

# MEDICAL UNIVERSITY

## "PROF. DR. PARASKEV STOYANOV" VARNA

FACULTY OF "DENTAP MEDICINE"

Approved at a Haguity councilmeeting №12 / 07.12.2022

Approved: **DEAN** 

/Prof. Dr. Stefan Peev, DMD, PhD, DSc/

"ДЕНТАЛНА МЕДИЦИНА"

### **CURRICULUM**

of "CLINICS OF PROSTHETIC DENTAL MEDICINE" Department: "Dental materials science and Prosthetic dental medicine"

Specialty - "DENTAL MEDICINE" **Educational-Qualification Degree - "MASTER"** Professional qualification - "PHYSICIAN IN DENTAL MEDICINE"

| Type classes             | Semester                | Workload -<br>hours | Workload – hours<br>Summary  |
|--------------------------|-------------------------|---------------------|------------------------------|
| Lectures                 | VI, VII,<br>VIII, IX, X | 1/1/<br>1/1/1       | 75 h                         |
| Practical exercises      | VI, VII,<br>VIII, IX, X | 2/4/<br>4/4/4       | 270 h                        |
| Summary hours            |                         |                     | 345 h                        |
| Types of control         | Current control         |                     | Examination – tenth semester |
| Credits (ECTS)           |                         | 4+4+2+3+5           | 18                           |
| Extracurricular workload |                         |                     | 195                          |

### Academic Staff of the Department:

- 1. Assoc. prof. Dr. Stoyan Georgiev Katsarov, DMD, PhD
- 2. Prof. Dr. Metodi Zahariev Abadzhiev, DMD, PhD, DSc
- 3. Assoc. prof. Dr. Desislava Atanasova Konstantinova, DMD, PhD
- 4. Assoc. prof. Dr. Iveta Plamenova Katreva, DMD, PhD
- 5. Chief-assist. prof. Dr. Kalina Stoyanova Georgieva-Bozhkova, DMD, PhD
- 6. Chief-assist. prof. Dr. Radostina Panayotova Vasileva, DMD, PhD
- 7. Chief-assist. prof. Dr. Dzhendo Atanasov Dzhendov, DMD, PhD
- 8. Chief-assist. prof. Dr. Kiril Georgiev Gogushev, DMD, PhD
- 9. Chief-assist. prof. Dr. Ivan Mihaylov Denkov, DMD, PhD
- 10. Chief-assist. prof. Dr. Preslav Plamenov Penchev, DMD, PhD
- 11. Chief-assist. prof. Dr. Liudmil Hristov Matev, DMD, PhD
- 12. Chief-assist. prof. Dr. Delyan Krasimirov Georgiev, DMD, PhD
- 13. Assist. prof. Dr. Simeon Georgiev Simeonov, DMD
- 14. Assist. prof. Dr. Nikoleta Tsankova Dimitrova Lecheva, DMD
- 15. Assist. prof. Dr. Yavor Vasilev Gagov, DMD
- 16. Assist. prof. Dr. Tsvetelina Nikolova Kanlieva, DMD
- 17. Assist. prof. Dr. Magdalena Norman Gugleva, DMD
- 18. Assist. prof. Dr. Damyan Tsankov Tsanev, DMD
- 19. Assist. prof. Dr. Dimo Krasimirov Nedelchev, DMD
- 20. Assist. prof. Dr. Polina Plamenova Peneva, DMD
- 21. Assist. prof. Dr. Gabriela Rosenova Kirova, DMD
- 22. Assist. prof. Dr. Miroslav Stoykov Stoykov, DMD
- 23. Assist. prof. Dr. Yordanka Donkova Shekerova, DMD
- 24. Assist. prof. Dr. Gergana Angelova Georgieva, DMD
- 25. Assist. prof. Dr. Elina Vladimirova Todorova, DMD
- 26. Assist. prof. Dr. Mariyana Georgieva Dimitrova, DMD
- 27. Assist. prof. Dr. Iva Yordanova Yordanova, DMD

#### ANNOTATION:

The aim of education in Clinics of Prosthetic dentistry is studying theoretically and practically methods and means of protection of the masticatory apparatus. Students study dental diseases in connection with Prosthetic dentistry, aesthetic and preventive restoration of chewing and speech function.

