



Medical Doctor Educational Programme (Regulated)

The programme title:	Medical Doctor
The education cycle	One-cycle
Language of Instruction	The educational programme is instructed in English
Awarded academic degree / qualification	Medical Doctor (MD)
	Degree awarded following education programme requirements and obtaining 360 credits.
Program volume with credits	The Medical Doctor educational programme consists of a one-cycle integrated higher medical education, upon successful completion the graduate is awarded the academic degree of Medical Doctor. The educational programme is based on the ECTS system, it is student-centred and is based on the student's academic workload required to achieve the education programme aims

	The one-cycle the Medical Doctor educational programme includes 360 ECTS credits, 60 credits per year, 30 credits per semester. Accordingly, the standard duration of the educational programme is 6 years-12 semesters. The annual student workload includes 60 (ECTS) credits, taking into account the duration, volume and structure defined by the relevant field characteristics within the Medical Doctor degree programme. According to the student's individual curriculum, the annual study load of the student can be determined by more than 60 credits, the total number of credits added above 60 defined by the field characteristics of the graduate medical education programme should not exceed 15 credits in total.
The programme leader	Nato Alavidze
	Liza Goderdzishvili

The characteristics of the Medical Doctor educational programme qualification

The aims of the programme
The aims for the graduates of the Medical Doctor Educational programme are: • To acquire in-depth and systematic knowledge of the fundamental principles of the field, as well as in the field of biomedical, behavioral, social, clinical sciences • Develop the ability to consult a patient, assess a clinical case, schedule examinations, make a differential diagnosis, discuss a disease management plan, provide first aid and resuscitation in emergencies, prescribe medication, and perform practical procedures. • Develop the ability to communicate effectively in a medical context, apply ethical and legal principles in medical practice, and evaluate the psychological and social aspects of a patient's illness; • Develop the ability to apply evidence-based principles, skills and knowledge, to effectively use information and information technology in the medical context, to apply the scientific principles, methods and knowledge of biomedicine in medical practice and research; • Develop the ability to implement health promotion measures, engage in public health issues, work effectively in the healthcare system; • Develop skills of self-responsibility, autonomy, professionalism, ethics, scientific research and work in a global context.

--

Learning Outcomes	
Knowledge and understanding	Completing the Medical Doctor educational programme, the student: A. Describes: • The normal structure of the human body, ranging from micro-structures to macrostructures, the function of the organism, its systems and organs, molecular biology and embryonic development of the organism, the metabolism of the organism, the function and features of the immune system; • The features of the physiology of the human body systems and organs, principles and peculiarities of human behavior, motivation and emotions, foundations and theories of emotion; • The pathological structure of the disease, the mechanisms of its development, infection, determines the body's reaction to it, the characteristics of the body's immunity and mechanisms of action; • Principles of clinical science in various specialties and sub-specialties of medicine, internal diseases, surgical diseases, etc; • Methodology of conducting scientific research; Principles of ethics for conducting scientific research; Its methods and means, the role of evidence in medical practice. • Principles of prescribing drugs, use of antibiotics and their resistance, side effects of drugs, their interactions, mechanisms of action of drugs, pharmacokinetics and pharmacodynamics. • Principles of public health, disease prevention mechanisms, lifestyle, proper nutrition, health promotion tools, disease screening and surveillance mechanisms, disability, gender issues in health, culture and ethics impact on health, resource allocation and health management, etc. B. Defines the importance of ethical and legal principles in medical practice, the rights of the patient, the principles of

