Curriculum

Educational Program	One-cycle Medical Education Program "Medical Doctor"
Degree awarded	Medical Doctor (MD)
Faculty	Faculty of Medicine
Head of the Program	Professor Irine Pkhakadze, MD, Ph.D. Contact Information: +995 591-22-87-78 e-mail: irine.pkhakadze@atsu.edu.ge
Length of the program (semester, ECTS)	Higher Medical english language Educational Program "Meidcal Doctor" involves 360 ECTS credits /One credit is equal to 25 academic hours at ATSU/ and ends with final qualification exam. Program duration is 6 academic years, 12 semesters, maximum 22 academic contact hours per week.
Language of the Program	English
Program development and renewal date of issue	Decision of ATSU Academic Council: - Protocol № 20 of session of Academic Council, July 13, 2012 - Protocol N13 of session of Academic Council, May 28, 2015 - Protocol N 24/10 of session of Academic Council, February 20. 2017, - Protocol № 45 of session of Academic Council, 15.09.2017 - Protocol №25, (19/20) of session of Academic Council, 3.12.2019. - Protocol №1, (20/21) of session of Academic Council, 9.09.2020. - Statement №3, 16.09.2022. - Statement №5, 14. 09.2023 **Accreditation Decision Number №** 680147, 06/07/2021

Program Prerequisites (Requirements)

- Secondary education certificate/diploma and the results of the Unified National Exams;
- Without passing the Unified National Exams, in the manner and within the time frame established by the Ministry of Education and Science of Georgia is allowed:

A) For foreign citizens and stateless persons who have received general secondary education or its equivalent education in a foreign country; who have successfully passed online interviews at ATSU

• Presentation of an internationally recognized certificate confirming at least a B1 level of English by a foreign citizen (IELTS, TOEFL, Cambridge English, UNIcert®, EnglishScore, etc.)

or

• For applicants who are citizens of a foreign country with English-language education, upon presentation of relevant documents (e.g. a school leaving certificate, a certificate, etc.), for Georgian citizens, who received education in a foreign country in the English language, or its equivalent education and who had been studying in a foreign country for the last 2 years in general education and presents a relevant document (e.g. a school leaving certificate, a certificate, etc.).

or

• The B1 level of knowledge confirmed as a result of the exam (which includes: listening, understanding and analysis of the read text, and speaking) organized by a higher educational institution to determine the level of the English language competence owned by a foreign citizen.

B) For Georgian citizens who acquired general secondary education in a foreign country or its equivalent and have studied the last two years of general secondary education abroad;
C) For the persons who studied/are studying and have accumulated credits at higher educational institution abroad and the institution is recognized on the basis of the legislation of the respective country.
- Mobility

Actuality of the program

The English language educational program of Medical Doctor has been implemented at the ATSU Faculty of Medicine since 2012 (Program Accreditation Decision No. 347, 06.09.2012). Implementation of the English language medical education program has been an important step for the Imereti region, sharing and utilizing modern international experience and approaches that have significantly influenced the development and improvement of education. The educational program was developed on the basis of the Sectoral Benchmarks of current medicine (approved by the Director of LEPL National Center for Educational Quality Enhancement No. 225, 01.06. 2011), and since its inception, the program has undergone significant stages of adequate modification and development as a result of changes in legislative and university regulations.

This version (Approved by the Academic Council of ATSU resolution №25,19/20, 3.12.2019) is in accordance with the requirements of Medicine sectoral benchmarks (Approved by the Director of LEPL National Center for Educational Quality Enhancement №10, 03.01.2018) and it reflects teaching-learning and assessment, development of curriculum content in relation to the plan, as well as program accreditation for the pilot mode and the changes implemented during 2012-2019 years at the Faculty of Medicine:
-Within the framework of TEMPUS **30519-TEMPUS-1-2012-1-UK-TEMPUS-JPCR** project "Establishment of the Supra-Regional Network of the National Center for Medical Education, focused on PBL and Virtual Patients" 2012-2015yy; As a result, a new educational Georgian-language program "Medicine + PBL" was created and implemented at the faculty, with the aim of "increasing" the needs of patients with complex problems and the ability to work in a multidisciplinary team, which is actually a great demand in today's labor market.
- In the pilot mode, the ATSU Faculty of Medicine was planned and visited by the National Center for Educational Quality Enhancement (December 6, 2017), the group of the Expert Panel for the Evaluation of Educational Program “Medicine + PBL”: Mr. Bruno Cardinaud (Chair of the Panel), Ms. Liliana Rogozea, Ms. Nino Chikladze, Mr. Vakhtang Tebidze.
Since the issue of population health is crucial, it is important to train professionals who provide solutions to health-related problems. Compliance with international standards as an important prerequisite for future successful medical practice is an important objective of ensuring the optimal functioning of the country's health Care system, Especially in the era of covid-19, when the existence of a state-level health care system and patient safety has become a major challenge, consequently, it is important to develop and implement an educational program that ultimately ensures the training of a successful preparation of certified doctor.
ATSU Faculty of Medicine is based on the University decades traditions, the national and European standards for higher Medical education, strives to provide high quality education and research activities and internationalization of educational activities. The principle of action of the faculty: promoting the personal and professional development of students, the training of future highly qualified and competitive professionals, who respect and recognize democratic values, human rights and freedoms; Intercultural relations, ideals of tolerance and humanism; taking care of improvement of the population health Effectively.
The new challenges issueing in the field of higher medical education by 2024 require the improvement of educational programs and the internationalization of higher education is crucial to meet the requirements set by the Sector Benchmarks of Higher Medical Education and the requirements the World Federation of Medical Education for the purpose of obtaining international accreditation of medical programs, for increasing the financial incomes by attracting foreign students and creating a sustainable financial platform. This can be considered as an effective condition for improving the quality of teaching / learning process within the educational programs.