Theoretical content of course is based on the contemporary physiological and functional study of Prosthetic dentistry, clinical and laboratory practice – in using of effective prosthetic restorations for occlusal-articulating and occlusal-periodontal equilibrium retrieval of masticatory apparatus.

The new schedule is updated by including contemporary methods and theoretical issues, which contributes to correct clinical thinking and gaining good professional skills from future specialists and increasing the quality of education in the Clinics of Prosthetic Dentistry.

### FORMS OF TEACHING, EXAMINATION AND ASSESSMENT

Types and methods of education: lectures, seminars, discussions, problem-solving of different clinical cases, practical education.

Types of assessment: current control, taking a part in seminars and presentations, tests, colloquium, practical exam - complete dentures, theoretical exam.

Evaluation formation: complex

- assessment of the student's practical skills during the clinical exercises
- taking a mandatory colloquium every semester
- taking a practical exam at the end of x semester
- evaluation of theory exam

After completing the course, students should have the following knowledge, skills and competencies:

**Knowledge** - about the clinical morphology of the masticatory apparatus, including the teeth, dental arches, periodontium, masticatory muscles and the temporomandibular joints, the etiology and pathogenesis of diseases of the masticatory apparatus, methods and means of examination, prevention and treatment of patients with diseases of the masticatory apparatus.

**Skills** - for diagnosis, treatment and prevention of dental diseases in the field of dental prosthetics and aesthetic and prophylactic restoration of masticatory and speech functions.

Competencies - about the etiology and pathogenesis, indications and contraindications, clinical picture, diagnosis, prevention and treatment of diseases of the masticatory apparatus with effective prosthetic structures to restore the occluso-articular and occluso-periodontal balance of the masticatory apparatus.

## CONTENT OF THE CURRICULUM:

LECTURES III YEAR (VI SEMESTER)

| No | Subject  | Number of hours |
|----|--|-----------------|
| 1  | Introduction to Clinics of prosthetic dentistry.  After a short historical reference main purposes and tasks of clinics of prosthetic dentistry and its role at contemporary healthcare in Bulgaria are presented.   | 1               |
| 2  | Diseases of the maxillofacial area – 2 hours.  | 1               |
|    | Subtopic 2.1. Etiology and pathogenesis of dental diseases. Medical and dental aspects of dental diseases are presented. The purpose is learning the bases of curing and making easier to assimilate the main characteristics of diseases, their prevention and treatment, too.  | 0,5             |
|    | Subtopic 2.2. Functional pathology of mastication apparatus. Huge amount of dental diseases, which are subject of prosthetic dentistry, are caused by complication, or are complicated by functional pathology. Studying its content, mechanism of manifestation, terminology are bases for proper orientation in clinics.   | 0,5             |
| 3  | Examination of a patient.  Examination of a patient is a main subject for every clinical discipline.  Patient's history taking (personal and medical), according to the requirements of medicine and prosthetic dental medicine, extraoral and intraoral examination, are introduced to students. Static-functional and functional methods of examination, also the main paraclinical examination methods, are expounded. Become familiar with the content and methods of filling in medical history.                            | 1               |
| 1  | Diagnosis and prognosis in the prosthetic dentistry.  Diagnosis and prognosis of prosthetic dental disease do not differ from the basic medical principles. After studying typical medical and differential diagnosis, particularities of morphological, aetiological, pathogenetical and functional diagnosis, are explained to students, in order to facilitate its preventive and curative activity. Students become familiar with the principles and factors that determine the compiling treatment prognosis.               | Ĭ               |
| 5  | Indications and contraindications for prosthetic treatment.  Indications and contraindications for prosthetic treatment are based on a clinical examination of the patient, diagnose and prognosis. Medical and specific (prosthotodontic) indications and contraindications, are studied, also principles of preventive, functional and aesthetic indications, are promoted, in order to correctness of the treatment plan, the The structure of the treatment plan, epicrisis and medical history, are introduced to students. | 1               |
| 6  | Diseases and injuries of the masticatory apparatus - subject of prosthetic treatment. Classification of the main types of dentures. Preparation of the oral cavity for a prosthetic treatment (Adjunctive care). Major diseases and disabilities that are subject to treatment in prosthetic dentistry are introduced to students. Classifications of Rumpel, Boyanov and accepted at the Department additions expand and systematize, already received bases and prepare the students for their future clinical practice.       | 1               |

