



**“CAROL DAVILA” UNIVERSITY
OF MEDICINE AND PHARMACY BUCHAREST**
Faculty of Dentistry
Dental Medicine in English



DISCIPLINE GRID

1. Programme:

1.1.	CAROL DAVILA UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST
1.2.	FACULTY OF DENTISTRY / 1st DEPARTMENT
1.3.	DIVISION: PROSTHODONTICS
1.4.	STUDY DOMAIN: Health, sectoral regulated within European Union
1.5.	STUDY LEVEL: LICENCE
1.6.	STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH

2. Discipline:

2.1.	DISCIPLINE NAME: DENTAL OCCLUSION AND SINGLE TOOTH INDIRECT RESTORATIONS						
2.2.	LOCATION: Aleea Barajul Iezeru 8 sect.3, Bucharest						
2.3.	Lectures tenure: Assoc. Prof. Cristina Bodnar, Prof. Alexandru Petre						
2.4.	Practical classes tenure: Lecturer Luminița Oancea, Lecturer Andrei Măcriș, Lecturer Mihaela Pantea, Lecturer Tudor Spînu						
2.5. Study year	III	2.6. Semester	V	2.7. Evaluation	Exam	2.8. Type of discipline	CD/SD

3. Estimated total time (hours/semester)

No. hours/week	5	out of which	Lectures: 2	Laboratory session: 3
Total hours out of learning schedule	70	out of which	Lectures: 28	Laboratory sessions: 42

Time distribution	hours
Textbook study, lecture support, bibliography and notes	25
Supplementary documentation activity in the library, on online platforms	15
Practical activity support material, homework, portfolio and essays	20
Tutorial activity	3
Examinations	7
Other activities	10
Total hours of individual study	80
Total hours per semester	150
Credits	6

4. Preconditions

4.1. curriculum	Notions of morphology and physiology of the dento-maxillary apparatus Dental materials, dental prosthesis technology
4.2. proficiencies	Dental modeling in plaster and wax

5. Conditions

5.1. for lecture activity	Amphitheater with projection system and writing board
5.2. for laboratory activity	<ul style="list-style-type: none"> - Dental units - Access to the dental laboratory - Laboratory with didactic models / simulators for prosthetic restorative dental treatments - Protective equipment: bathrobe, gloves, mask, goggles / visor - Telephone calls are not allowed - It is allowed to photograph clinical cases and therapeutic phases only with the consent of the teacher and the patient

6. Accumulated skills

6.1. Proficiencies (knowledge and abilities)	<ul style="list-style-type: none"> - Clinical examination algorithm for assessing dento-periodontal status - Identification and diagnosis of dental lesions - Designing the treatment plan by indirect restorations - Identifying the specific stages of mouth preparation for the fixed prosthetic treatment - Knowledge of clinical and laboratory stages in the treatment with indirect fixed restorations - Learning and using specialized terminology - Interpretation and imaging diagnosis associated with dental lesions in connection to the indirect fixed restorations - Specific techniques for preparing teeth for complete and partial dental crowns - Alginate impression and obtaining diagnostic models - Critique analysis of the design and fabrication of an indirect restoration - Algorithm for examining mandibulo-maxillary occlusion relationships - Clinical examination of the temporo-mandibular joint and the masticatory muscles - Occlusal diagnosis and therapeutic principles in occlusal treatment. - Physiology of mastication, swallowing and phonation. parafunctions
6.2. Transversal skills (role, professional and personal development)	<p>Role, professional and personal development skills</p> <ul style="list-style-type: none"> - Diagnosis and treatment of dental lesions by direct restoration versus indirect restorations - Establishing interdisciplinary correlations regarding the pre-prosthetic treatment of odontal, periodontal, surgical, orthodontic, endodontic pathology - Establishing correlations with the disciplines of removable prosthodontics, dental prosthesis technology and implantology - Development of the capacity for systematized planning of dental procedures - Development of the capacity to organize and perform dental maneuvers specific to treatment with indirect fixed prostheses.