The English language educational program, implemented by the faculty, is distinguished by: a problem-based and patient-centered approach; clinical, research and communication skills, as an important component for the development of the necessary requirements, students' interests and greater choice for future career development. Teaching is based on student-oriented methods, the teaching method means different stages of the program. This program is distinguished by increasing the degree of integration of the basic and clinical subjects of the program, With the ability to develop clinical skills from the very beginning of studying, with the implementation of the new teaching and the new assessment methods, based on the societal and student-centered approach, with the professional development aspects.	
Program Objectives	
The program aims to prepare an internationally qualified specialits with an academic degree of Medical Doctor, who will be faithful to moral values and ethical principles, with grounded knowledge of basic medical sciences and general clinical skills and evidence-based medicine, with clinical judgment skill required for work in medical-preventive settings, on the basis of which it will be able to identify and solve a specific medical problem, and make independent scientific-research activity, to realize his / her opportunities in public and professional activities and career advancement and will be committed to study throughout the lifetime according to the international standards of the World Federation of Medical Education (WFME)., The program graduate will be actively involved in the processes promoting health care effectiveness by ensuring this and, as a result, contribute to the development of health care system of population. The purpose of the program is to organize the content / volume of courses / modules, as well as to organize teaching and learning,which will help in: - Advanceing knowledge in biomedical, social and clinical sciences; Study of compulsory, clinical and elective courses / modules provided by the program; - Developing the necessary clinical skills and patient-centered competencies in the multi-professional environment from the first year of teaching; - Developing the ability to critically evaluate scientific-research and clinical news and use them to solve a clinical problem; - Acquireing knowledge of the legislative bases of the health Care system; - Developing ethical values important for the future profession; - Understanding the principles of evidence-based medicine, the need for continuous medical education and professional growth and readiness for professional development.	
Learning outcomes	
(General competencies) **Knowledge and understanding**	On the basis of deep, systematic sectoral and general knowledge acquired upon completion of the program, a graduate is able: - Demonstrate critical knowledge of biomedical, behavioral, social, clinical sciences, understand the received information critically, as a result, summarize, integrate and conclude the various data, provide evidence in the process, and / or provide counterarguments.
Skills	The graduate is able to: - Formulate tasks clearly, agree with group members, assessing team members' capabilities adequately and coordinating in their activities, managing conflict situations (ability to work in a team - both as a team member and as a leader). - Negotiate in a professional context and engaging in conflict resolution, working with colleagues and patients in adherence to democratic values, protecting patients' rights (ability to communicate, including in a foreign language). - Obtain, processing and critically evaluating large amounts of information from various sources. Using information obtained during professional

	activities, conducting research with appropriate methodology (information management); - Identify complex problems independently, analyzing expected results and making final decisions (problem solving / decision making). - Protect the professional subordination, following time management, performing the agreed work, taking responsibility for performance, evaluation and criticism (ability to adapt to new environment and work independently).
Responsibility and Autonomy	The graduate is able to: - Communicate with patients and colleagues in the field of ethics and patient rights, respect for justice, social and democratic values, and the attitudes needed to achieve a high standard of patient care; - Participate in the formation of values to contribute to their development, contributing to the development of the field, planning their own learning process, self-assessment and self-development.
Sectoral competences	1. **Sectoral knowledge**: Demonstrate and critical understanding of deep and systematic knowledge of biomedical, behavioral, social, clinical sciences, description of human development at molecular, cellular and systemic level, classification of normal organism structure, explanation of normal metabolism and normal immune function; Explanation of disease mechanisms, description of abnormal structure, analysis and application of drug administration principles, prevention and treatment of diseases; **2. Carry out a 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. Assess 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 care givers · take care of a terminal patient and his family members · manage the chronic disease **4. Providing first aid in emergency medical situations (First aid and resuscitation measures)** · Identifying and assessing the emergency medical conditions (DRSABCDE) · Treatment of emergency medical conditions · Providing with first aid; age peculiarities in newborns and children; · Conducting the basic life maintaining and cardiopulmonary resuscitation activities in compliance with the guidelines. · Conducting the activities for enhance lifetime maintenance in accordance with the guidelines. · Treatment of traumas according to the guidelines.

