

		1.	Prof. Dr. Ljubica Georgievska-Ismail (editor) et al.	Fundamentals of scientific research work: a textbook for medical students and students of professional studies in all health professions	Faculty of Medicine, University "Ss. Cyril and Methodius, Skopje	2021
		2.	Marušić M.	Uvod u znanstveni rad u medicine. 6th ed.	Medicinska klada, Zagreb	2019
		3.	Boniface DR	Research Methods in Medicine & Health Sciences	Cham: Springer	2020
	22.2	Additional Literature				
		Ord. No.	Ord. No.	Ord. No.	Ord. No.	Ord. No.
		1.	Hall GM	How to Write a Paper. 6th ed.	Boca Raton: CRC Press	2019
		2.	Innes NPT, Clarkson JE	Guide to Research Methods in Dentistry	Hoboken: Wiley-Blackwell	2016
		3.	Greenhalgh, T.	How to Read a Paper: The Basics of Evidence-Based Medicine (6th ed.).	Wiley-Blackwell	2019

Attachment No. 3		Course program for the first cycle of studies			
1.	Course title	Clinical Practice 2 - Periodontology and Oral Medicine (5 ECTS) - Prosthodontics (5 ECTS) - Oral Surgery (5 ECTS) - Endodontics and Restorative Dentistry (5 ECTS)			
2.	Code	DMMP26			
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, Department of Oral and Periodontal Diseases, Department of Oral Surgery, Department of Prosthodontic Dentistry, and Department of Endodontics and Restorative dentistry)			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	6	Semester	12
7.	Course workload expressed in ECTS credits	20			
8.	Teacher (in case of multiple teachers, designated teacher in charge)	Prof. Dr. Emilija Leveska Stefanovska *All professors from the stated departments participate in the teaching			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for taking and passing the course	Completed all compulsory subjects from the fifth year and passed all compulsory subjects from the fourth year			
11.	Course objectives (competences) and learning outcomes:	The student will be able to see the interconnection of different dental fields during patient care in a dental office.			
12.	Detailed course content by chapters and units with learning outcomes for each chapter	Theoretical instruction-lectures Chapter 1 - Department of Oral and Periodontal Diseases - General principles and need for periodontal disease therapy before tooth reconstruction.....2 classes - Specifics of periodontal disease therapy in patients at risk for dental			

