SYLABUS

Subject:	***Propedeutics of Dental Medicine 3***		
Study programme:	*Dental medicine*	**Semester:**	*3. semester*
Valuation:	*absolved*	**Obligation:**	*obligatory*
Number of hours:	*2 h. lectures and 4 h. practilacl/week*		*84 hours*

Place: Department of Stomatology and Maxillofacial Surgery and Akademia Kosice
1 st Department of Stomatology
Department of Stomatology and Maxillofacial Surgery

Monday PJ 07:30 - 09:00

Week	***Lecture***	***Practical***
1.	**Content of the prosthetic part of dental propedeutics. The masticatory system as a whole.** Static and dynamic occlusion**, o**cclusal plane, prosthetic plane, frankfurt horizontal plane, bipupillary line, Bonwill's triangle, curve of Spee, interdental contact, diastema, tremata, TMJ, condyle path inclination, incisal guidance, function of masticatory muscles and jaw movements, basic interalveolar relationships 15.09.2025 07:30-09:00 **MUDr. Ján Kučera, PhD.**	OBP instruction. *Review: Tooth numbering.* *Morphology of permanent teeth***.** Preparation and filling of Class III. and Class V. Black cavities with composite. Principles of working with a curing (polymerization) lamp.
2.	**Prosthetic Instrumentarium:** Preparation instruments, impression instruments, tools used for mixing impression materials, ISO standards in prosthetic dentistry. Devices, instruments, and aids used for model fabrication in the laboratory**.** 22.09.2025 07:30-09:00 **MUDr. Jana Ondrašovičová, PhD.**	***Theoretical Part:*** Definition and scope of Prosthetic Dentistry Basic concepts of Gnathology Description of the masticatory system Working procedure for filling root canals – review. ***Practical Part:*** Identification of individual prosthetic planes on models, skulls, and photographs. Instrumentarium for root canal treatment. Preparation and filling of the root canal using the conventional Step-back technique.

3.	**Tooth Loss and Its Consequences:** The role of dental prostheses Biological factor of the tooth Classification and types of Dental arch defects Classification of prosthetic restorations and their biodynamics 29.09.2025 07:30-09:00 **MUDr. Marcela Šestáková, PhD.**	***Practical Part:*** Identification of prosthetic instruments and equipment in the dental office and dental laboratory **Review:** Preparation and filling of Class I. and II. Black cavities with a light-cured composite. **Test** *: Basics of Gnathology*
4.	**Tooth Preparation in Fixed Prosthodontics:** General principles of tooth preparation, Types of preparation according to the type of restoration, Working procedure, technical aspects of preparation, Impression-taking in fixed prosthodontics 06.10.2025 07:30-09:00 **MUDr. Marcela Šestáková, PhD.**	***Theoretical Part:*** Scope of prosthetics, the role of dental protheses and the importance of tooth replacement with prosthetic appliances. Biological factor, Classification of dental arch defects according to Wild-Voldřich and Kennedy ***Practical Part:*** Determining abutment teeth on dental arch models and photographs Identifying dental arch defects on models and photographs Identification of dental prostheses ***Review:*** Preparation and filling of Class I. and II. Black cavities Principles of working with amalgam
5.	**Indirect Restorations:** Inlay, onlay, overlay - characteristics, indication spectrum, contraindications. Principles of preparation, Classification according to the materials used, Working procedures 13.10.2025 07:30-09:00 **MUDr. Andrea Sinčák - Konečná, PhD.**	***Theoretical and Practical Part:*** Selection of appropriate preparation instruments for preparing abutment teeth, Selection of impression trays based on the type of impression material, Taking an impression of the prepared model, Mutual fabrication of alginate impressions, Pouring a model from the impression, Sectioned model and simple model, Issues related to casting metal frameworks. ***Test:*** *Biological factor of the tooth,* *Classification and division of dental arch defects,* *Classification of dental prostheses and their biodynamics*

