

Curriculum

Medicine School (Faculty)

Program Name

Undergraduate MD (Medical Doctor) program

Academic Level

One-Cycle (Equal to Master degree) - VII Level

Name of Awarded Qualification

Certified Physician (Medical Doctor (MD))

Program Co-management

Professor Ilia Meskhi, MD, PhD
Karlo Matitaishvili – Assistant

Program Volume and Structure

Undergraduate MD program at Georgian-American University (GAU) is a 6-year (360 ECTS) medical program designed to meet the challenges of training competitive and highly qualified doctors for the 21st century.

Program consists of 4 phases:

Phase I - "From Cell to Body"

Years 1 and 2 - Introduction to core body systems, biomedical science, social and behavioral medicine, medical ethics using different teaching methods including PBL. Students learn key practical skills (interviewing patients) in clinical settings.

Phase II - "Mechanism of Disease"

Year 3 - with main emphasis is on Pathology and Pathophysiology of diseases. Students start mastering in physical diagnosis. They are introduced to General Pharmacology and General Surgery. This year students are trained in diagnostic thinking through case discussions related to different topics of medicine, integrating their knowledge and preparing for understanding clinical subjects next years.

Phase III - "Clinical Medicine"

Years 4 and 5 - Students learn main clinical subjects - Internal Medicine (system-based), Surgery, Obstetrics and Gynecology, Pediatrics, Psychiatry, Radiology, Otorhinolaryngology. In parallel they are continuously trained in Clinical Skills Lab and clinical settings.

Phase IV - "Preparing for Practice"

Year 6 (graduation) - during graduating year students have clinical attachments mastering gaining necessary competencies in Internal Medicine, Surgery, Obstetrics/Gynecology, Infectious Diseases, Family Medicine, Ophthalmology, Geriatrics, Pediatrics and Emergency Medicine. According to integration principles and spiral curriculum requirements, they revisit basic subjects (Clinical Pharmacology and Medical Genetics).

Main features of the GAU MD curriculum are:

- Partly Integrated core curriculum implying both vertical and horizontal integration;
- Increasing number of electives over the years of study;
- A body-system approach - integrated system-based courses address the major body systems;
- Courses of Problem- and Case-based learning;
- Spiral model of the curriculum that allows reviewing key basic topics in more depth;
- Early exposure to clinical settings and mastering clinical skills throughout 6 years;
- Longitudinal research skills teaching;
- Social and public health including Medical ethics, Behavioral medicine, Biostatistics, Epidemiology, Evidence-based Medicine, Health Law, Health care management.
- Student-oriented approach implying increasing role of independent study;
- Relevant assessment methods based on Miller's pyramid model including traditional (oral/written) examinations, MCQ testing, OSCE (Objective Structured Clinical Examination) and portfolio;
- Meeting requirements set out in Global standards of undergraduate medical education of World Federation for Medical Education (WFME).

To obtain qualification envisioned by the program students shall accumulate 360 credits. Based on student's individual workload credit count can be 60, more or less but shall not exceed 75 credits per year.

Language of Instruction

English

Program Goals

The goal of the MD program is to train knowledgeable, competitive doctors committed to life-long learning in accordance with international standards set by World Federation for Medical Education.

Admission to the Program

- Applicants should have secondary education;
 - Georgian citizens are required to pass Unified National Exams;
 - Foreign Nationals must submit corresponding documents to the Ministry of Education and Science of Georgia and start MD course after approval from the Ministry;
 - Applicants shall submit foreign language (English) test corresponding to B2 proficiency level (CEF);
 - Applicants who have completed previous education in English can waive aforementioned test.
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Prospective Student Number

80

Employment Options

Employment of program graduates and their status and positions are subject to Georgian and/or respective country's laws and regulations

Learning Outcomes/Competencies**Generic Competencies****1. Ability of analysis and synthesis**

To evaluate critically complicated, incomplete and contradictory data; independently analyze data, present the results of the analysis in an understandable manner and further use them; to have critical approach to new information; analyze, summarize, integrate different data and make conclusions; to present the evidence and counterarguments upon the analysis of the results.

