>Practical instruction:</p> <ul style="list-style-type: none"> - Occlusal principles and gnathological concepts. - Terminology of Aufwachstechnik - Modeling teeth after gnathological concept. - Modeling the lower lateral bridge. - Modeling the cliffs buccal tubercles . - Reduction of the wax model for fastening acrylic. - Modeling the upper frontal bridge. - Modeling of the outer bridge in the upper jaw. - Position cones of palatal and buccal tubercles. - Fine modeling. - Modeling teeth after gnathological concept - freedom in occlusion. 			
12.	Methods of learning: Lectures, preclinical laboratory exercises, auditory exercises , consultations.			
13.	Total available time		5 KTS x 30=150	
14.	Distribution of available time		30+30+15+10+65=150	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	30 hours
		15.2.	Exercise of laboratory, seminar papers, team work	30 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours
		16.3.	Home learning	65 hours
17.	Method of assessment			
	17.1.	Tests		40 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		10 points
18.	Assessment Criteria (points / score)	up to 50 points	5	(five) (F)
		from 51 to 60 points	6	(six) (E)
		from 61 to 70 points	7	(seven) (D)
		from 71 to 80 points	8	(eight) (C)

		from 81 to 90 points	9 (nine) (B)
		from 91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language of conducting the lectures	Macedonian	
21.	Method of monitoring the quality of the lectures	Self-evaluation	

22.	Literature					
	22.1.	Obligatory literature				
		No	Autors	Title	Editor	Year
		1.	Guguvcehevski Lj.	Oclusion	Skopje	1997
		2.	Suin M	Dental occlusion	Zagreb	1991
		3.				
		4.				
		5.				
	22.2.	Additional literature				
		No	Autors	Title	Editor	Year
		1.	Филипович В. и сарадн.	Ендодонција	Белград	2002
		2.				
		3.				
		4.				
		5.				

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Mobile prosthodontics total denture 2			
2.	Code	3MF150712			
3.	Study Program	Graduated dental technician - prosthodontics			
4.	Organizer of the study program (unit or institute, Faculty, department)	Faculty of medical sciences			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of credits	6
8.	Professor (s)	Prof. dr. Vankovski Vlado			
9.	Requirements for enrollment the Course	Enrolment of third year			
10.	Purposes of the curriculum (competencies): Biological bases of complete dentures Producing a complete denture, working in phases and denture repairing.				
11.	Content of the course program: Theoretical teaching units • Determine the position of the teeth in different skeletal relations . • Principles of balanced occlusion , definitively determine the position of the lateral teeth . • Modeling the shape and relief of the total prosthesis				

	<ul style="list-style-type: none"> • Techniques of modeling the shape of the total dentures . Rehearsal of the total dentures and opportunities for corrections • Methods for venture - cuveting of the total prosthesis • Opening of cuvettes and removing wax , sealing • acrylate , acrylate preparation and pressing of the cuvettes . • Methods for polymerization of acrylate • Problems when working with acrylic . Processing and polishing of the total prosthesis • Ivokap system • Immediate complete denture , the total prosthesis as sub structures over implants • repairs of the total prostheses , methods of basing of the total prosthesis <p>Practical teaching units</p> <ul style="list-style-type: none"> • Definitely stacking of teeth , different occlusal concepts . Demonstration of choice and place artificial teeth in various skeletal relations . • Principles of balanced occlusion , definitively determine the position of the lateral teeth . Rehearsal of occlusion and articulation , errors and needs for corrections of prostheses . • Modeling the shape and relief of the total dentures . Techniques of modeling the shape of the total prosthesis • Attempt of the total dentures and opportunities for corrections • Methods for venture - cuveting of the total dentures . Opening the cuvettes and removing wax , sealing • Acrylate , acrylate preparation and pressing the cuvettes . Methods for polymerization of acrylate . Problems at work with acrylate • Processing and polishing of the total prosthesis • Ivokap system • Immediate complete denture - demonstration • The total repairs to dentures • Methods for basing of the total prosthesis • The total prosthesis over implants as sub structures- demonstration
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12.	Learning methods: Lecture, discussion, debate, individual tasks			
13.	Total available time		6 KTS x 30=180	
14.	Distribution of available time		15+60+15+10+80=180	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	15 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	60 hours
16.	Други форми на активности	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours
		16.3.	Home learning	80 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		20 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		7 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language of teaching / study		Macedonian	

21.	Method of monitoring the quality of teaching	Self-evaluation
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22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Mircev E	Pre-clinical total prosthodontics	NIP,,Studentski zbor „ Skopje	2000.
		2.	Jankulovska E.	Pre-clinical total prosthodontics	Faculty of dentistry Skopje	2005
		3.				
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Gugucevski Lj. Dejanovski K. Veleviski D	Clinical of total prosthodontics	Ein-Sof Skopje	
		2.				
3.						

Annex No.3		Program of the Course - first/second/third cycle studies			
1.	Title of the Course	Mobile prosthodontics - partial denture 2			
2.	Code	3MF150812			
3.	Study Program	Graduated dental technician - prosthodontics			
4.	Organizer of the study program(unit or institute, Faculty, department)	Faculty of medical science			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of credits	7
8.	Professor (s)	Prof d-r Vankovski Vlado			
9.	Requirements for enrollment the Course				
10.	Purposes of the curriculum(competencies): Biological basis and meaning of the partial denture in patient treatment. Procedure for producing complete dentures.				