	5. Drug prescription · Prescribe drugs clearly and properly with consideration of patient's age. · Match appropriate drugs with clinical context. · Review appropriateness of drugs and other therapies and evaluate potential benefits and risks for the patient · Treat pain and distress · Consider compatibility of drugs before initiation of treatment. **6. Conducting Practical Procedures** · Vital Signs: Pulse, respiration, temperature · Measure Blood pressure · Venipuncture · Venous Catheterization · Drug injection into the vein and us of infusion device · Subcutaneous and intramuscular injection · Oxygen delivery, · Patient Transportation and Treatment · Suturing · Urinary Catheterization · Urinalysis · Electrocardiography · Electrocardiography · Interpretation · Performing Respiratory Function Test. **7. Communicate effectively in a medical context** ·Communicate with patient ·Communicate with colleagues ·Communicate in breaking bad news ·Communicate with patient's relatives ·Communicate with disabled peoples ·Communication in seeking informed consent ·Written communication (Including the medical records) ·Communicate in dealing with aggression ·Communicate with those who require an interpreter ·Communicate with law enforcement agencies and mass media ·Effective communication with any person regardless of his/her social, cultural, religious and ethnic background **8. The use of Ethic and Legal Principles in Medical Practice** · Keep confidentiality · The use of Ethical principles and analytical skills in treatment process · Get the informed consent and make an appropriate record · Issuing death certificate · Requiring autopsy (in compliance with the Georgian Legislation) · Apply Georgian and international legislation during treatment · Conducting medical activities in a multicultural society. **9. Evaluation of psychological and social aspects regarding patients' disease**. · Evaluating the psychological factors of disease detection and impacts on the patients · Evaluating the social factors of disease detection and impacts on the

	patients · Recognition of the stress related to disease · Recognition of the drug and alcohol abuse **10. The use of knowledge, skills and principles based on evidence** · The use of evidence in practice · Determining and conducting the relevant literature research · Critical analysis of the published literature, making conclusion and using them in practice **11. Use information and information technology effectively in a medical context** · Keep accurate and complete clinical records · Use computers in medical practice · Access specific information sources; · Store and retrieve information · Keep personal records (portfolio) **12. Ability to apply scientific principles, method and knowledge to medical** · practice and research · Knowledge of research conducting methodology; · Research designing, planning, result processing and conclusion-making skills · Ability to use the achievements of biomedicine in practice · Report/review writing skills based on critical analysis of the research literature in biomedicine · The awareness of ethics of conducting scientific research. 13. **Implementation of health promoting events, engage with public healthcare issues** · efficient performance within the healthcare system · Conducting the treatment that minimizes the risk of damage to the patient. · Implement measures for the prevention of infection spread · Understanding ones' own health problems and evaluating ones' own health with regard to professional responsibilities; · Participation in health promotion events both on individual and population-wide level. **14. Professionalism** Professional attributes · probity, honesty, ethical commitment · commitment to maintaining good practice, concern for quality · critical and self-critical abilities, reflective practice · empathy · creativity · initiative, will to succeed · interpersonal skills Professional working • ability to recognize limits and ask for help • ability to work autonomously when necessary • ability to solve problems

	• ability to make decisions • ability to work in a multidisciplinary team • ability to communicate with experts in other disciplines • ability to lead others • capacity to adapt to new situations • capacity for organization and planning (including time management) The doctor as expert • capacity for analysis and synthesis • capacity to learn (including lifelong self-directed learning) • capacity for applying knowledge in practice • ability to teach others • research skills The global doctor • appreciation of diversity and multi-culturalism • understanding of cultures and customs of other countries • ability to work in an international context • knowledge of a second language • general knowledge outside medicine.
Methods and activities for achieving learning outcomes	
- Problem Based Learning (PBL) / Tutorial; - CBL case-based learning - clinical case-based learning; - CBCR clinical case-based reasoning; - Interactive and modified lectures; - Discussion, debates (small and large group discussion), group work Practical reflection lessons, laboratory training; - Demonstration of study materials (identification of atlases, tables, etc. based on analysis of theoretical issues), - Demonstrate clinical skills using simulators and simulators; - Role Playing Games - Flipped classrom - Teaching in clinical and population settings; - Clinical rotation at university clinics - Bedside teaching; - Patient-centered learning; - Participate in research; Literature review, - Preparation / presentation of the abstract / presentation / poster; - Clinical skills training - clinical session; - Communication skills sessions; - Medical law and ethics sessions; - E-learning: e-learning system (moodle.atsu.edu.ge; Microsoft.Team).	
Structure of the Program	
According to Georgian legislation, the program Medical Doctor is one- cycle program and equals to master's degree. The program is based on ECTS system and includes 360 ECTS credits, 60 credits per year, 30 credits per semester. The standard duration of the educational program is 6 years, or 12 semester. The program is built on the principle of student-oriented approach - teaching and learner-centered, designed in the context of student actions gradually resembling professional (physician) actions and decisions. This is a problem-based and patient-oriented approach. Clinical and communication skills are recognized as an	

important component, and the research is considered as an essential requirement for integrated learning.
The educational program Medical Doctor is partially integrated (both horizontally and vertically). It integrates the basic medical and clinical sciences, their supporting courses, the social sciences, which are essential for the upgrading / promotion of modern general practitioner education; This ensures that the student of the program Medical Doctor is able to achieve clinical skills and scientific competences. The degree of integration of the program is enhanced by the PBL teaching method in the PBL session (tutorial) format and provides the opportunity to achieve the educational program 's learning outcomes effectively from the very beginning of teaching.
According to the requirements of the Sectoral Benchmarks, the curriculum includes:

- Compulsory courses - 333 (ECTS), including:

- 13 credits (ECTS) are devoted to the development of scientific skills (Biostatistics, Research Skills: Epidemiology, Evidence-Based Medicine and Research Process, Course Work/Research Methods) and provides for the involvment of students in scientific activities.
- 10 credits (ECTS) are devoted to the development of clinical skills in a relevant clinical skills laboratory

- 27 credits (ECTS) - elective courses, including 10 credits in Humanities: Philosophy, Art History, World Literature History, History of Europe, World Religions, International Relations of Asian countries, Business Project Management, Advanced Foreign Language Courses.

The Longitudinal Module of Professional Development: Professional Aspects -1, 2, 3 (Clinical Ethics, Understanding primary health care services, Time management, Communication in Health Care, Clinical skills 1; Medical Psychology, Behavioral Sciences) develop communication skills, personal awareness and self-care, multidisciplinary teamwork, and the ability to analyze and apply ethical principles.

Longitudinal Module: Population Health Care - 1, 2 (General Hygiene, Biostatistics, Public Health, Medical Law, Preventive Medicine) develop the ability to participate in health promotion activities.

The 6-year teaching period in the integrated curriculum comprihends 4 stages (Basic Medical Sciences, Preclinical, Clinical Medicine, and General Specialization).
The organizational structure of the program is conditionally divided into the following stages:

I Year	Problem-based learning	Basic Stage
II Year		Basic Stage
III Year		Preclinical Stage
IV Year		Clinical Stage
V Year		Clinical Stage
VI Year		Specialization Stage

Stage I

Basic stage - This part of the program is organized by modular teaching and discusses:
- Body Systems / Structure and Regulation / - 1, 2, 3, 4, 5, 6, 7, which covers the structure and function of the major systems of the body and is based on the horizontal integration of basic medical sciences around the body systems - 54 credits;
- Biomedical Sciences „ Gene, Cell, Tissue 1,2" - Medical Biology, Medical Genetics and Inherited Diseases, Cytology, Embryology, General Histology, Biophysics - 14 credits;
- Life Protection -1- Medical Microbiology and Immunology -12 credits;
- Professional Aspects 1,2,3 (Clinical Ethics, Understanding Primary Care Services, Time management, Communication in Health Care, Clinical skills 1; Medical Psychology, Behavioral Sciences), which introduces the student to primary care services, communication in health care and clinical ethics, and gives the student the ability to develop clinical skills - 15 credits;

The knowledge gained in the modules within the spiral curriculum will be further revised and system-based teaching is consolidated in the next stages.

Thus, the title of the basic medical science stage is only conditional, since it contains clinical medicine and population health care issues organized in specialized modules, introducing the most important professional aspects to a future doctor, accordingly, the provision of important medical ethics basics for physician and future personal development is initiated, supported by the PBL format of case-based teaching (PBL weeks).
There are 7 PBL weeks at this stage of the program, with the ability to develop clinical skills related to the problem (PBL session) at the Medical Diagnostic Institutions and Clinical Skills Laboratory.

Stage II

Preclinical stage – It is mainly organized to understand important aspects of human morbidity such as pathology, pathophysiology of diseases, mechanisms of disease development and treatment, by applying physical diagnostics methods for assessment, based on case studies by PBL format. This ensures the integration of the knowledge gained at the baseline to identify the causes, functional deficits and treatment mechanisms of the disease.

- Mechanisms of Disease and Treatment - 1, 2 - 21 credits;
- Principles of Physical Examinations - 1, 2 - 18 credits;
- Surgery -1 (General Surgery, Anatomy with Clinical Correlations) - 9 credits

Stage III

Clinical Stage - It is mainly about understanding the important aspects of human health and illness, that is organized by: Internal Medicine, Surgery, Life Cycle, Life Structure, Life Protection, Life Control, Life Support and Assurance, relevant PBL weeks are included in the teaching format.

- Internal Medicine 1, 2, 3 (Cardiology, Pulmonology, Gastroenterology and Metabolic Disorders, Endocrinology, Nutritionology, Nephrology, Urology) - 21credits;
- Surgery - 2,3,4,5 (Urgent Surgery, Traumatology, Neurosurgery, Angiology, Thoracosurgery; Otorhinolaryngology, Ophthalmology, Abdominal and Endocrine surgery) – 24 credits;
- Life Control (Neurology, Physical Medicine & Rehabilitation, Psychiatry) - 9 credits;
- Life Protection 2, 3,4 (Immune Diseases, Allergology, Rheumatology, Infectious Diseases, Virology, Helminth Diseases, Dermatology and Venereology, Oncology, Radiotherapy, Hematology) - 20 credits;
- Life Cycle 1, 2, 3, 4, 5 (Sexual and Reproductive Health, Physiological Obstetrics, Antenatal Care, Neonatology, Pathological Obstetrics, Newborn diseases, Gynecological diseases and prevention, Onco Gynecology, Extraginal Pathology and Pregnancy, Emergency Conditions in Obstetrics and Gynecology, Pediatrics 1,2; Geriatrics, Paliative medicine) - 32 credits;
- Forensic Medicine - 4 credits.

