

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Fiksna protetika 2.
Course title:	Fixed Prosthodontics 2.

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
45			75		120	8

Nosilec predmeta / Lecturer: Red. prof. dr. sc. Ivone Uhač/Ivone Uhač, DMD, PhD

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

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

Vsebina:

Anamneza, klinični pregled, diagnostika in plan zdravljenja pri izdelavi fiksne protetične nadomestka. Priprava zoba in ust za fiksno protetično terapijo. Oblika, barva, estetika naravnih in umetnih zob. Preverjanje in prilagoditev nadomestka v ustih v delovnih fazah in v zaključni fazi. Parodontološki vidiki fiksno-protetičnega dela. Materiali, priprava in uporaba sredstev za pritrjevanje fiksne protetične nadomestka. Trajnost in komplikacije v času uporabe fiksno-protetičnih del. Popravek in odstranjevanje fiksno-protetičnega nadomestka.

Krone, indikacije in kontraindikacije. Popolna kovinska krona. Fasetirana krona. Kovinsko-keramična krona. Akrilatna krona. Delna krona. Modificirana krona. Teleskopska in konus krona. Krona na vsadku. Priprava in odtisi za vsako posamezno krono. Prikazovanje meje preparacije.

Definicija in osnovni deli mosta, indikacije, kontraindikacije, načrtovanje. Telo mosta. Statika mosta. Akrilatni, imediatni, začasni most, inlay most, konzolni most, snemljivi most, adhezivni, kovinsko-keramični most.

Content (Syllabus outline):

Anamnesis, clinical examination, diagnostics and therapy plan when making a fixed prosthodontic restoration. Preparing teeth and oral cavity for fixed prosthodontic therapy. Shape, colours, aesthetics of natural and artificial teeth. Check up and adaptation of the restoration in the oral cavity in the working phases and in the final phase. Periodontal aspect of a fixed prosthodontic restoration. Materials, preparation and application of dental cements for fixed prosthodontic restorations. Durability and complications during the using phase of the fixed prosthodontic restorations. Repair and removal of the fixed prosthodontic restoration.

Crowns, indications and contraindications. Full metal crown. Veneered crown. Metal ceramic crown. Acrylate crown. Ceramic crown. Partial crown. Modified crown. Telescope and conus crown. Post and core crown. Tooth preparation and impressions for each type of crown. Margin preparation.

Definition and basic parts of a bridge, indications, contraindications, planning. Pontic. Bridge statics. Acrylate, immediate, provisional bridge, inlay bridge, cantilever bridge, removable bridge, adhesive, metal ceramic bridge.

Temeljni literatura in viri / Readings:

- Shillingburg HT. et al. Fundamentals of fixed prosthodontics, 4th ed. Quintessence Pub. Co. 2012.
- Hagiwara Y. Color Atlas of Fixed Prosthodontics, Quintessence Pub. Co. 2013.

Cilji in kompetence:

Cilj predmeta je seznaniti študenta s temeljnimi kliničnimi postopki izdelave fiksnih protetičnih nadomestkov. Študent bo usposobljen za praktično delo z bolniki s poškodovanimi in/ali izgubljenimi žvečilnimi zobmi, ki jih ni mogoče nadomestiti s konservativnimi dentalno-medicinskimi postopki. Cilj je seznaniti študenta z vsemi smernicami, ki so potrebne za uspešno izvedbo diagnostičnih postopkov in kliničnih posegov, ki se izvajajo v okviru fiksne-protetične terapije. Študent bo usposobljen za samostojno izvedbo vseh faz klinične izdelave kron in enostavnih mostov ter bo pripravljen za klinično delo pri predmetu Fiksna protetika 3.

Objectives and competences:

The aim of this course is to introduce basic clinical procedures of making fixed prosthodontic restorations to students. Students will be trained for practical work with patients who have damaged or lost teeth that were not able to be restored with classic restorative techniques. The goal is to introduce all the guidelines that are necessary for a successful diagnosis and clinical procedures to students. Students will be able to independently perform all the clinical phases of making a crown and simple bridges and they will be trained for clinical work on the course Fixed prosthodontics 3.

