DISCIPLINE SYLLABUS

1. PROGRAM DATA

1.1. Higher education institution	**University of Medicine and Pharmacy of Craiova**
1.2. Faculty	**Faculty of Dentistry**
1.3. Department	Department II
1.4. Field of study	Dental Medicine
1.5. Cycle of studies	Integrated Bachelor and Master's Degree
1.6. Study program	Dentistry in English
1.7. Qualification awarded	Doctor medic stomatolog (în limba engleză)
1.8. Qualification level	level 7 CNC/ CEC(EQF)/ ISCED
1.9. Form of education	Full-time (on-site attendance)

2. DISCIPLINE INFORMATION

2.1. Name of the discipline					RESTORATIVE DENTISTRY I			
2.2. Course coordinator (lectures)					Lecturer Dr. Popescu Alexandru Dan/ Lecturer Dr. Bugălă Adelina Smaranda			
2.3. Practical/laboratory coordinator(s)					Lecturer Dr. Popescu Alexandru Dan/ Lecturer Dr. Bugălă Adelina Smaranda			
2.4. Year of Study III	3	**2.5. Semester 6**	6	**2.6. Type of assessment**	CE (PA) SE (E/A)	**2.7. Discipline status**	**Category**	DS - disciplină de specialitate
							Status	DOB - obligatorie
2.8 Discipline code	MD3210							

3. TOTAL ESTIMATED WORKLOAD (HOURS / SEMESTER))

3.1.Weekly workload (hours) 7	Lecture hours (A) + Laboratory hours (B)	**3.2. Of which: Lecture**	3	**3.3. Laboratory**	4
3.4. Total hours according to the curriculum	98	**3.5. Of which: Lecture**	42	**3.6. Laboratory**	56
3.7. Additional academic activities (projects, research and guided academic activities, etc)					-
3.8. Examinations (assessment)					2
3.9. Total of academic hours					**100**
3.10. Hours attributed to individual study					
3.10.1 Study of textbooks, lecture notes, bibliography					20
3.10.2 Additional literature and electronic resources					10
3.10.3. Preparation for laboratories					7
3.10.4. Preparation of assignments / portfolios					-
3.10.5. Preparation for final examination					10
3.10.6. Other activities (consultations, student groups)					3
3.11. Total individual study hours					**50**
3.12. Total workload – hours per semester (total academic hours + hours attributed to individual study)					**150**
3.13. Number of credits (1 credit=30 hours)					**6**

4. PREREQUIREMENTS

4.1 Curriculum prerequisites	Completion and/or successful passing of the following disciplines: Histology, Microbiology, Pathophysiology, Dental Morphology, Radiology, Dental Materials Science.
4.2 Competency prerequisites	Acquisition of the following knowledge and skills: • To possess knowledge of the histology of dental tissues: enamel, dentin, cementum, and the pulp–dentin complex. • To possess knowledge of the morphopathology and pathophysiology of dental tissues. • To possess knowledge of the oral cavity microbiota, to identify cariogenic risk factors, and to be able to apply sealing or remineralization methods. • To possess knowledge of bacterial biofilm control methods and the role of oral hygiene in preventing caries recurrence. • To recognize the anatomical details of teeth in order to accurately restore dental morphology. • To possess knowledge of the physicochemical properties and indications of materials used in direct restorations (composites, glass ionomer cements, amalgams).