6.	**Root Inlay:** Characteristics, Classifications, Indications, Contraindications, Materials used for fabrication of root inlays, Working procedures 20.10.2025 07:30-09:00 **MDDr. A. Sinčák-Konečná, PhD.**	***Theoretical and Practical Part:*** Issues related to inlay, onlay, and overlay preparation, Impression techniques, Model fabrication, Modeling of indirect restoration using blue inlay wax, Modeling of indirect restoration with composite material Cementation of the indirect restoration into the prepared cavity ***Test:*** *Prosthetic instrumentarium (prosthetic instruments)*
7.	**Fixed Prosthetic Restorations:** **Cast Full Metal Crown** Description, Indications, Contraindications, Preparation, Laboratory fabrication – procedure. 27.10.2025 07:30-09:00 **MDDr. Naďa Homzová**	***Theoretical and Practical Part:*** Issues related to root inlay Preparation of the root canal Isolation of the root canal Impression technique before making a custom root inlay Direct modeling of the inlay using blue inlay wax
8.	**Fixed Prosthetic Restorations: Combined (Fused) Crown:** Description, Characteristics, Classification according to the material used, Indications, Preparation procedure, Laboratory fabrication , Cementation. 03.11.2025 07:30-09:00 **MDDr. Naďa Homzová**	***Review:*** Luting materials Dental waxes ***Theoretical Part:*** Cast metal crown and combined crown – working procedure ***Practical Part:*** Feather-edge preparation of a tooth indicated for full metal crown. Taking a detailed impression Fabrication of a sectioned model Wax modeling of the crown ***Test:*** *General principles of preparation in prosthetics* *Impression materials and impression techniques* *Model fabrication*

9.	**Fixed Prosthetic Restorations:** **Non-metallic Crown Restorations:** Resin Crown: Description, Indications, Preparation, Laboratory fabrication Temporary Resin Crown**:** Impression technique Laboratory fabrication All - ceramic Crown: Description, Indications, Preparation, laboratory fabrication, impression technique. 10.11.2025 07:30-09:00 **MDDr. Naďa Homzová**	***Review:*** Resin and ceramic materials ***Theoretical Part:*** Non-metallic crown restorations - working procedure ***Practical Part:*** Fabrication of a full resin protective crown using the stamp technique. Alginated impression of the situation. Step-preparation of the tooth. Application of self-curing resin into the alginate impression and fabrication of the crown Final finishing and polishing
10.	**Fixed Replacements for Missing Teeth:** **Fixed Bridge:** Characteristics, Description, Indications Working procedure, Impression technique, Structural components, Laboratory fabrication Materials. 17.11.2025 07:30-09:00 **MDDr. Naďa Homzová**	***Theoretical Part:*** Fixed bridge - working procedure ***Practical Part:*** Preparation of abutment teeth for a fixed bridge with attention to parallelism. Impression technique in fixed prosthodontics Fabrication of a sectioned model and evaluation of the parallelism of prepared abutment teeth.
11.	**Removable Prosthetic Restorations:** Definition Importance in overall prosthetic care Classification of removable dentures Indications for removable dentures Basic structural components Advantages and disadvantages 24.11.2025 07:30-09:00 **MUDr. Ján Kučera, PhD.**	***Theoretical Part:*** Removable Dentures - classification, types, description of structural components ***Practical Part:*** Removable prostheses - defect assessment Preliminary model analysis Sketching the layout of individual structural parts of the removable partial denture (RPD) Fabrication of an individual impression tray ***Test:*** ***Fixed prosthetic restorations***