|   | END OF VI SEMESTER  | SUMMARY<br>15 h. |
|---|---|------------------|
|   | Subtopic 11.3. Clinics of removable partial dentures – without clasps, immediate RPD, overdenture.  | 1                |
|   | Subtopic 11.2. Clinics of removable partial dentures – acrylic resin based RPDs, with bars, cast metal RPDs.  | 1                |
|   | Subtopic 11.1. Clinics of removable partial dentures (RPD) – metal based RPD, withmechanic connectors, milled -dentures, with telescopic crowns, with resin clasps type "Kemeni".   | 1                |
| 1 | Prosthetic treatment of DTAs by removable partial denture.  Subtonic 11.1 Clinics of removable partial dentures (RRD) mostal based.   | 3                |
| - | Subtopic 10.4. Clinics of fixed partial denture (FPD): splint bridge dentures, FPD made of plastic or porcelain, cantilever FPD, with a telescopic retainers, FPD with arch stabilization effect, complex FPDs, immediate FPD, FPD retained by implants.  | 0,5              |
|   | Subtopic 10.3. Planning and fabrication of fixed partial dentures. Design principles. Clinics of the fixed partial dentures: metal crowns /non-aesthetic and aesthetic/, retained by adhesive (extra coronal) and partial intracoronal retainers- inlay, onlay, overlay, different retainers.   | 0,5              |
|   | <ul> <li>inlay, onlay, overlay, custom. / Maryland-retainers /.</li> <li>Subtopic 10.2. Bridge-prostheses with adhesive (extra coronal) and partial intracoronal retainers- inlay, onlay, overlay, irregular. Pontic.</li> </ul>  | 0,5              |
|   | Subtopic 10.1. Abutment teeth and retainers. Classification of the retainers. Crown retainers – full veneer crown retainers, partial intracoronal retainers   | 0,5              |
| 0 | Prosthetic treatment of DTAs with fixed partial denture.  | 2                |
|   | Basic methods for the treatment of DTAs. Medico-biological characteristic and evaluation of prosthetic restorations used for treatment of the DTAs. The main indications and contraindications for prosthetic treatment of the DTAs.  | 1                |
|   | /DTA/. Etiology and pathogenesis of DTAs. Classification of DTA. Preparation of the oral cavity for treatment of a DTA. Godon's phenomenon.   | 1                |
|   | Subtopic 7.4. Restoration of the strongly damaged dental crowns. Clinics of the dowel core restorations.  Prosthetic prevention and treatment of the defects to the tooth arches  | 0,5              |
|   | Subtopic 7.3. Clinics of the aesthetic full veneer crowns – metal crowns with esthetic resin/ceramic veneer (blended), resin-metal crown, all-resin crowns, ceromer crowns, all-ceramic crowns, zirconium crowns.   | 0,5              |
|   | Subtopic 7.2. Adjustment, fixation and removal of the full veneer crowns. Clinics of non-aesthetic (metal) crowns.  | 0,5              |
|   | Subtopic 7.1. Aetiology of the defects of dental crown. Classification of the artificial crowns. Treatment of the defects of dental crown with partial and full crowns. Preparation of the teeth for crowns. Types of impression and impression methods for dental crowns. Provisional restoration, as a treatment stage in fixed prosthodontics. | 0,5              |
|   | Prosthetic prevention and treatment of the defects of the dental crown /DDC/.   | 2                |

LECTURES IV YEAR (VII AND VIII SEMESTER)

