1. Course programs with information in accordance with Article 4 of the Regulation on the Content of Study Programs ("Official Gazette of the Republic of Macedonia", No. 79/2023)

Serial number: 1

Annex no. 3		**First cycle study program**			
1.	Title of courses	Anatomy and Physiology of the Masticatory System			
2.	Code	PDTMAF1			
3.	Study Program	Professional Dental Technicians			
4.	Organizer of the study program (unit, i.e. institute, department, division)	UKIM - Faculty of Dentistry – Skopje, Department of Dental Prosthetics			
5.	Degree (first, second, third cycle)	First Cycle			
6.	Academic year/semester	Year	1	Semester	1
7	Course load expressed in ECTS credits	6			
8.	Teacher (in case of multiple teachers, a responsible teacher is appointed)	Prof. Dr. Sasho Jovanovski and teachers and associates from the Department of Dental Prosthetics			
9.	Course language	English			
10.	Necessary prerequisites for listening to and passing the course	n.a.			
11.	Course objectives (competencies) and learning outcomes:	Detailed introduction to the anatomy and physiology of the masticatory system, with special emphasis on the structures supporting fixed and mobile prosthetic and orthodontic restorations.			
12.	Detailed content of the course by chapters and units with learning outcomes for each chapter	Content of the course program: Chapter 1 - Introduction to the anatomical features of the face Introduction to the anatomical features of the face and components of the masticatory system ..... 2 classes Anatomy of the lower half of the face and the oral cavity from a dental technical perspective ..... 2 classes Osteology of the lower jaw, upper jaw, cavities and pits ..... 2 classes Osteology of the palatine bone, hard palate, hyoid-tongue bone ..... 2 classes Oral mucosa and mucous membrane formations in the mouth, mucous folds and frenulums, gingiva, soft palate …….. 2 classes Tongue, parts of the tongue, neutral space, tongue muscles (internal and external muscles), sublingual muscles ..... 2 classes Myology – term for the muscles of the stomatognathic system ..... 2 classes			

		Masticatory muscles – primary and accessory masticatory muscles ..... 2 classes Mimic, lingual, palatine, suprahyoid and subhyoid muscles ..... 2 classes Saliva and salivary glands ..... 2 classes Temporomandibular joint – anatomy, parts of the joint, articular fossa, articular surfaces, condylar process, articular disc, capsule, ligaments of the joint ..... 2 classes *Outcomes of the first chapter: The student will become familiar with the anatomy of the stomatognathic system, will gained knowledge about the bones, muscles and temporomandibular joint, saliva and the influence of prosthetic restorations.* Chapter 2 - Physiology of the masticatory system General terms for the physiology of the stomatognathic system ..... 2 classes Bone structures of the lower and upper jaw, palatine bone and cavities and pits from the aspect of prosthetic dental restorations …… 2 classes The mouth with teeth, periodontal tissues and soft oral tissues of the upper and lower jaws ..... 2 classes Physiology of: - masticatory muscles (masticatory, mimic, palatal, lingual, suphyoid and subhyoid) ..... 2 classes - nervous system ..... 2 classes - tongue, salivary glands, saliva and enzymes for breaking down food ..... 2 classes Functions of the stomatognathic system: masticatory (mastication), swallowing, phonetic, sensory, aesthetic-physiognomic, psychological-social ..... 2 classes Mandibular movements ..... 2 classes Occlusion and elements of occlusion ..... 2 classes Articulation ..... 2 classes Articulators (division and types) ..... 2 classes Facial arc ..... 1 class *Outcomes of the second chapter: The student will become familiar with the physiology of the stomatognathic system and its participation in the process of food preparation in the oral cavity and swallowing as stages before the further process of food digestion. He will acquire knowledge about occlusion and articulation during mandibular movements. He will also acquire knowledge about all functions of the stomatognathic system: masticatory, swallowing, phonetic and sensory as well as aesthetic-physiognomic and psychological-social function. He will acquire knowledge about the role and division of the articulators as well as the use and method of transmitting the facial arc in the articulators.* **Total ..... 45 classes**
13	Interrelationship of objects	
14.	Detailed description of the teaching and working methods for the subject	Theoretical teaching, interactive teaching, seminar work and other forms foreseen by the common ECTS criteria