	relations with colleagues, as well as the role of the physician in the health care system.
Skills	Completing the Medical Doctor educational programme, the student: C. Consults the patient: collects medical history, conducts physical examination of the patient, demonstrates clinical thinking and decision-making skills, gives explanations and advice to the patient, supports the patient and protects his / her rights, assesses the patient's psycho-emotional status; D. Evaluates the clinical case, appoints examinations, makes a differential diagnosis, discusses the disease management plan: identifies and evaluates the complexity of the clinical manifestation of the disease, appoints appropriate examinations and interprets the results, conducts differential diagnosis, treats On the condition of the patient and his family, manages the chronic disease; E. Provides first aid and resuscitation services to the patient in case of emergency medical conditions: Recognizes and evaluates (DRSABCDE) emergency medical condition, provides basic first aid to the patient according to his / her age characteristics (newborn, child, elderly), considers, in accordance with the guidelines, conducts basic life-sustaining and cardiopulmonary resuscitation measures, conducts extended life-sustaining measures in accordance with the guidelines, provides emergency care to the patient in case of trauma; F. Prescribes medication: Understands and correctly prescribed medication according to age aspects, links relevant medications to the clinical context, reviews the appropriateness of medication and other treatments, and evaluates potential benefits and potential risks to the patient; Treats pain and distress, provides medication compatibility when prescribing treatment; G. Performs practical procedures: determines vital signs: pulse, respiration, temperature, measures blood pressure,

	determines saturation, performs peripheral venous venipuncture, as well as subcutaneous and intramuscular injection, injects intravenously and uses an infusion device, transports and treats patients accordingly, performs blood transfusion and oxygen supply to the patient, treats wounds and inserts sutures, inserts and opens sutures, performs bladder catheterization and urinalysis, receives electrocardiograms and performs electrocardiographic system interpretation, performs functional inhalation tests of the respiratory system, uses inhalation medications; H. Communicates effectively in a medical context: communicates effectively orally and in writing, including through a support person, patient, relatives, colleagues, law enforcement, the media, and any person, regardless of social, cultural, religious or other background. Ethnicity, selects a communication model when reporting unpleasant news to the recipient, as well as with informed consent from the patient or his / her legal representative, resolves conflicts between colleagues and / or other third parties through negotiation; I. Applies ethical and legal principles in medical practice: protects the confidentiality of information available to the patient, adheres to the norms of professional ethics and the interests of the patient in the conduct of medical practice, receives information from the patient, his relative or legal representative, including written consent before the provision of medical services, completes and issues death certificates - forms of medical certificates of death, requests autopsies (autopsy to determine the cause of death or for scientific purposes), uses Georgian and international law in the treatment of patients, conducts medical procedures. In society; J. Assess the psychological and social aspects of the patient's illness: assesses the psychological and social factors of disease manifestation and impact on the patient, determines the stress associated with the illness, identifies the patient's alcohol and drug dependence; K. Uses evidence-based principles, skills and knowledge: Uses internationally recognized scientific evidence in practice, defines the research process and, in accordance with the standards of academic ethics, develops a scientific research project; Draws conclusions and uses them in practical activities;
--	---

	L. Effectively uses information and information technology in a medical context: Properly maintains and maintains complete clinical records, uses state-of-the-art information technology in practice, finds industry-specific information resources, stores necessary information, including personal records (portfolio); M. Applies the scientific principles, methods and knowledge of biomedicine in medical practice and research: reveals knowledge of the methodology of scientific research, develops research design and detailed research plan, analyses the results obtained and develops relevant conclusions; uses achievements in biomedical sciences in practical activities, critically analyzes the existing scientific literature in the field of biomedicine and writes an abstract / review / research project. N. Participates in health promotion activities, engages in public health issues, demonstrates the ability to work effectively in the health care system: conducts treatment that minimizes the risk of harm to the patient; Conducts measures to prevent the spread of infection, realizes one's own health problems and evaluates one's own health in relation to professional duties, participates in health promotion activities both at the individual and population level.
Responsibility and Authonomy	Completing the Medical Doctor educational programme, the student: O. Adheres to the principles of ethics and professional conduct, expresses readiness to provide quality medical care and striving for constant professional development, evaluates his / her abilities, makes decisions, can solve problems, plans and manages work, finds solutions to unpredictable situations and can adapt to new situations, adapts to new situations norms, takes responsibility for one's own and others' activities and professional development, assists others in learning and practice, seeks help from others when needed, adheres to the basic principles of teamwork, and participates in a multidisciplinary team;

	P. Independently searches for the latest information from a variety of sources, analyzes first-hand data, develops scientific research projects in accordance with academic ethics standards, conducts independent learning, adheres to the principle of lifelong learning, respects democratic and professional values, works in a multicultural and international context.
--	--

Prerequisites for admission:

A person with a full general education or equivalent certificate who has passed the relevant unified national examinations, passed the compulsory subject for enrollment in the educational program and has passed the English language level in English - has passed the minimum competency level 85 % + 1.

