

Caucasus International University

Tbilisi**, 2021**

Faculty of Medicine

Medical Educational program in English

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Rector

K.Kordzaia

Medical education program in English

Field

Health and Welfare

5. Direction

Healthcare

6.Detail field

Medicine

7. Program volume in credits360 credits

8. Study duration6 years, 12 semesters

9. Tuition form Full-time

10. Tuition language English

11. Qualification to be awarded Medical doctor (MD)

12. Program Director

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General description of the field

Medicine is one of the most important specialties of health care, which concerns not only human health, but also its life. According to the law of Georgia "On Medical Practice", the medical practice is defined as:

A professional activity carried out by a medicine-trained, adequately skilled and practically experienced person who, by applying the medical standards and ethical norms recognized in the country as well as by considering medical traditions, aims to protect, maintain and restore human health and mitigate a patient's suffering` (article 5 from the above lawof Georgia "On Medical Practice").

Goals of the program

Medical education is an important prerequisite for future successful medical practice. Reforms occurring in the country, internationalization and requirements of integrative learning is arising necessity of medical education to concur with international standards.

Presented undergraduate MD curriculum will assist in international acknowledgement of medical education taken in the country, and further, uninterrupted employment of medical graduates, also ensuring to offer higher quality medical services within the country.

The curriculum is based on sector benchmark, which is corresponding WFME standards. The compatibility of the quality of basic medical education and successful medical practice, based on international standards is important for ensuring the optimal performance of any country's health care system.

The goal of the program is to educate highly qualified medical doctors, who will be competitive both within the country and abroad.

The educational program has the following objectives: Provide the students knowledge and understanding of:

- 1. the basic biomedical sciences;
- 2. the behavioral and social sciences;
- 3. Public health;
- 4. Medical ethics, human rights and medical jurisprudence relevant to the practice of medicine;
- 5. The clinical sciences, including clinical skills with respect to diagnostic procedures, practical procedures, communication;
- 6. Treatment and prevention of disease, health promotion, rehabilitation;
- 7. Clinical reasoning and problem solving;
- 8. The ability to undertake lifelong learning;
- 9. In addition, demonstrate professionalism required for medical practitioner.

Program Structure credits:

Specialty mandatory education courses/ modules – 328 credits Among them:

- basic education courses 126 credits;
- Clinical education courses 169 credits.
- Scientific skills mandatory courses 12 credits;
- Clinical skills mandatory curses (among them in modules) 21 credits.
- Specialty elective courses 18 credits;
- General mandatory courses 9 credits;
- General elective courses 5credits.

The objective of specialty mandatory courses/modules

At preclinical level courses/ modules included in program represents fundamentals for clinical medicine. Without the profound understanding of above mentioned courses/modules it is impossible to get the clinical knowledge and put the obtained knowledge into practice.

At clinical level, goal of specialty mandatory courses are to give the students in-depth knowledge of clinical sciences and become aware of a physician's role within the public health care system; identify practical ways for solving clinical problems; Gain knowledge in fields such as internal medicine, surgery, pediatrics, obstetrics and gynecology, psychiatry, etc. and develop practical skills necessary for a physician. Studing clinical courses help the student to develop skills in the following fields: communication with a patient or a person responsible for the patient; complete physical examination; arrange appropriate instrumental and laboratory investigations; interpretation of instrumental and laboratory test results; differentiation of pathologies; setting a diagnosis and treating based on principles of evidence based medicine.

In order to strengthen the practical component, educational program considers hands-on training of students in clinical skills in Clinical Skills Center. For this purpose the center is equiped with

different types of patient simulators, which enables students to practice and develop skills important for medical practitioner. Besides hands-on training, students will acquire communication skills necessary for effective communication with patients. Clinical skills courses are held for patient care and nursing, first aid, internal medicine, pediatrics, obstetrics and gynecology, and advanced clinical skills. All of these courses are horizontally integrated with respective basic or clinical subjects.

The objective of scientific skills mandatory courses

Learning scientific skills from early semesters of study develops ability of searching information from different courses, analyzing data, thinking critically, independently, arriving to conclusions, Studying the methods of scientific research (experimental, statistical, etc.), and paper writing skills will help the student to begin work as in scientific field (to participate in project), as a lecturer too after graduation, be able to search and use evidence based knowledge in professional work. Knowledge of research ethics will help the student understand the basic principles of authorship, plagiarism, methods of choosing objects of scientific experimental work, legal aspects in this field.

To develop scientific skills, the 12-credit volume courses of study are provided. Taking the courses of Principles of Scientific Research, Skills of Scientific Research, Writing a Scientific Research greatly preconditions development of high academic level of the future specialist and development of the skills required to deal with special literature and informational base as well as working in scientific direction.

The objective of Specialty elective courses

Help the student extend his/her knowledge in the subject of his/her choice that would promote his/her professional development suitable for the labour market requirements or further learning. Specialty elective courses were selected according to their importance in general medical education and offered during preclinical and clinical phases of education. Elective courses are arranged at different level so that they accompany mandatory courses in a logical way.

