2024/2025

Univerza v Mariboru

UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	**Oralna kirurgija 1**
Course title:	**Oral Surgery 1**

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**	**7,8**

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
60			**60**		**90**	**7**

Nosilec predmeta / Lecturer: **Prof.dr.sc. Tomislav Ćabov,DMD, PhD**

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

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisits:**

Vsebina:	**Content (Syllabus outline):**
Predmet vključuje: uvod v oralno kirurgijo in oralno kirurško propedevtiko, anestezijo in analgezijo v zobozdravstvu in oralni kirurgiji, zaplete med lokalno anestezijo in po njej, indikacije in kontraindikacije pri ekstrakciji zob, ekstrakcijo zoba pri otrocih, zapleti med ekstrakcijo in poekstrakcije zob, ekstrakcija zoba pri bolnikih s tveganjem, dezinfekcijo in sterilizacijo v oralni kirurgiji, priprava bolnika za oralno-kirurški poseg in postoperativna oskrba. Predmet vključuje tudi: radiološko diagnozo v oralni kirurgiji, retinirani in impaktirani zobje, zdravljenje retiniranih in impaktiranih zob, alveolotomijo, travma zob, presaditev zoba, poškodba čeljusti in ust, gnojno vnetje čeljusti in okolnih mehkih tkiv, klinična slika, diagnostika in zdravljenje odontogenega vnetja, antibiotiki pri zdravljenju odontogenega vnetja in apikotomija.	The course contains the following: introduction to oral surgery and oral surgery propaedeutics; anesthesia and analgesia; complications during and after giving local anesthesia; indications and contraindications for tooth extraction; dental extraction in chidlren; complications during and after tooth extractions; dental extraction among high risk patients; disinfection and sterilization in oral surgery; pre and postoperative patient care protocol. The course also contains the following: assessment of radiography; impacted and unerupted (retained) teeth and their treatment; alveolotomy; tooth trauma and trauma of the jaws and mouth; tooth transplantation; purulent infection of the jaw and its surrounding soft tissues; management of odontogenic infections; antibiotic therapy; apicoectomy.

Temeljni literatura in viri / Readings:

- Hupp JR, Ellis III E, Tucker MR. Contemporary Oral and Maxillofacial Surgery. Mosby-Elsevier. St.Louis;2018
- Malamed S. Handbook of Local Anesthesia. Mosby. St. Louis;2019.
- Little JW, Falace DA, Miller CS, Rhodus NL. Dental Managment of the Medically Compromised Patient. Mosby. St. Louis; 2023.
- Andreasen J.O, Andreasen F.M, Andreasen L. Textbook and Color Atlas of Traumatic Injuries to the Teeth 5th Edition. Blackwell- Munksgaard;2018.