| No | Subject  | Number of hours  |
|----|--|------------------|
| 12 | Prosthetic treatment of the tooth abrasion and reduced height of jaw relation. Tooth abrasion as functional and pathological phenomenon, its etiology, pathogenesis and clinical symptoms are considered. Prosthetic methods and means of restoration of lost dental tissues and height of occlusion are followed.   |                  |
| 13 | Prosthetic treatment of the periodontium.  | 4                |
|    | Subtopic 13.1. Characteristics of the periodontal complex - compensatory forces. Periodontal diseases – the role of trauma. Parafunctions – bruxism, bruxomania.   | 2                |
|    | Subtopic 13.2. Methods for prosthetic treatment of a periodontal disease. Subjects of prosthetic treatment. Basic methods - selective grinding and splinting with removable and fixed splint.  | 2                |
| 14 | Prosthetic treatment after complete edentulism.  | 9                |
|    | Subtopic 14.1. Changes in maxillofacial area, after complete edentulism – topographical-morphological and functional. Indications and contraindications. Examining of the patients with toothless jaws. Treatment plan.  | 2                |
|    | Subtopic 14.2. Preliminary impression. Surgical preparation of the prosthetic field, after complete edentulism. Final impression - methods of checking the fit of individual functional trays, making of dental impression.  | 2                |
|    | making of compression impression. Determining the center position of the mandible. Centric jaw relation.   | 2                |
|    | Subtopic 14.4. Try-in with artificial teeth arranged.  | 1                |
|    | Subtopic 14.5. Insertion of complete dentures. Rebasing of complete dentures.  | 2                |
|    | END OF VII SEMESTER  | SUMMARY<br>15 h. |
| 5  | Special treatment methods after complete edentulism. Treatment with subperiostal and intraosseous implants.  | 2                |
| 6  | Immediate prosthetic treatment. Adaptation of the patients.  The advantages and disadvantages of the immediate dentures - indications and contraindications, methodologies, clinics of the immediate dentures are discussed. The neuro-reflex processes and adaptation of the patients to the dentures are followed. | 2                |
| 7  | Prosthetic treatment in adolescence.  Consider specifics of the masticatory system in childhood - the growth, development, stages. Pathology in childhood, its features, methods and means for the treatment of DTC, DTAs and toothless jaws.  | 2                |
| 8  | Diseases and damages caused by prosthetic treatment.   | 3                |
| 9  | Maxillofacial damages.   | 6                |
|    | Subtopic 9.1. Types of maxillofacial damages - congenital, acquired  | 2                |

| peacetime disabilities.  |                  |
|--|------------------|
| Subtopic 9.2. Types maxillofacial devices and prostheses - splints for fractures of the upper and lower jaws, forming apparatus, prosthetic treatment of palatal defects / obturators /. | 2                |
| Subtopic 9.3. Prosthetic prevention and treatment of the jaw defects after resection - a lower and upper jaw. Facial prostheses (ectoprostheses)   | 2                |
| END OF VIII SEMESTER   | SUMMARY<br>15 h. |

# LECTURES V YEAR (IX II X SEMESTER)

| Nº | Subject  | Number of hours  |
|----|--|------------------|
|    | Cycle "Gnathology and Dental Occlusion"  | Mours            |
| 20 | Topic 20.1. Occlusal-articulating problem. Gnathology and Dental occlusion.  | 2                |
|    | Topic 20.2. Basic theoretical principles of the Dental occlusion.  | 2                |
| 21 | Topic 21.1. Methods of examination in Dental Occlusion.  | 2                |
|    | Topic 21.2. Clinical methods of recording occlusal contacts.   | 2                |
| 22 | Topic 22.1. Classification of the occlusion contacts.  | 2                |
| -  | Topic 22.2. Review of the "perfect" occlusion.   | 2                |
| 23 | Topic 23.1. Basic centric positions of the mandible.   | 2                |
|    | Topic 23.2. Border occlusions and positions of the lower jaw   | 2                |
| 24 | Topic 24.1. Condyle axis and movement around it at lower jaw's joint.  | 2                |
|    | Topic 24.2. Face bow and transferring of condyle axis to an articulator.   | 2                |
| 25 | 1 opic 25.1. Types of articulators.  | 2                |
|    | Topic 25.2. Disadvantages of the different types of articulators   | 2                |
|    | Topic 25.3. New generation articulators.   | 2                |
| 26 | Topic 26.1. Intraoral graphical registration by intraoral plates, a face bow and an articulator.   | 2                |
|    | Topic 26.2. Advantages of the new generation articulators.   | 2                |
|    | END OF IX SEMESTER   | SUMMARY<br>30 h. |
| 27 | Restoration and maintenance of normal height of the jaw relation and the centric position of the mandible during the treatment protocol with fixed partial dentures.  Various clinical and paraclinical methods of examination, are considered and setting standards for reduced or increased height of the jaw relation, too. Contemporary means and methods for maintaining a centric position of the mandible, during the work, with fixed dentures, are presented. | 2                |
| 28 | Provisional restoration in fixed prosthodontics  The methods and means for preparation and fixation of provisional restorations, as a means of protection of prepared teeth and as a test – prototypes for preliminary evaluation of the permanent fixed restorations, are presented.  | 2                |
| 29 | Diagnosis and prosthetic treatment of occlusal tooth abrasion.  Modern concepts of ideology, pathogenesis and indications for treatment, are presented. The clinical aspects of the treatment using fixed restorations, are presented, too.  | 2                |

