

Educational Program Dentistry

Higher education level: One-Cycle Educational Program

Language of instruction: English

Type of Educational Program: Academic / Major

Detailed field description and code: 0911 Dental Studies

Qualification awarded: Doctor of Dental Medicine (DMD)

Duration of study: 5years (10 semesters)

Program Scope: 300 credits

Head of the Program:

Head of the educational program:

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Program Admission Precondition

To the educational program in dentistry is admitted:

A person who has completed general education and who holds a certificate of completion thereof or its equivalent document and who gained the right to study at the European University on the basis of a ranking of scores of the Unified National Exams.

An entrant is required to pass following compulsory subjects:

- a) Georgian language and literature, English language (minimum requirement 80%), Biology.
- b) one of the following subjects: Chemistry / Mathematics / Physics. The quota places allocated for each subject are 40%, 30%, 30%.

Eligibility to study at the program without passing the Unified National Exams:

Persons are authorized to be enrolled in the University without passing the Unified National Exams based on the order №224/5 of December 29, 2011 by the Minister of Education and Science of Georgia on “Approval of the procedure for submitting and reviewing documents by applicants / candidates for master degree / students having the right to study without passing the Unified National Examinations / General Entrance exam for Master's degree”. These persons are required to confirm their English language proficiency at B2 level, in accordance with the "Language Competence Rule" of the European University.

The program shall also be attended by:

Students enrolled through mobility in accordance with the order №10/5 of February 4, 2010 by the Minister of Education and Science of Georgia on “Approval of the Rule and Fees of Transfer from one Higher Educational Institution to another Higher Educational Institution”.

Structure of the program

Educational program in dentistry consists of:

- Components of major field of study – 270 credits, among them:
 - a) Compulsory components of major field of study – 258 credits;
 - b) Elective components of major field of study – 12 credits.
- Free components – 30 credits, among them:
 - a) Free components – 20 credits, which is oriented on development of general/transferable competencies;
 - b) Free components – 10 credits, which can be collected by a student through choosing any study course from university educational program of the same level by considering admission preconditions of the study course.

Educational program in dentistry can be divided into three parts:

Part I – Human Body Structure and Function (I-II years)

The basics of general medicine include basic concepts about the structure and function of the human body and biomedical sciences. During the first two years, students will learn about the structure of the human body, life sciences and research principles in the field, clinical and professional skills (communication and procedural skills, medical ethics), and the basics of public health. The teaching of these integrated modules will be carried out using different teaching methods (lectures, role-playing games, practical work, work in a simulation laboratory, etc.). Students will master key practical skills

(working on phantoms) in the phantom class. Through simulation teaching, students will gain knowledge-based experience; Students will also study regional anatomy through virtual dissection on mannequins and discussion of specific clinical cases. Besides, from the very first year, students will be involved in a problem-based learning course (PBL) that will be long-lasting. At the end of the specialty phantom courses, students take an integrated exam (MCQ and OSCE).

Part II - Mechanisms of Health and Illness (III-IV course)

Attention is paid to the clinical part (propaedeutic and clinical skills). This part is mainly focused on the most common symptoms and signs of the disease. At the same time, students improve their practical skills. During the III year, students learn diagnostic thinking by discussing cases in different medical fields, which in turn helps to integrate the acquired knowledge and prepares students to fully understand the clinical subjects, most of which is offered in the program from IV year. During the IV year, students study the main dental and clinical subjects in the form of clinical rotations - dermatology, pediatrics, otorhinolaryngology, etc. These modules are taught in both outpatient and clinical settings. The most important part is the inclusion of clinical courses of the major field of study, during which the students continue to master the clinical skills and symptoms of the dental diseases. At the end of the most study courses, students take an integrated exam (MCQ and OSCE).

Part III - Clinical Courses in Dentistry (V Course)

The third part is the continuation of clinical courses in the major field of study (Conservative, Surgical and Orthopedic Dentistry, Pediatric Dentistry and Pediatric Surgery, Orthodontics), during which students continue to study professional skills. During the V year, students will have additional clinical activities to strengthen and refine their competencies in the major field of study. At the end of some rotation, students take an integrated test. Within the same year, students are given a variety of clinical assignments, the completion of which prepares graduate students for future specialization and postgraduate residency programs.