The goal of general mandatory and elective courses are to

Help extend the student's general knowledge and develop competencies suitable for the labour market requirements or further learning. The student of the medical educational program gains awareness of the basics of different sciences.

By studying the elective university courses of study, the student of the medical educational program gains awareness of the fundamentals of a number of sciences (principles of philosophy, history of the world civilization, cultural studies, cultural anthropology, etc.) and acquires the general transfer skills to be successfully applied in the process of excelling specialty. The study of these courses are certainly important to the self-development and the formation of a wide range of competencies of the student.

Ultimately, the components of the medical education program aim at facilitating the achievement of the goals set within the program, and the development of the competencies of a physician. The pre-conditions for and sequence of teaching the study courses have been set out within the educational program's syllabuses.

A student shall choose the courses envisaged within the medical education program, based on the program syllabus, in the beginning of respective semester. A student will avail of the `training process management system` in this regard. All the students at the university will be authorized within this system (have their own passwords) and can familiarize themselves with the list of the

mandatory and optional subects within their own as well other educational program and make their choice prior to the beginning of a semester.

The student will be able to make his/her choice electronically. At the beginning of a semester, after the authorization, the student will be able to familiarize himself/herself with the list of the mandatory disciplines envisaged within the educational program that correspond the ongoing respective semester, displayed on his/her own electronic table. He/she will be offered the elective study courses in the form of a shortlist from which to choose within maximally allowed credits. A pre-condition for studying a training course and a limited number of students, or a small number of the students registered for this discipline (due to human and material resources available) may become an obstacle for choosing the given course.

The components of medical educational program are designed to ensure achievement of set goals and development of competences of a qualified physician as a result of study. Logical sequence of competences to be achieved determine content, structure and curriculum of the program.

Methods of achieving learning outcomes (lerning methodology)

The goals and tasks of the learning defined within the educational program will be achieved through integration of theoretical and practical teaching.

The purpose of the lectures is to review basic topics of the learning program in theoretical light and provide students with mandatory literature and information on the methodological foundations of the discipline under study.

The purpose of the practical sessions is to help the student to enhance the theoretical knowledge obtained earlier; comprehend the essence and significance of the issue under study adequately and identify the capacities for its practical application; develop skills for analyzing and assessing objectively the factors influencing the preparation and approval of the decisions with respect to the subjects, also skills to be used for practical activities and independent work.During the training process, a particular attention is paid to using active methods of instruction.

The following methods are used during the lectures:

- Verbal method (oral presentation of lectures and seminars, presentation);
- **Discussion/debate** (prompting an argument among students, expressing one's own viewpoint during an interactive lecture);
- **Brainstorming** (considers stimulating the realization of the students' mental capacities, during which various ideas proposed by students are generated around one particular issue and then classified and prioritized);
- The demonstrative method.

During the practical sessions, the following methods will further contribute considerably to the strengthening of the obtained knowledge and the development of the skills necessary for carrying out professional activities by the student:

- Analysis of a case or the case-based learning (CBL) method (which describes the specific situations, requires a discussion and serves as an incentive for logical reasoning by the students;
- **Group discussion/debates** (prompting an argument among students, expressing one's own viewpoint during an interactive lecture);
- The method of working on the book;
- The method of writing work, which considers the following: test work, solution of quizzes, exercises and problems, preparation of abstracts, papers and synopses by using the main and complementary training literature);

- **Team work** (which considers forming teams each consisting of 5-6 persons within academic groups; mutual presentation of seminars and scheduled training-creative projects; development of healthy competition among the groups); bedside teaching.Conducting practical and laboratory sessions;Counseling and independent work.
- **Problem based learning (PBL)** this method connects the learning process with decision making, problem solving skills so needed in both theoretical and practical medicine. Working with the tutor, students discuss clinical case, stating possible problems, discuss possible diagnose, diagnostic methods, treatment, plan studying, receive feedback. This method motivates for deeper understanding the concepts, look for and independently learn literature to make reasoned decisions and defend them, connect theoretical knowledge in basic subjects with clinical subjects, also develop team- working skills, essential for clinical practice.
- The innovative information/material retrieval method;
- Participation in scientific research projects.

Study, teaching and evaluation

Integration of theoretical and practical training, and development of clinical skills at a virtual simulation center and in a clinical environment (for junior as well as senior students). The university gives preferences to new technologies during the teaching process. The teaching is carried out by using the following methods:

Discussion/debates, the group work, case study, the demonstrative method and the explanatory method. After completing the educational program, the graduates shall be able to demonstrate the clinical skills acquired during the training process, independently, on the simulators or under supervision with patient.

