SYLABUS

Subject:	***Prosthetic Dentistry 3***		
Study programme:	*Dental Medicine*	**Semester:**	*8. semester*
Valuation:	*absolved*	**Obligation:**	*obligatory*
Number of hours:	*1 h. lectures and 4 h. practicals / week*		*70 hours*

Place: Department of Stomatology and Maxillofacial Surgery
1 st Department of Stomatology
Department of Stomatology and Maxillofacial Surgery and Specialized Hospital for Head and Neck Diseases, Academy of Košice, n.o

Lectures: Thursday 15:00 – 16:30 (OCW)
Lecture room PE

Week	***Lectures***	***Practicals***
1.	**Introduction to the issue of fixed bridges**, classification of fixed bridges, basic concepts, structural elements of fixed bridges and their design, biomechanics of fixed bridges according to the type of fixed bridge **12.02.2026** **MDDr. Homzová, N.**	**1, Review of theoretical knowledge and practical skills from the previous semester** – equipment of a prosthetic dental clinic, medical documentation and prosthetic label, ICD 10, division of individual procedures in prosthetic dentistry, code designation of procedures and dental prostheses + verification of knowledge from 1 lecture **2, Examination of the patient** – identification of physiological features of the orofacial system – basic gnathological points and planes, assessment of the patient's occlusion, X-ray analysis, identification of a dental defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment + verification of knowledge from 1 lecture

2.	**Patient examination before indication of fixed bridges**, indications and contraindications of fixed bridges based on dental defects, treatment planning and relevant documentation, requirements for preparation of abutment teeth when indication of fixed bridges **26.02.2026** **MUDr. Ondrašovičová, J., PhD.**	**3, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, preparation and making of an **indirect filling on phantoms, models, patient** + verification of knowledge from lectures 1 and 2 **4, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **preparation and making of a root inlay on phantoms, models, patient** + verification of knowledge from lectures 1 and 2
3.	**Metal-ceramic/all-ceramic fixed bridge** – definition, indications for linear/surface-anchored fixed bridge, detailed description of surgical and laboratory procedures complete **12.03.2026** **MUDr. Ondrašovičová, J., PhD.**	**5, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **preparation of abutments on phantoms, models, patient** + verification of knowledge from lectures 1,2 and 3 **6, Patient examination** – identification of physiological features of the orofacial

		system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **preparation of abutments on phantoms, models, patient** + verification of knowledge from lectures 1,2 and 3
4.	**Atypical fixed bridges** – Maryland, Rochett, glass abutment, adhesive bridges, indications, contraindications, detailed description of surgery and laboratory procedures complete **26.03.2026** **MDDr. Sinčák Konečná, A., PhD.**	**7, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **preparation of abutments on phantoms, models, patient** + verification of knowledge from lectures 1,2,3 and 4 **8, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **preparation of abutments, working with elastomeric impression materials, evaluation and analysis of models before making fixed bridge** + knowledge verification from lectures 1,2,3 and 4

5.	**Extensive, complex dental reconstructions with fixed dental prostheses** – determination of the Mx-Mn relationship (CJR) in non-carious dental defects and the need to adjust the vertical and horizontal Mx-Mn relationship, **Complications associated with fixed dental prostheses and their solutions** **09.04.2026** **MUDr. Kučera, J., PhD.**	**9, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **preparation of abutments, work with elastomeric impression materials, evaluation and analysis of models before making a fixed bridge** + verification of knowledge from lectures 1,2,3,4 and 5 **10, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **try in of fixed bridge frameworks** + knowledge verification from lectures 1,2,3,4 and 5
6.	**Fixed prosthetics in combination with removable restorations** - definition of special anchoring devices as part of fixed restorations - axial plug-in joints (root inlays), friction plug-in joints (ball/cylindrical), magnetic joints (root inlays), telescopic crowns, support bars, **23.04.2026** **MUDr. Kučera, J., PhD.**	**11**, **Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **try in of fixed bridge structures** + verification of knowledge from lectures 1,2,3,4,5 and 6 **12**, **Patient examination** – identification of physiological features of the orofacial

		system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and models of the upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **delivering of fixed prosthetic work, patient instruction** + verification of knowledge from lectures 1,2,3,4,5 and 6
7.	**Credit test** **07.05.2026** **MDDr. Sinčák Konečná, A., PhD.**	**13, Patient examination** – identification of physiological features of the orofacial system, assessment of the patient's occlusion, X-ray analysis, identification of the dentition defect, making study impressions and modelos of upper and lower jaw and design of prosthetic treatment, **pre-prosthetic treatment of the patient** – DH, conservative treatment, surgical treatment, **delivering of fixed prosthetic work, patient instruction** + verification of knowledge from lectures 1,2,3,4,5 and 6 **14, Presentation of the patient with a comprehensive prosthetic treatment plan for fixed bridge restorations** – writing out medical documentation, X-ray analysis, indication of pre-prosthetic rehabilitation, design of prosthetic treatment with prosthetic label and description of the workflow for making a fixed bridge in points. **Evaluation of student's performance and practical skills**

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Minimum requirements for awarding credit for the subject Prosthetic Dentistry 3 and a list of procedures during clinical practice:

1, **100% attendance at lectures, 60% success rate in the final credit test**
2, **100% active participation** in practical exercises (knowledge verification is done orally or in writing form)
3, **5x comprehensive examination of the prosthetic patient** with a complete medical documentation, X-ray analysis and a proposed treatment plan for fixed restorations
4, **3x making study impressions and study models**
5, **1x making a fixed bridge** (abutment preparation, making impressions, testing the structure, handing over the prosthetic work)
6, **3x pre-prosthetic preparation:** DH, or filling of the abutment / clasp tooth, or endodontic treatment of the abutment, or tooth extraction

Objective: examination of the patient, identification of the prosthetic problem, making study models and a complete prosthetic treatment plan with indications for fixed dentures

Recommended literature:

1, Calvani Lino: Fundamentals of treatment planning, 2020

2, Clovis Pagani: Tooth preparations, 2017

3, Jakovac Marko: Protocol, standardisation in fixed prosthodontics, 2024

4, Sailer I., Fehmer, V., Pjetursson B.: Fixed restorations, a clinical guide to the selection of materials and fabrication technology, 2021

5, Naylor W. Patrick: Introduction to metal -Ceramic Technology, 2018

6, Contemporary dental journals