This crucial phase of teaching is implemented and corelated in clinical decision by teaching in the clinical setting and by organizing PBL weeks, as well as by "knowing the context" of the preclinical stage (Anamnesis, Symptoms, Investigations, Interpretation, Management, Patient Communication and Population Health Care Issues, etc.).

Stage IV

Specialization Stage - This serves the teaching of the clinical medicine with rotations when transferring / disseminating the knowledge and skills accumulated at the earlier stages of training to prepare for independent work in the clinical setting:

- Clinical Medicine 1, 2 (Rare diseases, Syndromes and symptoms in medicine, Clinical Pharmacology, Quality Management in Health Care, Clinical Clerkship, Medical Errors) - 26 credits;
- Family Medicine - 6 credits;
- Critical Care Medicine (Anesthesiology, Resuscitation, Pain Management) -8 credits.

The whole program can be presented as four spirals:

- studying valuable issues of basic medical and clinical sciences and understanding according the context.
- doctor-patient relationship

- "Social and Population Health Care".
- "Personal and Professional Development"

The fourth spiral is gradually developing and provides the opportunity to achieve the most important learning outcomes ("Doctor as a Professional" (MEDINE 2))

Assessment System

The assessment of the academic performance of students of higher education programs at Akaki Tsereteli State University is carried out by the modern indicators with the order # 785 (05.01.2007), №3 (21.09.2009) and August 18, 2016, №102 / N of the Minister of Education and Science of Georgia, defined principles of Akaki Tsereteli State University academic council (№12; 30.10.2009; Decree №35; 10.11.2010, №1; 17/18 15.09. 2017).

The credits attributed to the program component can be obtained only in case when the learning outcomes are achieved in the syllabus, which is confirmed with one of the positive assessments provided by the assessment system:

The student's assessment foresees:

a) Mid-term assessments, which include the component of student attendance on lecture-practices, daily academic activity (survey, testing, presentation, essay), activities on tutorials, practical skills assessment and ongoing assessment. Mid-term assessment may also include other components.
b) Assessment of the final exam.

Overall Assessment is made on the basis of the sum of mid-term assessments and final assessments.

- **Student is required to have accumulated at least 24 points before he/she takes final exam and has not more than 50% of missed contact hours.**
- **Minimum margin of assessment received by the student on the final exam is 25 points.**

Maximum assessment of the course/module/subject block is 100 points equal to the maximum score of 40 points. The assessment methods are mainly used: test, oral or combined examinations -Summary Examination, OSCE Objective Structured Clinical Examination.

There are five types of positive and two negative assessment.

The assessment system allows:

a) **Five types of positive assessment:**
   a.a) (A) Excellent - 91-100 points;
   a.b) (B) Very good - 81-90 points;
   a.c) (C) Good - 71-80 points;
   a.d) (D) satisfactory - 61-70 points;
   a.e) (E) enough - 51-60 points

b) two types of negative assessment:

b.a) (FX) failed to pass - 41-50 points of maximum assessment, which means that the student needs more work to pass and is given the right to pass an additional exam with independent work;

b.b) (F) failed - The maximum score of 40 points and less, which means that the work carried out by the student is not enough and he/she has to retake the course

Minimum margin of assessment received by the student on the final exam is 25 points.

A student shall have the right to take a makeup exam in the same semester. The time interval between the final and relevant makeup exams has to be no longer than 5 days.

- The assessment on the makeup exam is student's final assessment, which does not include negative assessments received on the main examination.
- In case of obtaining 0-50 points at the final evaluation of the educational component, the student is given an assessment F-0.

The assessment of the **modules included in the program** are carried out via points calculated in sum as well as via European Credit Transfer and Accumulation System (ECTS). Student PBL tutorial week integrated into the courses and modules provides student assessment of affective (emotional) ways.

- MCQ - Tests with multiple choice questions, the student chooses the best answer from the possible answers provided.
- OSCE - Objectively Structured Clinical Examination / Students perform assignments according to a structured task list that includes practical procedures, interviewing methods or data interpretation.
- OSPE - Objectively Structured Practice Exam, used as an objective assessment tool in preclinical courses.
- DOPS - a direct observation of the procedural skills of how individual procedures are performed to demonstrate competence (e.g. pressure measurement, etc.).
- CBD - Case-based discussions, asking students questions in a structured way about the cases in which they are actively involved.
- Problem Analysis Questions, where students are provided with brief vignettes providing both context and stimulus questions that require student data interpretation, critical analysis of patient problems, and knowledge of mechanisms.
- Portfolio - A set of evidence that demonstrates students' ability to make and receive constructive criticism of their experiences, personal development and learning.
- Reports, oral presentations, or posters in specialized study modules, writing a critical review of a journal article (course work).
- Interpret patient data.