An entrant by the Law of Georgia on Higher Education, who certifies proficiency in English at the ALTE B2 level, has the right to study in the Medical Doctor education programme without passing the Unified National Examinations, in accordance with the rules of language competence at Eastern European University.

Enrollment in the educational programme of a certified physician can be done twice a year, within the timeframe set by the Ministry of Education, Science, Culture and Sports of Georgia, following the mandatory procedures and rules set by the University.

Enrollment of Georgian citizens or foreign nationals in the educational program of a foreign citizen recognized from a foreign higher education institution is carried out in accordance with the rules and within the timeframe established by the Ministry of Education, Science, Culture and Sports of Georgia.

Teaching & Learning methods and activities

☒ Lecture	The syllabus of each teaching course provided by the education programme Medical Doctor provides ways
---	---

☒ Seminar ☒ Learning with e-resources ☒ Group work ☒ Practical work ☒ other	(methods) to achieve the goal of the training course, which are based on the principles of student-centered teaching. The teaching-learning methods provided in the syllabus of each course are focused not only on acquiring knowledge, but also on developing skills. The teaching courses of the education programme Medical Doctor include teaching-teaching methods relevant to the specifics of the subject. The teaching-learning methods reflected in the syllabus of each course of the educational program correspond to the level of teaching and the goals and content of each course. Learning & Teaching methods, depending on the specifics of the training course, ensure the achievement of the learning outcomes provided by the syllabus of the teaching course, and the combination of existing teaching methods - the achievement of learning outcomes provided by the program. When choosing teaching methods, the purpose of the course and the expected result - what the student should know and what he / she can do. Teaching-learning methods such as lecture, working in a group, seminar, practical work, etc. are used to implement the educational component of the educational program. The Learning & Teaching methods provided in the syllabi of the course facilitate the mastery of specific material and develop the transfer skills of the student. In addition, the Learning & Teaching method may include relevant activities: discussion / debate, group (collaborative) work, demonstration, explanation, verbal or oral, deduction, induction, analysis, synthesis, mental assault, clinical case-based learning (CBL), Bedside-teaching, Clinical Thinking (CBCR). Case study, problem-based learning (PBL) and more. The activities used in the Learning & Teaching learning process complement and complement each other. The academic and guest staff implementing the program may use one or more of the above activities or any other activity depending on the specific learning task.
Learning Outcomes	Learning & Teaching methods and activities
Knowledge and Understanding	□ Lecture;

	□ Seminar; □ Case-based learning (CBL); □ Problem-based learning (PBL); □ Group work; □ Tutorial; □ Clinical rotations in universities / educational institutions; □ bedside-teaching; □ Role play □ Communication with patients; □ Work on a book; □ Written work; □ Verbal explanation; □ Demonstration; □ Independent learning: □ Induction, deduction, analysis, synthesis.
Skills	□ Lecture; □ Seminar; □ Tutorial; □ Practical work; □ bedside-teaching; □ analysis, synthesis; □ Brain storming; □ Group work (collaborative), Including a resuscitation mannequin; □ Discussion/debat; □ Heuristic method; □ Teaching in a clinical and simulation environment; □ Case-based learning (CBL);

