

1	Subject	Pediatric dentistry 1			
2	Code	DDS409			
3	Study Program	Study Program of Integrated studies in dental medicine			
4	Organizing Institution (Unit, Institute, Chair, Department)	Department of Pediatric and Preventive Dentistry			
5	Educational degree (first or second cycle)	Integrated study			
6	Study year/semester	4 / 8	7	Number of credits	5
8	Teacher	Prof.dr. Elizabeta Gjorgievska, Prof.dr. Mira Jankulovska, Prof.dr. Marija Stevanovic, Prof. dr. Zlatko Georgiev, Prof. Dr. Ana sotirovska – Ivkowska, Prof. Dr. Aleksandar Dimkov, Prof. Dr. Meri Pavlevska			
9	Preconditions	Passed all compulsory courses of 3 and 4 semester. Signatures of 5 and 6 semester courses			
10	<p>Teaching goals: Objectives of the course program (competences): Upon the completion of the theoretical classes and the practical exercises, and upon passing the exam, the student should be able to make an examination and assessment of the patient's psychological type and to determine the treatment plan; to have knowledge of the orofacial region growth and development, of primary and permanent dentition chronology, to diagnose and to treat teeth anomalies; to diagnose and to treat dental caries in primary and permanent teeth; to diagnose and treat pulp and periodontal tissues diseases, soft tissues diseases, as well as the complications caused by general, nutritive and metabolic disorders; to know how to select and apply adequate dental material according to indications; to plan and to achieve oral surgical interventions in children; to diagnose and to treat dental trauma and complications of trauma in children; to plan and achieve aesthetic procedures and prosthetic interventions in children.</p>				
11	Brief content				
	Theoretical course				Class
	Introduction in pediatric dentistry, goals, tasks, basic principles, physiology of child development (motor development, cognitive, emotional, social development, speech and adolescence). Parents and their impact on the dental treatment; parents – dentist relationship.				1
	Dental work with children (classification of children by age, by behaviour, work with noncooperative children).				1
	Pain control.				1
	Management of dental problems of handicapped and systemically compromised children.				1
	History (personal information, family history, medical and dental history). Clinical examination (extraoral and intraoral). Further investigation (X-ray). Risk assessment of caries and periodontal disease occurrence. Principles of treatment planning.				2
	Growth and development of orofacial complex. Prenatal and postnatal development, tooth development – odontogenesis, enamel and dentin development, teeth roots, dental pulp and alveolar ridge development, development of permanent teeth.				3
	Eruption of deciduous and permanent teeth (phases and mechanism of eruption). Roots resorption of deciduous teeth. Chronology of tooth development, teeth numbering systems.				2
	Anatomy and histological characteristics of deciduous and permanent teeth (enamel, dentine, cement, dental pulp and periodontium).				2
	Morphological characteristics of deciduous teeth.				1
	Morphological characteristics of young permanent teeth, anatomy characteristics of nasomaxillary and mandibular growth.				1
	Anomalies of tooth development. General and local disorders during tooth eruption, disturbances of eruption, premature eruption, retarded eruption. Disturbances of exfoliation.				1
	Abnormalities of tooth number, tooth size, tooth form, tooth position, tooth colour.				1
	Abnormalities of tooth structure caused by genral factors, intoxications and hereditary factors.				1

	Clinical aspects.	
	Dental caries. Development of carious lesion, detection and diagnosis. Diagnostic methods (visual – tactile and X-ray examination) and auxiliary methods. Clinical classification of caries. Treatment of dental caries – nonoperative and operative treatment.	2
	Radiographic assessment in childhood.	1
	Indications for restorative treatment of primary teeth (clinical characteristics of primary tooth caries, localization of caries, restorative techniques, restorative materials – conventional and new, deep caries lesion). Rampant caries or nursing bottle caries.	2
	Caries of young permanent teeth (classification, characteristics, therapy). Diagnosis, fissure sealing, caries of smooth surfaces, approximal caries, deep carious lesion. Minimally invasive technique, shaped cavity preparation. Atraumatic restorative technique. Preventive resin restorations.	3
	Pulp and periodontal tissues diseases in primary teeth (classification, etiology, indications for treatment, symptoms and signs, differential diagnosis, types and methods of pulp treatment).	3
	Pulp and periodontal tissues diseases in young permanent teeth (etiology, indications for treatment, symptoms and signs, differential diagnosis).	1
	Total	30
	Practical lessons:	Class
	Basic principles in treatment of children in dental practice, parents – dentist relationship, conduct towards patients based on their psychological profile, child's first visit of the dentist office.	3
	Treatment of handicapped, systemically compromised and children with dentophobia.	3
	Dental assessment: general assessment of the patient, history (personal information, major symptoms, current ailment, personal medical history, family history). Clinical examination - examination of head and neck (extraoral), and intraoral examination. Diagnosis, treatment plan, types of dental check-ups in children, recording and documenting of the obtained data.	4
	Radiographic techniques in dentistry, guide to perform dental radiographs, criteria for evaluation and reading radiographs in pediatric dentistry, precautions.	3
	Pain control during dental interventions: permission from a parent / custodian, documentation, indications and contraindications, methods of anesthesia administration, complications.	3
	Growth and development of orofacial complex, stages and mechanisms of eruption, resorption of deciduous teeth, chronology of tooth development, teeth numbering systems.	3
	Anatomy and histological characteristics of deciduous and permanent teeth: similarities and differences, characteristics of young permanent teeth.	3
	Anomalies of tooth eruption: general and local factors, dentitio praecox, dentitio tarda, disturbances of exfoliation.	3
	Abnormalities of tooth number, tooth size, tooth form, tooth position, tooth colour.	3
	Abnormalities of tooth structure caused by general and local factors, intoxications and hereditary factors, idiopathic anomalies.	3
	Clinical management of dental anomalies in children.	3
	Dental caries in children: providing a dry working field, cavity preparation in deciduous and permanent teeth, rampant caries treatment.	4
	Minimally invasive technique, atraumatic restorative technique (ART), chemo mechanical caries treatment, air abrasion, laser.	3
	Preparation of the cavity for restoration, methods and techniques of restorations.	4
	Total	45
12	Methods of studying: class room oriented lectures, interactive lectures, group work, practical training, seminar paper	
13	Total available time	150 classes
14	Organization of the course	30 classes - theoretical course, 45 classes- practical course, 75 classes - home individual learning and other activities

15	Forms of teaching activities	15.1.	Theoretical course			30 classes
		15.2.	Practical course, seminars			Practical course - 45 classes
16	Other forms of activities	16.1.	Project tasks			
		16.2.	Individual tasks			
		16.3.	Individual (home) learning			75 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;</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	Literature					
	22.1.	Mandatory textbooks				
		No.	Author	Title	Publisher	Year
		1	McDonald R, Avery D	Dentistry for the Child and Adolescent	Mosby, 7 ed	1999.
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
1		Beloica D i sar.	Dečja stomatologija	Elit-Medica Beograd,	2000.	
2		Бајрактарова Б, Бајрактарова-Ваљакова Е, Бајрактарова-Мишевска Ц.	Аномалии на забите	НУБ Скопје	2011	