

Tbilisi State Medical University

Educational Program for Dental Medicine

English version

Tbilisi

Program title: **Educational program for dental medicine**

Awarded qualification: **Doctor of Dental Medicine**

Program capacity: **300 Credits**

Teaching language: **English**

Objectives of the program:

Content and concept of educational program for Dental Medicine strategically meets to the mission of Tbilisi State Medical University, providing harmonious implementation of education, research and medical/practical activities in compliance with the principles on integration into entire European Education Area in order to prepare the qualified and competent specialist – Doctor of Dental Medicine.

Doctor of Dental Medicine should have:

- Theoretical knowledge of specialized field and the ability to apply it effectively in clinical practice;
- Knowledge of methodology in specialized field and the principles of professional ethics;
- General competencies:
 - a) Analysis, synthesis, problem solving, decision making, time planning and effective organization skills;
 - b) Ability to communicate in both the native and foreign languages.

c) Applying informational technologies

d) Effective work in the interdisciplinary groups (social skills)

e) Systemic skills of independent work, research activities, working on the project, practical activities within the frames of established competencies

Requirements/Prerequisites prior to the program permission:

All international applicants are required to pass an English proficiency test at Tbilisi State Medical University.

Applicants are not required to provide an English proficiency test score if they meet one of the following criteria:

- Applicants with English Medium School/College/University certificates
- Valid IELTS (>6.5) or TOEFL (>90) Certificate

General Competencies

Knowledge and understanding:

(should have theoretical knowledge and the clinical skills necessary for applying it in clinical practice; acquaintance with the scope of his/her own professional competences)

- Basic theoretical knowledge and developed clinical skills to perform his/her professional role and functions as doctor of Dental Medicine successfully and deliberately;
- Acquaintance with the basic values, ethical and legal aspects of Dental Medicine;
- Acquaintance with social, cultural, political and economical aspects of the specialty;
- Acquaintance with health care system, realizing a role of doctor of Dental Medicine in it;
- Acquaintance with the rules and regulations of patient's safety and the principles of infection control; understanding the necessity of following these principles to secure a safe work environment.

- Acquaintance with modern communication facilities;
- Acquaintance with the principles of registration, documentation and shearing of the information
- Realizes the necessity of continuing education and professional development;
- Realizes a role of a doctor in Dental Medicine in providing the high quality health care individually, as well as, in the context of working with in multidisciplinary professional team;
- Managing (leadership) abilities

Skills to apply knowledge in practice

(Ability to apply the acquired knowledge and practical skills in development of appropriate working plan, its management and quality assurance within the scope of the competency. Ability to provide the entire, systematic and accurate assessment of the need in professional assistance to ensure patient safety).

The Graduate should be able to:

- _ Perform routine medical/dental examinations: to study and assess the basic functional parameters of the body; to collect anamnesis; to conduct physical tests, puncture, subcutaneous and intramuscular injections, intravenous administration of medicine, using infusion appliances , to sutures the skin and mucous membrane.
- _ Elaboration and implementation of the individual recommendations for prevention of dental diseases;
- _ Elaboration of oral hygiene recommendations taking into account patient's age and dental status;
- _ Proper selection of anesthetics and their administration in treatment of various dental diseases;
- _ Utilization of different methods of tooth preparation and proper selection of dental direct and indirect restorative materials according to the indications;
- _ Proper selection of the methods of diagnosis, differential diagnosis and treatment of periodontal diseases;

- _ Identification of clinical, paraclinical and lab. elements of oral mucosa disease, their differentiation, diagnosis and development of appropriate treatment plan.
- Diagnosis and treatment of maxillo-facial diseases of different etiology;
- _ Primary management of maxillo-facial lesions;
 - Extraction of milk and permanent teeth;
- _ Participation in management of the patients with acute maxillo-facial traumas at the Emergency Care Unit
- _ Diagnosis of prosthodontic pathologies, development of treatment plan, selection of prosthodontic constructions;
- _ Diagnosis of occlusion malformations, development of treatment plan and participation in choosing the proper construction;
- _ Participation in providing the differential diagnosis and development of the algorithm for treatment of oncologic diseases in oral cavity and maxillo-facial area
- _ Keeping with the safety rules and regulations of patient and dental practitioner, identification of deontological, psychological and social problems and situation management within the scope of competencies.