11.	Content of the course program: <p>Theory:</p> <ol style="list-style-type: none"> 1. Preparing models for producing occlusion rims (adapting base) and occlusion rims (wax). 2. Determining interjaw relations in partial edentulism. 3. Dental articulators, facebows and fixing the models in articulator. 4. Selections of artificial teeth for partial dentures, type, classifications, and methods for selection. 5. Placement and arrangement of anterior and posterior teeth in partial dentures. 6. Methods for curing of partial dentures. 7. Polymerization methods of the acrylics. 8. Finishing and polishing of partial dentures. 9. Fit of dentures and follow-up, instructions how to use and maintenance. 10. Repairs of removable partial dentures. 11. Immediate partial denture. 12. Complications during total prosthesis and their care and treatment. <p>Practical teaching units:</p> <ol style="list-style-type: none"> 1. Placement and arrangement of anterior teeth. 2. Placement and arrangement of posterior teeth. 3. Modeling partial denture. 4. Methods for curing partial dentures. 5. Polymerization methods of the acrylics. 6. Finishing and polishing of partial dentures. 7. Methods for denture base repairing 8. Methods for reparation of broken denture, broken tooth, broken wire hook. 9. Producing immediate partial denture. 10. Producing allergen free acrylic resin partial denture. 11. Producing partial dentures with selective compression. 12. To determine the entering direction of partial denture. 			
12.	Learning methods:			
13.	Total available time		7 KTS x 30=210	
14.	Distribution of available time		15+75+15+10+95=210	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	15 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	75 hours
16.	Други форми на активности	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours

		16.3.	Home learning	95 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		20 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		7 points
18.	Assessment Criteria(points /score)		up 50points	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 requirementandpassingthefinal exam		Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language ofteaching / study		Macedonian	
21.	Method ofmonitoringthe quality of teaching		Self-evaluation	

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Dragoljub Veleski	Clinics and technics of clasic partial prosthesis	Faculty of dentistry, Skopje	2010
		2.	Guguvcevski Lj.	Pre-clinics of partial prosthodontics	Skopje	2008
		3.				
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.				
		2.				
		3.				

Annex no.3	First, second and third cycle study programme
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1.	Title of the course	Fixed prosthodontics 2			
2.	Code	3MF151312			
3.	Study program	Graduated dental technician - prosthodontist			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of ECTS credits	7
8.	Professor (s)	Doc. Gigovski Nikola			
9.	Requirements for course enrolment				
10.	Aims of the study programme (competencies): -Introduction to the development of fixed structures, crowns -Work on different phases of making fixed constructions				
11.	Content of the study programme: Theoretical teaching units • Dental bridges - biological bases • Parts of the bridge - the bridge role • Division of bridges • Prediction of future changes that would have occurred under the bridge and body of periodontium • Biomechanics - static bridges • Indications and contraindications for making various types of bridges • Alternative solutions bridge • Stages in making crowns and bridges metaloceramic • Making temporary crowns and bridges • Errors in construction of bridges • Definite remakes of bridges • Polishing of bridge structures Practical teaching units • Analysis of models, making a plan for making a dental bridge • Components of the bridge and its role • Changes that occur on periodontium warning Bridge construction • Division of bridges • Determine the number of carriers and members of the bridge • Modeling carriers of bridge construction in front • Modeling members of bridge construction in front • Modeling carriers of bridge construction in lateral region				

	<ul style="list-style-type: none"> • Modeling of members of bridge construction in the lateral region • Shifting and venture bridges constructions • Processing and adapting the construction mostovata • Faseting of the bridge construction 			
12.	Methods of learning:			
13.	Total available time		7KTS x 30=210	
14.	Distribution of available time		15+75+15+10+95=210	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	15 hours
		15.2.	Exercise of laboratory, seminar papers, team work	75 hours
16.	Other forms of activities	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours
		16.3.	Home learning	95 hours
17.	Method of assessment			
	17.1.	Tests		20 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		7 points
18.	Assessment Criteria (points / score)		up to 50 points	5 (five) (F)
			from 51 to 60 points	6 (six) (E)
			from 61 to 70 points	7 (seven) (D)
			from 71 to 80 points	8 (eight) (C)
			from 81 to 90 points	9 (nine) (B)
			from 91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language of conducting the lecturers		Macedonian	
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures	

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	Year
	1.	Mirchev E.	Preclinical fixed prosthodontics	Faculty of dentistry	2001 Skopje
	2.	Trifunovic, Vujoshevic	Dental prosthodontics-	Europien	1998

				fixed upgrades	centar for peace Beograd	
		3.	Radulovic Pantelic S	Dental prosthodontics- fixed upgrades part II	Tehnoloski fakultet Beograd	1998
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.				
		2.				
		3.				

Annex No.3		Program of the Course - first/second/thirdcyclestudies			
1.	Title of the Course	Esthetic dentistry			
2.	Code	3MF150312			
3.	Study Program	Graduated dental technician - prosthodontics			
4.	Organizer of the study program(unit orinstitute, Faculty, department)	Faculty of medical science			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of credits	3
8.	Professor (s)	Doc. D-r. Stipica Popovski			
9.	Requirements for enrollment the Course	Enrolment of third year			
10.	Purposes ofthe curriculum(competencies): While study of the subject will be presented: the principles of aesthetics, facial, dental and gingival elements, lines of lips, smile lines.				
11.	Content ofthecourse program: Theory: <ul style="list-style-type: none">- Aesthetics as a function of the masticatory system.- Principles of Aesthetics- Elements of a dent-facial aesthetics- Analysis of the dynamics of facial features- Dental elements and morphology- Gingival elements. physical elements				

	<ul style="list-style-type: none"> - Dento-facial relations - Aesthetics of teeth and tooth rows - Aesthetics of total and partial prosthesis - Aesthetics of crowns - Aesthetics of bridge constructions - Preparations and prints from aesthetic aspect <p>Practical teaching units:</p> <ul style="list-style-type: none"> - Aesthetics as a function of the masticatory system. - Principles of Aesthetics - Elements of a dent-facial aesthetics - Analysis of the dynamics of facial features - Dental elements and morphology - Gingival elements. physical elements - Dento-facial relations - Aesthetics of teeth and tooth rows - Aesthetics in total and partial prosthesis - Aesthetics in crowns - Aesthetics in mostovni constructions - Preparations and prints the aesthetic aspect 			
12.	Learning methods: Lectures, preclinical laboratory exercises, auditory exercises , consultations.			
13.	Total availabletime		3 KTS x 30=90	
14.	Distribution of availabletime		30+15+15+10+20=90часа	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours
		15.2.	theoretical andpractical exercises, e-exams, preparationofindependentseminar work	15 hours
16.	Други форми на активности	16.1.	Project tasks	15 hours
		16.2.	Individual tasks	10 hours
		16.3.	Home learning	20 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper/project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		10 points
18.	Assessment Criteria(points /score)		up 50points	5(five) (F)

		51 to 60 points	6(six) (E)
		61 to 70 points	7 (seven) (D)
		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language of teaching / study	Macedonian	
21.	Method of monitoring the quality of teaching	Self-evaluation	

22.	Literature				
	22.1.	Required literature			
		No.	Author	Title	Publisher Year
		1.		Autorised lessons	
		2.	Mirchev E.	Preclinical fixed prosthodontics	Faculty of dentistry 2001 Skopje
		3.	Trifunovic, Vujoshevic	Dental prosthodontics-fixed upgrades	Europien centar for peace Beograd 1998 Beorpa
	22.2.	Additional literature			
		No.	Author	Title	Publisher Year
		1.	Radulovic Pantelic S	Dental prosthodontics-fixed upgrades part II	Tehnoloski fakultet Beograd 1998
		2.			
		3.			

