Attachment No. 3		Course program for the first cycle of studies			
1.	Course title	Maxillofacial surgery			
2.	Code	DMMMS5			
3.	Study program	Dentistry - integrated first and second cycle of studies			
4.	Organizer of the study program (unit, i.e., institute, department, division)	UKIM - Faculty of Dentistry – Skopje, Department of Maxillofacial Surgery			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	5 и 6	semester	10 и 11
7	Course workload expressed in ECTS credits	8			
8.	Teacher (in case of multiple teachers, designated teacher in charge)	Teacher in charge: Prof. Dr. Antonio Kirkov *All professors from the department give lectures			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for taking and passing the course	- Completed all mandatory fourth-year courses and passed all mandatory third-year courses. - Passed a written test and passed the courses in orthodontics, oral surgery, and oral medicine.			
11.	Course objectives (competences) and learning outcomes:	Acquiring broader knowledge of pathology within the domain of maxillofacial surgery. The students will acquire skills in taking anamnesis, clinical examination, making a diagnosis, as well as practical skills in providing first aid, dressings, bandages, sutures, immobilization of fractures, detection (early) of tumors, etc.			
12.	Detailed course content by chapters and units with learning outcomes for each chapter	Theoretical instruction - lectures Chapter 1 - Introduction to Maxillofacial Surgery Patient history and physical examination. Preoperative evaluation of the health status of patients with special reference to patients with compromised health. Management of hospital patients.....2 classes Basic principles of surgery. Aseptic techniques. Incision, hemostasis. Wounds, types of wounds, wound treatment - sutures (types). Healing of soft and bone structures 2 classes. Outcomes from chapter 1: the students will be introduced to the specifics of the history, physical examination, evaluation of the health status of patients, and the basic principles of surgery			

		2. Chapter – Inflammations and infections in the maxillofacial region Complex odontogenic infections. Etiology, pathogenesis, clinical image, diagnosis, types, and general principles of treatment of acute odontogenic infections. ..... 2 Complex odontogenic infections by anatomical location. Anatomy, etiology, pathogenesis, clinical image, diagnosis, and treatment of acute odontogenic infections by anatomical locations 2 classes Inflammations of the salivary glands. Anatomy, etiology, pathogenesis, clinical image, diagnosis, and treatment of inflammations of the salivary glands. Sialolithiasis. ....2 classes Osteomyelitis. Bone inflammations. MRONJ. Etiology, pathogenesis, clinical image, diagnosis, and treatment. ..... 2 Bone lesions of the jaws. Etiology, pathogenesis, clinical image, diagnosis, and treatment.……. 2 Odontogenic sinusitis. Etiology, pathogenesis, clinical image, diagnosis and treatment.……. 2 Outcomes from chapter 2: the students refresh their knowledge of anatomy and will be introduced to the acute and chronic infections of the salivary glands, maxillary sinus, jaws and infections of odontogenic origin. 3. Chapter - Traumatology in the maxillofacial region Soft tissue injuries and dentoalveolar complex. Etiology, pathogenesis, diagnosis, clinical image, classification, and treatment; …….2 Fractures of the lower jaw. Etiology, pathogenesis, classification, clinical image, diagnosis, and treatment. ..... 2 Fractures of the upper jaw. Etiology, pathogenesis, classification, clinical image, diagnosis, and treatment. ..... 2 Fractures of the zygomatic bone. Etiology, pathogenesis, classification, clinical image, diagnosis, and treatment. ..... 2 Outcomes from chapter 3: The students will refresh their knowledge of anatomy and will be introduced to the traumatology of the maxillofacial bones, as well as the soft tissues in the maxillofacial region. 4. Chapter - Maxillofacial skeletal deformities Maxillofacial skeletal deformities. Etiology, classification and clinical image. Evaluation of patients. Multidisciplinary approach to treatment and division of surgical techniques..... 2 Outcomes from chapter 4: the students will learn of maxillofacial skeletal deformities, the appropriate surgical techniques for their resolution and the necessity of a multidisciplinary approach in their treatment. 5. Chapter – Tumors in the maxillofacial region Principles of diagnosis and differential diagnosis of oral lesions and tumors. Biopsy and types of biopsy, Surgical treatment..... 2 Malignant epithelial tumors in the maxillofacial region. Types. Etiology, pathogenesis, diagnosis, clinical image, classification, TNM staging, and early detection ..... 2 Treatment of malignant epithelial tumors in the maxillofacial region. Surgical techniques in the treatment of the primary tumor. Surgical techniques in the treatment of metastases. ……. 2 Salivary gland tumors. Etiology, pathogenesis, diagnosis, clinical image, classification, and treatment. Surgical techniques.2 Odontogenic tumors, epithelial, mesenchymal, mixed, and malignant. Etiology, pathogenesis, diagnosis, clinical image, and treatment. Types of surgical treatment – enucleation and resection (marginal, partial, hemi- and total). ..... 4 Mesenchymal tumors in the maxillofacial region – benign and malignant. Types, clinical image, diagnosis, and treatment..... 2 Congenital cysts. Soft tissue cysts. Lymphadenopathy, lymphomas. Etiology, pathogenesis, diagnosis and differential diagnosis, clinical image, classification, and treatment. ..... 2 Defects of soft and bone structures. Conservative treatment – epithesis and obturator prostheses. Surgical reconstructive treatment – grafts. ……. 2 Outcomes from chapter 5: The students will refresh their knowledge of