	interventions..... 2 classes - Sanitation of oral mucosa diseases in patients before definitive tooth restoration.....1 class - Preprosthodontic preparation of the periodontium.....1 class - Maintenance of the achieved results after the implemented complex periodontal therapy over a longer period of time (control examinations, re-motivation to maintain oral hygiene, detection of relapses of the disease and their rehabilitation)..... 2 classes Outcomes from chapter 1: The students will be directed towards acquiring knowledge of the importance of general and specific principles of periodontal disease therapy before tooth reconstruction, including in patients at risk. The students will also focus on education for the treatment of oral mucosal diseases and on maintaining the achieved results after fully implemented periodontal therapy over a longer period of time. 2. Chapter - Department of Prosthodontic Dentistry - Diagnostics and treatment plan for removable prosthodontics1 - Diagnostics and treatment plan for fixed prosthodontics1 - Types of preparation of supporting tissues (teeth and jaw ridge) for the manufacture of removable prosthodontics 1 - Types of preparation of supporting tissues (teeth and jaw ridge) for the manufacture of fixed prosthodontics 1 - Errors in the manufacture of removable prosthodontics 1 - Errors in the manufacture of fixed prosthodontics 1 - Problem solving (early and late) in wearers of removable prosthodontics 1 Planning of therapy with complex fixed-removable prosthodontics, selection of materials and aesthetic retention systems 1 Outcomes from chapter 2: The students will learn about the correct planning and selection of removable and fixed prosthodontic restorations as well as the preparation of supporting tissues. Will be able to recognize errors and problems in the manufacture of removable and fixed prosthodontic restorations and possible solutions to them. The students will learn about the principles and materials in oral rehabilitation with complex fixed-removable constructions. 3. Chapter - Department of Oral Surgery - Preparation and plan for oral surgical interventions in patients at risk ...1 class - Application of local infiltrative anesthesia techniques in the upper and lower jaw..... 1 class - Detection of local and general complications during and after anesthesia 1 class - Technique of atypical extractions in the upper and lower jaw1 class - Diagnosis and therapy of complications during and after tooth extraction ...1 class - Principles of soft tissue and bone post-extraction healing 1 class - Treatment of acute odontogenic infection from an oral surgical aspect1 class Outcomes from chapter 3.- The students will focus on mastering atypical techniques for tooth extraction and monitoring patients with a possible risk of complications. Drainage procedures in patients with acute odontogenic infection will also be mastered. 4. Chapter - Endodontics and Restorative Dentistry (Department of Endodontics and Restorative dentistry) - Assessment of subjective and objective findings in cases of damage to hard dental tissues from caries, trauma, erosion and other factors. Treatment plan and additional examinations.....1 - Definition of differential diagnostic procedures and application of various types of modern materials and methods in restorative cariology, errors in restorative procedures and their correction..... 1 - Pathology in the endodontic space, immunological, inflammatory reactions of the pulp, microbiology of necrotic and gangrenous pulp..... 1 - Diagnostics with radiographic recordings, pathological calcifications, and age-related changes in the immune reaction in the apical periodontium..... 1 - Modern approach to endodontic therapy, using modern diagnostic and therapeutic methods such as operating microscope, laser, and 3D radiography and assessment of the success of endodontic treatment..... 2 - The most common errors in endodontics and possibilities for their correction. Specifics of endodontic therapy in patients at risk for dental interventions.... 1
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		Outcomes from chapter 4.- The students will acquire knowledge and readiness to face the challenges of the general and individual characteristics of patients and master the correct approach to solving problems related to restorative dentistry and the dentinal pathology of the endodontic space. Total:30 classes Practical teaching - exercises - From the first chapter 120 classes - From the second chapter 120 classes - From the third chapter120 classes - From the fourth chapter120 classes Total480 classes		
13	Interrelation of subjects	Interrelation to all dental disciplines		
14.	Detailed description of the teaching and working methods for the subject	The students carry out the intended therapeutic procedures according to the therapy plan (periodontal treatment, treatment of diseases of the oral soft tissues, typical and atypical techniques for tooth extraction, restorative dentistry, and planning and selection of removable and fixed prosthodontic replacements) The instruction is interactive with exercises, laboratory or clinical, working in small groups, presentation and performance of laboratory procedures, demonstration of instruments and methods used, and teamwork (according to the specifics of the course)		
15.	Total available time	600 classes		
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching classes	30 classes
		16.2.	Exercises (laboratory, auditorium), seminars, teamwork: classes	480 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	90 classes
18	Signature requirements	The clinical practice will be carried out under the supervision of a Teacher in charge and mentor (assistant, research associate, professor). The report on the completed practice is filled out by the mentor, and the credits earned and the descriptive grade-passed are entered into the index by the teacher in charge. The professor responsible for the clinical practice keeps records (clinical practice diary) of the students' attendance and activities during the clinical practice performance. The students keep a patient book, in which they enter the interventions. In order to pass the course, the students need to present the documentation of the patients they have treated during the semester (history and photographs before and after treatment). In order to receive a signature and take the test, the students need to actively participate in the treatment of the patients and completely repair the dentition of 3 adult patients. Also, in order to take the test, the students must have previously passed the following courses: Clinical Periodontology, Clinical Fixed Prosthodontics, Clinical Endodontics, and Oral Surgery 2.		
19	Grading method			
	19.1.	Tests: points		
	19.2.	Seminar paper/project, written and oral presentation: points		30
	19.3.	Final exam: points		70
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.	Linde J.	Klinička parodontologija i implantologija Globus, Zagreb 2009	Globus, Zagreb	2009
		2.	Herbert F.Wolf, Edith M. Parodontologija, Stomatoloski atlas NAKLADA SLAP 2009	Parodontologija, Stomatoloski atlas	NAKLADA SLAP	2009
		3.	Bun San Chon	Harty's Endodontics in Clinical Practice, 7th Edition	Churchill Livingstone	2016
		4	Summit JB, Robbins JW, Hilton TJ, Schwartz RS.	Fundamentals of surgical dentistry: a contemporary approach:	Quintessence Publishing Co, Inc	2006.
		5	Aleksa Marković, Snježana Čolic, Ljiljana Stojčev Stajčić, Radojica Dražić,Bojan Gačić	Praktikum oralne hirurgije	Stomatološki fakultet Beograd	2014
		6	Ljubomir Todorović,Vlastimir Petrović, Milan Jurišić, Violeta Kafedžiska-Vračar	Oralna hirurgija	Agencija za marketing i zeppelin reklame DON VAS	2007
		7	Božidar Brković, Radojica Dražić, Radoje Milosavljević, Ljubomir Todorović	Stomatološka anesteziologija	Stomatološki fakultet Beograd	2012
		8	Fragiskos D.	Oral surgery	Springer	2007
		9	Rosenstiel SF, LandMF, Fujimoto J.	Contemporary fixed prosthodontics 4th edition	St. Louis: Mosby Inc	2006
		10	Bajevska J.	Dental ceramics	Faculty of Dentistry	2014
	11	Guguvchevski Lj, Dejanoski K, Veleski D.	Clinic of total prosthodontics	Ein-Sof, Skopje	2003	
	12	Stamenkovic D., Nastic M.	Stomatoloska protetika. Parcijalne proteze	Zavod za udzbenike i nastavna sredstva,	2017	
	22.2.	Additional literature				
		Ord. No.	Author	Title	Publisher	Year