Annex No.3		Program of the Course - first/second/third cycle studies	
1.	Title of the Course	Oral hygiene	
2.	Code	3MF161712	
3.	Study Program		
4.	Organizer of the study program (unit or institute, Faculty, department)	Faculty of medical science	
5.	Cycle (first, second and third)	First cycle	

	cycle)				
6.	Academic year / semester	Third/fifth	7.	Number of credits	2
8.	Professor (s)	Prof. Minovska Ana			
9.	Requirements for enrollment the Course	Enroled third year			
10.	Purposes of the curriculum (competencies): To familiarize students with the methods of assessment, home and ambulatory maintain and improve oral hygiene				
11.	Content of the course program: Theoretical lessons: <ul style="list-style-type: none">• Introduction to the course and process of patient care• Anamnestic data related to oral hygiene and dental plaque detection indices of dental plaque• Indices of tartar• Plaque control• Maintaining oral hygiene at home• Techniques of brushing teeth n• Caring for interdental spaces• Pharmacological agents in the maintenance of oral hygiene• Pigmentation of the teeth and their removal• Outpatient removal of dental plaque• Pigmentation of the teeth and their removal• Maintenance of oral hygiene in orthodontic, prosthetic implants and patients with• Maintenance of oral hygiene for patients with special needs• Motivation, re-motivation pacientit, maintenance and evaluation of results Practical lessons <ul style="list-style-type: none">• Introduction to the course and process of patient care• Anamnestic data related to oral hygiene and dental plaque detection indices of dental plaque• Indices of tartar• Plaque control• Maintaining oral hygiene at home• Techniques of brushing teeth n• Caring for interdental spaces• Pharmacological agents in the maintenance of oral hygiene• Pigmentation of the teeth and their removal• Outpatient removal of dental plaque• Pigmentation of the teeth and their removal• Maintenance of oral hygiene in orthodontic, prosthetic implants and patients with• Maintenance of oral hygiene for patients with special needs• Motivation, re-motivation pacientit, maintenance and evaluation of results				
12.	Learning methods: Lectures, practical exercises				

13.	Total available time		2EKC x 30 =60	
14.	Distribution of available time		15+15+15+5+10=60	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	15 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	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.	Method of assessment			
	17.1.	Tests / oral exams		40 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		10 points
18.	Assessment Criteria (points / score)	up 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Self-evaluation	

22.	Literature				
22.1.	Obligatory literature				
	No	Autors	Title	Editor	Year
	1.	Stavrevska-Minovska A., Pandilova M., Ivanovski K.	Oral hygiene	Faculty of dentistry, Skopje	2005
	2.	Newman MG, Takei HH, Carranza FA	Caranza's clinical periodontology	WB saunders Company , Philadelphia , New York; 9th edition	2001
	3.				
	4.				

		5.				
	22.2.	Additional literature				
		No	Autors	Title	Editor	Year
		1.				
		2.				
		3.				
		4.				
		5.				

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Restorative dentistry			
2.	Code	3MF108412			
3.	Study program	Graduated dental technician - prosthodontist			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of ECTS credits	2
8.	Professor (s)	Prof. Ivona Kovachevska			
9.	Requirements for course enrolment				
10.	Aims of the study programme (competencies): The student should gain knowledge about the diseases of the hard dental tissues and treatment of the same				
11.	Content of the study programme: Theoretical course units 13. Introduction, definition and classification of the cariogenic process 14. Strong dental tissues, construction, histology and expansion of the cariogenic process				

	15. Preparation of cavities from I and V class according Black 16. Preparation of cavities from II and MOD class according Black 17. Preparation of cavities from III and IV class according Black 18. Minimum invasive techniques of preparation 19. Instruments, dry working field, high engine machines 20. Application of indifferent layers 21. Dental amalgam, application, matrix and holders 22. Composite resins - application 23. Glass ionomer cement - indications and application 24. Adhesive systems - types and application <i>Practical course programs</i> 12.General knowledge about the caries classification 13.Diagnostic methods of caries 14.Instruments in restorative dentistry 15.Hand tools 16.Principles and postulates of Black 17.Preparation of cavities (first and fifth class) 18.Preparation of cavities from II and MOD class 19.Preparation of cavities from III and IV class 20.Setting of layers 21.Restoration of prepared cavities 22.Moulded fillings 23.Methods of preparation of inlay			
12.	Methods of learning:			
13.	Total available time		2EKTCx30=60	
14.	Distribution of available time		15+15+15+5+10=60	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	15 hours
		15.2.	Exercise of laboratory, seminar papers, team work	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.	Method of assessment					
	17.1.	Tests	20 points			
	17.2.	Paper work/project (presentation: written and oral)	10 points			
	17.3.	Activity and participation	7 points			
18.	Assessment Criteria (points / score)		up to 50 points	5	(five)	(F)
			from 51 to 60 points	6	(six)	(E)
			from 61 to 70 points	7	(seven)	(D)
			from 71 to 80 points	8	(eight)	(C)
			from 81 to 90 points	9	(nine)	(B)
			from 91 to 100 points	10	(ten)	(A)
19.	Signature requirement and passing the final exam		Presence of lectures and exercises, gained at least 42 points from pre-exam activities.			
20.	Language of conducting the lecturers		Macedonian			
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures			

22.	Literature					
	22.1.	Obligatory literature				
		No.	Author	Title	Publisher	Year
		1.	Kovachevska Ivona			
		2.	James B. Smith, J. William Robins et all	Foundations of teeth restoration		
		3.	A. Demean Valmsli, Trevor Walsh et all.	Restorative dentistry		
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Shutalo J	Pathology and therapy of strong dental tissues		
		2.	Olga Karadjov et all.	Preparation of cavities		
		3.				