|    | END OF X SEMESTER  | SUMMARY<br>15 h. |
|----|--|------------------|
|    | The most common mistakes in planning and execution of basic restorations are followed. The consequences, complications and disease as a result of medical errors committed, are presented.                 |                  |
| 33 | Clinical errors and complications in dentistry. The place of X-ray diagnostics in prosthetic dentistry.  | 2                |
|    | producing metal-ceramic construction upon a base of high-carat or precious metals. Technologies for producing restorations of zirconium dioxide (copy technique, CAD / CAM).                               |                  |
| 32 | Current innovations in dental materials science. Nanotechnology in dentistry and dental technology. Galvano and Captek technology for  | 3                |
| 31 | Removable partial dentures with special means of retention and stabilization. Overdentures – indications, types and clinics.   | 2                |
| 30 | Aesthetic prosthetic restoration by metal-ceramic, metal-resin, zirconium crowns and and fixed partial dentures.  The latest achievements and clinical approaches to various manipulations, are presented. | 2                |

## EXERCISES III YEAR (VI SEMESTER)

|      | END OF VI SEMESTER   | SUMMARY<br>30 h. |
|------|--|------------------|
| 15   | Colloquium. Attestation to semester.   | 2                |
| 14   | Analysis of the working models of patient with DTAs and compiling treatment plan - options.  | 2                |
| 13   | Anamnesis, diagnosis and treatment of a patient with a phenomenon of Godon; abrasion.  Demonstration — scanning and 3D-printing of metal based removable partial dentures. | 2                |
| 12   | Making an impression (anatomical, functional) by polyether impression materials. Pouring working models with movable dies. Mounting in articulator.                        | 2                |
| 11   | Making an impression (anatomical, functional) made by A-silicone. Pouring working casts with removable dies. Mounting in articulator.                                      | 2                |
| 9-10 | Making impression from maxilla and mandible by C-silicone. Pouring working casts with removable dies. Mounting in articulator.   | 4                |
| 7-8  | Making an impression (anatomical, functional) made by C-silicone. Pouring working casts with removable dies. Mounting in articulator.                                      | 4                |
| 4-6  | Making an impression (anatomical, functional) made by alginate. Pouring of diagnostic casts.   | 6                |
| 3    | Impression materials and techniques in fixed and removable dentures. Types of a working cast models.   | 2                |
| 2    | Anamnesis, examination of patient, diagnosis, treatment plan and prognosis.  | 2                |
| 1    | Introduction to the working rules at the clinical room.  Demonstration – scanning and 3D-printing of three-unit bridge fixed partial denture.                              | 2                |

EXERCISES IV YEAR (VII AND VIII SEMESTER)

| № | Subject  | Number of hours  |
|---|--|------------------|
| 1 | <ol> <li>Preparation of the two or three abutment teeth (single crown or three-unit bridge fixed partial denture, depends on clinical case).</li> <li>Fabrication of a pair of complete dentures.</li> <li>Fabrication of a pair of the removable partial dentures.</li> <li>Demonstration – scanning and 3D printing of three-unit bridge fixed partial denture.</li> </ol> | 60               |
|   | END OF VII SEMESTER  | SUMMARY<br>60 h. |
| 2 | <ol> <li>Preparation of the two or three abutment teeth (single crown or three-unit bridge fixed partial denture, dpends on clinical case).</li> <li>Fabrication of a pair of complete dentures.</li> <li>Fabrication of a pair of the removable partial dentures.</li> <li>Demonstration – scanning and 3D printing of metal based removable partial denture.</li> </ol>    | 60               |
|   | END OF VIII SEMESTER   | SUMMARY<br>60 h. |