5. REQUIREMENTS

5.1. 1 for lecture activities	• Lecture hall equipped with audiovisual projection facilities. • The scheduling of the final examination is established by the course coordinator in mutual agreement with the students. • In order to participate in lecture-based teaching activities, students must be familiar with and comply with the provisions set forth in: the UMFCV Charter, the Regulations on Didactic and Professional Activity of Romanian Students, the Department's Internal Regulations, the Student Examination Methodology, and the UMFCV Code of Ethics and Deontology. • Late arrival and entry after the teaching activity has commenced are not permitted, as they disrupt the continuity of the lecture. • During the lecture, students are required to keep their mobile phones switched off. • Taking photographs or making recordings during the lecture is strictly prohibited without the prior consent of the teaching staff.
5.2. for practical/laboratory activities	• Clinical training sessions are conducted in appropriately equipped facilities (dental units, desks and tablets, Wi-Fi): Clinical Training Rooms 401 and 402, Building B, 4th floor. • Materials and instruments specific to Restorative Dentistry are provided. • Practical sessions are organized in student groups according to the timetable. • Attendance at practical sessions is mandatory and conditional upon wearing the required clinical attire; attendance with a group other than the one in which the student is officially registered is not permitted. • Full compliance with the provisions of the Regulations on Didactic and Professional Activity of Students and the Department's Internal Regulations is required. • Strict adherence to hygiene, safety, and professional conduct standards is expected. • During practical sessions, students must keep their mobile phones switched off. Taking photographs or making recordings during practical activities is prohibited without the prior consent of the teaching staff. • Late arrival and entry after the teaching activity has commenced are not permitted, as they disrupt the proper conduct of the session. • Completion of all required tasks/assessment criteria is mandatory.

6. COMPETENCES

By completing this discipline, the student will develop the following professional and transversal competences, in accordance with the list of competences established by the National Qualifications Framework / European Qualifications Framework (NQF/EQF), harmonized with the European ESCO framework and the ARACIS 2025 standards.

6.1. Professional competences	• C1 – Identification of the disease state and establishment of the correct diagnosis of the dental condition(s). • C2 – Conservative therapy of odontogenic and periodontal structures.
6.2. Transversal competences	• CT1 – Identification of objectives to be achieved, available resources, conditions for completion, work stages, time allocation, deadlines, and associated risks. • CT2 – Identification of roles and responsibilities within a multidisciplinary team and the application of effective communication and teamwork techniques, both within the team and in relation to the patient. • CT3 – Efficient use of information sources and communication and professional training resources (internet portals, specialized software applications, databases, online courses, etc.), both in Romanian and in an internationally used language.

7. OBJECTIVES OF THE COURSE

7.1. General objective of the course:	To ensure the acquisition of concepts regarding the etiopathogenesis and epidemiology of dental caries, the understanding of the biological mechanisms of demineralization and remineralization, as well as the development of diagnostic and restorative treatment skills using both conventional and digital methods, with the aim of restoring the morphofunctional integrity of teeth.
7.2. Specific objectives (SO):	SO1. Clinical and Biological Correlations. Knowledge of the morphofunctional characteristics of the pulp–dentin complex, including its capacity for adaptation and repair. SO2: Modern and Digital Diagnosis. Acquisition of current detection and diagnostic methods (ICDAS codes, transillumination, laser fluorescence) and integration of digital techniques in the assessment of dental lesions. SO3: Caries Disease Management. Application of CAMBRA (Caries Management by Risk Assessment) protocols for evaluating caries risk and establishing an individualized therapeutic strategy. SO4: Classical and Modern Restorative Techniques. Acquisition of theoretical principles and cavity preparation stages according to the specific restorative material (amalgam vs. aesthetic materials). SO5: Management of Errors and Recurrence. Identification and therapeutic management of marginal secondary caries and caries recurrence, as well as evaluation of the quality of existing restorations. SO6: Biosecurity. Rigorous application of infection prevention, asepsis, and antisepsis protocols in the dental practice.

