

Discussed at the Faculty Board meeting:

Protocol №015-20, 04.12.2020

Approved by the decision of the Governing Board:

Resolution №46, 10.12.2020

Last changes are discussed at the Faculty Board meeting:

Protocol №b5-24, 05.09.2024

Approved by the decision of the Governing Board:

Resolution №21, 20.09.2024

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: 5 years (10 semesters)

Program Scope: 300 credits

Head of the Program:

Head of the educational program: Prof. Dr. Sophio Samkharadze, e-mail: sopho.samkharadze@eu.edu.ge

Co-head of the educational program: Assist. Prof. Marika Zurmukhtashvili, e-mail: marika.zurmukhtashvili@eu.edu.ge

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 number of seats for subjects should not be less than 30% of the seats announced on the program. The exact percentage distribution will be determined by the program head before the announcement of seats.

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”.

The relevance of the program

The dentist profession is one of the key fields of the healthcare system that relates to the maintenance and improvement of human oral health and quality of life. The pressing issue of modern medicine is patients' safety. Hence, the modern methods of prevention and treatment are very topical. This requires highly qualified professionals, as present market lacks the relevant specialists.

The modern, rapidly developing research by using high technologies, ways and means of treatment and rapidly updated knowledge in medicine help reveal pathologies at the initial stage and increase the life expectancy of patients.

Very often at medical organizations and rehabilitation centers employed personal lacks modern knowledge and experience, which in its turn influences the patients' service and its quality. The solution to the problem is possible by quality improvement of the relevant academic education and delivering the program that meet the market requirements.

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	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.
2	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.
3	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.
4	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.
5	Compares maxillofacial region odontogenic and non-odontogenic inflammation, neoplastic changes and traumatic injuries. Justifies conservative, surgical, reconstructive or restorative treatment needs.
6	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.
7	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.
8	Compares and differentiates various orthopedic diseases according to etiology, pathogenesis,

	degree and type of damage. Demonstrates diagnostic procedures and consequently chooses appropriate treatment methods.
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.

The aim of an educational program is in compliance with program learning outcomes (see appendix #1).

Components of an educational program ensure achievement of program learning outcomes (see appendix #2).

Volume of the programme

The educational program is constructed according to the European Credit Transfer System (ECTS) and is based on an academic workload of a student needed to achieve program learning outcomes.

The duration of educational program is 5 academic years, 10 academic semesters and consists of 300 credits (7 500 hours in total).

1 credit is equal to 25 astronomic hours.

A credit considers workload needed by a student to achieve learning outcomes. Workload consists of both contact and student's independent working hours.

Within a semester student registers for 30 credits (30 credits = 750 hours) and within an academic year - for 60 credits. A student can register for more or less than 60 credits based on an individual study plan of a student, however student's workload in an academic year cannot exceed 75 credits.

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.

Components of an educational program, credits allocated to each of them, admission preconditions and distribution of components according to an academic semester are determined by appendix – program study plan (see appendix #5).

Student's knowledge assessment system

The assessment determines the relevance of student achievement to the specific outcomes of the program. In the one-cycle educational program of a Medical Doctor, the assessment of student knowledge is based on criteria that determine whether the student possesses the learning outcomes specified in the course.

The grading system used within the program complies with the "Rules for Calculating Higher Education Programs with Credits" approved by the Minister of Education and Science of Georgia № 3 of January 5, 2007.

The level of achievement of learning outcome is assessed through assessment components, mid-term assessment, and final assessment, the sum of which is the final assessment. The maximum final grade of the training course is 100 points.

The student's assessment system allows:

a) five types of positive assessment:

(A) Excellent – 91-100 points;

(B) Very good – 81-90 points;

(C) Good – 71-80 points;

(D) Satisfactory – 61-70 points;

(E) Acceptable – 51-60 points;

b) two types of negative assessment:

(FX) Failed to pass – 41-50 points, meaning that the student is required to work more for passing the exam, and that she/he is entitled to retake exam only once after independent work;

(F) Failed to pass – 40 points and less, meaning that the work done by the student is not sufficient and she/he has to redo the study course/subject.

A student is allowed to take make-up exam in case she/he got a negative assessment (FX) or scored minimum 51 points, but did not obtain minimal competence level set for the final assessment. A make-up exam is appointed no later than 5 days since the announcement of the examination results.

The point of the make-up exam is not added to the point of the final exam. Make-up exam point is the final assessment of the educational component of the educational program.

60% (60 points) of final assessment is allocated to the midterm assessment grade and 40% (40 points) of final assessment - to the final exam grade.