7. Objectives (based on the grid of acquired specific skills)

7.1. General Objective	<ul style="list-style-type: none"> - Accumulation of theoretical information and learning of clinical maneuvers of examination, diagnosis and treatment with unidentified fixed prostheses - Assimilation of theoretical knowledge and practical skills to examine dental occlusion.
7.2. Specific Objectives	<ul style="list-style-type: none"> - Development of practical skills aimed at preparing teeth with dental lesions in the treatment with indirect fixed prostheses - Learning the diagnostic impression and model fabrication - Mastering the technique of examining the patient to assess the dento-periodontal status and to assess the dental occlusion, static and dynamic. - Development of clinical skills regarding the functional evaluation of the dento-maxillary apparatus and completion of the functional file - Knowledge and application in practice of theoretical support for the formulation of diagnosis and therapeutic options for different types of dental lesions.

8. Content

8.1. Lectures	No. hrs/topic	Teaching method	Obs.
Course 1 Introduction to fixed dental prosthetics and occlusology. Classification and treatment plan for unitary prosthetic restorations. Tools, materials, instruments, accessories, used in dental prosthetics. Fundamental of dental occlusion	2	Lecture, interactive systematic presentation	Oral presentations , computerized presentations
Course 2 Pathology of Dental Occlusion	2		Oral presentations , computerized presentations
Course 3 History Taking and Clinical Examination for Indirect Restorations	2		Oral presentations , computerized presentations
Course 4 Diagnostic Procedures for Indirect Restorations	2		Oral presentations , computerized presentations
Course 5 Dental Articulator Mounting.	2		Oral presentations , computerized presentations
Course 6 Treatment Planning for Indirect Restorations	2		Oral presentations , computerized presentations
Course 7 Principles of tooth preparation - biologic	2		Oral presentations , computerized presentations
Course 8 Principles of tooth preparation – restoration-tooth interface, esthetic	2		Oral presentations , computerized presentations
Course 9 Tooth preparation for ceramic restorations	2		Oral presentations , computerized presentations
Course 10 The complete crown preparation	2		Oral presentations , computerized presentations
Course 11 The Cast Partial veneer crown, inlay and onlay preparation	2		Oral presentations , computerized presentations
Course 12 Restoration of the Endodontically Treated Tooth	2		Oral presentations ,

			computerized presentations
Course 13 Interim Fixed Single Restorations	2		Oral presentations , computerized presentations
Course 14 Overview of indirect fixed restoration and principles of occlusion	2		Oral presentations , computerized presentations

8.2 Laboratory Sessions	No. hrs/topic	Teaching method	Obs.
1.Stages of patient examination for dental crown restorations. Presentation of the characteristics of correct study models Diagnostic Impression with irreversible hydrocolloids. Part 1	3	Lecture, interactive systematic presentation	Interactive and collaborative participation of students, in all diagnostic, clinical and laboratory stages during
2. Stages of patient examination for dental crown restorations. Presentation of the characteristics of correct study models Diagnostic Impression with irreversible hydrocolloids. Part 2	3		
3. General principles of preparation, preparation for monolithic crowns. Dental preparation for metal-ceramic crowns. Part 1	3		
4. General principles of preparation, preparation for monolithic crowns. Dental preparation for metal-ceramic crowns.Part 2	3		
5. Preparations for inlay, onlay. Preparations for all-ceramic crowns, veneers. Part 1	3		
6. Preparations for inlay, onlay. Preparations for all-ceramic crowns, veneers. Part 2	3		
7. Post and core restorations. The condylar position - the centric relation. Part 1	3		
8. Post and core restorations. The condylar position - the centric relation. Part 2	3		
9. Chart of occlusion. Determination and recording of mandibular movements. Part 1	3		
10. Chart of occlusion. Determination and recording of mandibular movements. Part 2	3		
11. Functional analysis: mastication, swallowing, phonation, respiration. Mandibular posture relationship. CO or ORC registration for laboratory transfer.Part 1	3		
12.Functional analysis: mastication, swallowing, phonation, respiration. Mandibular posture relationship. CO or ORC registration for laboratory transfer. Part 2	3		
13. Mounting of the casts in articulator. Principles of occlusal adjustment	3		
14.Mounting of the casts in articulator. Principles of occlusal adjustment	3		