8. LEARNING OUTCOMES

8.1. Knowledge (K)	The student/graduate acquires, describes, analyzes, and evaluates specialized knowledge regarding the structures of the dento-maxillary system, the pathology of teeth, jaws, and oral cavity tissues, dental and dentoalveolar anomalies, congenital malformations, as well as the principles of diagnosis and treatment (prophylactic, preventive, interceptive, and curative) specific to dentistry, using both classical and digital methods/techniques. Upon completion of the course RESTORATIVE DENTISTRY I, the student will be able to: ● K1: Describe the physical, chemical, and structural characteristics of hard dental tissues (enamel, dentin, cementum) and their implications in the carious process. ● K2: Explain the etiopathogenic mechanisms of dental caries and the role of risk factors (biofilm, diet, salivary flow). ● K3: Identify and classify carious and non-carious dental lesions according to modern systems (Black classification, ICDAS). ● K4: Demonstrate knowledge of the principles of positive and differential diagnosis, using clinical, radiological, and digital technologies such as fluorescence and transillumination. ● K5: Describe prevention methods and caries risk management protocols (CAMBRA). ● K6: Explain the principles of cavity preparation according to the selected restorative material (amalgam or adhesive aesthetic materials). ● K7: Demonstrate knowledge of the composition, properties, and clinical indications of direct restorative dental biomaterials. ● K8: Acquire and apply biosecurity standards, infection control measures, and waste management protocols in the dental practice.
8.2. Skills (S)	The student/graduate acquires and demonstrates specialized clinical experience under appropriate supervision, progressively and gradually performing practical and clinical procedures throughout the years of study, necessary for achieving the professional competencies (knowledge, skills, and abilities) specific to the dental profession. Upon completion of the course RESTORATIVE DENTISTRY I, the student will demonstrate the ability to: • S1 (Gradual Experience): Progressively perform cavity preparation and coronal restoration procedures, starting with simulation units and continuing, under supervision, with clinical procedures adapted to the level of training. • S2 (Practical Treatment Skills): Perform isolation of the operative field using the rubber dam technique and prepare cavities for various restorative materials (amalgam, composite resins). • S3 (Diagnosis and Decision-Making): Use clinical examination instruments and complementary methods to establish a positive diagnosis in simple dental caries. • S4 (Modern Techniques): Apply in practice caries treatment protocols and direct aesthetic restorative techniques. • S5 (Supervision and Professionalism): Fulfill the required number of practical procedures under the guidance of the teaching staff, strictly adhering to ergonomic principles (working positions) and biosecurity standards. • S6 (Digital Skills): Interpret digital radiological investigations and utilize assistive technologies in cariogenic diagnosis.

8.3. Responsibility and autonomy (R&A)	The student/graduate integrates and applies specialized competencies required for the prevention, diagnosis, and treatment of anomalies and conditions affecting the teeth, jaws, and associated tissues. They evaluate, analyze, differentiate, estimate, interpret, and utilize the information, knowledge, skills, and responsibilities acquired throughout their years of study in order to achieve the competencies necessary for practicing the dental profession. Upon completion of the course RESTORATIVE DENTISTRY I, the student will demonstrate: ● R&A1: Assumption of responsibility for the quality of procedures performed on simulation models and patients, under the direct supervision of the clinical tutor. ● R&A2: The ability to recognize the limits of one's own competence and to seek assistance or guidance when required by the clinical situation. ● R&A3: Compliance with ethical and deontological standards, as well as respect for patients' rights throughout all stages of odontotherapeutic treatment.

9. CONTENTS AND ORGANIZATION OF TEACHING–LEARNING ACTIVITIES

9.1. Lecture	Allocated time (hours)	Teaching methods	Notes
1. Hard dental tissues (enamel, cementum, dentin): topographic, physical, and chemical characteristics, structure, and their clinical implications. Morpho-clinical correlations in enamel, dentin, and cementum caries.	3 hours of lecture per week	• Interactive lectures delivered through PowerPoint presentations, guided discussion, problem-based learning, and explanatory approaches.	Oral presentations supported by PowerPoint, supplemented with images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
2. Scope and orientation of odontotherapy. Dental caries: general considerations and classification.	1 hour of lecture per week	• Interactive lectures incorporating guided discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.