Educational Program "Meidcal Doctor" ends with the combined complex qualification exam (maximum 100 points;) with the direct methods:

- Summary test - maximum 50 points;
- Objectively Structured Clinical Examination - OSCE , maximum 50 points;

The minimum threshold in the test -27,5 points (55%), the target benchmark of 2-year follow-up period - 30 points (60%), the target benchmark of 2-year follow-up period - 30 points (60%).

Successful completion of both stages of the complex exam results in the qualification of Medical Doctor.

There were set the target benchmark and minimum competency threshold for each learning outcome, in particular: The target for each of the outcomes of the program was achieving 60% of the total student achievement of 60% of the maximum score from the various activities. The monitoring will be held on comparing target benchmarks during every 2 years.

Note:

Student assessment is based on the following principles: feasibility, reliability, validity and transparency.

According Academic honesty of the policy of University, papers will not be corrected if academic dishonesty is identified. The ATSU Code for Academic Integrity explains the forms of academic dishonesty (plagiarism, self-plagiarism, counterfeiting) and their response mechanisms.

Employment Spheres

According to the Law of Georgia on Medical Practice, a graduate of the educational program ***Medical Doctor***.

- Has the right to undergo residency course and receive the right to carry out independent medical practice after the passing of a unified state certification examination;
- Work as a junior doctor in any organization, activities of which are related to health care and medical care of the population;
- Carry out research and pedagogic activities in the theoretical fields of medicine and / or other field of health care, which does not include independent medical practice (scientific research institute, different hospitals, etc.);
- To be employed in national and international pharmaceutical companies
- Work for forensic medical examination centers.
- Has the right to continue his/her studies in doctoral studies.

Supporting resources/conditions necessary for study

The implementation process of the program will be conducted by:

The academic staff of the University and invited teachers with the relevant competences. The well-prepared tutors (prepared and certified within the framework of TEMPUS **30519-TEMPUS-1-2012-1-UK-TEMPUS-JPCR** project "Establishment of the Supra-Regional Network of the National Center for Medical Education, focused on PBL and Virtual Patients").

Study process is carried out with the use of university study and lecture halls, special PBL rooms, laboratories, libraries and computer cabinets (classes) with access to the Internet, which allows students to surf the information and access e-library.

PBL teaching will be supported by online library, which will be used by the partner universities within the framework of TEMPUS grant. Students have access to e-mail through which closely connects them with academic staff and faculty administration. Learning process will be supported with clinical skills laboratory. Clinical disciplines are taught at relevant clinical bases, with which the university has signed agreements.

The following health care providers are available for students to receive clinical experience at the patient's bed:

- Evex Medical Corporation - Western Georgia Intervention Medicine Center,
- Evex Medical Corporation - Imereti Regional Clinical Hospital
- Medical Corporation "Evex" - Training Center
- Medical Corporation "Evex" - St. Nicholas Surgical Center
- Ltd Beaumond
- Ltd XXI Century
- Ltd Tsagareishvili Medical Center
- Psychosocial Center
- Nasarishvili Family Medicine Center
- Kutaisi Children's Polyclinic №3
- Hospital “Medicalcity”
- West Regional Center of Modern Medical Technologies

Akaki Tsereteli State University

Faculty of MEDICINE

One-Cycle Medical Education Program

Medical Doctor

Study Shedule of 2023-2029 years

(I-VI Semester)

№	Course	cont hours weekly	L / Pr / s / Laboratory	Credits Number	The number of hours			Semesters						preconditions
					Total	Contact	indipedent	I	II	III	IV	V	VI	
1	Foreign Language - 1 (Georgian)	4	0/4/0/0	4	100	60/3	37	4						
2	Gene, cell, tissue - 1													
	Medical Biology	6	30/60	8	200	90/5	105	8						
	Cytology, Embryology, General Histology													
3	Body functions													
	Introduction to Physiology	4	25/44	6	150	69/5	76	6						
	Introduction to Medical Biochemistry													
4	Body systems -1 / Structure and Regulation /													
	Musculoskeletal System Anatomy, Histology, Imaging	4	21/36	6	150	57/5	88	6						
	PBL week			1	25	12/2.	11	1						
5	Professional Aspects - 1													
	Clinical Ethics	4	15/45.	5	125	60/3	62	5						
	Time management													
	Observation of Primary Health Care Services													
		22		30	750	371	379	30						

