



DISCIPLINE SHEET

1. Study programme

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST
1.2.	FACULTY OF DENTISTRY
1.3.	DEPARTMENT: I
1.4.	DISCIPLINE: GERODONTOLOGY
1.5.	STUDY DOMAIN: Health, sectoral regulated within the European Union
1.6.	STUDY LEVEL: I (Bachelor's degree) and II (Master's degree)
1.7.	STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH

2. Discipline

2.1.	Discipline name according to the study curriculum: GERODONTOLOGY				
2.2.	Discipline code: MD04S10EN				
2.3.	Discipline type (FD/SD/CD): SD				
2.4.	Discipline optionality (COD/ED/FAD): COD				
2.5.	Lectures tenure: Lecturer dr. Mihaela Pantea, Professor dr. Alexandru Eugen Petre, Associate Professor dr. Cristina Bodnar, Lecturer dr. Andrei Macris, Lecturer dr. Tudor Claudiu Spinu				
2.6.	Practical classes / seminar tenure: Lecturer dr. Mihaela Pantea, Associate Professor dr. Cristina Bodnar, Lecturer dr. Andrei Macris, Associate Professor dr. Sergiu Drafta, Lecturer dr. Tudor Claudiu Spinu, Lecturer dr. Luminita Oancea, Assistant Professor dr. George Ion, Lecturer dr. Andreea Maria Smarandache, Assistant Professor dr. Sergiu Alexandru Radulescu, Assistant Professor dr. Cezar Ionita, Assistant Professor dr. Raluca Draghici, Assistant Professor dr. Miruna Dinescu, Assistant dr. Professor Ioana Valsan				
2.7. Year of study	IV	2.8. Semester	VII	2.9. Evaluation (E/C/V)	E

3. Estimated total time (hours/ semester of teaching and training activity /individual study)

I. University training						
3.1. Number of hours per week	3	from which:	3.2. lecture	1	3.3. practical class/ seminar	2
3.4. Total hours in the study curriculum	42	from which:	3.5. lecture	14	3.6. practical class/ seminar	28
II. Preparation/ individual study						
Time distribution						hours
Study of lecture materials, textbooks, books, study of the minimum recommended bibliography						25
Additional documentation activity in the library, on online platforms						10
Specific preparation activities for projects, practical classes, preparation of assignments, reports						10
Preparation for presentations or evaluations, preparation for the final examination						25
Tutoring activity						5

Other activities	3
3.7. Total hours of individual study	78
3.8. Total hours per semester (3.4.+3.7.)	120
3.9. Number of credits	4

4. Prerequisites (where appropriate)

4.1. curriculum	Knowledge of: - anatomy and physiology of the oral and maxillofacial structures - technology for the fabrication of fixed and removable prostheses - single-tooth fixed prosthodontics - some basic notions regarding edentulism
4.2. proficiencies	The students should know: - biomaterials used in dental prosthodontics - techniques for using prosthetic biomaterials - techniques of general and oral examination and diagnosis, in relation to the patient's clinical situation - techniques for tooth preparation for fixed prostheses, impression-taking, and recording of occlusal relationships

5. Conditions (where appropriate)

5.1. for lecture activity	Lecture hall with a minimum of 70 seats, computer, and video projector
5.2. for practical class/ seminar activity	Prosthodontics clinics equipped with dental units, materials, and instruments specific to the working techniques. Access to a dental technology laboratory for carrying out possible laboratory stages.

6. Learning outcomes*

Knowledge	Skills	Responsibility and autonomy
C1 To have basic knowledge of age-related general and local changes (dento-maxillary structures) in elderly patients.	A1 To show appropriate, ethical, and empathetic behavior towards elderly patients.	R1 The student analyzes and interprets all the knowledge, information, and skills acquired during lectures and practical work in the discipline of Gerodontology, in order to initiate the development of their abilities as a dentist in this field.
C2 To be able to establish, through extra- and intra-oral examination, an appropriate diagnosis for	A2 To have basic skills in identifying the chief complaint of the elderly patient, obtaining a general, medical, dental, and social history, performing extra- and	R2 Identification of roles and responsibilities within a multidisciplinary team, and application of techniques for effective interaction and teamwork