3. Epidemiological correlations in dental caries.	1 hour of lecture per week	• Interactive lectures supported by PowerPoint presentations, incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
4. Considerations on the etiology of dental caries. Indicators and risk factors of carious disease.	1 hour of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
5. The role of oral fluids in cariogenesis. The role of the bacterial biofilm in the initiation of carious disease. Biofilm-related factors influencing the cariogenic attack.	1 hour of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.

6. External risk factors related to diet.	1 hour of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
7. Biochemical mechanisms involved in the carious process. The role of fluoride in the demineralization and remineralization phenomena of carious lesions.	1 hour of lecture per week	• Interactive lectures supported by PowerPoint presentations, incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
8. Simple dental caries: clinical signs, positive and differential diagnosis, anatomo-clinical forms, evolution, and complications.	3 hours of lecture per week	• Interactive lectures supported by PowerPoint presentations, incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
9. Radiodiagnosis of dental caries.	1 hour of lecture per week	• Interactive lectures supported by PowerPoint presentations, incorporating discussion,	Oral presentations supported by

		problem-based approaches, and explanatory methods.	PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
10. Complementary examinations used in the diagnosis of dental caries: caries detection by staining methods, transillumination techniques (FOTI, DI-FOTI), radiographic examination, quantitative laser fluorescence (QLF), DIAGNOdent method, and measurement of the electrical resistance of dental tissues. The value of vitality tests in the diagnosis of caries.Integration of radiological image analysis software and the use of digital intraoral sensors.	2 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
11. Infection/contamination control during the treatment of simple dental caries (protective equipment, hand hygiene, decontamination of instruments and surfaces, waste management, and environmental infection control).	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.

12. Isolation of the operative field in restorative odontotherapy.	2 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
13. General principles of treatment of simple dental caries: treatment planning, operative stages, nomenclature, classification of cavities, and the principles and stages of cavity preparation. Evolution from preventive extension (Black) to preventive conservation.Digital ergonomics and the use of magnification systems (loupes, operating microscope).	4 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
14. Cavity preparation for amalgam restorations and methods of restoration (including special retention systems).	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
15. Cavity preparation for restoration with	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by

adhesive aesthetic materials.			PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
16. Classification of coronal restorative materials; temporary materials: composition, setting mechanism and reaction, properties, and clinical implications.	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
17. Non-aesthetic (non-physiognomic) long-term restorative materials: dental amalgams (composition, setting mechanism and reaction, properties, clinical implications), and amalgam restoration techniques.	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
18. Aesthetic (physiognomic) long-term restorative materials: composite materials, glass ionomer cements,	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images

compomers, ormocers, and giomers (composition, setting mechanism and reaction, properties, and clinical implications).			from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
19. Evaluation of the quality of restorations made from various plastic materials or amalgam. Caries adjacent to restorations and sealants: positive and differential diagnosis, and treatment.	3 hours of lecture per week	• Interactive lectures incorporating discussion, problem-based approaches, and explanatory methods.	Oral presentations supported by PowerPoint, complemented by images from pathology/imaging and/or instructional videos. Formative assessment through a set of five questions adapted to the lecture topic.
Total	Total hours per semester = 42		

Mandatory Bibliography

1. **Ţuculină M.J**., *Note de curs - Odontoterapie Restauratoare I*, format electronic/platforma educațională a UMFCV
2. **Ţuculină Mihaela, Moraru Iren Alina** – *Curs de Odontoterapie conservatoare şi restauratoare*, vol. I, Ed. Sitech Craiova, 2014.
3. **Marcov E.C. (coord.)** – *Manual de Odontoterapie Restauratoare (vol. II): Instrumentar utilizat în odontoterapia restauratoare*, Ed. Ars Docendi – Universitatea din Bucureşti, 2012.
4. **Ritter A.V., Boushell L.W., Walter R.** – *Sturdevant's Art and Science of Operative Dentistry*, Elsevier, 2025.
5. Manual pentru rezidențiat sub redacția prof. dr. Ecaterina Ionescu, vol 1, Ed. Universitară "Carol Davila" București 2021- capitolul 1 Odontoterapie *Restauratoare*