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Cilji in kompetence:	Objectives and competences:
Osnovni namen predmeta je seznaniti študente z osnovnimi cilji in nalogami oralne kirurgije kot specialistične veja stomatologije, razložiti cilje in naloge programa študija oralne kirurgije in študentom omogočiti, da opravljajo najpogostejše postopke v programu kliničnih vaj iz kolegija oralne kirurgije. Cilj predmeta je seznaniti študente z lokalno anestezijo, puljenjem zob in zapletov med in po anesteziji in odstranitvi zoba. - Poleg tega študent spoznava ves instrumentarij, potreben za izvedbo oralno-kirurških posegov ob demonstraciji tehnik lokalne anestezije in instrumentov za ekstrakcijo zob na fantomskem delovnem mestu. - Študent spoznava možnosti dezinfekcije in sterilizacije v oralni kirurgiji ter potrebne priprave bolnika za operativni poseg, kot tudi postoperativno nego. - Namen predmeta je omogočiti študentom, da pridobijo znanje in spretnosti za lokalno anestezijo, puljenje zob in zdravljenje zapletov med in po ekstrakciji s kliničnimi vajami. - Prav tako je cilj omogočiti študentu, da pridobi znanja, da prepozna vse klinične slike odontogenega vnetja in spretnosti za zdravljenje, vključno z intraoralno incizijo in predpisovanjem antibiotične terapije odvisno od klinične slike odontogenega vnetja. - V času kliničnih vaj omogočiti študentu analizo ustreznih radioloških posnetkov, potrebnih v diagnostiki in zdravljenju oralne-kirurške kazuistike in seznaniti študenta s posameznimi indikacijami za najpogostejše oralno-kirurške operacije (alveolotomije in apikotomije), in nekaterih travmatičnih poškodb zob in alveolarnega grebena, kot tudi z ustreznim načinom zdravljenja.	The chief purpose of this course is to introduce the students to the main targets oral surgery deals with and to qualify them for performing the most common operations according to the oral surgery clinical program. The student will be introduced to the local anesthesia procedure, tooth extraction methods, complications during and after injecting anesthetics as well as during and after extractions. Further, he will be introduced to the surgical equipment , followed by its demonstration on dummies together with the demonstration of the local anesthesia techniques. Finally, the student will be provided with an overview of disinfection and sterilization principles and with the pre and postoperative patient care protocol.They should also acquire knowledge and skills needed to give local anesthesia, to extract teeth and handle complications during and after extractions. The student has to learn how to recognize and differentiate all types of odontogenic inflammations and their appropriate treatment, including intraoral incisions and prescription of antibiotics. In the course of clinical practice, they have to analize radiolographic images needed in the diagnostics and therapy of oral surgery cases. They will be introduced with the proper indications for the most common surgical procedures (alveotomies and apicoectomies), with traumatic lesions of teeth and surrounding soft and hard tissues.
Predvideni študijski rezultati:	**Intended learning outcomes:**
Znanje in razumevanje: - Študent se spozna z anatomijo glave in vratu v okviru izvajanja najpogostejših oralno-kirurških posegov. - Spoznal bo vse lokalne anestetike, ki se uporabljajo v stomatologiji in oralni kirurgiji, kot tudi potreben inštrumentarij za izvajanje kirurških posegov. - Obvladal bo tehnike lokalne anestezije (pleksus in prevodna) ter tehnike odstranjevanja zob. - Poleg tega se bo študent seznanil z vsemi zapleti, ki se pojavijo med lokalno anestezijo in ekstrakcijo zoba. -Naučil se bo osnov dezinfekcije in sterilizacije v oralni kirurgiji, kot tudi priprave bolnika za operacijo in pooperativno nego. - Študent se bo naučil, kako vzeti anamnezo in opraviti dentalno-medicinski pregled s poudarkom na oralno-kirurški problematiki ter opisati in analizirati radiološke slike,potrebne v oralno-kirurški diagnostiki.	Knowledge and understanding: The student will master the practical anatomy of the head and neck while performing the most common oral surgery operations. He will learn all the local anesthetics used in dentistry, as well as the equipment required for surgical procedures. He will master the techniques of injecting local anesthesia (plexus and conduction anesthesia) and the methods of tooth extraction. He will learn the principles of disinfection and sterilization and the pre and postoperative patient care protocols.The student will learn how to take anamnesis, carry out a dental examination with emphasis on the oral surgery issues and assess radiographic images required in the diagnostics. He will acquire all the techniques of giving local anesthesia and their possible complications. He will acquire how to manage incidents such as allergic reactions, syncopes and heart failure. He will learn how to differentiate extraction tools, acquire the entire dental

- Spoznal bo vse tehnike lokalne anestezije in možne komplikacije in demonstriral tehniko lokalne anestezije v ustni votlini (površinska/pleksus/prevodna). - Spoznal bo postopke pri zapletih: sinkopi, kolapsu, alergijski reakciji in srčnemu zapletu ter razlikoval posamezne instrumente za ekstrakcijo zob. - Naučil se bo kompletnega postopka ekstrakcije zob, zlomljenega zoba/korenine, opisati postopek ekstrakcije zob pri rizičnih bolnikih, demonstrirati zaustavljanje krvavitve iz alveolov in mehkih tkiv, izvajati vse metode zdravljenja dolor postekstractionem, opisati vse komplikacije pred in po ekstrakciji zoba in možnosti zdravljenja, razložiti bolniku navodila o obnašanju po oralno-kirurškem posegu, postaviti indikacijo za alveolotomijo, postaviti posamezni šiv in demonstrirati odstranjevanje šivov. - Nadalje spoznati in diagnosticirati klinično sliko odontogenega vnetja in opisati metode zdravljenja ter opraviti incizijo intraoralnih absces-parulis, postaviti in zamenjati dren, ordinirati antibiotično zdravljenje/profilakso ter opisati periapikalne procese in možnosti zdravljenja. - Obvladati indikacije za apikotomijo in razložiti kirurške tehnike. - Naučil se bodo diagnosticirati: impaktirane, retinirane in odvečne zobe ter opisati možnosti zdravljenja, postaviti indikacije/kontraindikacije za ekstrakcijo modrostnih zob, opisati in demonstrirati zdravljenje perikoronitisa, diagnosticirati travmatske poškodbe zob, alveolarnega grebena in sluznice ter opisati postopke zdravljenja.	extraction process, root extraction process, he will be able to manage alveolar and soft tissue bleeding, pain after tooth ectraction, complications during and after dental extractions, indications for alveotomy, perform stitches. Further, he will be introduced to the clinical aspects of odontogenic inflammations, he will perform intraoral incisions and drainage of abscessi, prescribe antibiotics⁄antibiotic prophylaxis and learn about periapical lesions. He will be familiarized with the indications for apicoectomy and the appropriate surgical procedures and differentiate pathologic lesions in the oral cavity.He will manage the diagnostics and treatment of impacted,unerupted and supranumerary teeth, learn the indications for extracting third molars, demonstrate the therapy of pericoronitis, diagnostics and treatment of traumatic injuries.
Znanja in spretnosti so podrobneje opisane v Katalogu znanj in spretnosti.	Knowledge and skills are described in more detail in the Catalogue of Knowledge and Skills.