	□ Clinical thinking/Case based clinical reasoning (CBCR); □ Clinical rotations; □ Teaching of clinical skills in a simulation center or in a suitably equipped learning environment; □ Communication with patients (outpatients and inpatients); □ Practical methods, including practical work under supervision; □ Problem-based learning (PBL); □ Project development and presentation (oral, Power Point, etc.). □ Role and situational play, including physician and patient roles; □ Practice with outpatients and inpatients within medical organisations; □ Produce medical documentation, including the use of information technology); □ Participation in scientific research; □ Learning scientific skills; □ Educational video film; □ Scenario-based simulation learning; □ Learning using simulators; □ Learning through standardized patients; □ Case study.
Responsibility and Autonomy	□ Seminar; □ Tutorial; □ Educational video film; □ Independent learning (preparation of essay, abstract, project, report); □ Problem-based learning (PBL); □ Discussion-debate where the student will be able to demonstrate skills in understanding and reasoning ethical norms. □ Case-based learning (CBL); □ Clinical thinking/Case based clinical reasoning (CBCR); □ Practice with outpatients and inpatients within medical organisations;

Knowledge Assessment System

Mastering each of the learning courses provided by the Medical Doctor education programme presupposes the active participation of students in the learning process and is based on the principle of continuous evaluation of the acquired knowledge.

The level of student achievement in the implementation of the Medical Doctor education programme is assessed in accordance with the assessment system approved by the Order N3 of the Minister of Education and Science of January 5, 2007 "On the Rule of Calculation of Credits for Higher Education Programs".

The assessment of student's knowledge in the educational component of the Medical Doctor education programme includes the forms of assessment – Mid-term (single or multiple) and final assessment, the sum of which is the final assessment (100 points).

Mid-term and final assessment (assessment forms) includes the assessment component / components, which determines the way / methods of assessment of student knowledge and / or skills and / or competencies (oral / written test, oral / written survey, homework, practical / theoretical work, research Thesis / project, etc.).

The final assessment uses a new and effective method of assessment - the **Objectively Structured Clinical Examination (OSCE)**, recognised by the World Federation of Medical Education and the World Health Organization - as one of the key standards in medical education. Using this method, students complete assignments that may include practical procedures, interview methods, or data interpretation. **Objectively Structured Practical Examination (OSPE)** is used to assess student knowledge in pre-clinical courses, which is an objective tool for assessing theoretical, practical and problem-solving skills. During the exam, students should identify and describe anatomical, histological specimens, radiological images.

The assessment component combines uniform assessment methods (single-answer or multiple-choice test, essay, portfolio, demonstration, presentation, practical / theoretical assignment, clinical case analysis, practical procedure, direct observation, discussion, etc.). A quiz is also used to assess the student's knowledge, which is a method of rapid assessment and through which the student's knowledge, abilities, skills are determined / measured. The quiz consists of tests, theoretical questions, alternative choices (right / wrong), short answer type questions, exercises, situational analysis and problem analysis.

Assessment method / methods are measured by assessment criteria or units of measurement method, which determines the level of achievement of learning outcomes.

Each form and component of the assessment is determined by the total grade point average (100 points) in the final grade, which is reflected in a specific syllabus and is communicated to the student at the beginning of the semester.

It is not allowed to grant credit using only one form of assessment (interim or final assessment). Credit is awarded to a student only upon receipt of a positive grade.

During the implementation of the Medical Doctor education program, the share of the minimum competency threshold of the student's mid-term and final assessment is reflected in a specific syllabus and is notified to the student at the beginning of the semester.

The assessment system allows:

Five types of positive assessment:

(A) Excelent	91-100 points of assessment;
(B) Very good	81-90 points for maximum grade;
(C) Good	71-80 of maximum grade;
(D) Satisfactory	61-70 of maximum grade;
(E) Accebtale	51-60 of maximum grade

Two types of negative assessment:

(FX) Fail	41-50%, meaning that a professional student requires some more work before passing and is given a chance to sit an additional examination after independent work;
(F) Fail	40% and less, meaning that the work of a student is not acceptable and he/she has to study the subject again.

