Study program: Integrated studies of dentistry

Type and level of the study program: Integrated academic studies

Course title: Operative dentistry - clinical I (DIII-OPDCL)

Teacher: Ljubomir M. Petrović, Larisa P. Blažić, Ivana M. Stojšin, Igor Lj. Stojanac, Milan R. Drobac, Ivana R. Kantardžić

Course status: compulsory

ECTS Credits: 12

Condition: Operative dentistry-preclinical; General and Oral Pathology (exam)

Course aim

Goal of the subject is to teach the student for the treatment of diseases of hard dental tissue and dental pulp in clinical conditions

Expected outcome of the course:

Theoretical knowledge and practical skills in performing all types of cavity preparations, retention and restoration of the cavity by applying modern dental materials, instruments and equipment for definitive fillings.

Skills are acquired during clinical practical teaching and independent work with the control of the working phases. The course continues with advanced practical teaching in the next semester.

At the end of the practical course the student should:

– Be able to take the medical history of the patients
– Be able to perform diagnostic procedures related to diseases of hard dental tissue and dental pulp
– Be able to prepare the working area, equipment, instrumentation and apparatus in dental practice
– Master the theoretical and practical knowledge of materials for temporary and definitive cavity closure
– Be able to theoretically and practically demonstrate all methods of cavity preparation and restoration of hard dental tissues

Course description

Theoretical education

1. Introduction – preparing for clinical work. 2. Biology of teeth. 3. Structure and function of the pulp-dentin complex. 4. Structure and function of dentin, changes associated with aging. Diagnosis and diagnostic tools in dental pathology. 5. The mechanisms of emergence and perception of pulp-dentinal pain. 6. Local anesthesia in restorative dentistry. 7. Histopathology of pulp-dentin complex. Defense and reparatory processes of the pulp-dentin complex. 8. Exposed dentin and protection procedures – etiology and pathogenesis of non-carious changes. 9. Exposed dentin and protection procedures – diagnostic and therapy plan for non-carious changes. 10. Reversible changes in dental pulp – pulp regeneration. 11. Deep caries – histopathology and clinical picture. 12. Deep caries - diagnosis and differential diagnosis, therapy plan. 13. Treatment of deep caries and materials for indirect capping. 14. Treatment of deep caries – one-step and multi-step therapy. 15. Traumatic and artificial dental pulp injuries. 16. Open pulp therapy, materials for direct pulp capping. 17. Pulp wound healing, the course, prognosis and evolution and control. 18. Minimum invasive procedures in restorative dentistry. 19. Pulp reaction to restorative procedures. 20. Postoperative teeth sensitivity – positive and negative characteristics of dental materials in relation to dental pulp. 21. Symptomatology and diagnosis of dental pulp diseases – odontalgia. Classification of dental pulp diseases. 22. Clinical picture of inflammatory process in dental pulp, course and prognosis. 23. Treatment of teeth with reversible changes in the dental pulp. Techniques for preserving teeth vitality, indications and contraindications, the treatment plan. 24. Treatment of teeth with irreversible changes in the dental pulp. Techniques for preserving teeth vitality, indications and contraindications, the treatment plan. 25. Regressive and degenerative changes of pulp tissue. 26. Necrosis and gangrene of dental pulp

Practical education: exercises, other forms of education, research related activities

1. Introduction to clinical work, working place, organizing the working space and procedure itself. 2. Basic procedures and phases in restorative dentistry, equipment and instrumentation. 3. Anamnesis, Patient's consent, Rights and responsibilities of the patient. 4. Clinical examination, entering data in dental records. 5. Diagnosis of caries (anamnesis, inspection, sticking probe). 6. Diagnostic instruments and methods (teeth vitality tests). 6. Preparing for clinical work – fixing of instruments and hands in clinical settings. 7. Cavity preparation for amalgam fillings of the 1st and 2nd class (placing of the basis, matrix and inerdental pins, placement of definitive fillings). 8. MOD cavity preparation for amalgam fillings (placing of the basis, matrix and inerdental pins, placement of definitive fillings). 8. Cavity preparation for adhesive-bound fillings of frontal teeth – applying adhesive materials. 9. Preparation and restoration of the 3rd class-cavity applying composite material and adhesive system without glass-ionomer cement base. 10. Preparation and restoration of the 3rd class-cavity applying composite material and adhesive system with glass-ionomer cement base. 11. Preparation and restoration of the 4th class-cavity applying composite fillings. 12. Preparation and restoration of complex 4th class-cavity applying composite fillings. 13. Preparation and restoration of the 5th class-cavity applying composite fillings in frontal teeth. 14. Preparation and restoration of the 5th class-cavity applying composite fillings in lateral teeth. 15. Application of composite fillings in lateral teeth – indications and contraindications. 16. Application of composite fillings in lateral teeth – adhesive preparation. 17. Cavity preparation for adhesive fillings and placement of dental adhesives. 18. Therapeutic procedure in deep caries (diagnosis and treatment of deep carious lesions, placement of the materials for indirect capping of the pulp). 19. Final processing / finishing of definitive fillings

Literature

Compulsory

Outlines of lectures

Additional

Number of active classes				Other:
Lectures: 30	Practice: 135	Other types of teaching:	Research related activities:	

Teaching methods

Theoretical and practical

Student activity assessment (maximally 100 points)

Pre-exam activities	**points**	**Final exam**	**points**
Lectures	10*	Written	60
Practices	30**	Oral	
Colloquium		.....	
Essay			

*5 attendance + 5 activity; **10 attendance + 20 activity