Optional Bibliography

6. **Mount G.J. et al.** – *Preservation and Restoration of Tooth Structure*, Third Edition, Wiley Blackwell, 2016.
7. G.V. Black – *Work on Operative Dentistry*

9.2. PRACTICAL SESSIONS	Allocated time (hours)	Teaching methods and continuous assessment	Practical activities performed by students
1. Presentation of examination and treatment instruments, and working positions. Functioning and use of the dental unit in	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised

conservative odontotherapy. Presentation of the simulation unit. Working positions according to the location of the operative field.		the group instructor, and short oral and/or written assessments based on the practical session topic.	Instruments used: dental unit, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, CT1–CT3.
2. Demonstration of working and support positions, as well as methods of using instruments for the treatment of simple dental caries in patients. Coronal morphology – review.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: dental unit, examination kit, treatment instruments, models and acrylic teeth Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, CT1–CT3.
3. Organization of the dental office (protective equipment, hand hygiene, environmental hygiene).	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: dental unit Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
4. Clinical examination of the patient: clinical record (patient chart), complementary examinations, and diagnostic tests in simple dental caries	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: dental unit, examination kit Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, CT1–CT3.
5. General principles of cavity preparation.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
6. Treatment of simple dental caries – Class I cavities.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised

		the group instructor, and short oral and/or written assessments based on the practical session topic.	Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
7. Treatment of simple dental caries – Class II cavities.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
8. Treatment of simple dental caries – Class III and Class IV cavities.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
9. Treatment of simple dental caries – Class V cavities.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
10. Treatment of simple dental caries – Class VI cavities.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, CT1–CT3.
11. Presentation of temporary coronal restorative materials,	4 hours of	Practical demonstration followed by supervised	Type of activity: applied technique, clinical procedure

practical demonstrations, and students' performance of restorations on extracted teeth or simulation models.	practical sessions per week	student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments, modeling instruments, composite material, light-curing unit Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C4, CT1–CT3.
12. Presentation of permanent coronal restorative materials, practical demonstrations, and students' performance of permanent restorations on extracted teeth or simulation models.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments, composite material, light-curing unit Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C4, CT1–CT3.
13. Rubber dam isolation for anterior and posterior teeth – practical demonstration by the instructor and performance of procedures by students on simulation models. Presentation of dental separation methods.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, rubber dam system, dental separation devices Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C4, CT1–CT5.
14. Non-operative preventive and therapeutic methods of etiological treatment in dental caries.	4 hours of practical sessions per week	Practical demonstration followed by supervised student practical activity (practical sessions), interactive discussion with the group instructor, and short oral and/or written assessments based on the practical session topic.	Type of activity: applied technique, clinical procedure Level of involvement: individual, supervised Instruments used: simulator, examination kit, treatment instruments Objective of the activity: through this activity, the student will develop the following competencies: C1, C2, C3, C4, CT1–CT5.
Total	Total hours per semester = 56		

Mandatory Bibliography

1. **Ţuculină M.J.,** *Note de curs - Odontoterapie Restauratoare I*, format electronic/platforma educațională a UMFCV
2. **Ţuculină Mihaela, Moraru Iren Alina** – *Curs de Odontoterapie conservatoare şi restauratoare*, vol. I, Ed. Sitech Craiova, 2014.