		1.	B. Dimitrievikj	Clinical Periodontology	Zavod za uzhbenike	2010
		2.	Edwina M. Kidd et al.	Pickard's manual of operative dentistry.	TF,Oxford University Press, UK, 2011.	2011.
		3.	Leif Tronstad	Clinical Endodontics	Thieme 2003	2003
		4.	James R. Hupp	Contemporary oral and maxillofacial surgery	Mosby, Elsevier	2014
		5.	Peterson Larry J.	Contemporary oral and maxillofacial surgery	Mosby Year Book, Inc	1993
		6.	Babic B.	Skeletirana proteza	Medicinska knjiga, Beograd-Zagreb	1977
		7.	Mc Cracken	Removable Partial Prosthodontics 11th edition	Mosby, Inc	Inc 2005
		8.	Shillingburg H.T. et al.	Fundamentals of Fixed Prosthodontics Quintessence	Publishing Co. Chicago	1997
		9.	Rangarajan V, Padmanaban T.V .	Textbook of prosthodontics	Ars Lamina	2017

Attachment No. 3		Course program for the first cycle of studies			
1.	Course title	Computerized dentistry			
2.	Code	DMECD6			
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, Department of Implantology and Department of Oral Surgery			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	6	semester	11
7.	Course workload expressed in ECTS credits	2			
8.	Teacher (in case of multiple teachers, designated teacher in charge)	Prof. Dr. Janev Edvard (Teacher in charge), Prof. Dr. Oliver Dimitrovski			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for taking and passing the course	No			
11.	Course objectives (competences) and learning outcomes:	Digital dentistry allows students to learn about establishing a diagnosis, planning therapy, and how to move through the phases of treatment faster, more efficiently, more easily, and more accurately. The development of computer-based technologies, including virtual simulation, computer-aided design, and fabrication, creates a need for continuous education and practice. The aim of this course is to introduce you to the most modern diagnostic methods, such as computed tomography, magnetic resonance imaging, three-dimensional visualization, and digital scanning (CT, CBCT, MRI, 3D, DigitalScan).			
12.	Detailed course content by chapters and units, with learning outcomes for each chapter	Theoretical teaching - lectures Modern dentistry, development and application of Computerized dentistry in clinical practice...1 class Types of CT scanners: CT and CBCT. Advantages and disadvantages of CBCT, advantages and disadvantages of CT..... 1 class Precision, variations and deviations of CT and CBCT measurements in clinical dental practice.....1 class			