The aim of the program

The program aims to train a professional dentist under modern international standards, who: Possesses the theoretical knowledge and practical skills required for professional activities (1), who qualitatively uses research, ethical and communication skills (2), develops professionally in an ever-changing environment (3).

Learning Outcomes of the program

Learning Outcome	A Description of the Learning Outcomes
1	<p>Describes the systems of the human body, its essential elements, tissues, their interconnections, developmental features, and functions; Explains the anatomical, physiological features of the body and the biochemical processes taking place in the living organism; Discusses the organism as an integrated system. Recognizes and characterizes cases of norm and pathology, identifies causes of pathologies. Lists the preventive measures and understands the necessity and importance of their implementation.</p>
2	<p>Identifies the construction of dental equipment, rules of operation and management. Lists the purpose of the dental instruments and medical and dental materials, methods of their application. Chooses the methods of aseptic and antiseptic, explains their importance in maintaining sanitary and hygienic standards. Conducts the waste management/utilization procedures.</p>
3	<p>Explains the etiology and pathogenesis of tooth soft and hard tissue diseases. Formulates a diagnosis, including differential diagnoses. As a result selects and implements modern and adequate diagnostic, prophylaxis and treatment methods, according to the patient's age and needs.</p>
4	<p>Interprets periodontal tissue and oral mucosa diseases, defines their diagnoses, including differential diagnosis. Evaluates, selects and implements the modern methods of diagnose, prevention and treatment.</p>
5	<p>Compares maxillofacial region odontogenic and non-odontogenic inflammation, neoplastic changes and traumatic injuries. Justifies conservative, surgical, reconstructive or restorative treatment needs.</p>
6	<p>Categorizes diseases of oral surgery. Determines traumatic injuries of the oral cavity. Chooses appropriate treatment methods depending on etiology and pathogenesis, diagnoses and differential diagnosis.</p>
7	<p>Interprets and describes anomalies of the jaws, determines etiological factors, differentiates them and makes the diagnoses. Based on the attained data chooses the correct orthodontic treatment tactics and the appropriate appliances.</p>
8	<p>Compares and differentiates various orthopedic diseases according to etiology, pathogenesis, degree and type of damage. Demonstrates diagnostic procedures and consequently chooses appropriate treatment methods.</p>

9	Chooses the types and application methods of local and general anesthesia. Explains possible problems and can cope (govern) with complications of local anesthesia.
10	Can gather anamnesis, complete a medical card. Examines patient. Write down the examination data and keep recording; Choose the necessary additional examinations; Analyze and interpret the data of examination, conduct differential diagnosis and determine the diagnosis; Demonstrates basic clinical skills.
11	Defines and explains the importance of applying ethical norms and legal regulations in medical practice. Demonstrates verbal and written communication skills on issues related to the field, ability to design research, make detailed planning, process results and conclude; Discusses scientific research methodology;
12	Estimates and substantiates the need for further professional development and the need to keep up-to-date with the latest developments in the field.

Areas of employment and prospects for further education

According to the Georgian current legislation, a graduate of one cycle educational program in dentistry is allowed to run the independent medical practice after obtaining state certificate giving him/her the right mentioned above (The Law of Georgia on Medical Practice, Article 7).

According to the law mentioned above (article 17), a graduate having a higher medical education have the right to:

- a) complete postgraduate professional training program to acquire the right to perform an independent medical practice after passing a state certification exam;
- b) carry out research and teaching activities in the theoretical fields of medicine, or other fields of health care that do not imply an independent medical practice;
- c) work as a junior doctor (intern).

A graduate of one cycle educational program in dentistry has right to continue further education on next level of higher education.

Programme evaluation system

The student knowledge assessment system complies with the rules for calculating credits of higher education programs approved by the Order N3 of the Minister of Education and Science of Georgia of January 5, 2007. Which allows:

A) Five positive grading:

Aa) (A) Frequent - 91-100 grading points;

Ab) (B) Very good - 81-90 points of maximum grading;

Ac) (C) Good - 71-80 points of maximum grading;

Ad) (D) Satisfactory - 61-70 points of maximum grading;

Ae) (E) Sufficient - 51-60 points for maximum grading.

B) Two types of negative grading:

Ba) (FX) Failed to pass - 41-50 points of maximum grade, which means that the student needs more work to pass and is given the right to take the additional exam once with independent work;

Bb) (F) Failed - 40 points or less of the maximum grade, which means that the work done by the student is not enough and he / she has to re-study the subject.

