

		4.	Krstic M and assoc.,	Dental prosthodontics Total prosthesis	Interprint, Belgrade	2011
		5.	Marinkovic Z, Tihacek-SoicLj, Zivkovic R	Total prosthesis	Faculty of Dentistry, Belgrade	2014
		6.	Stamenkovic D	Dental Prosthodontics Partial Prosthesis, Second Revised Edition	Data status Belgrade	2017
	22.2.	Additional literature				
		Ord. No.	Author	Title	Publisher	Year
		1.	Ran A, Ivanhoe J, and Plummer K.	Textbook of total prosthesis	Arberia Design	2016
		2.	MacEntee M	The complete prosthesis: A clinical Pathway, 2nd edition	Quintessence books	2019
		3.	Carr A, Brown D	McCracken's Removable Partial Prosthodontics, 13th edition	Elsevier	2016

Attachment No. 3		Course program of the first cycle of studies			
1.	Course title	Clinical Cariology and Restorative Dentistry			
2.	Code	DMMCC4			
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 Endodontics and Restorative dentistry			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	4	Semester	7 and 8
7.	Course workload expressed in ECTS credits	9			
8.	Teacher	Teacher in charge: Prof. Ilijana Muratovska, Prof. Lidija Popovska			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for taking and passing the course	All compulsory subjects from the third year have been completed, and all compulsory subjects from the second year have been passed.			
11.	Course objectives (competences) and learning outcomes:	The student will be introduced to taking anamnestic data and recognizing pain of carious origin, the morphological characteristics of caries progression, working in a dry working field, as well as the methods, techniques, materials, and instruments necessary for performing a successful restorative procedure. The knowledge acquired from theoretical and practical teaching will enable the student to correctly and fully apply it in clinical conditions and ways to avoid possible errors.			
12.	Detailed course content by chapters and units, with learning outcomes for each chapter	Theoretical teaching – lectures Chapter 1 -Introduction to cariology, patient admission, medical and dental history, treatment plan, ethics of the profession1 -Clinical significance of hard dental structures, determining risk factors for caries, therapy of carious lesions.....1 -Subjective and objective findings in the patient, methods for caries detection, and use of radiography.1 -Modern methods for early diagnosis of dental caries.....1 -Methods of providing a dry working area in dentistry.....1 -Pain control in restorative dentistry, need and types of anesthesia.....1 -Changes, deviations, and modifications in tooth preparation, modern attitudes, minimally invasive preparations.....1 -Alternative methods of tooth preparation.....1 -Adhesive systems - total etching technique.....1 -Adhesive systems - self-etching technique.....1 -Treatment of deep caries.....1 -Most common errors and omissions in tooth preparation and restoration.....1			

		-Separation, papillae suppression, matrices and their application in restorative dentistry.....1 -Biological significance of hard dental substances.....1 Colloquium Results of 1 chapter: The student acquires knowledge about accurate and precise diagnostics of carious lesions, preparation for intervention, and performance of restorative procedures, with a review of modern possibilities and technologies. Chapter 2 -Restorations of anterior teeth.....1 -Restorations of posterior teeth.....1 -Restoration of cervical and root caries.....1 -Aesthetic restorations in the front with composite materials....1 -Indirect restorations.....1 -Coronary restorations of severely damaged teeth.....1 -Functional anomalies.....1 -Structural anomalies.....1 -Dentine wound, cavity cleaning, pulp reaction to dental restoration materials.....1 -Polymerization contraction.....1 -Whitening of vital and non-vital teeth.....1 -Tooth hypersensitivity.....1 -Occlusal adjustment of dental restorations.....1 -Patient monitoring system, control of achieved results.....1 Colloquium Results from chapter 2 – The student will focus on education on complex carious issues, the causes that led to them, with knowledge of their most adequate solution, and ways to obtain highly aesthetic restorations. Monitoring of results and the need for control. Lectures.....30 classes Practical teaching - exercises.....105 classes		
13	Interrelation of subjects	Preclinical cariology and restorative dentistry, Dental materials		
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching, teamwork, laboratory exercises that include working in small groups with demonstrations of instruments and methods used in cariology and restorative dentistry, therapies, and presentation and performance of endodontic procedures on models by students.		
15.	Total available time	270 classes		
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching, classes	30 classes
		16.2.	Exercises (laboratory, lecture), seminars, teamwork: classes	105 classes
		16.3.	Practice: classes	
17.	Other forms of activities	17.1.	Project assignments: classes	
		17.2.	Independent assignments: classes	
		17.3.	Homework – assignments	135
18	Signature requirements	Attendance at 60% of theoretical classes and 80% of practical classes		
19	Method of assessment			
	19.1.	Tests: points	15+15	
	19.2.	Seminar paper/project, written and oral presentation: points	6-10	
	19.3.	Final exam: points	36-60	
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.	Popovska L, Muratovska I	Clinical caryology and therapeutic procedures	'Gjurgja'	2017
	22.2.	Additional literature				
		Ord. No.	Author	Title	Publisher	Year
		1.	Mount GJ, Hume WR.	Preservation and restoration of tooth structure	Mosby International Ltd.	1998
		2.	Summit JB, Robbins JW, Hilton TJ, Schwartz RS	Fundament of surgical dentistry: a contemporary approach	Quintessence Publishing Co, Inc	2006
		3.	Walmsley D., Walsh T. et all.	Restorative dentistry	Elsevier limited	2007
		4.	Edwina M. Kidd et all. Pickard's	Manual of Surgical dentistry.	Oxford University Press	2003
		5.	Mjør IA;	Pulp and dentine biology in restorative dentistry.	Quintessence publishing, Hanover Park, USA,	2002.

Attachment No. 3		Course program of the first cycle of studies			
1.	Course title	Dental radiology			
2.	Code	DMMDR4			
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 Pediatric and Preventive Dentistry			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	4	Semester	7
7.	Course workload expressed in ECTS credits	4			
8.	Teacher	Prof. Dr. Marija Stevanovikj Prof. Dr. Aleksandar Dimkov			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for taking and passing the course	Completed all mandatory third year courses and passed all mandatory second year courses			
11.	Course objectives (competences) and learning outcomes:	Objectives of the course program (competences): after attending theoretical and practical classes and passing the exam, the student acquires knowledge and skills about the methods of creating X-rays, the methods of performing and processing X-rays, the harmful effects and protection from X-ray radiation, interpretation of X-rays, competent reading and interpretation of normal radiography of the dental and jaw structures and knowledge about the correct diagnosis of pathological conditions in the orofacial region.			
12.	Detailed course content by chapters and units, with learning outcomes for each chapter	Course content: Chapter 1. Fundamentals of dental radiography and radiology Basic physical principles of ionizing radiation; X-ray tube; generation of X-rays.....2 classes Biological effects of X-ray radiation and protection from X-ray radiation.....2 classes Types of X-ray imaging in the orofacial region; Performing intraoral, extraoral,			