

Study program: Integrated Academic Studies in Dental Medicine
Course title: Clinical Prosthetics 1
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Course status: compulsory
ECTS Credits: 11
Condition: Dental Prosthetics – Preclinical; Dental Materials (exam)
<p>Course aim Acquiring knowledge on basic biomedical and technological skills in mobile prosthetic dentistry as well as skills essential for clinical work in a conventional or implant-prosthetic therapy or partially or totally toothless jaws</p> <p>Expected outcome of the course: The curriculum will provide student with knowledge on the importance of oral health and needs of mobile prosthetic therapy, non-physiological and pathological conditions of stomatognathic system, functional anatomy and physiology of partially or totally toothless jaw, diagnostic procedures and laboratory tests relevant for the implementation of mobile prosthetic therapy, setting indication and designing a corresponding plan of mobile prosthetic therapy, the impact of selected mobile prosthetic therapy on patient's stomatognathic system and general health condition, interconnection between laboratory and clinical procedures relevant for mobile prosthetics therapy, materials and instruments as well as laboratory and clinical equipment and instrumentation, selecting the type of material to be used for the mobile prosthetic therapy, implementing mobile prosthetic therapy to the purpose of improving oral health for an acceptable and adequate time period, relevant literature data with an aim of improving professional knowledge and its application in everyday practice, materials and processing technologies and their application in laboratory and clinical mobile prosthetics, physiology of the stomatognathic system - normal function, diagnostics and mobile prosthetic treatment of temporomandibular disorders, biomechanics of the stomatognathic system and effects of mobile prosthetic procedures on it, conventional mobile prosthetic therapy and rehabilitation of the stomatognathic system, implant-prosthetic treatment of totally toothless jaw, clinical-epidemiological research on the possibilities of implementing mobile prosthetic therapy applying conventional procedures, knowledge and skills related to diagnostic, therapeutic and laboratory procedures are acquired through lectures, seminars and colloquia as well as through clinical practical work in small groups.</p>
<p>Course description <i>Theoretical education</i></p> <p>TOTAL PROSTHESIS - anatomical structure of the upper and lower jaw. Anatomical structure and kinematics of temporomandibular joint. The position and movement of the lower jaw. Functions of stomatognathic system. Support of the upper and lower total prosthesis. Soft tissue and muscle activity. Preliminary (anatomical) and functional imprints of the upper and lower toothless jaw. Retention factors of total prosthesis. Stabilization factors in total prosthesis. Determining interjaw relationship. Transferring working models in the articulator and simulating movement capabilities of the lower jaw. Portable buccal arc. Positional registry. Adjusting junction and incisal guidance in semi adjustable articulators. Guidelines for determining the position of front teeth. Guidelines for determining the position of lateral teeth. Specificities of skeletal jaw relationship. Determining the position of the teeth in toothless patients of the skeletal class I, II and III. Clinical testing of teeth positioning in toothless patients. Concept (model) of bilateral balanced occlusion. Laboratory procedures for finalization of complete dentures. Temporary and immediate total prosthesis. Supradental prosthesis. Implant - prosthetic aspects of rehabilitation of toothless patients. Changes in the soft tissues of the holders of complete dentures. Complications during the wearing of complete dentures. Geriatric aspects of therapy in toothless patients.</p> <p>REMOVABLE PARTIAL DENTURES - Stomatognathic system. The teeth and dental series. Supporting tissues. Toothless or residual alveolar ridge. Interactions between the remaining teeth and denture. Implants as support elements for removable partial denture. Occlusion. Functions of the stomatognathic system. Teeth-loss and its consequences to the stomatognathic system. Classification of toothlessness. Classification of partial dentures. Forms of partial dentures. Goals of prosthetic treatment using partial dentures. Partial-panel denture. Temporary partial denture. Immediate partial dentures. Transitional or interim dentures. Bite plates. Bite plates and other occlusal splints. Conditional permanent partial plate denture. Permanent partial plate denture. Partial skeleton denture. Elements of partial skeleton dentures. Dental parallelometer. Basic issues in planning skeleton denture. Retention, biostatics, planning of partial skeleton denture. Complex partial dentures. Guidelines to constructing partial skeleton denture. Fixed composites for attaching of partial skeleton dentures. Grinding technique in prosthetic dentistry. Attachments of fixed composite and mobile replacement. Partial dentures with attachments. Classification of attachments. Construction of dentures with attachments. Double telescope crown. Double cone crown. Construction of partial telescope dentures. Specificities of clinical and laboratory construction of partial telescope dentures. Other types of partial dentures. Supradental, double dentures, swing-lock, reduced, unilateral partial denture. Flexible partial dentures. Implant supported partial dentures. Obturator and postressection</p>

partial dentures. ESTHETICS of partial dentures.

Practical education (labs)

TOTAL DENTURES: Anamnesis, status, clinical examination; Treatment plan; Preparing the patient for total denture treatment; Selection and evaluation of the molding spoon; Preparing imprint materials and taking the anatomical imprints. Testing and shaping individual molding spoons for toothless upper and lower jaws. Functional imprints of toothless jaw. Determining jaw relations in the treatment with total dentures. Transferring and fixing of working models using the face bow; Working with mid-range articulators. Analyzing models and jaw relations in the articulator; Determining the shape, size and color of teeth. Controlling the teeth position in complete dentures; Functional and ESTHETIC factors and individual adjustments of teeth position. Delivery of finished complete dentures; Control and correction of the therapy. Repairing the fractures of the denture base; Direct and indirect rebasing of total dentures. PARTIAL DENTURES: Preparation of the patient and working place for mobile-prosthetic therapy; Filling out the Protocol/Records. Analysis of X-ray images; Deciding about the treatment plan; Preparing the supporting tissue for partial denture. Selecting molding spoons; Making anatomical imprint of the upper and / or lower jaw; Plotting margins of mobile and immobile mucosa. Analysis of study models; Classification of toothlessness. Testing and shaping of individual molding spoons for partly toothless upper and/or lower jaw. Functional imprints. Planning the size of the partial denture basis; planning the method for stabilization and retention of partial denture; Determining the shape and technique of grinding denture elements in the combined therapy with partial dentures. Determining jaw relations in the treatment with partial dentures. Transferring and fixing of working models using the face bow; Working with mid-range articulators. Testing the model of partial denture; Clinical check-up of teeth position in partial denture. Delivery of finished partial dentures; Control and maintenance of partial dentures.

Literature

Compulsory

1. Rahn AO. Textbook of complete dentures, 6th edition, 1993

Number of active classes	Theoretical classes: 30	Practical classes: 180	
Teaching methods Lectures Practical classes			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	15	Written	10
Practices	15	Oral	60
Colloquium			
Essay			