Annex no.3		First, second and third cycle study programme	
1.	Title of the course	Sociology of health and illness	
2.	Code	3MF123112	

3.	Study program	Graduated dental technician - prosthodontist			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	Third/fifth	7.	Number of ECTS credits	2
8.	Professor (s)	Prof. Petrovski Vlado			
9.	Requirements for course enrolment				
10.	Aims of the study programme (competencies): Curriculum contribute mainly to the development of the following general and specific competences: Teaching units contribute mainly to the development of the following general and specific competences - To provide students with knowledge of basic features of the sociology of health and illness ; - Be familiar with health and disease as the subject of the sociology of medicine ; - To gain knowledge about mental health and mental illness ; - Students can learn the relationship between the patient - doctor ; - To gain knowledge of alternative medicine .				
11.	Content of the study programme: Sociology of Health and Illness, objectives and development The ratio of the sociology of health and illness and related sciences; Origin and development of the sociology of health and illness; Basic content and categories of sociology of health and illness; Concepts of disease; Mental health and mental illness; Doctor-patient relationship; Professions and professionalization of medical practice; Alternative Medicine;				

12.	Methods of learning: Lectures, exercises, debates, discussions, essays, consultations, individual and group work, papers and presentations			
13.	Total available time		2EKTS x 30=60	
14.	Distribution of available time		15+15+15+5+10=60	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	15 hours
		15.2.	Exercise of laboratory, seminar papers, team work	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.	Method of assessment			
	17.1.	Tests		40 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up to 50 points	5 (five) (F)
			from 51 to 60 points	6 (six) (E)
			from 61 to 70 points	7 (seven) (D)
			from 71 to 80 points	8 (eight) (C)
			from 81 to 90 points	9 (nine) (B)
			from 91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Presence of lectures and exercises, gained at least 42 points from pre-exam activities.	
20.	Language of conducting the lectures		Macedonian	
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures	

22.	Literature				
	22.1.	Obligatory literature			
		No.	Author	Title	Publisher
		1.	Kostovski S., Sarkanjac B.	Medical sociology	Skopje
		2.	Tasheva M.	Sociology	Filosophical faculty Skopje
	Year				
	1999				
	2003				

		3.	Petrovski V	Sociology	Pedagogical faculty	2006
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Markovic	Sociology	Nish	2011
		2.				
		3.				

Sixth semester

Annex No.3		Subject program for first, second and third cycle of studies			
1.	Name of the subject	Skeleton denture			
2.	Code	3MF157512			
3.	Study program	Professional studies for dental technicians- prosthodontists			
4.	Organizer of the study program(unit, institute, desk, department)	Faculty of Medical Sciences- department of dentistry Vocational studies			
5.	Degree (first, second, third cycle)	First cycle			
6.	Academic year/semester	III-6	7.	Number of ECTS credits	6
8.	Tutor/mentor	Prof. Vlado Vankovski PhD			
9.	Conditions for listening the subject				
10.	Goals of the subject program <ul style="list-style-type: none">Technical production of metal skeleton dentures with active participation of students in all phases to the completion of the process				
11.	Contents of the study program: Theoretical units: <ul style="list-style-type: none">Introduction in metal skeleton denture. Impressions for making metal skeleton denture-anatomic and functionalClassification of metal skeleton dentureAdvantages, imperfections, indications and contraindications for making metal skeleton denturePart of metal skeleton denture. Gingival part of the metal skeleton denture (types of saddle)Shapes of a big conector in upper and lower denture. Dental part of the metal skeleton denture (analysis of the model and planning)Elements of retention for partial dentures. Cast retention hocks NEY and other systems: general terms, indications, advantages and imperfectionsApplication of doubling and ways of doubling. Types of modeling and technical production of the skeleton.				

	<ul style="list-style-type: none"> Investment, casting and rough machining of the skeleton . Placing the metal skeleton and fine processing Making biting templates and determining inter jaw relations . Fixation patterns in articulatory , selection and stacking of teeth in front and side area. Modeling skeleton partial denture and making forgus . Processing and polishing skeleton partial denture. Types of paralelometars and milling devices , analysis models , determining the direction of the input and the plains leading skeleton partial and metods of frezing. Modern means of retention and stabilization Telescopic systems with complex skeleton prosthesis . General characteristics and types of atechmens. Extracrown atechmens , supraradikular , obstacles . Proofreading and repairs in skeleton partial dentures. <p><i>Practical units</i></p> <ul style="list-style-type: none"> Taking impressions with silicon and hydrocolloid impression materials. Preparing working models Determining the classes of partial adentia. Marking the models on a paralelometer Doubling the model. Modeling of the metal skeleton of the denture in wax Modeling of the metal skeleton of the denture with semi prepared wax mould. Modeling of the retention elements (NEY hocks) Shtivting of the modeled skeleton in wax. Casting of the metal skeleton . Processing and upasuvanje the skeleton . Making zagrizni templates and determinining inter jaw relations. Selection of artificial teeth . Stacking the teeth in frontal region. Stacking of teeth in the lateral region . Modeling partial skeleton denture. Venture skeleton partial dentures with making forgusi . Polymerization of partial skeleton dentures. Creating, processing and polishing skeleton partial dentures . Repairs and correcting the broken pieces of metal partial skeleton denture. Modeling of dedicated crowns . Assembling atechmen matrix (barrier and button) Assembling atechmen crutches . Lecture skeletiranata prosthesis and tips for properly wearing the same. 			
12.	Methods of studying :			
13.	Total available lesson fond		105 lessons	
14.	Distribution of the lesson fond		2+4+1	
15.	Types of educational activities	15.1.	Lectures-theoretical education	30 lessons
		15.2.	Practical lectures (laboratory, auditory) seminars, team work	60 lessons
16.	Other types of activities	16.1.	Project exercises	5 lessons

		16.2.	Independent exercises	5 lessons
		16.3.	Home studying	5 lessons
17.	Type of grading			
	17.1.	Tests		20 points
	17.2.	Seminar work/project (presentation: written and oral)		10 points
	17.3.	Active participation		7 points
18.	Grading criteria(points/grade)		Up to 50 points	5 (five) (F)
			From 51 to 60 points	6 (six) (E)
			From 61 to 70 points	7 (seven) (D)
			From 71 to 80 points	8 (eight) (C)
			From 81 to 90 points	9 (nine) (B)
			From 91 to 100 points	10 (ten) (A)
19.	Condition for signature and taking a final examination			
20.	Language of lectures		Macedonian	
21.	Method of following the lectures		Interactive participation of students	

22.	Literature					
	22.1.	Compulsory literature				
		No.	Author	Title	Publisher	Year
		1.	Prof. Dragoljub Veleski PhD	Clinic and techniques of partial dentures-volume 2(metal skeleton denture authorized lectures)	Faculty of Dentistry-Skopje	2011
		2.	Prof. Dragoljub Veleski PhD	Clinic and techniques of partial dentures-volume 2-komplex dentures		
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Stamenkovic Nastic	Partial dentures	Belgrade	1998
		2.	Babic	Metal skeleton denture		
		3.				