Employment:

According to the “Law of Georgia on Medical Practice”, a graduate of a Medical Doctor educational programme has the right to work as a junior doctor and to perform as a doctor under the supervision and responsibility of an independent medical practitioner.

A graduate of a Medical Doctor education programme has the right to engage in pedagogical and / or scientific activities or to be employed in another field of health care, which does not involve independent medical practice.

According to Georgian law, a graduate of a Medical Doctor educational programme is not eligible to pursue independent medical practice.

Further studies:

A graduate of a Medical Doctor degree programme has the right to pursue a postgraduate professional training course (or an equivalent professional programme abroad recognised by the law of that country) and to be eligible for independent medical practice after passing a state certification exam.

A graduate of a one-cycle Medical Doctor education programme has the right to continue his / her studies in a doctoral educational programme of Georgian or foreign higher education institutions, which is focused on the preparation of a further level researcher.

Material and technical base of the programme

The university infrastructure, material and technical resources available to students without restrictions and used to achieve the learning outcomes provided by the Medical Doctor educational programme, namely:

- Classrooms equipped with appropriate inventory, working rooms for academic and administrative staff;
- Conference hall;
- Library equipped with computer equipment and information-communication technologies, where the relevant printed and electronic literature provided by the syllabi of the programme is available;
- Three computer resource centers, computer equipment connected to the Internet and internal network, and adequate computer programmes for the

- learning/teaching process;
- Various technical devices, etc.

The Clinical and Practical Skills Development Centre is also used to achieve the learning outcomes provided by the Medical Doctor educational programme, which includes:

- Simulation Laboratory;
- Anatomy Room;
- Chemistry and Biochemistry Laboratory;
- Microbiology Laboratory;
- Histology and Cell Biology Laboratory;
- Objectively Structured Clinical Examination (OSCE) stations.

The programme is supported by the University Library, which also includes a modern book fund in English-language. The book fund includes compulsory literature, syllabi, readers, and other study materials (including those available on electronic trains; which is supplemented and updated annually with basic and additional textbooks provided in the syllabi of the teaching courses, as well as other types of literature.

The latest scientific publications are available to students in electronic and material form, international electronic library databases: Cambridge Journals Online, The New England Journal of Medicine, Edward Elgar Publishing's journals and development studies eBooks, Sage Journals, e-Duke Journals Scholarly Collection, Royal Society Journals Collection, The European Respiratory Journal, Vitae, ELSEVIER.

In order to develop practical skills, the University has signed memorandums of cooperation with affiliated clinics. Clinical training courses are provided on the basis of the following medical organisation:

- Acad. O. Ghudushauri National Medical Center Ltd.,
- Ivane Beretashvili Experimental Biomedicine Center LEPL,
- Tbilisi Central Hospital Ltd,
- Pineo Medical Ecosystem Ltd.

- Medclub Georgia Ltd,
- Academician Nikoloz Kipshidze Central University Clinic Ltd.,
- Clinic of Academician Vakhtang Bochorishvili Ltd,
- Mardaleishvili Clinic Ltd,
- K. Nation National Center for Experimental and Clinical Surgery JSC,
- Georgia Israel Joint Clinic – Gidmedi Ltd,
- Akhali Mzera Ltd,
- Chachava Clinic JSC.

Human resources for the implementation of the programme

The implementation of the Medical Doctor education programme is provided with appropriate human resources. The teaching courses provided by the educational programme are led by the academic staff of the University, as well as by invited specialists with basic experience and competencies. For more information on human resources, see the curriculum appendix and course syllabi.

General description of the Medical Doctor educational programme

The Medical Doctor education programme is built in accordance with the legislation of Georgia and the European system of credit accumulation. The structure of the education programme and the teaching courses correspond to the qualifications awarded by the programme and ensure the achievement of the learning outcomes.