8.3. Bibliography for lectures and laboratory/practical sessions

1. Rosenstiel, S.F., M.F. Land, and R.D. Walter, Contemporary fixed prosthodontics. 2023, Elsevier,: St. Louis, Missouri.
2. Shillingburg, H.T., R. Jacobi, and S.E. Brackett, Fundamentals of tooth preparations for cast metal and porcelain restorations. 1987, Chicago: Quintessence Pub
3. Shillingburg, H.T. and D.A. Sather, Fundamentals of fixed prosthodontics. 4th ed. 2012, Hanover Park, IL: Quintessence Pub
4. Nelson, S.J., Wheeler's dental anatomy, physiology, and occlusion. Tenth edition. ed. 2015, St. Louis, Missouri: Elsevier, Saunders
5. Klineberg, I. and S. Eckert, Functional Occlusion in Restorative Dentistry and Prosthodontics. 2015, Elsevier Health Sciences UK
6. Wiens, J., *Fundamentals of Occlusion*. ACP, 2015.
7. Lecture notes – digital format

9. Corroborating the contents of the discipline with the expectations of epistemic community representatives, professional associations and employers in the fields representative for the program

The discipline is a clinical discipline indispensable for the training of students in the undergraduate studies of Dentistry. Prosthetic treatment of dental lesions by fixed restorations is approached with a high frequency in the dental community and requires the practitioner to interact with almost all areas of specialized training, both with the near-mobilizable prosthesis, implantology and denture technology, and with the disciplines of restorative dentistry, endodontics, periodontology, orthodontics, surgery, dental radiology.

Knowledge of dental occlusion and application of functional principles in prosthetic restorations contributes to restoring and / or maintaining the health of the dentomaxillary apparatus.

We adapt the analytical program to the needs of the current practical activity

We actively participate in scientific events, forms of continuing medical education and exhibitions of equipment and materials dedicated to the practical activity of dentistry - in order to update the specialized information that we pass on to the student.

We are open to collaboration with teachers in the field, tenured in other higher education institutions, to coordinate the content taught with similar programs in other higher education institutions

Evaluation

10.1 Evaluation			
Activity type	Evaluation Criteria	Methods of evaluation	% out of final grade
Lecture	<p>A. Knowledge for mark 5: Designing the treatment plan with indirect fixed prostheses, theoretical knowledge of the stages of treatment with indirect prostheses</p> <p>B. Additional knowledge for mark 10 Examination of the dental occlusion with the completion of the file related to the requirements provided in the analytical program</p>	Written exam type questions with answers and / or editorial and / or oral test	85%
Laboratory Sessions	<p>A. Knowledge for mark 5: Making the preparations provided in the internship program</p> <p>B. Additional knowledge for mark 10 Punctuality, dress, The doctor-student relationship. Patient-student, practical skills</p>	Seminar, oral presentations, evaluation of the patient's clinical file, evaluation of the performance	15%
Minimum performance standards			

Designing the treatment plan with indirect fixed prostheses
Theoretical knowledge of the stages of treatment with indirect fixed prostheses,
Performing the preparations provided in the internship program
Examination of the dental occlusion with the completion of the file related to the requirements provided in the analytical program

Date: 08.09.2024

Chair of Prosthodontics Division,
Prof. Marina Imre

**Date of the approval in
Department Board:**

Department director,
Prof. Marina Imre