2. Information Management

to collect data from different information sources; to process the large amount of information and make critical analysis; using collected information in his/her professional activities.

3. Problem solution/Decision making

To define Independently and formulate complex problems and to find the ways for their solution; provide the analysis of expected results and make a final decision; know and in case of need to be able to efficiently use additional resources within the field of study.

4. Communication skills, including usage of foreign languages

To observe, listen, and ask question, as well as communicate non-verbally; to participate in meetings and communicate own opinions verbally and in writing; conduct negotiations within a professional context and participate in conflict resolution.

5. Ability to stay up to date with Learning

Using the full spectrum of education and information resources; to manage own learning process; understand the necessity of staying up to date with learning; objectively evaluate own knowledge and skills.

6. Adaptation with the new environment	To be able of practical working in a team, ability of professional subordination/adaptation and utilization of new technologies.
7. Ability to work independently	to manage time properly; define priorities, follow the deadlines and work on agreed issues; effectively plan the resources related to expected activities and to be responsible for the work done.
8. Values	to have the knowledge of ethical and legal principles in the context of Medicine, be able to protect the rights of the patient; to conduct negotiations within a professional context and participate in conflict resolution with any person, regardless of its social, cultural, religious or ethnic background; communicate with the colleagues and patients following the principles of Justice, social and democratic values.

Subject-specific competencies

1. Field knowledge	knowledge of basic, clinical, behavioral and social sciences; knowledge of drugs and their prescribing; knowledge of public health, ethical and legal principles in medical practice; knowledge of the role of doctor in health care system.
2. Ability to carry out consultation with a patient	take a history; carry out physical examination; make clinical judgements and decisions; provide explanation and advice; provide reassurance and support; Assess the patient's mental state.
3. Ability to asses clinical presentations, order investigations, make differential diagnoses, and negotiate a management plan	recognize and assess the severity of clinical presentations; order appropriate investigations and interpret the results; make differential diagnoses; negotiate an appropriate management plan with patients and caregivers; provide care of the dying and their families;

	Manage chronic illness.
4. Providing immediate care of medical emergencies, including First Aid and resuscitation	<p>recognize and assess acute medical emergencies;</p> <p>treat acute medical emergencies;</p> <p>provide basic First Aid;</p> <p>provide basic life support and cardio-pulmonary resuscitation according to current guidelines;</p> <p>Provide advanced life support according to current guidelines.</p>
5. Ability to prescribe drugs	<p>prescribe clearly and accurately;</p> <p>match appropriate drugs and other therapies to the clinical context;</p> <p>review the appropriateness of drug and other therapies and evaluate potential; benefits and risks;</p> <p>treat pain and distress;</p>
6. Carrying out practical procedures	<p>measure blood pressure;</p> <p>venipuncture;</p> <p>cannulation of veins;</p> <p>administer IV therapy and use infusion devices;</p> <p>subcutaneous and intramuscular injection;</p> <p>administer oxygen;</p> <p>move and handle patients;</p> <p>suturing;</p> <p>blood transfusion;</p> <p>bladder catheterization;</p> <p>urinalysis;</p> <p>electrocardiography;</p> <p>Basic respiratory function tests.</p> <p>(All procedures listed above are performed on clinical simulators)</p>
7. Communicate effectively in a medical context	<p>communicate with patients;</p> <p>communicate with colleagues;</p> <p>communicate in breaking bad news;</p> <p>communicate with relatives;</p> <p>communicate with disabled people;</p> <p>communicate in seeking informed consent;</p> <p>communicate in writing (including medical records);</p> <p>communicate in dealing with aggression;</p> <p>communicate by telephone;</p>