Making judgments

(Identification of specific problems, quick search for ways to ensure their safe and reliable solution and perform related activities on the basis of the conclusions adopted)

On the base of assimilated knowledge, the graduate should be able to perform early identification of deviations, risks, life-threatening conditions, to provide appropriate decisions and take measures in coordination with the medical team and / or - act adequately in case of need;

Communication skills

(Ability to communicate effectively in a changeable professional environment. The graduate can use contemporary informational and communication facilities and is able to assimilate new

technologies; ability to obtain specific professional information, its processing and transmission in different ways).

Graduate would be able to establish the oral and written communication with: medical staff, social and health care workers, patients, patient's family members and other individuals to provide effective medical services;

Utilization of the modern methods and facilities of communication skills to provide timely and accurate registration, recording and security of relevant medical documentation and to transfer and distribute it in case of need; ability to realize the mentioned competency in both the native and foreign languages;

Utilization of interpersonal communication skills for development of effective collaboration and coordinated activities with professional team workers and the other specialists.

Learning skills

(Ability to determine independently the deficiency, needs and priorities of his/her knowledge for further professional development)

Ability to determine imperfections, needs and priorities of his/her knowledge.

Having realized that education is a continuous process, the graduate is trying to use every opportunity to acquire modern and advanced knowledge through all possible ways of postgraduate and continuous professional education, achieving improvement in his/her professional knowledge and advancement in a career.

Values:

(Clearly defined values, he/she is guided in a specialists' professional environment).

Acting in accordance with the international and local legislative and ethical regulations on professional activities;

High sense of responsibility to his/her professional activities;

Critical approach to his/her work, taking into account (if applicable) adequate professional notes, instructions and recommendations;

Objective assessment of the others' attitude to professional values and readiness to share his/her own attitude with others.

**Sectoral (Base)
Competencies:**

- Knowledge of basic medical sciences and the skills to apply it in professional scope of activity.
- Knowledge of the methodology and ethics of the field.
- Principles of identification and resolution of complex problems in sectoral sciences
- Follow the rules and regulations for patient and doctor-stomatologist safety, identification of deontological, psychological and social problems and situation management within the terms of competencies.
- Principles of identification and evaluation of emergency and acute states within the terms of competencies, in accordance with the acquired basic knowledge
- Acquaintance with the way of dental disease prevention methods and the skills to apply them in clinical practice.
- Elaboration of oral hygiene recommendations taking into consideration patients' age and dental status.
- Classification of teeth non-cariou teeth lesions diagnosis, differential diagnosis and the skills to apply the treatment methods in clinical practice.
- Proper selection of anesthetics and adequate anesthetic principles in treatment of dental diseases.
- Age-dependend features of the diseases of different etiology and pathogenesis in conservative dentistry of children and adults; classification, diagnosis, differential diagnosis and principles of treatment.
- Classification, diagnosis, differential diagnosis and treatment principles of caries and its complications
- Dental materials and the principles for their adequate use.

- Identification of clinical, paraclinical and lab. elements of oral mucosa and periodontal disease. Classification, diagnosis, differential diagnosis and principle of treatment.
- Classification, diagnosis, differential diagnosis and treatment principles of the diseases of different etiology and pathogenesis in surgical stomatology and maxillo-facial surgery;
- Basic principles of Implantology and general principles in dentistry.
- Classification, diagnosis, differential diagnosis and treatment principles of the diseases of different etiology and pathogenesis in pediatric and adult's oral surgery; management of the patient with maxillo-facial acute traumas at emergency care units.
- Classification, diagnosis, differential diagnosis and treatment principles of the diseases of different etiology and pathogenesis in prosthodontics and maxillo-facial orthopedics;
- Classification, diagnosis, differential diagnosis and treatment principles of the diseases of different etiology and pathogenesis in orthodontics.
- Classification, diagnosis, differential diagnosis and development of treatment algorithm for oral, head and neck oncology.

Program Structure

Program components

The research and evidence based program fits the epidemiologic, demographic, social and cultural contextual priorities and consists of the following essential components:

- Block of the general education courses
- Block of fundamental medical-biological sciences
- Professional, ethical and juridical (legal) aspects
- Principles of etiology, development, diagnosis, treatment and prevention of the diseases
- Epidemiology and management of the diseases
- Research skills
- Communication skills

– Information management and information technologies

Component

Content:

- The cycle of general educational disciplines: foreign languages, bioethics, history of medicine, medical Latin language and medical terminology.
- Medical Physics and Biophysics, Medical Chemistry, Human anatomy, Cytology, Histology, Parasitology, Microbiology, Bacteriology, Medical biochemistry, Human physiology, Molecular and medical genetics, General hygiene, Pathologic anatomy, Pathophysiology, Virology, Immunology, Topographic Anatomy, Medical Psychology, Pharmacology.
- The cycle of clinical disciplines: Internal diseases, General surgery, surgery, Dermato-venereology, Neurology, Ophthalmology, Pediatrics, Oto-rhino-laryngology, Urology, Infectious diseases, Phthisiatry, Hematology, Psychiatry, radiology, Forensic medicine, Allergology.
- The cycle of specialized clinical disciplines: Prevention of dental diseases, Conservative Dentistry of children and adults, Oral surgery for children and adults, Periodontology (pre clinical and clinical), Oral Mucosa Diseases, Clinical Operative Odontology, Oral surgery, Endodontics (pre clinical and clinical), Children and adults' oral and maxillo-facial surgery, Orthodontics, Periodontal and oral mucosa diseases in children, prosthodontics (pre clinical and clinical), Oral, head and neck oncology.
- The course of clinical integration:
 - _ Operative odontology and endodontics;
 - _ Children and adults' oral and maxillo-facial surgery,
- Management, financing and economics of dental diseases.

The methods, used to achieve the course learning outcomes /competencies:

- Student-oriented methods
 - Active involvement in learning process. Assimilation of practical skills on the phantoms, participation in discussions on clinical cases, attending lectures, seminars, practical courses, work with referral papers, presentations and are participating in discussions.

- Problem-oriented teaching
- Learning by experience – its sense consists in assimilation of practical skills and accumulation experiences on the lower courses (on the phantoms) but on the higher courses application of acquired skills in clinical practice.

It consists of the following steps:

- Clinical practical competencies – description what happened;
- Feelings - what students think and feel;
- Assessment - what is good and what is bad in the gained experience;
- Analysis of the experience - why this or that experience was good or bad;
- Conclusion - what else should or shouldn't do the student to improve the outcomes/results;
- Action plan for the next practice - what a student will do in case the similar situation turns up again.

Student's assessment system (indicators):

a. Five types of positive assessment:

- (A) **excellent** - 91% and more from maximum grading points;
- (B) **very good** - 81-90% from maximum grading points;
- (C) **good** - 71-80% from maximum grading points;
- (D) **Medium** - 61-70% from maximum grading points;
- (E) **Satisfactory** - 51-60% from maximum grading points.

b. Two types of negative assessment:

- (Fx) **Unsatisfactory** –41-50% from maximum points; considerable further work required from the student; after independent work he/she will have only one chance to pass additional (secondary) exam ;
- (F) **Completely unsatisfactory** – 40% and less, the work performed by the student is not

enough and further work required to learn the subject over again.

Credits transfer is possible only after achievement of learning outcomes/competencies based upon the syllabus and reflected by one of the above-mentioned positive assessments.

- The student will have the chance to pass on the secondary (additional) exam in the same semester;
- The interval between the final and secondary exams should be not less than 5 days.

The student is obtaining permission to the secondary exam in the following cases:

a) If the student does not attend the exam at the basic examination sessions, regardless of the reason

b) If at the basic examination - the student gets Fx (unsatisfactory) grading scores.

– Maximum grading scores for studying course/discipline - 100 scores

–Midterm assessment (final summary scores of knowledge assessment components based upon the syllabus) – 60 scores

– Final exam is graded by - 40 scores

– Assessment of the final exam will be positive in case the student gets ≥ 24 scores (60% and more from maximum grading points)

– For obtaining permission to the final exam the student should gain 51 scores, including midterm assessments and final exam scores.

System background:

- Bologna Process - European Credit Transfer System (ECTS)
- Georgian Law on “Higher Education”
- President of Georgia - order #473, June 8, 2005
- Minister of Education and Science of Georgia, order #785, September, 2009
- Alterations made to the order #3, January 5, 2007 of the Minister of Education and Science of Georgia on “Approval Grading Regulations for Programs of Higher Education”

Human resources necessary for program implementation

In implementation of the program participate: academic staff of Tbilisi State medical University, invited specialists and teachers.

Material resources necessary for program implementation

For learning of basic subjects are used: material-technical base of Tbilisi State Medical University, and simulation classes

The Faculty of Stomatology has 3 clinical bases staffed with highly qualified specialists, these are:

University Dental Clinic named after Apolon Urushadze

TSMU N.1 Dental Clinic

TSMU N.2 Pediatric Dental Clinic

Besides the above-mentioned, the Center of Clinical Skills is performing at A. Urushadze Central Dental Clinic of TSMU, where the initial year students have chance to get trained in practical skills on phantoms, including all kinds of clinical manipulations and interventions.