Metode poučevanja in učenja:	**Learning and teaching methods:**
Predavanja Klinične vaje	Lectures Clinical training

Načini ocenjevanja:	**Delež (v %) / Weight (in %)**	**Assessment:**
Način (pisni izpit, ustno izpraševanje, naloge, projekt) Ob koncu 7. semestra se opravlja pisni izpit. Zaključni izpit je sestavljen iz pisnega in ustnega teoretičnega dela izpita.	100 %	Type (examination, oral, coursework, project): At the end of the 7th semester, there will be a written test. The final exam consists of written and oral theoretical part of the exam.

Reference nosilca / Lecturer's references:

1. Planinić D, Dubravica I, Šarac Z, Poljak-Guberina R, Celebic A, Bago I, **Ćabov T**, Peric B. Comparison of different surgical procedures on the stability of dental implants in posterior maxilla: A randomized clinical study. J Stomatol Oral Maxillofac Surg. 2021 Nov;122(5):487-493. doi: 10.1016/j.jormas.2020.08.004. Epub 2020 Aug 21. PMID: 32828993.

2. Lorencin I, Baressi Šegota S, Anđelić N, Blagojević A, Šušteršić T, Protić A, Arsenijević M, **Ćabov T**, Filipović N, Car Z. Automatic Evaluation of the Lung Condition of COVID-19 Patients Using X-ray Images and Convolutional Neural Networks. J Pers Med. 2021 Jan 4;11(1):28. doi: 10.3390/jpm11010028.
3. Anđelić N, Baressi Šegota S, Lorencin I, Jurilj Z, Šušteršič T, Blagojević A, Protić A, **Ćabov T**, Filipović N, Car Z. Estimation of COVID-19 Epidemiology Curve of the United States Using Genetic Programming Algorithm. Int J Environ Res Public Health. 2021 Jan 22;18(3):959. doi: 10.3390/ijerph18030959.
4. Lorencin I, Baressi Šegota S, Anđelić N, Mrzljak V, **Ćabov T**, Španjol J, Car Z. On Urinary Bladder Cancer Diagnosis: Utilization of Deep Convolutional Generative Adversarial Networks for Data Augmentation. Biology (Basel). 2021 Feb 26;10(3):175. doi: 10.3390/biology10030175.
5. Musulin J, Štifanić D, Zulijani A, **Ćabov T**, Dekanić A, Car Z. An Enhanced Histopathology Analysis: An AI-Based System for Multiclass Grading of Oral Squamous Cell Carcinoma and Segmenting of Epithelial and Stromal Tissue. Cancers (Basel). 2021 Apr 8;13(8):1784. doi: 10.3390/cancers13081784.
6. . Musulin J, Baressi Šegota S, Štifanić D, Lorencin I, Anđelić N, Šušteršič T, Blagojević A, Filipović N, **Ćabov T**, Markova-Car E. Application of Artificial Intelligence-Based Regression Methods in the Problem of COVID-19 Spread Prediction: A Systematic Review. Int J Environ Res Public Health. 2021 Apr 18;18(8):4287. doi: 10.3390/ijerph18084287.
7. **Ćabov T**, Nola Fuchs P, Zulijani A, Ćabov Ercegović L, Marelić S. Odontomas:Pediatric case report and review of the literature. Acta Clin Croat 2021;60:146-152.
8. Kinkela Devčić M, Simonić-Kocijan S, Prpić J, Paškovic I, **Ćabov T**, Kovač Z, Glažar I. Oral Candidal Colonization in Patients with Different Prosthetic Appliances. J Fungi (Basel). 2021 Aug 16;7(8):662. doi: 10.3390/jof7080662.
9. **Ćabov T**, Legović A, Ćabov Ercegović L, Zulijani A. Role of panoramic radiography inthe indentification of dental anomalies and disturbed development of the dentition. World J Dent 2021;12(4):271-277.
10. **Ćabov T**, Eljuga K, Fuchs PN, Devcic MK, Prpic J, Kovac Z, Puharic Z, Glazar I, Zulec M. Oral Health Knowledge, Attitude, and Behavior of Nursing and Technical Students in Croatia. Eur J Dent. 2022 Feb;16(1):102-108. doi: 10.1055/s-0041-1731852. Epub 2021 Aug 24. PMID: 34428841; PMCID: PMC8890930.
11. Kovac Z, **Ćabov T**, Blaskovic M, Morelato L. Regeneration of Horizontal Bone Defect in Edentulous Maxilla Using the Allogenic Bone-Plate Shell Technique and a Composite Bone Graft-A Case Report. Medicina (Kaunas). 2023 Mar 2;59(3):494. doi: 10.3390/medicina59030494. PMID: 36984495; PMCID: PMC10053208.