The programme provides for vertical and horizontal integration and corresponds to Harden scale levels VII-VIII. The programme uses modern methods of teaching and assessment. The lectures are interactive, problem-based learning (PBL) is used in seminars and practical lessons, Clinical Case-Based Training (CBL), Clinical Thinking (CBCR), Clinical and Professional Skills Assessment is done through an objectively structured clinical trial (OSCE). Knowledge is assessed by closed-ended and open-ended questions, case analysis, and other relevant assessment methods identified in the relevant syllabus.

During the first two years, students take integrated biomedical courses: Life Sciences - Cell Biology (with Integrated Biochemistry), Molecular Biology and

Genetics, Organizational Systems (Integrated Modules: Anatomy-Histology, Organology) - Radiology (Function) Integrated modules: Physiology-Biochemistry), Immunology.

In the third academic year, the curriculum includes pre-clinical integrated courses: pathology (integrated with pharmacology), microbiology (integrated with pharmacology and immunology), diagnostic methods (integrated courses: physical diagnostics, radiology and laboratory medicine).

The clinical courses of the fourth and fifth academic years are carried out in the format of clinical rotations in medical institutions (clinic, hospital, etc.). Internal Medicine and Surgery courses are integrated according to the body systems and relevant topics: Internal Medicine I (cardiovascular and pulmonary systems) and Surgery II (chest surgery); Internal Medicine II (Digestion, Endocrine Systems, Metabolism) and Surgery III (abdominal organs); Internal Medicine III (urogenital system) and Surgery V (urology), etc. Students are involved in the process of solving clinical problems and develop the skills of information analysis and synthesis, as well as their application in practice.

In the sixth academic year, students learn inpatient and outpatient clinical practice skills (theoretical and practical courses): Family Medicine, Rehabilitation and Sports Medicine, Geriatrics, Palliative Medicine, Emergency Medicine, Clinical Pharmacology and more.

Clinical and professional skills courses are taught for 10 semesters. The topics covered in these teaching courses are in line with the topics of the biomedical and clinical teaching courses defined by the semesters. Teaching with the same activity can be carried out at different levels (understanding, deepening, strengthening).

From the third academic year, the learning outcomes of each semester of clinical and professional skills learning courses are assessed in an integrated manner with the OSCE, with mannequins, mules and standardized patients used at OSCE stations.

The programme teaching courses in the field of health include the following issues and areas: culture, gender, lifestyle, health promotion, disease prevention, medical sociology, public health, health quality management, global health and sustainability, etc.

The programme provides research skills, teaches research principles and methods (Research Skills I), research tools (Epidemiology and Biostatistics (Research Skills II); Evidence based Medicine (Research Skills III), and provides knowledge application (Research Skills IV); Which implies the development

of a project by a student in the XII semester.

Objectively structured practical examination (OSPE) is used in the basics of medicine teaching courses. Clinical and professional skills teaching courses are conducted in a simulation laboratory and are completed by the OSCE.

Medical Doctor Educational Programme Curriculum
(Modules, subjects with indication of relevant credits)

№	Course Code	Title of the training course / module	Prerequisite for admission	Credit / hour	Student teaching Load	
					Contact hours	Independent hours
		I Semester				
		Compulsory Course				
1.	MD001	Cell Biology (Cell Biology and Biochemistry)	N/A	6/150	75	75
2.	MD002	Body Systems I (Anatomy, Histology, Imaging)	N/A	8/200	89	111
3.	MD003	Biophysics and Medical Physics	N/A	4/100	49	51
4.	MD004	Foreign Language I ¹	N/A	4/100	47	53
5.	MD005	Clinical and Professional skills I	N/A	2/50	33	17

¹ A person who possesses the Georgian language at the B1 level has the right to choose a learning course from another educational program of the university instead of the Georgian language learning courses, based on the prerequisites.