It is very important to apply the following forms of instruction during the training process:

- Interactive lectures, seminars;
- interim exams;
- Bedside teaching;
- (PBL);
- (CBL);
- Training on simulators and molds;
- Role play of the patient and the physician;
- Laboratory study;
- Presentations;
- Clinical rotations in clinics.

Within the medical education, a considerable significance is attached to the development of clinical skills. In this regard, different kinds of simulators illustrating actual disease, a diagnostic or therapy procedure will be applied.

An essential requirement is to develop scientific research skills for students. It is important that students not only learn how to assess scientific information critically, but also to learn the basic principles for organizing, conducting and analyzing the research and presenting its outcomes. The students attend and participate in the scientific conferences organized by the university. While assessing the knowledge and skills, there should be used oral and written tests, objective structured practical examination (OSPE), objectively structured clinical examination (OSCE) - utilizing standardized patients and/or simulators, presentation, abstract-thesis.

The system for evaluation of the student's knowladge

Evaluation of knowladge according to the study components of the program:

Study courses: During learning the study courses, the total grade of the work performed by the student is defined in accordance to two compound elements - interim and final exam evaluations; each of these elements has its own percentage share within the overall system of assessment; The intermediate evaluation element is devided into components (working at the lectures and within the working group, midterm exams, preparation of the pre-selected topic and group or individual presentation, preparation of an abstract and its defense, etc.), which have their percentage share within the framework of this element;

Midterm exams are held for each subject once in a semester, each of them is evaluated by 20 points;

Based on the concrete study course specifics, it is possible to define more precisely the components of the interim evaluation element: the content and spesific weight of the components are defined by the senior lecturer of the course;

The student may gather maximum 60 points by the intermediate evaluation;

The student will be allowed to pass the final exam in case of having minimum 25 points by the intermediate evaluation.

The final exam is mandatory, its specific share into the evaluation system is maximum 40 points; The final exam is passed, if the student has minimum 20 points.

The student obtains credit in study course, if he/she has minimum 51 points, based on outcomes of intermediate evaluations and final exam.

Knowledge Evaluation Forms and Grading Criteria:

1.At the Lectures and within the working groups (Seminars, practical and laboratory classes)

Activity - maximum 30 - 40 points;

2. Presentation of the pre-selected topic, Preparation and defense of abstract - maximum - 10

points;

3. Midterm exam- maximum – 20 points;

4. The final exam- maximum - 40 points;

5. The final grade-maximum- 100 points

Evaluation of modules:

In each course included in the module, the student receives an intermediate grade, the

components of which are different for different courses, and they are described in detail in the syllabi.

The student must accumulate a minimum of 25 points out of 60 in each course to be eligible to tke the module integrated final exam.

If a student scores less than 25 points in any course, he / she will not be admitted to the final exam, in which case he / she will have to repeat only this course.

The integrated interim evaluation of the module is calculated in proportion to the credit of the training course with the total credit of the module.

Special mention should be made of one of the results of the program – professionalism.

Professionalism – is one of the most important competences for medical student, and thus, best practice, how to teach professionalism is one of the most important issues in Medical Education. Developing professional elements the student begins from the first year of study, till 12-th semester.

Professionalism is assessed on different stages of learning, for this purpose different questionnaires, OSCE, 360 grade assessment, "critical case report", Portfolio are used.

Professionalism it is difficult to evaluate, as evidenced by the numerous articles / literature

dedicated to this topic.

Based on this literature review and analysis, we have developed methods for assessing professionalism that we believe are appropriate for our program and university.

The academic degree/qualification to be awarded

The qualification to the graduated of the medical education programs shall be awarded **according**

to the decree of the Minister of Education and Science of Georgia as of April 10, 2019 № 96 / N on the Approval of the National Qualification Framework and Classifier of Fields of Study ".

The graduates of the educational program shall be awarded the **qualification/academic degree of the Doctor of Medicine (MD)** and shall be given a state diploma certifying the completion of respective program, together with the diploma annex determined by the state.

A pre-condition for awarding the academic degree/ qualification is gathering 360 ECTS credits by the student.

Field of Employment

According to the applicable legislation, the graduates of undergraduate medical educationprogram (MD) are not authorized to carry out independent medical activities independenly.

In accordance with the "Law of Georgia on Medical Activities", the "right to independent medical activities shall be exercised by a citizen or a stateless person of Georgia or a foreign country who graduated from an accredited higher medical institution of Georgia and has acquired a state certificate verifying his/her right to independent medical activities in conformity with this law` (article 7).

The field of employment for MDs are the following:

- Medical activity in the capacity of a junior doctor. The junior doctor performs the function of a doctor under the instructions and responsibility of the person authorized to carry out independent medical activities (article 5, Law of Georgia on Medical Activities);
- Pedagogic and scientific activities.

Human resources responsible for the implementation for the medical education program

The implementation of the medical education program will be ensured by the availability of highly qualified personnel. The training components reflected within the program, are headed by the academic and invited personnel of the university with appropriate scientific and practical experience.