Annex no.3		First, second and third cycle study programme	
1.	Title of the course		Craniofacial prostodontics
2.	Code		3MF157612

3.	Study program	Graduated dental technician - prosthodontist - vocational studies			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences Faculty - Vocational school			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	III-6	7.	Number of ECTS credits	3
8.	Professor (s)	Prof. D-r Dragoljub Veleski			
9.	Requirements for course enrolment				
10.	Aims of the study programme (competencies):				
11.	<p>Content of the study programme:</p> <p>Theoretical teaching units</p> <ul style="list-style-type: none">• Introduction and terminology in cranio-facial prostodontics• Meaning of appliances and braces in cranio-facial prostodontics• Terms in descriptive and topografical anatomy• Dental extraction and imediate prostodontics• Treatment of oro-facial trauma - fractures of the mandibule• Apparatus and surgical prostheses in maxillofacial trauma• Fractures and treatment of maxillary and facial bone fractures (maxilla an zigomatic bone)• Ruptures and other birth defects in cranio-facial region• Treatment of dentoalveolar injuries and rehabilitation prostodontics• Treatment of traumatic lesions of the soft tissues of the face and mouth• Treatment maxillofacial tumors with appliances and surgical prostheses (opturatori) and resekcioni dentures - clinical and laboratory procedures• Epitezis <p>Practical teaching units</p> <ul style="list-style-type: none">• Introduction and terminology incranio-facial prosthetics• Meaning of appliances and braces in cranio-facial prosthetics• Terms in descriptive and topografical anatomy• Dental extraction and imediat prostodontics• Treatment of oro-maksilofacijal trauma - fractures of the mandibule• Apparatus and surgical prostheses in maxillofacial trauma• Fractures and treatment of maxillary and facial bone fractures maxilla and zigomatic bone• Ruptures and other birth defects in cranio-facial region• Treatment of dentoalveolar injuries and rehabilitation prostodontics• Treatment of traumatic lesions of the soft tissues of the face and mouth• Treatment maxillofacial tumors with appliances and surgical prostheses (opturatori)				

	and resekcioni dentures - clinical and laboratory procedures • Epitezis				
12.	Methods of learning:				
13.	Total available time		60		
14.	Distribution of available time		2+1+1		
15.	Forms of teaching activities	15.1.	Lectures - theoretical	30 hours	
		15.2.	Exercise of laboratory, seminar papers, team work	15 hours	
16.	Other forms of activities	16.1.	Project tasks	5 hours	
		16.2.	Individual tasks	5 hours	
		16.3.	Home learning	5 hours	
17.	Method of assessment				
	17.1.	Tests			20 points
	17.2.	Paper work/project (presentation: written and oral)			10 points
	17.3.	Activity and participation			7 points
18.	Assessment Criteria (points / score)		up to 50 points	5	(five) (F)
			from 51 to 60 points	6	(six) (E)
			from 61 to 70 points	7	(seven) (D)
			from 71 to 80 points	8	(eight) (C)
			from 81 to 90 points	9	(nine) (B)
			from 91 to 100 points	10	(ten) (A)
19.	Signature requirement and passing the final exam				
20.	Language of conducting the lecturers		Macedonian		
21.	Method of monitoring the quality of the lectures		Interactive communication of the students in the lectures		

22.	Literature				
22.1.	Required literature				
	No.	Author	Title	Publisher	
	1.	Proff.Dr Dragoljub Veleski	Autorized lectures		
	2.				
	3.				

	22.2.	Additional literature				
		No	Author	Title	Publisher	
		1.				
		2.				
		3.				

Annex no.3		First, second and third cycle study programme			
1.	Title of the course	Dental Implantology			
2.	Code	3MF154912			
3.	Study program	Graduated dental technician - prosthodontist - vocational studies			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	Faculty of Medical Sciences			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	III/6	7.	Number of ECTS credits	3
8.	Professor (s)	Prof. dr. Vlado Vankovski			
9.	Requirements for course enrolment	Enrolled thirth year			
10.	Aims of the study programme (competencies): - Modern systems of dental implants - Techniques for insertion of dental implants, features - Making suprastrukturi dental implants				
11.	Content of the study programme: Theory: - Historical aspects of oral implantology and its future - Use of biomaterial and the importance of biomechanics in oral implantology. - Basic physiological processes of bone, its recovery, maturation and meaning funkcionalnosta. - Surgical Anatomy of facial bones their classification. - Muscles, nerves and arteries in the orofacial region and their importance for insertion of implants. - Primary retention and stabilization of the implants. - Scheduling patient for Implantology (patient selection, their introduction, history). - Planning cuts, choice of implants and transmukozalna upgrades. Implantoloshki systems. - Installation of dental implants for compensation in postekstrakciona wound.				

