


**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

<b>Predmet:</b>	<b>Klinična fiziologija stomatognatnega sistema</b>
<b>Course title:</b>	<b>Clinical Physiology of the Stomatognathic System</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		4	7

Vrsta predmeta / Course type:

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
45	30		30		75	6

Nosilec predmeta / Lecturer:

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

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

**Vsebina:**  
 Vsebina predmeta zajema uvod v definicijo in zgodovino gnatologije, funkcionalno anatomijo in nevrofiziologijo somatognatnega sistema, položaje in gibanje spodnje čeljusti, registracijo položaja in gibanj spodnje čeljust-šarnirske osi, funkcionalno morfolgijo okluzalnega reliefa, geometrijo okluzije, okluzalne koncepte, funkcijske motnje stomatognatnega sistema, artikulacije, opremo in tehniko, klinično analizo funkcionalnih motenj stomatognatnega sistema, instrumentalno analizo funkcionalnih motenj stomatognatnega sistema, osnovno zdravljenje funkcionalnih motenj.

**Content (Syllabus outline):**  
 The aim of the course is to provide the understanding of interrelationships between all parts of stomatognathic system: biological reactions and rules existing between the teeth, periodontium, temporomandibular joint, masticatory muscle with the maxilla and mandible activated by the nervous system during physiological and pathological movements. Students are required to recognize the clinical picture of pathological stomatognathic system by using the methods of clinical and instrumental functional analysis. The final aim is to enable the students to apply the obtained knowledge in other dental disciplines.

**Temeljni literatura in viri / Readings:**

**Cilji in kompetence:**  
 Cilj je usposobiti študente za razumevanje medsebojnih odnosov vseh delov stomatognatnega sistema ter katere biološke interakcije in pravila veljajo med zobmi, zobnimi tkivi, temporomandibularnimi sklepi, žvečilnih

**Objectives and competences:**  
 The aim of the course is to provide the understanding of interrelationships between all parts of stomatognathic system: biological reactions and rules existing between the teeth, periodontium, temporomandibular joint,



<p>mišic zgornje in spodnje čeljusti, ki so vzpodbujane s strani živčnega sistema med fiziološkimi in patološkimi gibi. Prav tako mora študent znati prepoznati klinično sliko bolezenskega procesa stomatognatnega sistema z uporabo metod klinične in instrumentalne funkcionalne analize. Končni cilj je naučiti študenta, da pridobljena znanja lahko uporabi v drugih stomatoloških disciplinah.</p>	<p>masticatory muscle with the maxilla and mandible activated by the nervous system during physiological and pathological movements. Students are required to recognize the clinical picture of pathological stomatognathic system by using the methods of clinical and instrumental functional analysis. The final aim is to enable the students to apply the obtained knowledge in other dental disciplines.</p>
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**Predvideni študijski rezultati:****Intended learning outcomes:**

<p>Znanje in razumevanje: Po opravljenem predmetu bo imel študent dentalne medicine naslednja znanja:</p> <ol style="list-style-type: none"> <li>1. Mora poznati funkcijske gibe stomatognatnega sistema v orofacialni regiji – žvečenje, požiranje, govor.</li> <li>2. Mora poznati vrste okluzije in upoštevati odstopanja od fiziološkega stanja.</li> <li>3. Mora razlikovati centrične in ekscentrične gibe mandibule.</li> <li>4. Mora identificirati in razložiti razloge za nastanek bolečin orofacialne regije.</li> <li>5. Mora poznati vzroke in klasifikacijo temporomandibularnih disfunkcij.</li> <li>6. Mora zaznati vpliv psiholoških in sistemskih dejavnikov ter spola na pojav bolečin v orofacialni regiji.</li> <li>7. Mora izvesti diagnostični in terapevtski protokol za bolečino v orofacialni regiji.</li> <li>8. Mora implementirati artikatorje povprečne vrednosti.</li> <li>9. Mora načrtovati in preveriti grizni odtis.</li> </ol>	<p>Knowledge and understanding: Upon completion of this course, the dental student will be able to:</p> <ol style="list-style-type: none"> <li>1. understand functional movements of the orofacial region - mastication, swallowing, speech</li> <li>2. understand types of occlusion and notice deviations from the physiological state</li> <li>3. distinguish centric and eccentric mandibular movements</li> <li>4. observe and explain the reasons for the occurrence of pain in the orofacial region</li> <li>5. understand the etiology and classification of temporomandibular dysfunctions</li> <li>6. notice the influence of psychological and systemic factors as well as gender on the occurrence of pain in the orofacial region</li> <li>7. perform diagnostic and therapeutic protocol for orofacial pain</li> <li>8. implement mean value articulators</li> <li>9. plan and check bite splints</li> </ol>
<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 Seminarji Klinične vaje</p>	<p>Lectures Seminars Clinical training</p>
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<b>Načini ocenjevanja:</b>	<b>Delež (v %) / Weight (in %)</b>	<b>Assessment:</b>
<p>Način (pisni izpit, ustno izpraševanje, naloge, projekt) Zaključni izpit je sestavljen iz:</p> <ul style="list-style-type: none"> <li>- pisnega izpita (70 %) in</li> <li>- ustnega ter praktičnega dela izpita (30 %)</li> </ul>	<p>70 %  30 %</p>	<p>Type (examination, oral, coursework, project): Students during the course have one colloquia. The final exam consists of the:</p> <ul style="list-style-type: none"> <li>- written exam (70 %) and</li> <li>- oral theoretical part of the exam (30 %) conducted</li> </ul>

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

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1. Association of Masticatory Efficiency and Reduced Number of Antagonistic Contacts Due to Extraction, Changing Dentition or Malocclusion in Children Cicvaric, Odri; **Grzic, Renata**; Simunovic Erpusina, Marija; Simonic-Kocijan, Suncana; Bakarcic, Danko; Ivancic Jokic, Natasa : Dentistry Journal, - 11 3-11 **Q2**
2. Assessment of internal derangement of the temporomandibular joint according to the concentration of salivary cytokines in patients with spondyloarthritis Ana-Marija Laskarin, Gordana Laskarin, Tatjana Kehler, **Renata Grzic**, Niksa Dulcic Medical Hypotheses - <https://doi.org/10.1016/j.mehy.2022.111000> **Q2**
3. Pandemic Financial Stress in Dental Medicine in Croatia  
Edi Orlic , Stjepan Spalj , Natasa Ivancic Jokic , Danko Bakarcic , Odri Cicvaric and **Renata Grzic** Dentistry Journal - Dent. J. 2023, 11, 9. <https://doi.org/10.3390/dj11010009> **Q2**
4. Masticatory efficiency in children with cerebral palsy. Bakarčić D., LajnertV., Ivančić Jokić N., **Gržić R.**:European Archives of Paediatric Dentistry.: 1(2020),1-1 doi:10.1007/s40368-020-00529-7 – 1 **Q1**