6	Foreign Language - 2 (Georgian)	4	0/4/0/0	4	100	60/3	37		4					1
7	Gene, cell, tissue - 2													
	Medical Genetics and Hereditary Diseases	4	30/30	6	150	60/4.	86		6					2
	Medical Biophysics													
8	Professional Aspects - 2													
	Clinical skills 1	4	0/60	6	150	60/4	86		6					5
	Communication in Healthcare													
9	Body systems -2 / Structure and Regulation /													2,3
	Nervous System and Organs of Perception	8	35/80	8	200	115/5	80		8					
	(Anatomy) (2cr), Histology (2cr), Biochemistry (2cr), Physiology (2cr)													
	Neuro Imaging, (CT, MRT)													
	PBL week			1	25	12/2.	11		1					
10	Body systems - 3 / Structure and Regulation /													2,3
	Endocrine System, Laboratory Evalution	4	20/32	4	100	52/4	44		4					
	Anatomy (1cr), Histology (1cr), Biochemistry (1cr), Physiology (1cr)													
	PBL week			1	25	12/2.	11		1					
		24		30	750	395	355		30					
11	Foreign Language - 3 (Georgian)	4	0/4/0/0	4	100	60/3	37			4				6
12	Professional Aspects - 3													5
	Clinical Psychology	2	10.20.	3	75	30/3	42			3				
	Behavioral Science													
13	Population Healthcare - 1													
	Biostatistics	3	25/30	4	100	55/3	42			4				
	Hygiene													
14	Body systems - 4 / Structure and Regulation /													2,3

	Respiratory System	5	20/60	6	150	80/5.	65			6				
	Anatomy, Imaging, Histology, Biochemistry, Physiology													
	PBL week			1	25	12/2.	11			1				
15	Body systems - 5 / Structure and Regulation /													2,3
	Cardiovascular system	7	40/60	8	200	100/5.	95			8				
	Anatomy(2cr)Imaging, Histology(2cr),Biochemistry (2cr),Physiology (2cr)													
	PBL week			1	25	12/2.	11			1				
16	Elective course 1	2	0/0/2/0	3	75	30/2	43			3				
		24		30	750	399	351			30				
	Elective course list - 1													
1.1.	History of medicine													
1.2.	Medical Informatics													
1.3.	Internet and Medicine													
1.4.	Information literacy													
17	Life Protection -1													2,3, 7
	Medical Microbiology	5	40/65	11	275	105/5	165				11			
	General Immunology													
	PBL week			1	25	12/2.	11				1			
18	Body systems - 6 / Structure and Regulation /													2,3
	Digestive system	6	25/65	8	200	90/5	105				8			
	Anatom.(2cr),Histolog(2cr),Biochemistr(2cr),Physiolog(2cr)Examination													
	PBL week			1	25	12/2.	11				1			
19	Body systems - 7 / Structure and Regulation /													2,3
	Urine - the Reproductive System	4	25/40	6	150	65/5	80				6			
	Anatomy (2cr), Histology (2cr), Biochemistry (1cr),Physiology (1cr)													
20	Elective course - 2	2	0/0/2/0	3	75	30/2	43				3			
		17		30	750	335	415				30			
	Elective course list - 2													

2.1.	History of Art													
2.2.	Introduction to Philosophy													
2.3.	History of World Literature													
2.4.	Additional course of foreign language - 1													
21	Mechanism of Diseases and Treatment -1													9,10,14, 15,17,1 8,19
	General Pathology	8	3/5/0/0	11	275	120/5	150					11		
	Pharmacology, Fundamental Principles													
	PBL week			1	25	12/2.	11					1		
22	Principles of Physical Examinations - 1													
	Physical Diagnostics - 1	5	1/4/0/0	9	225	75/5	145					9		9,10,14, 15,18,1 9
	Clinical skills - 2													8
23	Research Skills													13
	Epidemiology	3	15/35	5	125	50/5	70					5		
	Evidence Based Medicine and Research Process													
24	Elective course - 3	2	0/0/2/0	4	100	30/2	68					4		
		18		30	750	306	444					30		
Elective course list - 3														
3.1.	International Relations of Asian countries (XIX-XX centuries)													
3.2.	World Religions													
3.3.	History of Europe (XVIII-XX centuries)													
3.4.	Additional course of foreign language – 2(Professional skills)													
25	Mechanism of Diseases and Treatment - 2													21
	Systemic Pathology	7	3/4/0/0	9	225	105/5	115						9	
	Systemic Pharmacology													
26	Principles of Physical Examinations - 2													22

	Physical Diagnostics - 2													
	Pediatric Physical Examinations	7	32.71.	9	225	103/5	117						9	
	Laboratory medicine													
27	Surgery -1													4, 9,10,14, 15,18,1 9
	Anatomy with Clinical Correlations	7	3/4/0/0	9	225	105/5	115						9	
	General Surgery													
28	Elective course - 4	1	5./15.	3	75	20/2.	53						3	
		22		30	750	350	400						30	
	List of elective courses - 4													
4.1.	Additional course of foreign language - 3 /Professional skills/													
4.2.	Business Projects Management													
4.3.	Medical Marketing													
4.4.	Principles of Demography													
4.5.	International Medical and Healthcare Organizations													
№	Clinical series (VII - XII Semester)	dayly durat.	l/pr	credit number	The number of hours			semesters						preconditions
					Total	contact	indipedent	VII	VIII	IX	X	XI	XII	
29	Internal Medicine -1													26
	Cardiology	15	20/60	6	150	80/5	65	6						
	Pulmonology													
	PBL week			1	25	12/2.	11	1						
30	Surgery - 2													27
	Urgent Surgery	20	26/78	7	175	104/5	66	7						
	Traumatology-Orthopedics													