Predvideni študijski rezultati:

Znanje in razumevanje:

Študent bo sposoben:

- Izvesti anamnezo in klinični pregled za potrebe fiksne protetične terapije.
- Analizirati RTG in študijske modele.
- Analizirati fiksno protetično delo kot sredstvo terapije.
- Opisati klinično-laboratorijski potek izdelave fiksnega protetičnega dela.
- Postaviti indikacije in oceniti kontraindikacije za izdelavo kron.
- Uporabiti aparate in instrumentarij v protetični ordinaciji.
- Uporabiti lokalno anestezijo z namenom brušenja zob.
- Izbrusiti zob z upoštevanjem osnovnih principov priprave.
- Izbrusiti vrat zoba tangencialno in stopničasto.
- Opraviti specifične preparacije za popolno kovinsko, popolno akrilatno, fasetirano akrilatno, delno, kovinsko-keramično, popolno keramično, modificirano, teleskopsko in konus krono ter krono na vsadku.
- Postaviti retrakcijsko nit v gingivni sulkus izbrušenega zoba, razlikovati sredstva in materiale za prikaz meje preparacije ter razložiti in uporabiti mehansko-kemične tehnike prikazovanja meje preparacije.
- Izbrati ustrezne žlice za odtise.
- Izbrati ustrezen odtisni material in uporabiti ustrezno tehniko odtisa.
- Opisati posamezne tehnike določanja medčeljustnih odnosov v fiksni protetiki in razlikovati, v katerih kliničnih postopkih se uporablja določen postopek.
- Postaviti obrazni lok na pacientu.
- Prenesti referenčne točke s pacienta v artikulatorko.

Intended learning outcomes:

Students will be able to:

- Conduct anamnesis and clinical examination for fixed prosthodontic therapy.
- Analyse RTG and study models.
- Analyse a fixed prosthodontic restoration as a mean of therapy
- Describe the clinical and laboratorial production process of a fixed prosthodontic restoration.
- Evaluate indications and contraindications for making a crown.
- Use appliances and instruments in a prosthodontics' practice.
- Apply local anaesthesia for tooth preparation purposes.
- Prepare a tooth following the main principles of preparation.
- Prepare a cervical finish line in a knife edge and shoulder shape.
- Make specific preparations for a full metal, full acrylate, veneered acrylate, partial, metal ceramic, full ceramic, modified, telescopic and conus crown and post crown.
- Set up retraction threads in the gingival sulcus of the prepared tooth, differentiate materials for showing the preparation margin and explain and apply the mechanical-chemical technique for showing the preparation margin.
- Choose the adequate impression tray.
- Choose the adequate impression material and impression technique.
- Describe techniques of determining jaw relations in fixed prosthodontics, differentiate when is which technique used.

- Registrirati medčeljustne odnose v maksimalni interkuspidaciji, centrični relaciji in ekscentričnih položajih.
- Prenesti modele v pol-prilagojen artikulator ter ga individualizirati.
- Analizirati in uskladiti okluzijske in artikulacijske odnose.
- Izbrati barvo in vrsto estetskega materiala za izdelavo fiksnega protetičnega nadomestka.
- Pričvrstiti začasno in trajno fiksno protetični nadomestek in izbrati optimalno sredstvo za pritrnitev v določenem kliničnem primeru.
- Postaviti diagnozo in indikacijo za izdelavo mostne konstrukcije.
- Planirati izdelavo mostne konstrukcije (izbira zoba nosilca).
- Analizirati pravilnost in natančnost laboratorijske izdelave fiksnega protetičnega nadomestka (poskus in odnos do zoba nosilca, sosednjih zob, marginalni gingivi, antagonistih).
- Oceniti pravilnost tehnične izdelave mostne konstrukcije (statika, telo mosta – higienski pogoji, odnos do alveolarnega grebena).
- Preveriti klinično prilagoditev novega fiksnega protetičnega dela.
- Sneti dotrajani fiksni protetični nadomestek.
- Obnoviti estetski del poškodovanega dela fiksnega protetičnega nadomestka.
- Izdelati neposredni začasni fiksni protetični nadomestek.
- Pripraviti korenski kanal za lito nadgradnjo.
- Registrirati direktni in indirektni odtis za lito nadgradnjo.
- Preizkusiti, prilagoditi in pritrditi individualno lito nadgradnjo.
- Izvesti kontrolni pregled pacienta s fiksnim protetičnim delom.

Znanja in spretnosti so podrobneje opisane v Katalogu znanj in spretnosti.

Metode poučevanja in učenja:

Predavanja
Klinične vaje

- Set a face-bow on a patient.
- Transfer reference points from a patient in an articulator.
- Register jaw relations in maximum intercuspitation, centric relation and excentric positions.
- Transfer models in a semi-adjustable articulator and individualise it.
- Analyse and harmonize occlusal and articular relations.
- Choose a colour and type of aesthetic material for a fixed prosthodontic restoration.
- Cement a fixed prosthodontic restoration temporarily and permanently and choose the right cement in different clinical cases
- Diagnose and indicate the right situation for a dental bridge.
- Plan a dental bridge.
- Analyse the regularity and precision of the laboratory production of a fixed prosthodontic restoration (try-in and relation to the abutment tooth, adjacent teeth, marginal gingiva and antagonists)
- Evaluate the regularity of the technical production of the dental bridge (statics, pontic – hygienic conditions, relation to the alveolar ridge)
- Check the clinical adaptation of the new fixed prosthodontic restoration.
- Remove an old fixed prosthodontic restoration.
- Repair the aesthetical part of a damaged fixed prosthetic restoration.
- Directly make a provisional restoration.
- Prepare a root canal for a cast post and core.
- Take a direct and indirect impression for a cast post and core.
- Try-in, adapt and attach a cast post and core.
- Conduct a control examination on a patient with a fixed prosthodontic restoration.

