


**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

<b>Predmet:</b>	<b>Otroško zobozdravstvo 2</b>
<b>Course title:</b>	<b>Pediatric Dentistry 2</b>

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
Dentalna medicina/Dental Medicine 2. stopnja/2nd cycle		5	9, 10

Vrsta predmeta / Course type: Obvezni/ Compulsory

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Clinical training	Druge oblike študija Other forms of study	Samost. delo Individual work	ECTS
30			75		75	6

Nosilec predmeta / Lecturer: Red. prof. dr. Nataša Ivančič Jokić

Jeziki / Predavanja / Lectures: slovenščina/slovene  
 Languages: Vaje / Tutorial: slovenščina/slovene

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:  Prerequisites:

**Vsebina:**  
 Namen poučevanja je, da študenti obvladajo metode zdravljenja kariesa in rekonstrukcijo mlečnih in mladih trajnih zob ter zdravljenje pulpe mlečnih in mladih stalnih zob. Naloga praktičnega izobraževanja je seznaniti se s specifično patologijo v otroški dobi in posebnimi metodami zdravljenja. Študentje morajo tudi obvladovati postopke za diagnosticiranje in zdravljenje najpogostejše zobne poškodbe pri otrocih in metode za njihovo preprečevanje.

**Content (Syllabus outline):**  
 The task of teaching is that students master the methods of treating caries and reconstruction of primary and young permanent teeth, and pulp therapy of deciduous and young permanent teeth. Task is to introduce specific pathology in children and specific methods of treatment. Students should also master the methods for diagnosis and treatment of dental trauma most frequent in children and methods for their prevention. In the fourth semester of study, students should be familiar with specific procedures.

**Temeljni literatura in viri / Readings:**

- Koch G, Poulsen S. Pediatric dentistry a clinical approach. Second edition. Blackwell Munksgaard 2009.
- Andreasen JO, Andreasen FM, Andersson L. Textbook and Color Atlas of Traumatic Injuries to the Teeth. Wiley 2007.

**Cilji in kompetence:**  
 Praktično usposabljanje: metode za preprečevanje kariesa, diagnostični postopki, zdravljenje mlečnih in mladih stalnih zob, zdravljenje zob pri ljudeh s težavami pri razvoju, metode zdravljenja najpogostejših vrst dentalnih, facialnih poškodb in pravočasno prepoznavanje ortodontskih anomalij. Prav tako študenti skozi praktično delo utrdijo in izboljšajo prej naštete segmente usposabljanja.

**Objectives and competences:**  
 Practical mastery of: Method for caries prevention, diagnostic procedures, treatment of deciduous and young permanent teeth, dental treatment in persons with developmental disabilities, methods of treating the most common types of dentofacial injuries and timely recognition of malocclusion. The task is also to teach through practical works, and progress in this segment of training.

**Predvideni študijski rezultati:**  **Intended learning outcomes:**

Študent bo znal:

- Opisati etiologijo patoloških sprememb zobne pulpe mlečnih in nezrelih stalnih zob.
- Razlikovati diagnoze patoloških sprememb zobne pulpe mlečnih in nezrelih stalnih zob.
- Opisati, primerjati endodontske tehnike mlečnih in nezrelih stalnih zob.
- Opisati reakcijo tkiva po endodontski terapiji mlečnih in nezrelih stalnih zob.
- Opisati komplikacije po endodontski terapiji mlečnih in nezrelih stalnih zob.
- Opisati in definirati proces apeksogeneze.
- Opisati in definirati proces apeksifikacije.
- Razlikovati in primerjati apeksogenezo in apeksifikacijo.
- Primerjati materiale in terapevtska sredstva v endodontskem zdravljenju mlečnih in nezrelih stalnih zob.
- Opisati zdravljenje kariesa in doseganje remineralizacije okvare z ozonom.
- Opisati beljenje nevitalnih obarvanih stalnih zob.
- Razlikovati obravnavo urgentnega stanja pri otroku.
- Določiti in razlikovati lokalno analgezijo in lokalno anestezijo.
- Argumentirati indikacije in kontraindikacije za lokalno anestezijo.
- Razlikovati neželene učinke in zaplete, povezane z lokalno anestezijo.
- Razlikovati tehnike lokalne anestezije.
- Narediti topikalno metodo.
- Opisati metode infiltracije.
- Opisati načine izvajanja.
- Argumentirati uporabo analgetikov.
- Opisati in argumentirati indikacije za farmakološko sedacijo pri dentalno-medicinskih postopkih.
- Opisati in navesti indikacije za inhalacijsko sedacijo v dentalno-medicinskih postopkih.
- Argumentirati indikacije za zobozdravstvene posege v splošni anesteziji.
- Opraviti polnjenje na mlečnih ali stalnih zobeh.
- Opisati minimalno invazivne posege v otroški dentalni medicini.
- Opis razvoja varovala zob pri otrocih in mladostnikih.
- Opisati in argumentirati indikacije za izdelavo kron, delne in totalne proteze pri otrocih in mladostnikih.
- Opisati normalna parodontna stanja.
- Razlikovati parodontna stanja in bolezni pri otrocih in mladostnikih.
- Opisati epidemiološke vidike nastanka poškodbe zob.
- Opisati etiologijo dentofacialnih poškodb.
- Opisati metode preprečevanja dentofacialnih poškodb pri otrocih.
- Razlikovati diagnoze travmatskih poškodb zob in orofacialnih struktur.
- Analizirati radiološke slike travmatiziranih zob in orofacialnih struktur.

Knowledge and understanding:

Students attending the course must:

- describe the etiology of pathological changes in dental pulp of deciduous and immature permanent teeth
- differentiate the diagnosis of pathological changes in dental pulp of deciduous and immature permanent teeth
- describe and compare endodontic techniques in deciduous and immature permanent teeth
- describe the reaction of tissues after endodontic therapy of deciduous and immature permanent teeth
- described complications after endodontic therapy of deciduous and immature permanent teeth
- describe and define the process of apexogenesis
- describe and define the process of apexification
- differentiate and compare apexogenesis and apexification
- compare materials and therapeutic means in endodontic therapy of deciduous and immature permanent teeth
- describe the treatment of caries and remineralization with ozone therapy
- describe bleaching nonvital stained permanent teeth
- differentiate treatments of emergency conditions in children
- define and distinguish between local analgesia and local anesthesia
- argue indications and contraindications for local anesthetics
- different side effects and complications associated with local anesthesia
- different techniques local anesthesia
- make a topical method
- describe methods infiltration local anesthesia
- describe the conduction method of local anesthesia
- explained the use of analgesics
- described and explained the indications for pharmacological sedation for dental medical treatment
- describe and argue for the indication of inhalation sedation for dental medical treatment
- argue dental and medical indications for intervention under general anesthesia
- Make filling in primary and permanent teeth
- describe minimally invasive procedures in pediatric dental medicine
- describe the construction of a mouth guard (mouthpiece) in children and adolescents
- describe and explain the indications for making crowns, partial and complete dentures in children and adolescents
- describe normal periodontal conditions
- distinguish between periodontal conditions and diseases in children and adolescents
- describe the epidemiological aspects of dental trauma
- describe the etiology of dentofacial injuries
- describe the method of prevention of dentofacial injuries in children
- differentiate the diagnosis of traumatic injury to the teeth and orofacial structures