If a student receives a negative grade (FX), he / she is entitled to take an additional exam in the same semester. The interval between the final and the relevant additional exam should be not less than 5 days after the announcement of the results.

Program Study Plan

#	Modules	Prerequisites	ECTS	Total hours	Distribution of hours						Semester									
					Contact hours					Independent work hrs	I	II	III	IV	V	VI	VII	VII I	IX	X
					Lecture	Working in a Group, Practical Study	Midterm Exam/ Final Exam	Total Contact Hours												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Compulsory free component, which is oriented on development of general/transferable competencies (20 credits)																				
1	Foreign Language I (Georgian A1)/(German A1)	-	5	125	0	60	4	64	61	5										
2	Foreign Language II (Georgian A2)/(German A2)	Foreign Language I (Georgian A1)/(German A1)	5	125	0	60	4	64	61		5									
3	Foreign Language III (Georgian B1.1)/(German B1.1)	Foreign Language II (Georgian A2)/(German A2)	5	125	0	60	4	64	61			5								
4	Foreign Language IV (Georgian B1.2)/(German B1.2)	Foreign Language III (Georgian B1.1)/(German B1.1)	5	125	0	60	4	64	61				5							
Compulsory courses of major field of study (258 credits)																				
Basic and clinical courses (133 credits)																				
1	Medical Chemistry	N/A	4	100	15	30	4	49	51	4										
2	Body System I (Human Anatomy, Physiology, Imaging)	N/A	7 (3+ 2+ 2)	175	15	30	4	119	56	7										
					15	30														
					10	15														
3	Cell Biology	N/A	5	125	14	46	4	64	61	5										
4	Molecular Biology and Genetics	Cell Biology	5	125	15	30	4	49	76		5									
5	Introduction to Clinical Sciences I	Cell Biology Medical Chemistry	6 (2)	150	15	17	4	100	50		6									
					15	17														

	(Histology & Embryology Medical biochemistry)		+2 +2)		15	17													
6	Introduction to Clinical Sciences II (Histology & Embryology Medical biochemistry)	Introduction to Clinical Sciences I (Histology & Embryology Medical biochemistry)	6	150	15	17	4	100	50			6							
					15	17													
					15	17													
7	Basis of Diseases and Treatment (Pathology and Pharmacology)	Body System II; Introduction Course of Clinical Sciences II	6	150	15	30	4	94	56				6						
					15	30													
8	The body's immune system (Microbiology, Immunology)	Molecular Biology and Genetics	5	125	15	30	4	94	31				5						
					15	30													
9	Behavioral Science	N/A	3	75	15	30	4	49	26	3									
10	Psychology	Behavioral Science	3	75	14	31	4	49	26		3								
11	Research Methods I (Argumentative Writing)	N/A	4	100	9	36	4	79	21	4									
					0	30													
12	Research Methods II	Research Methods I (Argumentative Writing)	2	50	14	16	4	34	16			2							
13	Research Methods III	Research Methods II	2	50	14	16	4	34	16				2						
14	Evidence Based Medicine	Research Methods III	2	50	5	10	4	19	31						2				
15	Epidemiology and Biostatistics	Medicine and Society III	2	50	10	10	4	24	26									2	
16	Research Project	Epidemiology and Biostatistics	4	100	5	55	4	64	36										4
17	Medicine and Society I	N/A	2	50	15	15	4	34	16			2							
18	Medicine and Society II	Medicine and Society I	2	50	15	15	4	34	16				2						
19	Medicine and Society III	Medicine and Society II	3	75	7	21	4	32	43								3		
20	Clinical Skills I (Clinical Skills I, Bioethics)	N/A	4	100	0 6	30 30	4	70	30		4								
21	Clinical Skills II (Clinical Skills II, Communication skills)	Clinical Skills I (Clinical Skills I, Bioethics)	4	100	0 15	30 15	4	64	36			4							
22	Clinical Skills III (Infection Control and Waste Management in Dentistry)	Clinical Skills II (Clinical Skills II, Communication skills)	2	50	0	30	4	34	16						2				