EXERCISES V YEAR (IX AND X SEMESTER)

| № | Subject   | Number of hours  |
|---|---|------------------|
| 1 | <ol> <li>Preparation of six abutment teeth (single crown or bridge three-unit structure, depends on clinical case).</li> <li>Fabrication of a pair of complete dentures.</li> <li>Fabrication of a pair of removable partial dentures.</li> <li>Ability to make a restoration using special attachments agents and aesthetic restorations (metal-free restorations) in decision of the assistant professor and approval by the Head of the department.</li> <li>Demonstration – scanning and 3D printing of three-unit bridge fixed partial denture.</li> </ol>   | 60               |
|   | END OF IX SEMESTER  | SUMMARY<br>60 h. |
| 2 | <ol> <li>Preparation of two or three abutment teeth (single crown or bridge three-unit structure, depends on clinical case).</li> <li>Fabricating a pair of complete or removable partial dentures.</li> <li>Demonstration – scanning and 3D printing of metal based removable partial denture.</li> <li>Practical exam on Clinics of Prosthetic Dentistry – fabrication and insertion of a pair of complete dentures.</li> <li>Held in the last five clinical exercises under the supervision of the assistant professor of the group. Transmission of dentures and their evaluation is made by a committee chaired by the Head of the department, on preliminary schedule.</li> </ol> | 60               |
|   | END OF X SEMESTER   | SUMMARY<br>60 h. |

#### LITERATURE:

- 1. Филчев А., Р. Ралев. Пропедевтика на протетичната дентална медицина. София, 2010
- 2. Йорданов Б., Ил. Йончева. Ръководство за практически упражнения по пропедевтика на протетичната стоматология. Медицина и физкултура, 2000
- 3. Пеев Т., А. Филчев. Клиника на Протетичната дентална медицина. София, 2008
- 4. Филчев А., Ив. Анастасов, Б. Йорданов и кол. Методично указание по Клиника на Протетичната дентална медицина. София, 2010
- 5. Тодоров Г., А. Влахова, Хр. Кисов. Биомеханична восъчна техника. София, 2013
- 6. Попов Н., Ст. Пеев, М. Абаджиев и кол. Зъбопротезна имплантология. изд. Минерва, София, 2012
- 7. Попов Н., М. Абаджиев. Ръководство за обучение по зъбопротезна имплантология. София, 2009
- 8. Михайлов, Тр., Г. Георгиев. Лицево-челюстно протезиране. Quintessence BG, София, 1993
- 9. Анастасов Ив. Дентално материалознание. София, 2013
- 10. Кисов Хр. Стоматологична керамика част І. изд. "Индекс", София, 1997г.
- 11. Кисов Хр. Отпечатъчни материали и отпечатъчни методи в неподвижното протезиране. изд. "Индекс", София, 1998г.
- 12. Кисов Xp. Стоматологични цименти и техники на циментиране на протезните конструкции. София, Непрекъснато усъвършенстване, 2008
- 13. Кисов Хр. Изпиляване на зъбите за керамични и металокерамични корони. София
- 14. Shilingburg H. "Fundamentals of fixed prosthodontics 4-th edition" Quintessence Publishing Co, Inc
- 15. J. Brudvik. "Partial removable dentures", a row of prof. T. Peev, ed. "Sharov," 2001
- 16. M. McAnthy "Complete Dentures. Clinical approach "in order of prof. T. Peev," Sharov "2001
- 17. Functional Occlusion From TMJ to Smile Design- Peter E. Dawson, Mosby Elsevier, 2007
- 18. Contemporary Implant Dentistry- Carl E. Milsch, Mosby Elsevier, 3rd ed., 2008
- 19. Lectures

