

	22.1.	Compulsory literature				
		Serial number	Author	Title	Publisher	Year
		1.	Wolfgang Bengel	Mastering dental photography	Quintessence Publishing Co, Ltd. London	2006
		2.	Irfan Ahmad	Essentials of Dental Photography	Wiley Blackwell	2020
		3.	Course teachers	Authorized Lectures	Faculty of Dentistry - Skopje	2019
	22.2.	For further reading				
		Serial number	Author	Title	Publisher	Year
		1.				
		2.				
		3.				

Serial number: 42

Annex no. 3		First cycle study program			
1.	Title of courses	Orthodontic-Surgical Treatment of Craniofacial Deformities			
2.	Code	PDTECF3			
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 Orthodontics			
5.	Degree (first, second, third cycle)	First Cycle			
6.	Academic year/semester	Year	3	semester	6
7.	Course load expressed in ECTS credits	3			
8.	Teacher (in case of multiple teachers, a responsible teacher is appointed)	Prof. Dr. Biljana Dzipunova and teachers from the Department of Orthodontics			
9.	Course language	English			
10.	Necessary prerequisites for listening to and passing the course	Passed Basics of orthodontics and Orthodontic appliances 1, signature from Orthodontic appliances 2			
11.	Course objectives (competencies) and learning outcomes:	detailed introduction of students to the design, techniques and methods of manufacturing obturators and stimulators in children with clefts, splints for orthognathic surgery and acrylate splints for trauma in the orofacial region, orthodontic appliances over microimplants, orthodontic-surgical treatment of adults and therapy of sleep apnea and TMJ dysfunctions			
12.	Detailed content of the course by chapters and units with learning outcomes for each chapter	Theoretical teaching: Chapter 1 – etiology, occurrence and characteristics of cleft lip and palate, and possibilities for orthodontic-surgical treatment Cleft lip and palate – definition, etiology, mechanism of occurrence, classification, clinical picture, chronology of interdisciplinary therapy 2 classes Production of opturators and stimulators for cleft lip and palate 2 classes			

		Velopharyngeal defects and therapy with obturators ("palatal lift") 1 class <i>Outcomes of Chapter 1 - the student obtains knowledge about clefts lip and palate and modern techniques and protocols in orthodontic-surgical therapy</i> Chapter 2 - goals, methods and modern techniques of orthodontic-surgical therapy of skeletal orthodontic anomalies and tooth impactions Skeletal orthodontic anomalies in the sagittal, transverse and vertical (bimaxillary protrusion, distocclusion, mandibular prognathism, open bite, gummy smile, laterocclusion and facial asymmetry) - orthodontic-surgical treatment (orthodontic preparation for surgical treatment and post-surgical orthodontics) 3 classes Use of mini implants in orthodontic therapy. 1 class Orthodontic-surgical treatment of impacted deformities 1 class <i>Outcomes of the 2nd chapter - the student obtains knowledge of modern techniques and protocols in orthodontic preparation of patients for orthognathic surgery and the treatment of dental impactions.</i> Chapter 3 – techniques, procedures and appliances in modern orthodontic therapy for trauma in the orofacial region Traumas of the colum mandibulae and possibilities for immobilization and orthodontic treatment 1 class <i>Outcomes of the 3rd chapter - the student acquires knowledge of modern techniques and protocols in orthodontic therapy of face trauma</i> Chapter 4 – techniques, procedures and appliances in modern orthodontic therapy in adults Orthodontic therapy in adults 2 classes Characteristics and treatment of Sleep apnea 1 class Changes in TMJ and treatment possibilities 1 class <i>Outcomes of the 4th chapter - The student obtains knowledge about the interdisciplinary treatment of adults and patients with TMJ dysfunctions and Sleep apnea.</i> Total: 15 classes <i>Exercises</i> <i>For each of the above theoretical methodological units, Students will conduct literature review and prepare seminar papers on various treatment modalities of craniofacial deformities in the domain of orthodontic-surgical treatment, which they will present to fellow students and the responsible teacher.</i> Total: 15 classes
p	Interrelationship of courses	Basics of orthodontics, Orthodontic appliances 1, Orthodontic appliances 2
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching, work in small groups, introduction to the design, techniques and methods of manufacturing obturators and stimulators in children with clefts, splints for orthognathic surgery and acrylate splints for trauma in the orofacial region, orthodontic appliances over microimplants, orthodontic-surgical treatment of adults and therapy of sleep apnea and TMJ dysfunctions

15.	Total available classes fund		90 classes			
16.	Forms of teaching activities		16.1.	Lectures - theoretical teaching, classes	15	
			16.2.	Exercises (laboratory, classroom), <u>seminars</u> , teamwork: classes	15	
			16.3.	Practice: classes		
17.	Other forms of activities		17.1.	Project work: classes		
			17.2.	Individual work: classes	30	
			17.3.	Homework - tasks	30	
18	Signature requirements		Attendance to at least 60% of the theoretical classes demonstrated activity to classes, and a prepared and presented seminary paper are required.			
19	Method of the evaluation					
	19.1.	Tests: points 1 test (50 points)			50	
	19.2.	Seminar work/project, written and oral presentation: points			10	
	19.3.	Final exam: points			40	
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 teachers in carrying out seminars 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.	Zuzhelova M.	Orthodontics for Professional Dental Technicians	Faculty of Dentistry	2004
		2.	Markovikj M et al.	Orthodontics	Faculty of Dentistry - Belgrade	1989
	22.2.	For further reading				
		Serial number	Author	Title	Publisher	Year
		1.	Proffit WR, Fields HW	Contemporary orthodontics	Mosby Inc	2014
		2.	Reyneke J	Essentials of Orthognathic Surgery	Quintessence Publishing USA	2010
		3.	Gregoret J	Orthodontics and Orthognathic Surgery: Diagnosis and Planning	Espaxs	2003

Serial number: 43

Annex no. 3		First cycle study program
1.	Title of courses	Technical Procedures for the Treatment Of Bruxism and the TMJ
2.	Code	PDTEBR3