Midterm assessment consists of different components. Obligatory component of midterm evaluation is midterm exam, scheduled in the eighth-ninth week of the academic calendar (during curricular midterm exam period is defined by the course syllabus). Midterm assessment components and the allocation of points to each component are determined by the lecturer within the course syllabus.

A student is admitted to the final exam if she/he scored minimal competence level set for the midterm assessment. Final exam is considered as passed if a student scored minimal competence level set for the final exam grade.

Minimal competence levels set for midterm assessment and final exam grade are as follows: 50% of midterm assessment (a student is admitted to the final exam if she/he scored minimum 30 points of midterm assessment), 50%+1 of final exam grade (final exam is considered as passed if a student scored minimum 21 points).

A credit can be awarded only after obtaining minimal competence levels set for midterm assessment and final exam grade and scoring 51 points or more.

The personnel implementing the learning course, taking into account the specifics of the learning course, has the right to determine a different (higher) interim and final assessment minimum competence limit, in accordance with the requirements established by the current legislation of Georgia.

In case of integrated study courses, personnel has the right to determine the minimum competence limit in each component of this course. In this case credit is obtained if a student exceeds the minimum competence threshold of each component of this course, exceeds the minimum competence threshold in each assessment component (midterm and final assessment) and obtaining at least 51 points as a result of the points and sums obtained in the midterm and final assessments.

The personnel implementing the learning course, taking into account the goals, learning outcomes and the specifics of the learning course, has the right to determine the minimum competence limit in the evaluation method/methods. In the case of the existence of a minimum competence limit in the evaluation method/methods, it will be possible to grant credit In case of exceeding the minimum competence threshold in each assessment method, exceeding the minimum competence threshold in each assessment component (midterm and final assessment) and obtaining at least 51 points as a result of the points and sums obtained in the midterm and final assessments.

The means for assessing achievement of learning outcomes or the assessment methods used in the educational program in dentistry are as follows:

Oral Presentation - An assessment method that involves the lecturer asking questions to individual students to demonstrate and evaluate their knowledge of the material explained during the lecture and independently processed by them. When assessing the oral survey, the standard attention is paid to the student's sharpness, adequacy/relevance of the answers, accuracy of the facts, ability to convey in an understandable language, persuasiveness, etc.

Presentation - An assessment method that involves assessing a student in the context of his / her presentation of visual material to a group of students accompanied by visual aids. The presentation checks the student's manner of delivery, ability to work with the equipment, presentability, adequacy of the information provided, and more.

Practical activity - the student will be given an assignment relevant to the learning component (performing virtually any manipulation that he/she has already done several times in the practical training). The student should be able to complete this practical assignment.

Quiz (Short Answer Question/Open Question/Multiple Choice Question) - An assessment method that involves a lecturer writing a survey of students in a short-test format, usually consisting of closed or open questions. The purpose of the quiz is to test students' current knowledge and the correctness of the answers to the standard criteria for its assessment. The lecturer uses a syllabus to determine the time allotted for the quiz and the rate of each question.

Laboratory work - assesses how well the student has the skills to set up, adjust and operate the equipment, set the appropriate tests, etc.

Case Study - an assessment method that involves the lecturer presenting a specific case to a student (analyzing and synthesizing the results of instrumental and laboratory tests, making a differential diagnosis, determine a diagnosis, developing an appropriate treatment plan). Through the case, the lecturer tests the student's ability to think critically, to draw conclusions, to understand a complex issue/problem and to find original ways to solve it, including professional-ethical values and the ability to operate on these values.

OSPE - Objectively Structured Practice Exam - is a new concept in the practical assessment of basic medical sciences used to assess students' anatomy and laboratory skills at the preclinical stage of a medical curriculum. Stations are created and each station has a specific purpose for which it evaluates. OSPE is an objective, reliable, and accurate tool for assessing anatomy and laboratory practical aspects in an integrated problem-based curriculum. The evaluation of each component at the stations is determined according to the evaluation sheet. The evaluation sheet is designed to take into account the specifics of the task to be performed directly.

The OSCE - Objectively Structured Clinical Exam - is a modern type of assessment system often used in medical education. It is designed to test clinical skills and competence in areas such as communication, clinical examination, prescribing/performing medical procedures, radiographic positioning, radiographic

image evaluation, and interpretation of results. It is a practical, realistic approach to learning that allows students to understand the key factors that facilitate the medical decision-making process, expose their mistakes, ensure decision-making improves, and develop responsibility based on practice.

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.

Head(s) of the educational program:

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