### QUESTIONNAIRE OF CLINICS OF PROSTHETIC DENTAL MEDICINE

#### 2022

- 1. Diseases of the masticatory apparatus. Theory for the etiology of the diseases. Reactivity and resistance of the organism.
- 2. Diseases of the masticatory apparatus. Etiological factors internal and external factors.
- 3. Pathogenesis of the diseases. Pathogenic mechanisms. Basic pathogenic mechanisms in the Medicine.
- 4. Functional pathology in the Dental Medicine. Relationship between the conceptions: shape function reaction; part continuum; local common; peripheral central. Functional pathology of the masticatory apparatus. Mechanisms. Functional terminology.
- 5. Examination of a patient for prosthetic treatment. Registration, anamnesis, extra- and intraoral observation (examination). Paraclinical examinations and tests- X- ray, test for galvanic activity, allergies, Periotest, T-scan test. Methods of examination of speech production. Phonographic, sonographic, dynamic palatographic method. Clinical approach. Diagnoses in Prosthetic Dentistry. Prognosis.
- 6. Indications and contraindications for prosthetic treatment. Treatment plan, epicrysis, medical history of the disease.
- 7. Classification of basic types of prosthetic restorations.
- 8. Mouth preparation for a prosthetic treatment.
- 9. Prosthetic prophylaxis and treatment of the natural tooth crown. Indications and contraindications for its treatment. Requirements for the artificial crowns.
- 10. Types of artificial crowns. Classification.
- 11. Provisional crowns types and working techniques. Protection of the prepared teeth.
- 12. Definitive artificial crowns- partial and full coverage crowns. Clinical protocol.
- 13. Tooth preparation for a full coverage crown. Types of preparation.
- 14. Restoration of severely damaged tooth crowns. Methods.
- 15. Impression materials and impression techniques for full crowns. Advantages and disadvantages of the different impression protocols.
- 16. Materials and methods for gingival retraction (soft tissue management).
- 17. Fitting and fixing of the full crowns. Removing of full crowns.
- 18. Full metal crowns. Metal crowns partially and completely veneered with esthetic materials.
- 19. All-ceramic crowns. All-ceramic crown press technique, zirconia restorations.
- 20. CAD / CAM technology.
- 21. Optical impression. Methods advantages and disadvantages. Types of intraoral scanners.
- 22. Etiology, pathogenesis and treatment methods of occlusal tooth abrasion.
- 23. Prosthetic prophylaxis and treatment of partial edentulism. Etiology. Pathogenesis. Prognosis. Classification of the partial edentulousness.
- 24. Basic principles and options of prosthetic treatment of a partially edentulous patient. Indications, contraindications of the different treatment plans. Principles for construction. Advantages and disadvantages of fixed and removable prosthetic restorations.
- 25. Godon's phenomenon. Etiology, pathogenesis and treatment.
- 26. Prosthetic prophylaxis and treatment of the partial edentulous patients with bridge constructions. Terminology, definition, indications and contraindications for such types of fixed prostheses.
- 27. Clinical planning and designing of a bridge. Clinical protocol.
- 28. Bridge-prostheses with ceramic fused to metal crown retainers.
- 29. Bridge-prostheses with adhesive (extra coronal) and partial intracoronal retainers inlay, onlay, overlay, irregular.