the geriatric patient according to the case (including specification of elements involved in defining the degree of difficulty and complexity).	intra-oral examinations, and communicating effectively with the patient, their family, or caregivers.	(dentist, nurse, technician) as well as in relation to the patient, their family, or caregivers.
C3 To be able to indicate prosthetic treatment alternatives in relation to the complexity of the case (age, degree of difficulty, etc.).	A3 To have basic knowledge of various aspects frequently encountered in the dental treatment of geriatric patients (management of root and secondary caries, management of tooth wear, periodontal treatment, indications for extraction, endodontic therapy, fixed and removable prostheses, management of xerostomia).	R3 Identification of objectives to be achieved, available resources, conditions for completion, stages and timelines, deadlines, and associated risks.
C4 To have basic knowledge of the theories of aging, as well as the demographic and socio-economic aspects in the geriatric context. To have basic knowledge of oral health care in a multidisciplinary context. To have basic knowledge of the organization of a safe environment for dental treatment of elderly patients.	A4 To have basic knowledge of oral health education, oral hygiene instructions for elderly patients, as well as of providing guidance on the wearing and cleaning of complete, partially removable, and fixed prostheses, and on the prevention of accidents and complications.	R4 Efficient use of informational sources and of communication and professionally assisted training resources.

7. Discipline objectives (correlated with learning outcomes)

7.1. General objective	The educational objective is to increase students' awareness of the complex geriatric patient context and of the barriers to oral healthcare, as well as to prepare them - through knowledge, attitudes, and ethical principles - to initiate the development of the skills necessary for providing oral healthcare to older adults.
7.2. Specific objectives	<p>In defining the specific initial competencies in Gerodontology, the following aspects are of interest, based on the required levels of knowledge, attitudes, and skills:</p> <ul style="list-style-type: none"> - Be competent at: the student should have a sound theoretical knowledge and understanding of the subject together with an adequate clinical experience to be able to resolve clinical problems encountered, independently, or without assistance. - Have knowledge of: students should have a sound theoretical knowledge of the subject, but need only to have limited clinical/practical experience.

	<p>- Be familiar with: students should have a basic understanding of the subject but need not have direct clinical experience or be expected to carry out procedures independently.</p> <p>The student/graduate must be competent at:</p> <ol style="list-style-type: none"> 1. Displaying an appropriate and ethical caring behavior towards older patients. 2. Demonstration of basic skills in identifying the main problems and complaint for the geriatric patient's visit, as well as their needs and requirements. Demonstration of basic skills in obtaining a general, medical, dental, and social history of the geriatric patient, performing extra- and intra-oral examinations, and communicating effectively with the patient, their family, or caregivers. 3. Demonstration of basic skills in providing oral health education and oral hygiene instructions to elderly patients - particularly those with reduced manual dexterity - and to their caregivers. 4. Demonstration of basic knowledge of age-related general and local changes (dento-maxillary structures) in elderly patients, as well as of various aspects frequently encountered in the dental treatment of geriatric patients (management of root and secondary caries, management of tooth wear, periodontal treatment, indications for extraction, endodontic therapy, fixed and removable prostheses, management of xerostomia). <p>The student/graduate has knowledge of:</p> <ol style="list-style-type: none"> 1. Theories of ageing, demographic and socio-economic aspects in the geriatric context. 2. The basic provision of oral health care in a multidisciplinary context, the organization of a safe and welcoming dental treatment environment for older patients, and principles of preventive gerodontology. <p>Be familiar with:</p> <ol style="list-style-type: none"> 1. The organization of general and oral health care for the elderly in the community and in the hospitals, the organization of domiciliary care, as well as the assessment of oral health related quality of life in elderly patients.
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8. Contents

8.1. Lecture	Teaching methods	Observations
1. Introduction to Gerodontology: terminology and definitions; theories of the ageing process; demographic and socio-economic aspects in the geriatric context	Lectures / Theoretical courses PowerPoint presentations Videos Interactive discussions	2 hours