34	Otorhinolaryngology	Surgery I	2	50	5	15	4	24	26								2			
35	Clinical Radiology	Body systems II	2	50	13	15	4	32	18				2							
36	Body Systems II (Human Anatomy, Physiology, Imaging)	Body Systems I	7 (3+ 2+ 2)	175	15	30	4	119	56											
					15	30														
					10	15														
Therapeutic dentistry courses (29 credits)																				
1.	Simulation Course of Operative Odontology	Body systems II	2	50	5	25	4	34	16				2							
2.	Dental Materials	Medical Chemistry	2	50	5	25	4	34	16				2							
3.	Simulation Course of Endodontics	Simulation Course of Operative Odontology	3	75	4	41	4	49	26					3						
4.	Clinical Course of Operative Odontology	Simulation Course of Operative Odontology	3	75	5	35	4	44	31						3					
5.	Clinical Course of Endodontics	Simulation Course of Endodontics	3	75	5	35	4	44	31							3				
6.	Introduction to Periodontology	Clinical Course of Operative Odontology	5	125	11	37	4	52	73								5			
7.	Diseases of the Oral Mucosa I	Introduction to Periodontology	3	75	5	40	4	49	26									3		
8.	Clinical Course of Periodontology	Introduction to Periodontology	4	100	13	52	4	69	31										4	
9.	Diseases of the Oral Mucosa II	Diseases of the Oral Mucosa I	4	100	5	55	4	64	36										4	
Surgical dentistry courses (23 credits)																				
1.	Simulation Course of Surgical Dentistry	Body System II	3	75	12	33	4	49	26					3						
2.	Oral Surgery I	Simulation Course of Surgical Dentistry	3	75	4	36	4	44	31						3					
3.	Oral Surgery II	Oral Surgery I	3	75	5	35	4	44	31							3				
4.	Surgical Dentistry I	Oral Surgery II	3	75	7	33	4	44	31								3			
5.	Surgical Dentistry II	Surgical Dentistry I	3	75	6	34	4	44	31									3		
6.	Surgical Dentistry III	Surgical Dentistry II	4	100	16	24	4	44	56										4	
7.	Surgical Dentistry IV	Surgical Dentistry III	4	100	8	44	4	56	44										4	
Orthopedic dentistry courses (24 credits)																				
1.	Propaedeutic of Orthopedic Dentistry I	Body systems II	2	50	7	23	4	34	16				2							

		Dentistry I																		
2.	Orthodontics II	Orthodontics I	3	75	3	37	4	44	31									3		
3.	Orthodontics III	Orthodontics II	3	75	3	37	4	44	31										3	
4.	Orthodontics IV	Orthodontics III	3	75	5	35	4	44	31										3	
Elective courses of major field of study (12 credits)																				
1.	Latin Language	N/A	2	50	0	30	4	34	16	2										
2.	History of Medicine	N/A		50	15	15	4	34	16											
3.	Intrduction to Sociology	N/A	2	50	14	16	4	34	16			2								
5.	Medical Sociology	N/A		50	13	17	4	34	16											
6.	Ophtalmology	Methods of Diagnosis; Surgery I	2	50	6	18	4	28	22						2					
4.	Medical Materials	Medical Chemistry		50	8	22	4	34	16											
7.	Psychiatry	N/A		50	6	18	4	28	22											
8.	Nutritionology	N/A	2	50	8	16	4	28	22								2			
9.	Narcology	N/A		50	4	12	4	20	30											
10.	Modern Sport Dentistry	Surgical Dentistry II	4	100	9	31	4	44	56										4	
11.	Implantology	Surgical Dentistry III		100	7	44	4	44	56											
Free components, which can be chosen by a student from university educational program of the same level by considering admission preconditions of the component (10 credits)														5	5					
Distribution of credits over academic semesters										30	30	30	30	30	30	30	30	30	30	30

Note:

1. It is compulsory for foreign students to confirm Georgian language proficiency level of B1.2 or to achieve it through the program. A student confirms language proficiency level in accordance to the rule for determining language proficiency level of European University;
2. A student studies a foreign language starting with the level determined by the rule mentioned above. If a student confirms language proficiency level of B1.2, he/she is allowed to cover the credits for foreign language (20 ECTS) by taking elective courses of major field of study. If a student's confirmed proficiency level is higher than beginning level of foreign language (A1), the rest of the credits can be obtained by elective courses of major field of study;

3. *Free credits, which can be covered by taking study courses from any same level educational program of the university, can be obtained by elective courses of major field of study.*