6.	MD006	Introduction to Information Technologies	N/A	2/50	33	17
		Elective Courses				
7.	MD007	Medical Chemistry	N/A	4/100	47	53
8.	MD008	Ecology	N/A	4/100	47	53
		II Semseter				
		Compulsory Course				
9.	MD009	Molecular Biology and Genetics	MD001	6/150	61	89
10.	MD010	Body Systems II (Anatomy, Histology, Imaging)	MD002	8/200	89	111
11.	MD011	Body Function I (Physiology, Biochemistry)	MD001 MD003	7/175	75	100
12.	MD012	Foreign Language II	MD004	4/100	47	53
13.	MD013	Clinical and Professional skills II	MD005	2/50	33	17
14.	MD014	Bioethics	N/A	3/75	31	44
		III Semester				
		Compulsory Course				
15.	MD015	Body Systems III (Anatomy, Histology, Imaging)	MD010	8/200	89	111
16.	MD016	Body Function II (Physiology, Biochemistry)	MD011	6/ 150	66	84
17.	MD017	Neuroscience	MD010 MD011	4/ 100	47	53
18.	MD018	Foreign Language III	MD012	4/100	47	53
19.	MD019	Clinical and Professional skills III	MD013	2/50	33	17
20.	MD020	Skills for Academic Study	N/A	3/75	33	42
21.	MD021	Public Health I	N/A	3/75	31	44

		IV Semester				
		Compulsory Course				
22.	MD022	Body systems IV (Anatomy, Histology, Imaging)	MD015	8/200	89	111
23.	MD023	Body function III (Physiology, Biochemistry)	MD016	7/175	75	100
24.	MD024	Immunology	MD009	5/ 125	49	76
25.	MD025	Clinical and Professional Skills IV (Communication Skills)	MD019	2/50	33	17
26.	MD026	Introduction to Psychology	N/A	2/50	31	19
27.	MD027	Research Skills I	MD020	4/100	47	53
		Elective Courses				
28.	MD028	Fundamentals of Philosophy	N/A	2/50	31	19
29.	MD029	History of Medicine	N/A	2/50	31	19
		V Semester				
		Compulsory Course				
30.	MD030	Pathology I (Pathology, Pharmacology)	MD022 MD023 MD024	8/200	92	108
31.	MD031	Methods of Diagnosis I (Physical Diagnosis, Radiology, Laboratory Medicine)	MD022, MD023	8/200	103	97
32.	MD032	Microbiology I (Microbiology, Pharmacology)	MD024	8/200	92	108
33.	MD033	Public health II	MD021	4/100	45	55
		Elective Courses				
34.	MD034	Cancer Biology	N/A	2/50	31	19
35.	MD035	Parasitology	N/A	2/50	31	19

		VI Semester				
		Compulsory Course				
36.	MD036	Pathology II (Pathology, Pharmacology)	MD030	8/200	92	108
37.	MD037	Methods of Diagnosis II (Physical Diagnosis, Radiology, Laboratory Medicine)	MD031	8/200	103	97
38.	MD038	Microbiology II (Microbiology, Immunology, Pharmacology)	MD032	8/200	92	108
39.	MD039	Surgery I (General)	MD031	4/100	51	49
40.	MD040	Public Health III	MD033	2/50	31	19
		VII Semester				
		Compulsory Course				
41.	MD041	Internal Medicine I	MD036 MD037	8/ 200	118	82
42.	MD042	Surgery II	MD039	4/100	47	53
43.	MD043	Research Skills II (Epidemiology and Biostatistics)	MD027	6/150	56	84
44.	MD044	Dermatology	MD037	4/100	43	57
45.	MD045	Pediatrics	MD037	6/150	70	80
46.	MD046	Clinical and Professional skills V	MD025	2/50	33	17
		VIII Semester				
		Compulsory Course				
47.	MD047	Internal Medicine II	MD041	8/200	89	111
48.	MD048	Surgery III	MD039	4/100	47	53
49.	MD049	Infectious Diseases	MD036 MD037	6/150	77	73