	<p>Transdental implants.</p> <ul style="list-style-type: none"> - Transplantation of soft and hard tissues. Embed allogeneic materials, artificial bone - Complications during implantation, mucositis and perimplantitis. Augmentation. - Sinus lift and transposition of n. mentalis. Prosthetic rehabilitation implants <p>Practical instruction:</p> <ul style="list-style-type: none"> - History of oral implantology and its future - Use the biomaterial and the importance of biomechanics in oral implantology. - Basic physiological processes of bone, its recovery, growth and importance for functional stability. - Surgical anatomy of maxillary and mandibular bone and their classification. - Muscles, nerves and arteries in the orofacial region and their significance for installation of implants. - Retention and stabilization of primary implants. - Planning for implantology patient (patient selection, their introduction, history). - Planning of cuts, selection of implants and transmucosal upgrades. <p>Implant systems.</p> <ul style="list-style-type: none"> - Installation of implants in charge of toothed post-extraction wound. - Transplantation of soft and hard tissues. - Local and systemic complications in implantology. - Planning for future upgrades of prosthetic implants. 			
12.	Methods of learning: Lectures, preclinical laboratory exercises, consultations.			
13.	Total available time		48	
14.	Distribution of available time		2+1+1	
15.	Forms of teaching activities	15.1.	Lectures - theoretical	30 hours
		15.2.	Exercise of laboratory, seminar papers, team work	15 hours
16.	Other forms of activities	16.1.	Project tasks	5 hours
		16.2.	Individual tasks	5 hours
		16.3.	Home learning	5 hours
17.	Method of assessment Lectures, preclinical laboratory exercises, consultations.			
	17.1.	Tests		40 points
	17.2.	Paper work/project (presentation: written and oral)		10 points
	17.3.	Activity and participation		10 points
18.	Assessment Criteria (points / score)	up to 50 points		5 (five) (F)
		from 51 to 60 points		6 (six) (E)
		from 61 to 70 points		7 (seven)

			(D)
		from 71 to 80 points	8 (eight) (C)
		from 81 to 90 points	9 (nine) (B)
		from 91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam	Regularity and activity of theoretical and practical classes, independent project assignment, passed the practical exam	
20.	Language of conducting the lectures	Macedonian	
21.	Method of monitoring the quality of the lectures	Interactive communication of the students in the lectures	

22.	Literature				
22.1.	Obligatory literature				
	No	Autors	Title	Editor	Year
	1.	Vankovski Vlado	Dental superstructure over implants		2005
	2.	Carl E.Misch	“Contemporary Implant Dentistry”, 3rd ed	. Mosby,	2007.
	3.				
	4.				
	5.				
	Additional literature				
	No	Autors	Title	Editor	Year
	1.	Peterson L.	“Contemporary Oral and Maxillofacial Surgery”, 3rd ed.,	Mosby	1998.
	2.				
	3.				
	4.				
	5.				

Annex No.3	Program of the Course - first/second/third cycle studies
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1.	Title of the Course	Dental ceramics			
2.	Code	3MF151612			
3.	Study Program	Graduated dental technician - prosthodontics'			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical sciences Department of prosthodontics' and orthopaedics of teeth and jaws			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	THIRD 6 th semester	7.	Number of credits	4
8.	Professor (s)	Prof. Dr. Ivona Kovachevska			
9.	Requirements for enrollment the Course	Enrolment in 6 th semester			
10.	Purposes of the curriculum (competencies): Introduction with the indications, contraindications and technical procedures for making metal – ceramic and all ceramic fixed construction.				
11.	Content of the course program: Theoretical teaching unit 13. Ceramic material, types, composition and characteristics 14. Working with ceramic materials 15. Impressions, casting a working models and fixation 16. Preparing the stone abutment, molding a copings for metal ceramic crowns 17. Investing the wax model in fire-resistant material 18. Application of opaque on metal, backing, application of cervical, dentinal and enamel mass. 19. Veneering of posterior crowns 20. Producing metal ceramic bridge 21. Veneering of the metal construction for metal ceramic bridge 22. Porcelain jacket crown 23. Vita in ceram 24. Superstructures over implants				

	Practical teaching units <ol style="list-style-type: none"> 1. Ceramic material, types, composition and characteristics 2. Working with ceramic materials 3. Impressions, casting a working models and fixation 4. Preparing the stone abutment, molding a copings for metal ceramic crowns 5. Investing the wax model in fire-resistant material 6. Application of opaque on metal, backing, application of cervical, dentinal and enamel mass. 7. Veneering of posterior crowns 8. Producing metal ceramic bridge 9. Veneering of the metal construction for metal ceramic bridge 10. Porcelain jacket crown 11. Vita in ceram 12. Superstructures over implants 			
12.	Learning methods: Lecture, discussion, debate, cooperative learning techniques, individual tasks, simulation of outside teaching character activities, self-study.			
13.	Total available time		120	
14.	Distribution of available time		2+5+1 / per week	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30classes
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	75 classes
16.	Other forms of activities	16.1.	Project tasks	5hours

		16.2.	Individual tasks	5hours
		16.3.	Home learning	5hours
17.	Method of assessment			
	17.1.	Tests / oral exams		70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam			
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Continuous: reflection and evaluation of students. In phases: self-evaluation internal and external evaluation	

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Šabanov E.	authorized lectures		
		2.	Mirčev.E	Preclinic fixed prosthodontics	NIP , Skopje	1996
		3.	Trifunovik D., Vujošević L.	prosthodontics -Fixed structures.	Univerzity in Belgrade	1998
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Radlović-Pantelić S.,	prosthodontics	Univerzity in Belgrade	1998
		2.				
		3.				

Annex No.3	Program of the Course - first/second/third cycle studies
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1.	Title of the Course	Oral surgery			
2.	Code	3MF157512			
3.	Study Program	Professional studies for graduate professional dental technician - prosthodontists			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical science Department of oral and maxillofacial surgery and dental implantology			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	2012/13 VI	7.	Number of credits	4
8.	Professor (s)	Assist. Prof d-r Cena Dimova			
9.	Requirements for enrollment the Course	Enrolled in third year of studies			
10.	Purposes of the curriculum (competencies): Concepts in oral surgery (Local anesthetics and anesthesia, exodontia, acute dental infections, bleeding, cysts, pre prosthetic interventions)				
11.	Content of the course program: Theory: - History and use of oral-surgical anatomy - Local anesthetics and anesthetics - Techniques of dental tooth extractions in groups - Chronic per apical processes - Postoperative treatment of extractions and operative wound - Acute and chronic dental infections - Bleeding and hemostasis - Implantology in the oral and facial region - Preprosthetic surgery of soft and hard tissues - Diseases and injuries of nerves - Cysts of the jaw and soft tissue - Tumors in the oral surgery. Work in practice - practical classes: - Patient history and examination of the patient - Local anesthetics and anesthetics - Techniques of dental tooth extractions in groups - Chronic per apical processes - Postoperative treatment of extractions and operative wound - Acute and chronic dental infections - Bleeding and hemostasis - Implantology in the orofacial region - Preprosthetic surgery of soft and hard tissues				