<ul style="list-style-type: none"> <li>- Opisati postopek zgodovine bolezni pri travmatičnih poškodbah zoba in orofacialnih struktur.</li> <li>- Opisati klinični pregled pri travmatskih poškodbah zob in orofacialnih struktur.</li> <li>- Razlikovati nujne terapevtske postopke pri travmatskih poškodbah mlečnih zob.</li> <li>- Opisati spremljanje travmatsko poškodovanih zob.</li> <li>- Argumentirati prognozo travmatsko poškodovanih zob.</li> <li>- Opisati in razlikovati posledice poškodbe mlečnih zob na stalno denticijo (rast zob).</li> <li>- Opisati zdravljenje travmatsko poškodovanih zob, frakture zobne krone: preprosti in zapleteni, fraktura korena, luksacijske poškodbe zoba, replantacije.</li> <li>- Prepoznati poškodbe alveolarnega dela.</li> <li>- Opisati zdravljenje poškodb mehkih tkiv.</li> <li>- Opisati in razlikovati oralne mukozne lezije.</li> <li>- Argumentirati terapevtske postopke za oralne lezije sluznice in opisati indikacije za kirurške posege pri otrocih.</li> <li>- Razlikovati zobno in ustno patologijo v mladosti.</li> <li>- Razlikovati metode zdravljenja zob in ustnih struktur v adolescenci.</li> <li>- Prepoznati malokluzije pri mlečni, mešani in stalni denticiji.</li> <li>- Opisati pristop zdravnika dentalne medicine k ortodontskim problemom.</li> <li>- Opisati in argumentirati postopke za preprečevanje in interceptivno zdravljenje malokluzij.</li> </ul>	<p>analysis of radiological images of traumatized teeth and orofacial structures</p> <p>describe the process of taking the medical history of traumatic injury to the teeth and orofacial structures</p> <p>describe the clinical examination by a traumatic injury to the teeth and orofacial structures</p> <p>different emergency treatments for traumatic injuries of primary teeth</p> <p>different emergency treatments for traumatic injuries of permanent teeth</p> <p>describe the monitoring of traumatic tooth injuries</p> <p>argue forecast for traumatic dental injuries</p> <p>describe and distinguish the effects of deciduous teeth injuries to permanent dentition</p> <p>describe the treatment of traumatic injuries of teeth, dental crown fracture: simple or complex, root fracture, luxation injury and tooth replantation</p> <p>recognize the damage of alveolar bone</p> <p>describe the treatment of soft tissue injuries</p> <p>describe and differentiate the oral mucosal lesions</p> <p>argue treatments for oral mucosal lesions</p> <p>describe and explain the indications for surgical procedures in children</p> <p>distinguish between dental and oral pathology in adolescence</p> <p>different methods of treatment of teeth and oral structures in adolescence</p> <p>recognition of malocclusion in deciduous, mixed and permanent dentition</p> <p>describe the approach the doctor of dental medicine to orthodontic problems</p> <p>described and explained the procedures for the prevention and interceptive treatment of malocclusion.</p>
<p>Znanja in spretnosti so podrobneje opisane v Katalogu znanj in spretnosti.</p>	<p>Knowledge and skills are described in more detail in the Catalogue of Knowledge and Skills.</p>

**Metode poučevanja in učenja:****Learning and teaching methods:**

<p>Predavanja Klinične vaje</p>	<p>Lectures Clinical training</p>
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**Delež (v %) /****Weight (in %) /****Assessment:**

<b>Načini ocenjevanja:</b>	<b>Delež (v %) /</b>	<b>Assessment:</b>
<p>Način (pisni izpit, ustno izpraševanje, naloge, projekt)</p>		<p>Type (examination, oral, coursework, project):</p>
<p>Zaključni izpit je sestavljen iz:</p>		<p>The final exam is consists of:</p>
<ul style="list-style-type: none"> <li>- praktičnega dela 50 %,</li> </ul>	<p>50 %</p>	<ul style="list-style-type: none"> <li>- practical part 50 %,</li> </ul>
<ul style="list-style-type: none"> <li>- pisnega dela 25 % in</li> </ul>	<p>25 %</p>	<ul style="list-style-type: none"> <li>- written exam 25 % and</li> </ul>
<ul style="list-style-type: none"> <li>- ustnega izpita 25 %.</li> </ul>	<p>25 %</p>	<ul style="list-style-type: none"> <li>- oral exam 25 %.</li> </ul>

**Reference nosilca / Lecturer's references:**

Verzak Ž, **Ivančič Jokić N**, Modrić VE, Bakarčić D, Karlović Z, Ulovec Z, Negovetić Vranić D. Psychosocial and economic status of the parents with children with and without tooth trauma. *Psychiatria Danubina*. 2016;28:428-433.