	Neurosurgery													
31	Life Control													26
	Neurology	25	35/70	9	225	105/5	115	9						
	Psychiatry													
	Physical Medicine and Rehabilitation													
32	Life Cycle -1													26
	Sexual and Reproductive Health	15	25/75	6	150	100/5	45	6						
	Physiological Obstetrics, Antenatal Care													
	Neonatology													
	PBL week			1	25	12/2.	11	1						
		75		30	750	437	313	30						
33	Internal Medicine 2													26
	Gastroenterology, Metabolic disorders	15	20/60	7	175	80/5	90		7					
	Endocrinology													
	Nutrition													
	PBL week			1	25	12/2.	11		1					
34	Life Protection - 2													17,25,26
	Immune Diseases, Allergology	15	20/60	6	150	80/5	65		6					
	Reumataology													
	PBL week			1	25	12/2.	11		1					
35	Surgery - 3													27
	AngioSurgery	15	15/45	5	125	60/5	60		5					
	Thoracic Surgery													
36	Life Cycle - 2													32
	Pathological Obstetrics	15	20/60	5	125	80/5	40		5					
	Newborn diseases													
	PBL week			1	25	12/2.	11		1					
37	Population Healthcare - 2													13

	Public Health, Medical law Preventive medicine	15	15/45	4	100	60/5	35		4					
		75		30	750	427	323		30					
38	Internal Medicine - 3													26
	Nephrology Urology	15	16/48	5	125	64/5	56			5				
	PBL week			1	25	12/2.	11			1				
39	Surgery - 4													27
	Otorhynolaryngology Ophthalmology	15	20/60	6	150	80/5	65			6				
	PBL week			1	25	12/2.	11			1				
40	Life Protection - 3													34
	Infectious Diseases, Virusology, Helminth Diseases Dermatology, Venerology	25	30/90	7	175	120/5	50			7				
41	Life Cycle -3													36
	Gynecological diseases and prevention, Onco Gynecology Pediatrics -1	15	20/60	6	150	80/5	65			6				
42	Elective course - 5	5	8/24	4	100	32/3	65			4				
		75		30	750	427	323			30				
	Elective course list - 5													
5.1.	Pediatric Neurology													31
5.2.	Tuberculosis and Chest diseases													
5.3.	Heart Rhythm Monitoring													29
5.4.	Artificial Intelligence in Health care													29
43	Life Protection - 4													40
	Oncology, Radiotherapy Hematology	15	15/45	6	150	60/5	85				6			
44	Surgery - 5													27

	Abdominal	10	10/30	5	125	40/5	80				5			
	Endocrine surgery														
45	Life Cycle - 4														41
	Extraginal Pathology and Pregnancy	20	20/60	6	150	80/5	65				6			
	Emergency Conditions in Obstetrics and Gynecology														
	PBL week			1	25	12/2.	11				1			
46	Forensic Medicine	10	10/30	4	100	40/3.	57				4			25
47	Clinical Skills 3	10	0/30	4	100	30/5.	65				4			22
48	Elective course - 6	5	5/15	4	100	20/2.	78				4			
		70		30	750	309	441				30			
	Elective course list - 6														
6.1.	Dentistry														
6.2.	Sports Medicine														
6.3.	Medical Deontology														
49	Clinical Medicine -1							29,31,33,37,38							
	Rare diseases, Symptoms and Syndromes in medicine	30	35/120	12	300	155/5	140					12		
	Clinical Pharmacology													
	Quality management in Health Care													
50	Life Cycle - 5							45							
	Pediatrics 2	15	15/45	5	125	60/5	60					5		
	Geriatrics													
	Paliative medicine													
	PBL week			1	25	12/2.	11					1		
51	Family Medicine	15	15/45	6	150	60/5	85					6		29,33,38,44
52	Academic Writing	5	5/15	3	75	20/3.	52					3		23
53	Elective course - 7	5	5/20	3	75	25/3.	47					3		
		70		30	750	355	395					30		

	Elective course list - 7													
7.1.	Vertebrology													26
7.2.	Interventional Cardiology													29
7.3.	Patient's rights													
7.4.	Physician-Patient Communications													
54	Critical Care Medicine													25,26
	Anesthesiology, Resuscitation	20	20/60	8	200	80/5	115						8	
	Pain Management													
55	Course work / Research methods		/30.	5	125	.30/5.	90						5	52
56	Clinical Medicine -2													49
	Clinical Clerkship	50	5/290	14	350	295/5	50						14	
	Medical errors													
57	Elective course -8	5	5/20	3	75	.25/3.	47						3	
		75		30	750	448	302						30	
	Elective course list - 8													
8.1.	Hospital management													
8.2.	Insurance Medicine													
8.3.	Medicine of Addiction													25
8.4.	Pediatric Surgery													26,27
8.5.	Management of acute cardiac pathologies													29
				360	9000	4511	4489						360	