12.	**Removable Prosthetic Restorations:** **Partial Removable Dentures (PRD):** Classification Description of structural components Clinical (chairside) and laboratory working procedures 01.12.2025 07:30-09:00 **MUDr. Ján Kučera, PhD.**	***Theoretical and Practical Part:*** Partial removable dentures (PRD) - fabrication of occlusal rims, Importance of determining maxillo-mandibular (Mx-Mn) relationship Wax denture fabrication Principles of tooth arrangement Flasking Wax elimination (dewaxing) Preparation of resin dough Processing (pressing) Polymerization Denture finishing
13.	**Removable Prosthetic Restorations:** **Complete Denture (CD):** Importance in the rehabilitation of edentulous patients Description of retention and stability issues Anatomical and functional bases Parts of the complete denture Clinical (chairside) working procedure 08.12.2025 07:30-09:00 **MDDr. A. Sinčák-Konečná, PhD.**	***Theoretical Part:*** Complete removable (total) denture, clinical phase ***Practical Part:*** Fabrication of complete denture (CD): Model analysis, Sketching the denture base outline, Making an individual impression tray and occlusal rims Importance of determining maxillo-mandibular (Mx-Mn) relationship Wax denture fabrication Principles of tooth arrangement Flasking, Wax elimination (dewaxing) Preparation of resin dough, Processing (pressing), Polymerization, Denture finishing ***RETAKE Tests***
14.	**Complete Removable Dentures:** Laboratory working procedure Denture delivery Hygiene in removable prosthetics Denture repairs (relining, rebasing, repairs) **FINAL TEST** 15.12.2025 07:30-09:00 **MDDr. A. Sinčák-Konečná, PhD.**	***Theoretical Part:*** Complete denture (CD) laboratory working procedure ***Practical Part:*** Complete denture (CD) - continuation of the laboratory phase: Principles of tooth arrangement, Flasking Wax elimination (dewaxing) Preparation of resin dough, Processing, Polymerization, Denture finishing **Final knowledge assessment, semester evaluation, practical performance review**

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Conditions for Completing the Course *: Propedeutics of Dental Medicine 3*

- 100% attendance at practical lessons, lectures, and seminars is required.
- Mandatory preparation**:** Before each practical session, students must study the assigned topic in advance.
- Topic proficiency: At the beginning of each session, knowledge of the topic is verified either orally or in writing.
- **Make-up for absences:** A student may have a maximum of 3 excused absences, which must be made up during the 14th week of the semester.

Protocols and Seminar Papers

Protocols: The student is required to submit written protocols for all completed practical tasks.
Seminar Papers: If seminar papers are assigned, they must be completed and submitted by the specified deadline.

Final Evaluation

Ongoing assessment of theoretical knowledge and practical skills, with recorded evaluations during practical training.
Completion of a final test with a minimum required score of 60%.
Final assessment of theoretical knowledge and skills during credit week, with a minimum passing score of 60%**.**
The final grade for the course may consist of a written test, oral examination, and evaluation of performance throughout the semester
.Retake policy: The student is entitled to 2 retake opportunities for each test.
Credits: Upon successful completion of the course, the student will receive the corresponding number of credits.

Recommended literature:

1. Banerjee, Watson: Pickard's Manual of Operative Dentistry, 2011, Oxford University Press ISBN-13: 978-0199579150

2. Nelson SJ. *Wheeler's Dental Anatomy, Physiology and Occlusion*. 11th ed. St. Louis: Elsevier; 2020.

3. Schwartz RS, Summitt JB, Robbins JW. *Fundamentals of Operative Dentistry: A Contemporary Approach*. 4th ed. Chicago: Quintessence Publishing; 2013.

4. Rosenstiel SF, Land MF, Fujimoto J. *Contemporary fixed prosthodontics.* 4th ed. St. Louis: Mosby/Elsevier; 2016.

5. Ahmad I. **:** *Prosthodontics at a glance.* 2nd ed. Hoboken (NJ): Wiley-Blackwell; 2021.

6. Carr AB, Brown DT.: *Mc Cracken's removable partial prosthodontics.* 13th ed. St. Louis: Elsevier; 2016.

7. Shillingburg HT, Hobo S, Whitsett LD, Jacobi R, Brackett SE.: *Fundamentals of fixed prosthodontics.* 4th ed. Chicago: Quintessence Publishing; 2012.

8. Craig RG, Powers JM.: *Restorative dental materials.* 11th ed. St. Louis: Mosby; 2002.