	<ul style="list-style-type: none"> - Diseases and injuries of nerves - Cysts of the jaw and soft tissue - Tumors in the oral surgery 			
12.	Learning methods: Lectures, auditoria exercises, consultations.			
13.	Total available time		60	
14.	Distribution of available time		2+1+1 / per week	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	15 hours
16.	Other forms of activities	16.1.	Project tasks	5 hours
		16.2.	Individual tasks	5 hours
		16.3.	Home learning	5 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		(20+20+30)=70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity theoretical and practical instruction, independent project work, project task group First Requirement for signature - regularity of theoretical and practical instruction, Second Requirement for passing the final exam - achieved 42 points (or 60%). (Rating is obtained after passing the final examination which may be oral or written)	
20.	Language of teaching / study		Macedonian	

21.	Method of monitoring the quality of teaching	Supporting the evaluation of students and Self-evaluation
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22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Dimova Cena	Oral surgery – authorized lectures	UGD	2013
		2.	Peterson L.	“Contemporary Oral and Maxillofacial Surgery”, 3rd ed.,	Mosby	1998.
		3.				
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Todorovic et al	Oral surgery	Nauka, Beograd	2002
		2.				
		3.				

Annex no.3		First, second and third cycle study program			
1.	Title of the course	Dental therapy			
2.	Code	3MF162212			
3.	Study program	Graduated dental technician - prosthodontist - vocational studies			
4.	Holder of the study program (unit, i.e. institute, faculty, department)	FMS (Faculty of Medical Sciences)			
5.	Cycle (first, second, third cycle)	First cycle			
6.	Academic year / semester	3 / 6 sem.	7.	Number of ECTS credits	2
8.	Professor (s)	Prof.D-r. Ivona Kovachevska			
9.	Requirements for course enrolment	Enrolled in III academic year Attended Restorative dentistry			
10.	Aims of the study programme (competencies):				

	Students should learn the pathological changes of the pulp tissue, diagnostic and therapeutic procedures.	
11.	<p>Content of the study programme:</p> <p>Theoretical course units</p> <ol style="list-style-type: none"> 1. Introduction. Pulp: anatomy, histology, topography, functions 2. Classification of pulp diseases. Reversible diseases of the pulp - hyperaemia 3. Acute inflammations of the pulp - clinical symptomatology, ethiology, pathogenesis, diagnosis 4. Asymptomatic diseases of the pulp. Chronically inflammations of the pulp 5. Necroses and gangrenes 6. Treatment of pulp diseases. General postulates, methods and techniques 7. Phases of endodontic therapy 8. Manual techniques of intra canal preparation 9. Medicaments and means of canal irrigation 10. Intra canal obturation-materials and techniques 11. Apical periodontitis 12. Therapy of apical periodontitis <p><i>Practical course programs</i></p> <ol style="list-style-type: none"> 1. Hyperaemia of the pulp - symptomatology 2. Acute inflammations of the pulp, providing first aid 3. Endodontic treatment - mortal method 4. Endodontic treatment - vital method 5. Topography, ergonomic approach to cavum pulpa 6. Trepanation, extirpation of coronary and canal pulp 7. Techniques of manual canal preparation 8. Medicaments of intra canal irrigation 9. Canal obturation 10. Treating teeth with necrosis 11. Treating teeth with gangrene 12. Endodontic treatment of teeth with apical periodontitis 	
12.	Methods of learning:	
13.	Total available time	45 hours

14.	Distribution of available time			2+0+1		
15.	Forms of teaching activities		15.1.	Lectures - theory		30 hours
			15.2.	Exercise of laboratory, seminar papers, team work		0 hours
16.	Other forms of activities		16.1.	Project tasks		5 hours
			16.2.	Individual tasks		5hours
			16.3.	Home learning		5 hours
17.	Method of assessment					
	17.1.	Tests				20 points
	17.2.	Paper work/project (presentation: written and oral)				10 points
	17.3.	Activity and participation				7 points
18.	Assessment Criteria (points / score)			up to 50 points		5 (five) (F)
				from 51 to 60 points		6 (six) (E)
				from 61 to 70 points		7 (seven) (D)
				from 71 to 80 points		8 (eight) (C)
				from 81 to 90 points		9 (nine) (B)
				from 91 to 100 points		10 (ten) (A)
19.	Signature requirement and passing the final exam			Attended Clinical Cariology I Passed Clinical Cariology I		
20.	Language of conducting the lecturers			Macedonian		
21.	Method of monitoring the quality of the lectures			Interactive communication of the students in the lectures		

22.	Literature					
	22.1.	Obligatory literature				
		No.	Author	Title	Publisher	Year
		1.	Kovachevska I.	Authorized lectures		
		2.	Odjaklievska S.	Clinical Endodontology	Skopje	
		3.	Bergenholtz G.	Textbook of Endodontology	Second Edition	
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Tronstad L.	Clinical Endodontology	Danubius Dental - Belgrade	
		2.				

		3.				
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Annex No.3		Program of the course- first, second and third cycle of study				
1.	Course title		Paediatric dentistry			
2.	Code		3MF155012			
3.	Study programme		Professional studies for dental technician prosthodontists			
4.	Organizer of the study programme (unit/ institute, department)		University “Goce Delcev”Stip			
5.	Level of study (first, second, third cycle)		First cycle			
6.	Academic year / semester		Third year/sixth semester	7.	Number of ECTS credits	2
8.	Professor		Docent PhD Zlatko Georgiev			
9.	Preconditions for course enrollment		Enrolled sixth semester			
10.	Goals of the syllabus (competences): Acquiring knowledge of the development of teeth, caries treatment and orofacial diseases in childhood.					
11.	Content of the syllabus: 1. Introduction to children's dentistry. Psychological types of children. 2. Developing teeth and orofacial cavity. 3. Characteristics of children's teeth and jaws. Timeline of eruption of deciduous and permanent teeth. 4. Deciduous teeth caries. Deciduous teeth circular cavities. 5. Treatment of caries in deciduous teeth. 6. Materials for obturation of cavities in deciduous teeth 7. Pulpitides of deciduous teeth. Periodontitis in deciduous teeth. 8. Irregularities in tooth development. 9. Young permanent teeth. 10. Dental Traumatology. 11. Soft tissue pathology in childhood. 12. Interceptive and prosthetic rehabilitation in childhood..					
12.	Methods of study: Interactive teaching (theoretical), work in small groups (exercises), and other forms provided by the common criteria of the ECTS					
13.	Total amount of available time:			45		
14.	Distribution of available time:			2+0+1		
15.	Forms of teaching activities	15.1.	Lectures- theoretical classes		30	
		15.2.	Practice(laboratory, auditory) seminars, team work			
16.	Other forms of activities	16.1.	Project tasks		5	
		16.2.	Individual tasks		5	
		16.3.	Homework		5	
17.	Forms of assessment					

