



**UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE
„CAROL DAVILA” DIN BUCUREȘTI
Facultatea de Stomatologie**



DISCIPLINE GRID

1. Program

1.1.	CAROL DAVILA UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST
1.2.	FACULTY OF DENTAL MEDICINE / 1st DEPARTMENT
1.3.	Division: Dental prosthesis technology
1.4.	Study Domain: Health, sectorial regulated within the European Union
1.5.	Study Level: LICENSE
1.6.	Study Program: DENTAL MEDICINE IN ENGLISH

2. Discipline

2.1.	Name of the discipline/compulsory subject within the discipline: Practice			
2.2.	Discipline location: Eforie Clinic, 4-6 Eforie St., Sect 5, Bucharest			
2.3.	Lectures tenure: Lucian Toma Ciocan (DDS, DMD, PhD) – Assoc. Prof., Irina Ioana Donciu (DMD, MSc, PhD) – Lecturer, Camelia Ionescu (DMD, MSc, PhD) – Lecturer, Vlad – Gabriel Vasilescu (DMD, PhD) - Lecturer			
2.4.	Teaching assistants for practical lessons tenure: Irina Ioana Donciu (DMD, MSc PhD) – Lecturer, Camelia Ionescu (DMD, MSc, PhD) - Lecturer, Vlad Gabriel Vasilescu (DMD, PhD) - Lecturer, Dana Aurelia Pîrvu (DMD, PhD) - Assist. Prof., Cătălin - Constantin Andrei (DDS, DMD, PhD) - Assist. Prof.			
2.5. Study year	II	2.6. Semester	IV	2.7. Evaluation
				Colloquium
				2.8. Type of discipline
				CD

3. Estimated total time (hours/semester)

No. hours/week	40	out of which	Lectures:	Clinical: 40
Total hours out of learning schedule	160	out of which	Lectures:	Clinical: 160

Time distribution	hours
Textbook study, lecture support, bibliography and notes	0
Supplementary documentation activity in the library, on online platforms	0
Practical activity support material, homework, portfolio and essays	0
Tutorial activity	0
Examinations	0
Other activities	0
Total hours of individual study	0
Total hours	160
Credits	2

4. Preconditions

4.1. curriculum	Notions of morphology and function of the dento-maxillary apparatus Notions of technology for obtaining unitary prostheses and fixed partial dentures
4.2. proficiencies	It is not the case

5. Conditions

5.1. for practical activities	- Dental offices - Dental laboratories
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6. Accumulated skills

Professional skills	I. <u>Knowledge (cognitive dimension)</u> - Ability to identify and diagnose dental lesions and edentulousness - Ability to use specialized terminology appropriately and in context - Knowledge of the structural components of fixed, removable and removable dentures II. <u>Skills (functional dimension)</u> - Practical skill of the clinical and technological stages in obtaining fixed and removable prostheses - Gaining the necessary practical experience to go through the technical steps in making fixed and removable dentures - Knowledge of technologies for obtaining fixed dentures by melting-casting, sintering, milling, polymerization and printing - Gaining the necessary practical experience to go through the technical steps in making partial and complete dental prostheses
Transversal skills	III. <u>Role skills</u> - Using assimilated notions in new contexts - Application of theoretical notions in practical activity - Establishing interdisciplinary correlations within the studied fields IV. <u>Professional, personal development skills</u> - Development of synthesis capacity - Developing the ability to integrate and collaborate - Developing organizational capacity

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

7.1. General Objective	- Learning by students the practical notions of restoring the morphology and functions of teeth and dental arches by fixed and removable dentures - Knowledge by the future dentist of the organization and activity and interaction of the dental laboratory with the dental office - Knowledge of the laboratory steps taken to obtain a fixed denture. - Development of professional communication skills for achieving an efficient collaboration within the dental technician team
7.2. Specific Objectives	- Recognition of the types of fixed and removable dentures used in dentistry - Knowledge of how to make a fixed, removable partial or full dental prosthesis, and the clinical and technical steps required to obtain it

	- Acquiring the knowledge to cast a working model in fixed and removable prosthesis - Acquiring knowledge of the laboratory steps required to make a fixed and removable dental prosthesis.
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8. Content

8.1. Clinical sessions
1. Notation in the treatment sheet of lesions and restorations of the oral cavity.
2. Identification of the types of prosthetic restorations (crowns, inlays, bridges, posts, removable prostheses)
3. Establishing the prosthetic diagnosis (edentulousness) on clinical cases (exercises).
4. Assisting the specialist in the preparation of dental abutments (knowledge of the types of cutters and preparation characteristics)
5. Impression with alginates and study models.
6. Prosthetic field conditioning and arch impressions with synthetic elastomers
7. Materials and methods of impressions in fixed restoration technology
8. Segmented arch casts for temporary restorations
9. Temporary restorations with acrylate or composite
10. Types of dental models used in the stages of obtaining prosthetic restorations
11. Assisting the specialist in examining and fixing prosthetic restorations
12. Preparation of fixed prosthetic restorations for luting (depending on the type of cement and restoration)
13. Preparation of the prosthetic field for luting dental restorations
14. Ways to restore dental abutments (restorative materials, fiberglass posts, metal posts)
15. Imaging materials and methods used in the technology of complete prostheses
16. Materials for custom trays
17. Repairs and conditioning of complete dentures.