Knowledge and skills are described in more detail in the Catalogue of Knowledge and Skills.

Learning and teaching methods:

Lectures
Clinical training

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Način (pisni izpit, ustno izpraševanje, naloge, projekt)		Type (examination, oral, coursework, project):
<u>Praktično delo</u>	30 %	<u>Practical work</u>
<u>Kolokvij v pisni obliki</u>	20 %	<u>Written partial exam</u>
<u>Pisni zaključni izpit</u>	50 %	<u>The final written exam</u>

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Reference nosilca / Lecturer's references:

1. Tamarut T, Kovačević M, **Uhač I**. Detection of transitional ion concentration zone during electronic measurement of root canal length: a study in vitro. *International Endodontic Journal* 2000;33:374-380. **(CC)**
2. Gržič R, Kovač Z, Kovačević D, **Uhač I**, Delić Z. Kineziografska istraživanja pacijenata s križnim okluzom. *Coll Antropol.* 2000, 24. Suppl; 1:57-62. **(CC)**
3. **Uhač I**, Kovač Z, Vukovojac S, Žuvić-Butorac M, Gržič R, Delić Z. The effect of occlusal relationships on the occurrence of sounds in the temporomandibular joint. *Coll Antropol.* 26(2002); 285-292. **(CC)**
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6. Muhvić-Urek M, Bralić M, Tomac J, Borčić J, **Uhač I**, Glažar I, Antonić R, Ferreri S. Early and late effects of X-irradiation on submandibular gland: a morphological study in mice. *Arch Med Res* 2005;33:339-343. **(CC)**
7. Kovač Z, **Uhač I**, Buković D, Čabov T, Kovačević D, Gržič R. Oral health status and temporomandibular disorders in multiple sclerosis patients. *Coll Antropol.* 2005 Dec;29(2):441-4. **(CC)**
8. **Uhač I**, Kovač Z, Muhvić-Urek M, Kovačević D, Frančisković T, Šimunović-Šoškić M. The prevalence of temporomandibular disorders in war veterans with post-traumatic stress disorder. *Mil Med.* 2006 Nov;171(11):1147-9. **(CC)**
9. Muhvić-Urek M, **Uhač I**, Vukšić-Mihaljević Z, Leović D, Blečić N, Kovač Z. Oral health status in war veterans with post-traumatic stress disorder. *J Oral Rehabil.* 2007 Jan;34(1):1-8. **(CC)**
10. Simonić-Kocijan S, **Uhač I**, Braut V, Kovac Z, Pavčić DK, Fugosić V, Urek MM. Influence of chronic stress and occlusal interference on masseter muscle pain in rat. *Coll Antropol.* 2009 Sep;33(3):863-6. **(CC)**
11. Ardu S, Braut V, **Uhač I**, Benbachir N, Feilzer AJ, Krejci I. A new classification of resin-based aesthetic adhesive materials. *Coll Antropol.* 2010 Sep;34(3):1045-50. **(CC)**
12. Ardu S, Braut V, **Uhač I**, Benbachir N, Feilzer AJ, Krejci I. Influence of mechanical and chemical degradation on surface gloss of resin composite materials. *Am J Dent.* 2009 Oct;22(5):264-8. **(CC)**
13. **Uhač I**, Tariba P, Kovac Z, Simonić-Kocijan S, Lajnert V, Mesić VF, Kuis D, Braut V. Masticatory muscle and temporomandibular joint pain in Croatian war veterans with posttraumatic stress disorder. *Coll Antropol.* 2011 Dec;35(4):1161-6. **(CC)**
14. Simunović-Soskić M, Juretić M, Kovac Z, Cerović R, **Uhač I**, Antonić R, Pezelj-Ribarić S. Implant prosthetic rehabilitation of the patients with mandibular resection following oral malignoma surgery. *Coll Antropol.* 2012 Mar;36(1):301-5. **(CC)**
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16. Kovac Z, Troskot Z, **Uhač I**, Cabov T, Lajnert V, Pavčić DK, Filipović-Zore I, Tariba P. Multivariate analysis of different factors affecting the patient general satisfaction with complete dentures. *Coll Antropol.* 2012 Sep;36(3):791-.. **(CC)**
17. Gržič R, Spalj S, Lajnert V, Glavčić S, **Uhač I**, Pavčić DK. Factors influencing a patient's decision to choose the type of treatment to improve dental esthetics. *Vojnosanit Pregl.* 2012 Nov;69(11):978-85. **(SCI)**
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