	Communicate with those who require an interpreter.
8. Ability to apply ethical and legal principles in medical practice	maintain confidentiality; apply ethical principles and analysis to clinical care; obtain and record informed consent; certify death; request autopsy; Apply national law to clinical care.
9. Assess psychological and social aspects of a patient's illness	assess psychological factors in presentations and impact of illness; assess social factors in presentations and impact of illness; detect stress in relation to illness; Detect alcohol and substance abuse, dependency.
10. Ability to apply the principles, skills and knowledge of evidence-based medicine	apply evidence to practice; define and carry out an appropriate literature search; Critically appraise published medical literature.
11. Use information and information technology effectively in a medical context	keep accurate and complete clinical records; use computers; access information sources; store and retrieve information.
12. Ability to apply scientific principles, method and knowledge to medical practice and research	knowledge of methodology of research; ability of making: design of research, detailed planning, interpretation of the results and decision taking; ability to use achievements of biomedical sciences in practice; writing a review on the basis of critical analysis of scientific literature; Knowledge of ethical principles for conduction of scientific research.
13. Promote health, engage with population health issues and work effectively in a health care system	provide patient care which minimizes the risk of harm to patients; apply measures to prevent the spread of infection;

recognize own health needs and ensure own health does not interfere with professional responsibilities;
conform with professional regulation and certification to practice;
receive and provide professional appraisal;
make informed career choices;
Engage in health promotion at individual and population levels.

Teaching and Learning Methods

Interactive lectures, practical, small group teaching, tutorials, problem-based and case-based learning, role-playing, simulators-based teaching, bedside teaching, presentation, participation in research projects, night calls, teamwork.

Evaluation system

Student can accumulate credits during the learning course only in case of successful completion of workload determined by the syllabus and achievement of positive grading required by Georgian legislation.

Students' evaluation is determined according of the following system and quantitative indicators.

Positive evaluations:

- (A) Excellent – outstanding performance with only minor errors, 91 points or above;
- (B) Very good – above the average standard but with some errors, 81-90 points;
- (C) Good – generally sound work with a number of notable errors, 71-80 points;
- (D) Average – fair but with significant shortcomings, 61-70 points;
- (E) Poor – performance meets the minimum criteria, 51-60 points.

Negative evaluations:

- (FX) Fail – some more work required before the credit can be awarded, 41-50 points;
- (F) Fail – considerable further work is required.

(FX) Fail – student with negative evaluation has right to pass the repeated final exam.

(F) Fail – student with this negative evaluation is obliged to pass the teaching course again.

To evaluate the level of achievement of learning outcomes per program component student is evaluated via interim and final grading scheme. Credit cannot be granted solely for completion of either interim or final evaluation.

Maximum grade for final exam is 40 points. Remaining 60 points are redistributed among interim grading components.

Students should have minimum of 25 points (total score before final exam) to be eligible for final exam.

The minimal passing score for the final exam is 16 points.

Study course will be considered passed if the student receives 51 points total from of midterm evaluations and final exam.

Cumulative grading is calculated to establish final student rating and boost motivation by the end of each study course. Cumulative grade is calculated according to the following scheme: Grades obtained by the student during each study course is multiplied by credits allocated for respective course and product is then sum of products is divided by the sum of credits accumulated by the student.

Resources Required for Program Implementation

Technical resources:

- Facility area required by the law and regulatory bodies (main study facilities and auxiliary area)
- Auditoriums, conference rooms, computer labs and offices for academic personnel furnished with all necessary equipment
- Uninterruptible power supply system
- Washrooms
- Natural illumination
- Heating, Ventilation and Air Conditioning (HVAC) systems
- Fire safety systems and equipment; Fire suppression equipment;
- Evacuation plan;
- First aid system (Medical room)
- Campus security services (university security services)
- Relevant number of PCs with internet access
- Library with all necessary holdings and online information retrieval systems and databases required for the program implementation

Human Resources

- Academic personnel selected according to relevant laws and regulatory body requirements consider their academic experience and qualifications;
- Practitioners and scholars with relevant experience and academic degrees are appointed as researchers and instructors for the academic program.