3. **Marcov E.C. (coord.)** – *Manual de Odontoterapie Restauratoare (vol. II): Instrumentar utilizat în odontoterapia restauratoare*, Ed. Ars Docendi – Universitatea din Bucureşti, 2012.
4. **Ritter A.V., Boushell L.W., Walter R.** – *Sturdevant's Art and Science of Operative Dentistry*, Elsevier, 2025.
5. Manual pentru rezidențiat sub redacția prof. dr. Ecaterina Ionescu, vol 1, Ed. Universitară "Carol Davila" București 2021- capitolul 1 Odontoterapie *Restauratoare*

Optional Bibliography
1. **Mount G.J. et al.** – *Preservation and Restoration of Tooth Structure*, Third Edition, Wiley Blackwell, 2016.
2. G.V. Black – *Work on Operative Dentistry*

10. CORRELATION OF CONTENT, OBJECTIVES AND EXPECTED LEARNING OUTCOMES WITH STAKEHOLDER EXPECTATIONS

The content of the discipline has been updated and aligned with the requirements formulated by the academic and professional community in the field of Dentistry, taking into account national standards (ARACIS, CNC), international and European competence classifications (EQF, ESCO), and the occupational competence profile according to Directive 2005/36/EC. Knowledge and skills are established as educational objectives and are specified accordingly in syllabi revised annually.
Following internal analysis within the discipline, the content was discussed and approved by the Curriculum Committee, which includes representatives of relevant stakeholders, with the aim of harmonizing it with other disciplines as well as with labor market requirements. Throughout this process, the correspondence between the curriculum content and the expectations of the academic community, community representatives, professional associations, and employers is systematically evaluated, as far as possible directly.
In order to adapt and coordinate the content and to select appropriate teaching/learning methods, the course coordinator has also considered the syllabi of similar disciplines from other higher education institutions. As a primary objective, the discipline aims to provide students with optimal foundations for subsequent years of study within the integrated Bachelor's and Master's program in Dentistry, with the perspective of successful employment immediately after graduation, particularly in residency programs in Romania and other EU countries.

11. RECOVERY PROGRAMMES AND LEARNING MOTIVATION SUPPORT

11.1 Recovery programs					
Activity type	**Maximum number of absences that can be recovered**	**Location**	**Period**	**Responsible staff**	**Topics / content scheduling**
Absence recovery	3	Department location (headquarters of the discipline).	The last week of the semester.	Course coordinator (course holder).	According to the course schedule.
Additional guidance	2 hours per week.	Department location (headquarters of the discipline).	Weekly, on Wednesdays, 11:00–13:00.	Course coordinator (course holder).	According to students' requests. Topics proposed at the beginning of each semester are addressed.
Support programme for underprepared students	4 hours per semester.	Department location (headquarters of the discipline).	The last two weeks of the semester.	Course coordinator (course holder).	According to the difficulty of the topics, as indicated by the assessment results.
11.2. Learning motivation support programs					
	Student scientific group / themes		**Location**	**Period**	**Responsible staff**
Student scientific group					
Scientific projects					
Workshops					
Student Competitions					
Other activities					
*Additional clarification: ...					

12. ASSESSMENT

Activity type	12.1. Assessment criteria	12.2. Targeted learning outcomes	12.3. Assessment methods	12.4. Weight in final grade
12.5. Lectures	Accuracy of responses to multiple-choice questions and essay-type questions; Ability to acquire and understand the taught concepts; Ability to substantiate theoretical concepts; Clarity of expression and logical organization of information.	The following codes will be respected: K1–K8, R&A3.	Written (multiple-choice tests and/or essay-type questions – extended, individualized topics).	50%
12.6. Practical/Laboratory work	Accuracy of performing the clinical procedure; Appropriate selection of instruments and necessary materials; Compliance with clinical steps and standard protocols; Precision and quality of the final result; Demonstration of knowledge regarding instruments, materials, and working techniques	The following codes will be respected: K1, K8, S1–S6, R&A1–R&A3.	Practical and oral examination (at the end of the clinical training period, at the end of the semester) Correct demonstration of cavity preparation and restoration techniques (on models, extracted teeth) for a specific type of cavity. Assessment of the required number of procedures performed during the semester.	30%
12.7. Semester activity	Ability to substantiate theoretical concepts; Clarity of expression and logical organization of information; Ability to synthesize and integrate knowledge from the taught topics; Active attendance and participation in all practical activities; Correct and complete performance of procedures specific to each practical session; Logical application of theoretical knowledge in practice; Compliance with hygiene, ethical, and professional safety standards.	The following codes will be respected: K1, K8, S1–S6, R&A1–R&A3.	Continuous practical assessment; Multiple-choice test (40 questions) covering the content of the first 7 lectures (Frequency: twice per semester during practical sessions and once during a lecture). Evaluation of clinical activity during the placement by the group instructor; Assessment of attendance, punctuality,	20%

