Attachment No. 3		Course program of the first cycle of studies				
1.	Course title	Anesthesia and sedation				
2.	Code	DMMAS3				
3.	Study program	Dentistry - integrated first and second cycle of studies				
4.	Organizer of the study program (unit, i.e. institute, department, division)	University "Ss. Cyril and Methodius" in Skopje, 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	3	Semester	6	
7	Course workload expressed in ECTS credits	3				
8.	Teacher	Prof. Dr. Danica Popovikj Monevska				
9.	Language in which the	English				

	curriculum is conducted	
10.	Necessary prerequisites for taking and passing the course	Completed all compulsory subjects from the second year and passed all compulsory subjects from the first year
11.	Course objectives (competences) and learning outcomes:	The student will understand the techniques for anesthesia in the facial and head region. The student will acquire knowledge about the chemical structure, mode of action, and indications for use of local anesthetics, sedation, and general anesthesia. The student will acquire knowledge about the techniques of applying local anesthetics.
12.	Detailed course content by chapters and units with learning outcomes for each chapter	Theoretical teaching - lectures 1. Chapter - Local anesthetics - Pain, concept, maxillofacial pain pathways. Cranial nerves that participate in the transmission of pain from the head and neck. 1 - Concept of analgesia, concept of anesthesia. Types of anesthesia, local, general, and sedation. Indications for local, general anesthesia and sedation 1 - Local anesthetics, history, chemical structure. Mechanism of action of local anesthetics 1 - Types of local anesthetics, Vasoconstrictors 1 - Techniques of local anesthesia 1 - Local and general complications of local anesthesia 1 Results from chapter 1: The student will become familiar with the types of local anesthetics, indications for use, and application techniques Chapter 2 - Sedation - Sedation, psychosedation, and pharmacosedation 1 - Pharmacosedative medications, routes of drug administration 1 - Assessment of patient health status, ASA classification, recognizing anxiety, and stress reduction protocols 1 - Benzodiazepines, opiates, and other sedation medications 1 - Inhalation sedation, nitrous oxide sedation for outpatient activities 1 - Monitoring equipment for sedation 1 Results from chapter 2: The student will become familiar with sedation techniques and indications for their use. 3. Chapter - General anesthesia - General anesthesia, indications, stages of general anesthesia 1 - Sedation techniques and general anesthesia 1 - Complications of general anesthesia 1 Results from chapter 3: the student will be familiar with the techniques of general anesthesia and sedation. Total: .....15 classes Practical teaching (exercises): - Pain, concept, pathways of maxillofacial pain. Cranial nerves that participate in the transmission of pain from the head and neck. 2 - Concept of analgesia, concept of anesthesia. Types of anesthesia, local, general, and sedation. Indications for local, general anesthesia, and sedation 2 - Local anesthetics, history, chemical structure - Mechanism of action of local anesthetics 2 - Types of local anesthetics, Vasoconstrictors 2 - Local anesthesia techniques 2 - Local and general complications of local anesthesia 2 - Sedation, psychosedation, and pharmacosedation 2 - Pharmacosedative medications, routes of drug administration 2 - Assessment of patient health status, ASA classification, recognizing anxiety, and stress reduction protocols 2 - Benzodiazepines, opiates, and other sedation medications 2 - Inhalation sedation, nitrous oxide sedation for outpatient activities 2 - Monitoring equipment for sedation 2 - General anesthesia, indications, stages of general anesthesia 2

		- Sedation techniques and general anesthesia 2 - Complications of general anesthesia 2 Results of the practical teaching: the student will be educated through demonstration with the techniques of sedation, anesthesia, and the indications for their use. Total: .....30 classes			
13	Interrelation of subjects	Connection with preclinical subjects in the field of dentistry			
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching, clinical exercises, working in small groups, presentation and performance of oral surgical interventions with local anesthesia, demonstration of cardiopulmonary resuscitation with application exercises on anatomical models. Anamnesis, disease history, preparation of the patient for local anesthesia. Preparation of the patient for sedation and general anesthesia. Indications and contraindications for local anesthesia, sedation, and general anesthesia. Local anesthesia techniques, exercises on models. sedation and general anesthesia techniques, presentation of patients in the operating room. Complications of local anesthesia.			
15.	Total available time	90 classes			
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching. classes	15	
		16.2.	Exercises (laboratory, lecture), seminars, teamwork: classes	15 + 15	
		16.3.	Practice: classes		
17.	Other forms of activities	17.1.	Project assignments: classes		
		17.2.	Independent assignments: classes		
		17.3.	Home study – assignments	45	
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 student has the right to be absent from two exercises): 3-5 points			
19	Method of assessment				
	19.1.	Tests: points		Test 1 - 20 points Test 2 - 20 points	
	19.2.	Seminar paper/project, written and oral presentation: points		5 points	
	19.3.	Final exam: oral part - points		45 points	
20	Grading criteria (points/grade)		from 59 points	5 (five) (F)	
			60 to 68 points	6 (six) (E)	
			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 teaching	Self-evaluation by students, control of assistants in carrying out practical teaching 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.	Stanly Malamed	Sedation	Mosby	2009
		2.	Prof. Danica Popovikj Monevska	Authorized lectures		
	22.2.	Additional literature			
		Ord. No.	Author	Title	Publisher	Year
		1.	Peterson	Contemporary Oral and maxillofacial surgery	Mosby	2014