		anatomy and will be introduced to tumor pathology in the maxillofacial region, with special emphasis on oral cancer and its early detection as the most common malignant tumor in dental practice. 6. Chapter – Congenital anomalies (clefts) of the lip, jaws, and palate. Clefts of the lips, jaws, and hard and soft palate. Embryology, etiology, pathogenesis, diagnosis, clinical image, and classification of clefts. Importance of multidisciplinary treatment. Types of surgical treatment. ..... 2 Outcomes from chapter 6: the students will learn about congenital anomalies of soft and bone structures in the maxillofacial region, management of patients with clefts, as well as the necessity for a multidisciplinary approach in their complex treatment. 7. Chapter – Painful conditions in the maxillofacial region and pathology of the temporomandibular joint. Painful conditions in the maxillofacial region. Physiology of pain, etiology, diagnosis, differential diagnosis, classification, clinical image, and treatment. ……. 2 Facial neuropathology. Facial neuralgias. Etiology, diagnosis, differential diagnosis, clinical image, and treatment. Facial nerve paresis. ……. 2 Diseases of the temporomandibular joint. Inflammations, dysfunctions, trauma, and tumors of the TMJ. Etiology, pathogenesis, diagnosis, clinical image, and treatment. …….. 4 Outcomes from chapter 7: The students will learn the disease conditions in the maxillofacial region with an emphasis on their differential diagnosis, where TMJ disorders are significantly represented. 8. Chapter – Rare diseases, preprosthodontic surgery, and current issues in maxillofacial surgery Preprosthodontic surgery of soft tissue and bone structures. Indications and types of treatment. …….. 2 Rare diseases and syndromes in the maxillofacial region. Etiology, diagnosis, clinical image, and treatment. …….. 2 Current issues in maxillofacial surgery. New and contemporary current diagnostic and therapeutic achievements in diseases of the maxillofacial region. …… 2 Outcomes from chapter 7: The students will learn about preprosthodontic surgery and rare diseases in the maxillofacial region and will be introduced to the latest diagnostic and therapeutic achievements in maxillofacial surgery. Total: .....60 classes Practical teaching - exercises - From the first chapter ..... 4 classes - From the second chapter ..... 14 classes - From the third chapter ..... 14 classes - From the fourth chapter ..... 4 classes - From the fifth chapter ..... 14 classes - From the sixth chapter ..... 2 classes - From the seventh chapter ..... 6 classes - From the eighth chapter ..... 2 classes The students will be ready to independently take anamnesis and conduct a physical examination, from which they will be able to recognize patients at risk of disease for which they should refer them to an appropriate specialist, and in certain diseases (injuries, infections) to provide first aid and give drug therapy. Total .....60 classes
13	Interrelation of subjects	Connection with anatomy, pharmacology, anesthesia and sedation, clinical radiology, orthodontics, internal medicine, otorhinolaryngology, and surgery.
14.	Detailed description of the teaching and working methods for the subject	Interactive instruction, laboratory or clinical exercises, working in small groups, presentation and performance of laboratory procedures, demonstration of instruments and methods used, teamwork (according to

		the specifics of the subject)			
15.	Total available time	240 часа			
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching classes		60 classes
		16.2.	Exercises (laboratory, auditorium), seminars, teamwork: classes		60 classes
		16.3.	Practice: classes		
17.	Other forms of activities	17.1.	Project assignments: classes		
		17.2.	Independent assignments: classes		
		17.3.	Home study - assignments		120 classes
18	Signature requirements	Regular attendance at theoretical classes (attendance of at least 60% of classes): 1-5 points. Regular attendance and activity at practical classes (the students have the right to be absent from two exercises): 3-5 points			
19	Grading method				
	19.1.	Tests: points		Test 1 – 15 points Test 2 - 15 points	
	19.2.	Seminar paper/project, written and oral presentation: points		5 points	
	19.3.	Завршен испит: практичен и устен дел		10+45 = 55 points	
20	Grading criteria (points/grade)		up to 59 points	5 (five) (F)	
			from 60 to 68 points	6 (six) (E)	
			from 69 to 76 points	7 (seven) (D)	
			from 77 to 84 points	8 (eight) (C)	
			from 85 to 92 points	9 (nine) (B)	
			from 93 to 100 points	10 (ten) (A)	
21.	Method of monitoring the quality of instruction	Self-evaluation by students, control by assistants in carrying out practical instruction, and assessment of the students' success, as well as the pass rate of students who have passed the course			

22. Literature

22.1.	Required literature				
	Ord. No.	Author	Title	Publisher	Year
	1.	Miodrag Gavric	Maksilofacijalna hirugija	Izdavacka agencija Draganic, Beograd	2004
	2.	James R.Hupp, Edward Ellis III, Myron R.	Contemporary Oral and Maxillofacial Surgery, 6th Edition	Elsevier	2014
	3.	Course professors	Authorized lectures		
22.2.	Additional literature				
	Ord. No.	Author	Title	Publisher	Year
	1.	Michael Miloro, GE Ghali, Peter Larsen, Peter Waite	Peterson's Principles of Oral and Maxillofacial Surgery, Third Edition	PMPH USA	2011