**Ivancic Jokić N**, Bakarcic D, Grzic R, Majstorovic M, Sostarek M. What general medicine students of University of Rijeka know about dental avulsion? *Eur J Dent Educ*. 2016; 31 doi:10.1111/eje.12235 (Epub ahead of print)



- Negovetić Vranić D, **Ivančić Jokić N**, Bakarčić D, Carek A, Rotim Ž, Verzak Ž. Dental fear in children with repeated tooth injuries. *Acta Clin Croat* 2016;55:259-264.
- Ivančić Jokić N**, Bakarčić D, Nastić V, Majstorović M, Negovetić Vranić D. Disanje na usta kao uzrok orofacijalnih anomalija *Paediatr Croat*. 2014;58:114-118.
- Bakarčić D, **Ivančić Jokić N**, Negovetić Vranić D, Majstorović M, Vukić Lušić D, Blečić E, Gržić R. Guidelines for teeth fluoridation with respect to fluoride concentration in Primorje-Gorski Kotar County. *Paediatr Croat* 2014;58:25-30.
- Ivančić Jokić N**, Bakarčić D, Janković S, Malatestinić G, Dabo J, Majstorović M, Vuksan V. Dental caries experience in Croatian school children in Primorsko-goranska county. *Cent Eur J Public Health* 2013;21:39-42.
- R. Gržić, D. Bakarčić, I. Prpić, **N. Ivančić Jokić**, A. Sasso, Z. Kovač, V. Lajnert. Dental Health and Dental Care in Children with Cerebral Palsy. *Coll Antropol*. 35(2011)3:765-774.
- D. Bakarčić, V. Lajnert, I. Vlašić Cicvarić, **N. Ivančić Jokić**, S. Hrvatin, R. Gržić, I. Prpić. Utječe li mentalna retardacija na žvačnu učinkovitost kod djece sa cerebralnom paralizom?. *Paediatr Croat* 2011;55:243-246.
- D. Bakarčić, I. Prpić, **N. Ivančić Jokić**, I. Bilić, V. Lajnert, D. Buković. Dental Status as a Quality Control Health Care Parameter for Children With Disabilities. *Coll Antropol*. 33(2009)1: 139-142.
- N. Ivancic Jokic**, D. Bakarcic, V. Fugosic, M. Majstorovic, I. Skrinjaric. Dental trauma in children and young adults visiting a University Dental Clinic. *Dental Traumatology* 2009;25:84-87; doi: 10.1111/j.1600-9657.2008.00711.x
- G. Starčević-Klasan, O. Cvijanović, S. Peharec, M. Zulle, J. Arbanas, **N. Ivančić Jokić**, D. Bakarčić, D. Malnar-Dragojević, D. Bobinac. Anthropometric Parameters as Predictors for Iliopsoas Muscle Strenght in Healthy Girls and in Girls with Adolescent Idiopathic Scoliosis. *Coll. Antropol*. 32(2008)2:461-466.
- Bakarčić D, **Ivančić Jokić N**, Majstorović M, Škrinjaric A, Zarevski P. Structural Analysis of Dental Fear in Children with and without Dental Trauma Experience. *Coll. Antropol*. 31(2007)3:675-681.
- Ivančić Jokić N**, Majstorović M, Bakarčić D, Katalinić A, Szirovica L. Dental caries in disabled children. *Coll. Antropol*. 31(2007)1:321-324.
- Legovic M, Novosel A, Skrinjaric T, Legovic A, Mady B, **Ivancic N**. A comparison of methods for predicting the size of unerupted permanent canines and premolars. *Eur J Orthod*. 2006 Oct;28(5):485-90.