

1	Subject	<b>DENTAL MATERIALS 2</b>			
2	Code	DSM307			
3	Study Program	Study Program of Integrated studies in dental medicine			
4	Organizing Institution (Unit, Institute, Chair, Department)	Department of Conservative Dentistry and Endodontics Department of Pediatric and Preventive Dentistry			
5	Educational degree (first or second cycle)	Integrated study			
6	Study year/semester	3/5	7	Number of credits	3
8	Teacher	Prof. Sonja Apostolska, Prof. Lidija popovska, Prof. Ilijana Muratovska, Prof. Vasilka Rendzova, Assist. Prof. Marina Eftimoska, Prof. Elizabeta Gjorgievska, Prof. Marija Stevanovic, Prof. Mira Jankulovska, Prof. Ana Sotirovska-Ivkovska, Assoc. Prof. Aleksandar Dimkov			
9	Preconditions	Having attended all courses from the 3st and 4th semester, and having passed all mandatory subjects from the 1st and second semester			
10	Teaching goals: Objectives of the course program (competences): wider knowledge of the physical and the chemical characteristics of the dental materials used in restorative dentistry and endodontics, their classifications, indications and contraindications, the proper use, standardization and biocompatibility of these materials as well as the procedures for working with them.				
11	<b>Brief content</b>				
	<b>Theoretical course</b>				<b>Class</b>
	Classification of the materials used in tooth restoration				2
	Materials for definitive restoration: history, composition, indications, testing and standardization of the restorative materials, physical and chemical characteristics				2
	Biocompatibility and bioactivity of the restorative materials				2
	Composite resins: composition, characteristics, classifications, indications				4
	Dental adhesives: classification, characteristics, indications				2
	Glass-ionomer cements				2
	Hybrid materials: resin-modified glass-ionomer cements, compomers, giomers				2
	Materials for dentin wound protection				2
	Remineralizing agents				2
	Calcium-silicate cements				2
	Intracanal medicaments				2
	Contemporary materials for definitive root canal obturation				2
	Endodontic materials used in deciduous teeth				2
	Materials for tooth bleaching in vital and non-vital teeth				2
	<b>Total</b>				<b>15</b>
	<b>Seminars</b>				<b>Class</b>
	Elaboration of topics from the relevant material, presentation of the topics by the students and active involvement of the students until discussion of the given topic.				15
12	Methods of studying: class room oriented lectures, interactive lectures, group work, practical training, seminar paper				
13	Total available time	90 classes			
14	Organization of the course	30 classes - theoretical course, 15 classes- seminars, 45 classes - home individual learning and other activities			

15	Forms of teaching activities	15.1.	Theoretical course			30 classes
		15.2.	Practical course, seminars			seminars- 15 classes
16	Other forms of activities	16.1.	Project tasks			
		16.2.	Individual tasks			
		16.3.	Individual (home) learning			45 classes
17	Method of assessment	17.1.	Tests			30 points
		17.2.	Active participation, seminar paper/project (oral/written presentation)			10 points
		17.3.	Final (oral) exam			60 points
18	Grading criteria (points / grade)	Up to 59 points			5 (five) (F)	
		from 60 to 67 points			6 (six) (E)	
		from 68 to 75 points			7 (seven) (D)	
		from 76 to 84 points			8 (eight) (C)	
		from 85 to 93 points			9 (nine) (B)	
		from 94 to 100 points			10 (ten) (A)	
19	Requirement for signature and taking the final exam	<p>The student is required to actively follow all of the planned activities.</p> <p>Conditional criteria for assessment of knowledge:</p> <p>In order to get a signature, the student should obtain minimum points in both theoretical and practical courses, and to present seminar paper;</p> <p>In order to take the final exam, the student should obtain the minimum points from activity and test;</p> <p>If the student has not obtained the minimum points in the continual assessments, he/she in next exam session will have paper part of the exam (40 points) and final exam (60 points)</p>				
20	Language of the course	English				
21	Method for evaluation of the quality of education	Anonymous student's evaluation of the subject, teachers and collaborators involved in the educational activities				
22	<b>Literature</b>					
	22.1.	<b>Mandatory textbooks</b>				
		No.	Author	Title	Publisher	Year
		1.	Anusavice et al.	Phillips' Science of Dental Materials	Saunders	2012
	22.2.	<b>Additional literature</b>				
		No.	Author	Title	Publisher	Year
1.		Nicholson JW, Czarnecka B	Materials for the Direct Restoration of Teeth	DOI:10.1016/B978-0-08-100491-3.00006-4	2016	