2. General age-related changes of the human body in older adults		2 hours
3. Age-related changes in the dento-maxillary system in older adults		2 hours
4. Specific considerations regarding oral rehabilitation in gerodontology		2 hours
5. Interdisciplinary collaboration in gerodontology. Communication and ethical aspects in gerodontology		2 hours
6. Digital dentistry and artificial intelligence in gerodontology		2 hours
7. Quality of life and oral health in older people: preventive approaches and the concept of “healthy ageing” (“geriatric wellbeing”)		2 hours

Recent bibliography:

- Anastassia Kossioni, Gerodontology Essentials for Health Care Professionals, Springer, 2020
- European College of Gerodontology – Undergraduate Curriculum Guidelines in Gerodontology; <http://www.gerodontology.eu/guidelines.php>
- Gerry McKenna, Nutrition and Oral Health, Springer 2021
- Poul Holm-Pedersen, Angus Walls, Jonathan Ship, Textbook of Geriatric dentistry, Third edition, Wiley Blackwell, 2015
- MacEntee MI, Oral Healthcare and the Frail Elder: A Clinical Perspective. Wiley, 2011
- Mihaela Pantea. Consideratii asupra tratamentelor protetice in geronto-stomatologie. Ed. Universitara „Carol Davila”, Bucuresti. 2016; ISBN: 978-973-708-942-7
- Mihaela Pantea. Tehnici de prefigurare a tratamentelor protetice la pacientii de varsta a treia. CAD-CAM, o tehnologie a mileniului trei in stomatologie. Ed. Didactica si Pedagogica, Bucuresti. 2016: 107-126, ISBN: 978-606-31-0330-8
- Scientific Literature / Journals / access from databases:
 - Gerodontology
 - Journal of Prosthetic Dentistry
 - British Dental Journal

8.2. Practical classes/ seminar	Teaching methods	Observations
1. Introduction to Gerodontology. First contact with the geriatric patient; Effective communication with the geriatric patient; Adaptation of the clinical environment and	Specific practical activities and demonstrations PowerPoint presentations Videos Interactive exercises Role-play (simulation) Student-centered discussions Seminars	4 hours / Practical class The topics may be addressed in several practical sessions.

dental services to the needs of older adults		
2. Examination of the geriatric patient in dentistry; Presentation of a clinical case with geriatric specificity		
3. Tooth preparation for single-tooth prosthetic restorations, with particularities specific to the geriatric patient		
4. Tooth preparation for multi-tooth prosthetic restorations, with particularities specific to the geriatric patient		
5. Oral health education and oral hygiene in older patients. Preventive Gerodontology		
6. Repeat sessions of practical classes / training.		
7. Practical examination.		

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9. Assessment

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of final grade
9.4. Lecture	<ul style="list-style-type: none"> - Accuracy of knowledge - Ability to correlate and synthesize - Coherence of argumentation - Correct use of specialized terminology in gerodontontology 	Written final theoretical exam (with synthesis-type questions, essays, problems, or tests) (based on the chapters of the curriculum)	80%
9.5. Practical classes/seminar	<ul style="list-style-type: none"> - During each practical training session – discussions in correlation with the lecture concepts and the practical training syllabus. - Compliance with working protocols, accuracy and precision in performing techniques, manual dexterity - Ability to apply theory in practice - Student's attitude during training (attendance, punctuality, professional appearance, theoretical preparation in accordance with requirements, attitude towards patients and auxiliary staff) - Creativity, innovation, capacity for synthesis, presentation skills. 	Seminars (Periodic evaluation, Attitude during practical training) (Practical training mark/grade) Practical examination (Practical examination mark/grade)	10% 10%
9.5.1. Individual project (if any)		Individual project	
Minimum performance standard			
Basic knowledge of the of age-related general and local changes (dento-maxillary structures) in elderly patients. Basic knowledge of the particularities of oral clinical examination in the geriatric context and of communication with the geriatric patient, as well as of various aspects frequently encountered in the dental treatment of geriatric patients.			