15.	Total available classes fund	180 classes		
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching: classes	45
		16.2.	Exercises (laboratory, classroom), seminars, teamwork: classes	
		16.3.	Practice: classes	
17.	Other forms of activities	17.1.	Project work: classes	
		17.2.	Individual work: classes	30
		17.3.	Homework - tasks	105
18	Signature requirements	Regular attendance at lectures 60%, seminar work		
19	Method of the evaluation			
	19.1.	Tests: (2 tests per 15 points)		30
	19.2.	Seminar work/project, written and oral presentation: points		20
	19.3.	Final exam: points		50
20	Evaluation 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 teaching	Self-evaluation by students, control of assistants in carrying out practical teaching and assessment of the achieved success of students, as well as the pass rate of students who have passed the course		

22. Literature

22.1. Compulsory literature

Serial number	Author	Title	Publisher	Year
1.	Jankulovska E.	Anatomy and morphology of jaws and teeth	Faculty of Dentistry	2005

22.2. For further reading

Serial number	Author	Title	Publisher	Year
1.	Stanley J. Nelson,Major M. Ash, Jr.	Wheeler's dental anatomy, physiology and occlusion	Elsevier	2010
2.	A. Damien Walmsley et al.	Restorative Dentistry	Ars Lamina LLC	2011
3.	James B. Smith et al.	Fundamentals of Dental Restoration	Ars Lamina LLC	2011
4.	Joey D. Da Silva, David A. Mitchell, Laura Mitchell, Paul Brunton	American Handbook of Restorative Dentistry	Ars Lamina LLC	2011

		5.	Jeffrey P. Okeson	Management of temporomandibular disorders and occlusion - 7th ed.	Elsevier	2013

Serial number: 2

Annex no. 3		**First cycle study program**			
1.	Title of courses	Teeth Morphology 1			
2.	Code	PDTMM11			
3.	Study Program	Professional Dental Technicians			
4.	Organizer of the study program (unit, i.e. institute, department, division)	UKIM - Faculty of Dentistry – Skopje, Department of Dental Prosthetics			
5.	Degree (first, second, third cycle)	First Cycle			
6.	Academic year/semester	Year	1	Semester	1
7	Course load expressed in ECTS credits	6			
8.	Teacher (in case of multiple teachers, a responsible teacher is appointed)	Prof. Dr. Sasho Elenchevski and teachers at the Department of dental prosthetics			
9.	Course language	English			
10.	Necessary prerequisites for listening to and passing the course	None			
11.	Course objectives (competencies) and learning outcomes:	The objective of the course is for the student to gain knowledge about the development, anatomy, and morphology of teeth and their supporting tissues. The student will study the anatomical and morphological features of permanent incisors and canines, as well as their role in the function and aesthetics of the smile and face. Additionally, the student will develop practical skills for modeling teeth from the intercanine sector of the permanent dentition, which will allow him to better understand their anatomy and function.			
12.	Detailed content of the course by chapters and units with learning outcomes for each chapter	Chapter 1 – Anatomical - morphological and histological characteristics of teeth Dental dentition, development and characteristics of teeth ..... 1 class Permanent dentition, chronology, dental arches and arcs ..... 1 class Mixed dentition and differences between deciduous and permanent teeth ..... 1 class Contact points and surfaces, characteristic features of teeth ..... 1 class Tooth marking systems ..... 1 class Tooth anatomy – tooth crown; terminology of crown surfaces and edges ..... 1 class Anatomy of the tooth – neck and root of the tooth, dental cavity ..... 1 class Histology of the tooth – enamel, dentin, cementum and dental pulp ..... 1 class Supporting tissues of the tooth – gingiva, periodontium, alveolar bone ..... 1 class *Results of Chapter 1: The student will learn the basic anatomical, morphological and histological characteristics of teeth and supporting*			