- 30. Cantilever partial fixed dentures.
- 31. Fixed partial dentures splints.
- 32. Bridge-prostheses with telescopic crowns retainers.
- 33. Immediate bridge prostheses.
- 34. Classification of the removable partial dentures.
- 35. Preparation of the mouth for treatment with removable partial dentures. Review of the main factors.
- 36. Treatment with a removable denture. Selection and design of the denture's elements(parts). Planning of partial dentures with acrylic framework. Design principles.
- 37. Clinic of the partial dentures. Clinical protocol.
- 38. Types of partial removable dentures. Resin-based partial dentures with bended clasps.
- 39. Resin-based partial denture with resin clasps type "Kemeni", without clasps, with metal major connector.
- 40. Metal cast partial dentures. Partial dentures with metal framework. Design principles.
- 41. Combined prosthodontics. A fixed prosthesis together with a removable partial denture.
- 42. Combined prosthodontics. A fixed prosthesis together with a removable partial denture with mechanic connectors.
- 43. Removable partial denture with telescope crowns.
- 44. Removable partial denture with bar connectors.
- 45. Removable partial denture milled dentures.
- 46. Various types of partial overdentures.
- 47. Trauma, caused by occlusion. Trauma of the hard tooth tissue., periodontium, masticatory muscles, temporo-mandibular joints.
- 48. Parafunctions. Bruxism (nocturnal bruxism) and bruxomania (tooth clenching during daytime).
- 49. Occlusal contacts. Preliminary contacts and occluso-articulation blockages. Occlusal correction by selective grinding of the teeth.
- 50. Splinting of the teeth. Temporary splinting- removable and fixed temporary splints. Permanent splinting- removable and fixed permanent splints.
- 51. Factors that determine the type of splinting condition and number of the teeth. Involving the occlusal or incisal surface of the teeth. Direction of mobility. Types of stabilizations.
- 52. Prophylaxis and treatment of the edentulism. Morphologic extra- and intraoral changes in the: mucosa, jaws, muscles, ligaments, temporomandibular joints, saliva. Functional changes of the mastication and speech, esthetic and psychological changes of the patient. Esthetic and psychological changes.
- 53. Diagnosis, prognosis and treatment plan of edentulous patients. Indications and contraindications for prosthetic treatment of the edentulism. Estimation of the anamnesis data in the emphasis of the factors as: state of the patient's nervous system, persistence of allergies, profession, budget. Classification of compete dentures.
- 54. Surgical preparation of the prosthetic field for the purpose of the prosthetic treatment of the complete edentulism. Surgery of the mucosa and the bones.
- 55. Types of impressions for complete dentures- preliminary and final (definitive). Impression materials, impression trays. Impression techniques. Myodynamic tests for upper and lower edentulous jaw in the state of opened and closed mouth.
- 56. Methods of determination of the occlusal plane and the height of jaw relation. Methods.
- 57. Determining the centric position of the mandible. Methods.
- 58. Methods for fixing the centric position of the mandible. Outlines. Selection and setting of the artificial dentition.
- 59. Try-in with arranged teeth of the complete denture. Spatula test. Insertion of the complete dentures. Fitting, retention and stabilization of the prosthesis. Advices towards the patient. Adaptation of the patients to the prostheses. Stages of the adaptation. Relining of the complete dentures. Methods.
- 60. Special treatment methods of the complete edentulism prognatism, mandible prognatism, hyper developed tuber maxillae, nausea reflex, micro stoma, allergy. Complete denture with metal framework.

- 61. Immediate complete denture.
- 62. Prosthodontics over endossal implants. Indications and contraindications. Paraclinical tests, preparation, implantation, immobilization.
- 63. Prosthodontics over endossal implants. Planning of removable and fixed dentures. Construction principles for bridge prostheses. Clinical steps.
- 64. Prosthodontics over endossal implants. Clinical protocol- impression techniques.
- 65. Prosthodontics over endossal implants. Clinical protocol- abutments.
- 66. Subperiostal prosthodontics. Indications and contraindications. Clinical protocol- preparation, impression, implantation, prosthodontic rehabilitation. Reasons for the failure of the over implant prosthodontics.
- 67. Types of prosthetic implant treatment in complete edentulism.
- 68. Dental photography in modern prosthetic dentistry necessity, requirements, protocols.
- 69. Prosthodontics in adolescence.
- 70. Prosthetic treatment of some other kinds of the temporomandibular joints and masticatory muscles disorders. Costen Syndrome. Trauma of discus articularis. Habitual luxation.
- 71. Characteristics of the maxillo-facial damages. Congenital and acquired disorders damages. Various types of maxillo-facial apparatuses and prostheses. Repositioning and fixing apparatuses for jaw fractures. Forming and replacing apparatuses. Prosthetic treatment in cases of palatine defects (obturators). Facial prostheses (ectoprostheses).

### Practical examination:

ΚΑΤΕΔΡΑ ΔΕΗΤΑΛΗΟ

МАТЕРИАЛОЗНАНИЕ И ПРОТЕТИЧНА

AEHTAAHA MEAULUHA Woo \* BAPHA \* ° °

1. A pair of complete dentures.

The Curriculum was updated with Protocol № 9 / 05.12.2022 of a Department council meeting of the Department of Dental material science and Prosthetic dental medicine, Faculty of Dental medicine, Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

Head of ES PDM: .....

(Assoc. prof. Dr. Stoyan Katsarov, DMD, PhD)

Head of Department DMSPDM: ......

(Prof. Dr. Mario Milkoy, MD, PhD)