	17.1.	Tests	65 points
	17.2.	Seminar paper/project (presentation: oral and written)	20 points
	17.3.	Activity and participation	15 points
18.	Criteria for assessment (points /grade)	to 50 points	5 (five) (F)
		from 51 to 60 points	6 (six) (E)
		from 61 to 70 points	7 (seven) (D)
		from 71 to 80 points	8 (eight) (C)
		from 81 to 90 points	9 (nine) (B)
		from 91 to 100 points	10 (ten) (A)
19.	Condition for getting a signature and taking the final exam	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 in which the classes are conducted	Macedonian	
21.	Method of monitoring the quality of instruction	Self-evaluation by students, as well as transfer of students who passed the course	

22.	Literature:					
	22.1.	Compulsory literature				
		Ordinal number	Author	Title	Publisher	Year
		1.	Beloica D i sar.	Dentistry for the Child	Elit-Medica Beograd,	2000.
		2.	McDonald R, Avery D	Dentistry for the Child and Adolescent	Mosby, 7 ed	1999.
		3.	Bajractorova B	Dental traumatology	Skopje	2006.
	22.2.	Additional literature				
		Ordinal number	Author	Title	Publisher	Year
		1.	Doc. D-r Z. Georgiev	Authorized lectures		
		2.				
		3.				

Annex No.3	Program of the Course - first/second/third cycle studies
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1.	Title of the Course	Emergency in dentistry			
2.	Code	3MF155012			
3.	Study Program	Graduated dental technician - prosthodontist - vocational studies			
4.	Organizer of the study program (unit or institute, Faculty, department)	University Goce Delcev Faculty of medical science Department of oral and maxillofacial surgery and dental implantology			
5.	Cycle (first, second and third cycle)	First cycle			
6.	Academic year / semester	3 year 6 semestars	7.	Number of credits	2
8.	Professor (s)	Assist. Prof d-r Cena Dimova			
9.	Requirements for enrollment the Course	Enrolled in third year of studies			
10.	Purposes of the curriculum (competencies): Emergency medicine and dentistry, their timely diagnosis, differential diagnosis and therapy, concepts in emergencies in the dentistry. Introduce students to diagnose emergency conditions related to dental practice, differential diagnosis and treatment of the same procedure in the diagnosis and treatment of painful conditions in the area of the face and jaw, with special emphasis on diagnosis and treatment of pain associated with odontalgia. One of the goals of this course is to introduce students to the procedures for bleeding face and neck, and the basics of diagnosis of injuries in the area of the face, jaw and neck. Part of the course includes introduction to emergency situations that may occur during dental practice, their diagnosis, and the procedures that are expected of a dentist in these situations.				
11.	Content of the course program: Theory: <ul style="list-style-type: none">- Introduction, definition of emergency situations in medicine and dentistry,- Painful conditions. Bleeding, type, kind, treatment.- Complications and incidents during the general anesthesia- Common complications and incidents during of local anesthesia- Local complications and incidents during of local anesthesia- Allergic reaction in carrying local anesthesia. Allergic shock. Toxic reactions to local anesthesia,- Syncope, collapse, epileptic seizure, hysterical attack- Emergency cardiovascular respiratory conditions (cardiac arrest, respiratory arrest)- Emergency situations during dental therapy. Acute dental infection- Injuries to the soft tissues of the oral cavity- Injuries of the teeth- periodontal tissue injuries of the teeth, jaw injuries- Treatment of HIV + and hepatitis (HCV+, HBV+) patients				

12.	Learning methods: Lectures, auditoria exercises, consultations.			
13.	Total available time		30+0+15=45	
14.	Distribution of available time		2+0+1 / per week	
15.	Forms of teaching / learning activities	15.1.	lectures / theoretical - contact teaching, e-teaching	30 hours
		15.2.	theoretical and practical exercises, e-exams, preparation of independent seminar work	hours
16.	Other forms of activities	16.1.	Project tasks	5 hours
		16.2.	Individual tasks	5 hours
		16.3.	Home learning	5 hours
17.	Method of assessment			
	17.1.	Tests / oral exams		(20+20+30)=70 points
	17.2.	Seminars (paper / project - presentation: written and/or oral)		10 points
	17.3.	Activity and participation		20 points
18.	Assessment Criteria (points / score)		up 50 points	5 (five) (F)
			51 to 60 points	6 (six) (E)
			61 to 70 points	7 (seven) (D)
			71 to 80 points	8 (eight) (C)
			81 to 90 points	9 (nine) (B)
			91 to 100 points	10 (ten) (A)
19.	Signature requirement and passing the final exam		Regularity and activity theoretical and practical instruction, independent project work, project task group First Requirement for signature - regularity of theoretical and practical instruction, Second Requirement for passing the final exam - achieved 42 points (or 60%). (Rating is obtained after passing the final examination which may be oral or written)	
20.	Language of teaching / study		Macedonian	
21.	Method of monitoring the quality of teaching		Supporting the evaluation of students and Self-evaluation	

22.	Literature					
	22.1.	Required literature				
		No.	Author	Title	Publisher	Year
		1.	Dimova Cena	Emergencies in the dentistry practice	UGD	2013
		2.	Petrovic M, Gavric	Emergencies in the dental practice	IK Draganic, Belgrade	2001.
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1.	Todorovic et al	Oral surgery	Belgrade	2002
		2.	Peterson L.	“Contemporary Oral and Maxillofacial Surgery”, 3rd ed.,	Mosby	1998.