			professional attire, attitude towards patients and auxiliary staff, and level of involvement during practical sessions.	
12.8. Minimal standard	At the end of Semester VI of the third year, students demonstrate the ability to: Diagnosis and Evaluation: The ability to correctly use examination instruments and complementary methods (classical and digital) for the detection and identification of carious dental lesions. Theoretical Foundation: Define and correctly apply concepts related to the etiopathogenesis of caries, mechanisms of demineralization and remineralization, and caries risk management. Practical Skills (Simulation): Correctly perform, on simulation units or extracted teeth, the stages of cavity preparation (Classes I–VI) according to the selected restorative material (amalgam or aesthetic materials), respecting operative steps. Biosecurity and Ergonomics: Strict application of hygiene and infection control standards, as well as maintaining ergonomic working positions during practical activities. Responsibility: Recognition of the limits of one's own competence, compliance with the department's internal regulations, and completion of the full clinical requirements.			
12.9. Promotion criteria	To be considered as having successfully passed, the student must cumulatively fulfill the following requirements: ● Pass the written test (40 multiple-choice questions) covering the content of the first 7 lectures – the minimum passing grade is 7; the test may be taken a maximum of two times before the first examination session; ● Fulfill the minimum required number of procedures, which will be presented at the practical examination for evaluation; ● Achieve 100% attendance in clinical training sessions, or, in case of absences, fully complete all required make-up activities within the maximum allowed limit; ● Obtain a minimum grade of 5 (five) in the theoretical assessment (lecture – multiple-choice test and oral test with two topics); ● Obtain a minimum grade of 5 (five) in the practical assessment; ● Comply with university regulations regarding academic conduct and must not have been involved in any form of academic misconduct. LECTURE – Requirements for grade 5: Acquisition of specialized terminology and its correct use in context; Acquisition of fundamental knowledge regarding the etiopathogenesis of dental caries and the classification of cavities. Ability to describe the stages of cavity preparation for amalgam and aesthetic materials. Written examination responses must not contain major errors that could jeopardize tooth vitality (e.g., failure to respect cavity depth). LECTURE – Requirements for grade 10: Accurate and comprehensive development of essential concepts through mastery of the entire course content and recommended bibliography; Ability to correlate clinical diagnosis with digital radiological findings and to propose a caries risk management plan (CAMBRA); Ability to justify the choice of cavity design according to the properties of the studied biomaterials; Correct and complete answers to all examination questions. PRACTICAL SESSIONS – Requirements for grade 5: Knowledge of instruments and ergonomic working positions; Correct execution of the outline form and operative stages for Class I and Class II cavities on the simulation unit; Compliance with biosecurity standards and mandatory attendance at clinical training sessions.			

	PRACTICAL SESSIONS – Requirements for grade 10: Impeccable execution of the full range of cavity preparations (Classes I–VI) on extracted teeth or simulation models; Ability to perform rubber dam isolation of the operative field within an optimal time; Ability to critically evaluate the quality of a cavity preparation and to identify potential technical errors.

Date approved in the Department: 18.09.2026

Head of Department,	**Study Program Coordinator,**	**Course Coordinator,**
Professor Dr. Mihaela Jana Tuculina	**Professor Dr. Adrian CAMEN**	**Lecturer Dr. Popescu Alexandru Dan**