8.2. Course bibliography and practical papers
1. Dental Prosthesis Technology I - Course Handouts, PPT format, current year of study 2. Dental Prosthesis Technology I - Handbook for students and residents, Editura Universitară "Carol Davila", Bucharest, 2024 3. Dental Prosthesis Technology II - Course Handouts, PPT format, current year of study 4. Dental Prosthesis Technology II - Handbook for students and residents, Editura Universitară "Carol Davila", Bucharest, 2024 5. Att W - Digital Workflow in Reconstructive Dentistry, Quintessence 2019 6. Carr AB, Brown DT - McCracken's Removable Partial Prosthodontics, 13th Edition, Elsevier, 2016 7. Johnson T, Patrick DG, Stokes CW, Wildgoose DG, Wood DJ - Basics of Dental Technology: A Step by Step Approach, 2nd Edition, Wiley-Blackwell, 2015 8. Johnson T, Wood DJ - Techniques in Complete Denture Technology, Wiley, 2021 9. Nallaswamy D.- Textbook of Prosthodontics, 2nd edition, Jaypee Brothers Medical Publishers, 2017 10. Özkan YK - Complete Denture Prosthodontics: Planning and Decision-Making, Springer 2018 11. Rosenstiel SF, Land MF - Contemporary Fixed Prosthodontics, 5th Edition, Elsevier, 2015

12. Sailer I, Fehmer V, Pjetursson BE - Fixed restorations, A clinical guide to the selection of materials and fabrication technology, Quintessence 2021
13. Sakaguchi RL, Ferracane J, Powers J, Powers J. - Craig's restorative dental materials, 14th ed., 2019
14. Sakar O - Removable Partial Dentures, Springer, 2015
15. Shen C, Rawls HR, Esquivel-Upshaw JF - Phillips' Science of Dental Materials, 13th Edition, Elsevier, 2021
16. Shillingburg HT et al - Fundamentals of fixed prosthodontics, 4th Edition, Chicago, Quintessence Publishing, 2012
17. Verhaeghe TV, Tan HK - Complete denture prosthodontics, A clinical and laboratory guide, E-book, 2018
18. Wismeijer D, Barter S, Donos N - ITI Treatment Guide, Vol 11: Digital Workflows in Implant Dentistry, Quintessence 2019
19. Zarb GA - Prosthodontic Treatment for Edentulous Patients, Elsevier, 2012

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 of Dental Prosthesis Technology is a fundamental discipline, mandatory for a student to become a dentist.
- Permanent and constructive dialogue with representatives of the dental community - in order to identify the needs and expectations of employers in the field and to adapt the analytical program to the needs of the current practical activity
- Permanent participation of department members in scientific events, in various forms of continuing medical education and in exhibitions of equipment and materials dedicated to the practical activity in dentistry - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of relevance.
- Maintaining contacts with other teachers in the field, with tenured professors in other higher education institutions, to coordinate the content taught with other similar programs within other higher education institutions.
- The studied notions are in accordance with the regulations in force and are compatible with the activities carried out at national and international level in the pre-clinical dentistry segment.

10. Evaluation

10.1. Assessment			
Type of activity	Evaluation criteria	Evaluation methods	Weight of the final grade
Practical work	Evaluation of acquired knowledge	Written exam with a grid and/or essay questions	55%
	Evaluation of the activity carried out during the internship	Awarding qualifications in the evaluation sheet	45%
Minimum performance standards			
• Acquisition of the main notions related to the technology of fixed and mobile dentures: • Technical stages of making the main current versions of single- and multi-dental metal fixed prostheses: the model, mounting in the articulator, mock-up, packaging, casting of metal alloys, sintering, milling. • Technical stages of laboratory production of fixed ceramic (sintering, melting-pressing and milling of ceramics) and polymeric (self-polymerization, photopolymerization, milling, printing) prostheses			

- Treatment of partial and total edentulism by means of fixed, removable and mobile partial prostheses – manufacturing principles, component elements, materials used.
 - Technology for making mixed metal-polymeric, metal-ceramic and all-ceramic bridges.
 - Technology for making removable and mobile dental prostheses.
- Minimum grade 5 in the written exam.

Date:

02.09.2024

**Chair of Dental prosthesis technology Division,
Assoc. Prof. Dr. Lucian Toma Ciocan**

**Date of approval in the
Department Board**

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**Department director
Prof. Dr. Marina Imre**