			MD038			
50.	MD050	Clinical and Professional skills VI	MD046	2/50	33	17
51.	MD051	Public Health IV	MD040	4/100	47	53
52.	MD052	Leadership in Healthcare	N/A	2/50	31	19
		Elective Courses				
53.	MD053	Tuberculosis	MD024 MD041	4/100	35	65
54.	MD054	Nutrition	N/A	4/100	35	65
		IX Semester				
		Compulsory Course				
55.	MD055	Internal medicine III	MD047	4/100	45	55
56.	MD056	Neurology	MD036 MD037	7/175	77	98
57.	MD057	Surgery IV	MD039	7/175	105	70
58.	MD058	Surgery V	MD039	3/75	35	40
59.	MD059	Forensic Medicine	MD047 MD048	4/100	41	59
60.	MD060	Clinical and Professional skills VII	MD050	2/50	33	17
61.	MD061	Public Health V	MD051	3/75	33	47
		X Semester				
		Compulsory Course				
62.	MD062	Internal Medicine IV	MD055	8/200	85	115
63.	MD063	Psychiatry	MD056	4/100	53	47

64.	MD064	Surgery VI	MD058	3/75	41	34
65.	MD065	Clinical and Professional skills VIII	MD060	2/50	33	17
66.	MD066	Obstetrics and Gynaecology I (Obstetrics)	MD039 MD055	7/175	77	98
67.	MD067	Research Skills III (Evidence-Based Medicine)	MD043	2/50	31	19
		Elective Courses				
68.	MD068	Child Neurology	MD056	4/100	45	55
69.	MD069	Quality and Safety in Healthcare	N/A	4/100	43	57
		XI Semester				
		Compulsory Course				
70.	MD070	Internal Medicine V	MD062	6/150	65	85
71.	MD071	Surgery VII	MD037 MD039	4/100	45	55
72.	MD072	Medical Rehabilitation and Physical Therapy	MD056 MD058 MD062	4/100	43	57
73.	MD073	Clinical and Professional Skills IX	MD065	2/50	33	17
74.	MD074	Clinical Radiology	MD062 MD064	4/100	45	55
75.	MD075	Obstetrics and Gynaecology II (Gynaecology)	MD066	6/150	77	73
76.	MD076	Palliative Medicine	MD062	4/100	45	55
		XII Semester				
		Compulsory Course				

77.	MD077	Internal Medicine VI (Clinical Pharmacology)	MD070	4/100	44	56
78.	MD078	Surgery VIII	MD071	3/75	37	38
79.	MD079	Anesthesiology and Intensive Care	MD071	5/125	56	69
80.	MD080	Family Medicine and Geriatrics	MD070 MD071 MD075 MD076	4/100	61	39
81.	MD081	Clinical and Professional Skills X	MD073	4/100	61	39
82.	MD082	Research Skills IV	MD067	5/125	31	94
		Elective Courses				
83.	MD083	Reproductive Medicine	MD075	5/125	56	69
84.	MD084	Emergency Medicine	MD070 MD071	5/125	56	69

Map of programme aims and learning outcomes

The programme aims	Learning Outcomes
The aim of the programme is to provide the student with in-depth and systematic knowledge about the fundamental principles of the field, as well as in the field of biomedical, behavioral, social, clinical sciences.	Completing the Medical Doctor educational programme, the student: (A) describes: The normal structure of the human body, ranging from micro-structures to

	macrostructures, the function of the organism, its systems and organs, molecular biology and embryonic development of the organism, the metabolism of the organism, the function and features of the immune system; • The features of the physiology of the human body systems and organs, principles and peculiarities of human behavior, motivation and emotions, foundations and theories of emotion; • The pathological structure of the disease, the mechanisms of its development, infection, determines the body's reaction to it, the characteristics of the body's immunity and mechanisms of action: • Principles of clinical science in various specialties and sub-specialties of medicine, internal diseases, surgical diseases, etc .; • Methodology of conducting scientific research; Principles of ethics for conducting scientific research; Its methods and means, the role of evidence in medical practice. • Principles of prescribing drugs, use of antibiotics and their resistance, side effects of drugs, their interactions, mechanisms of action of drugs, pharmacokinetics and pharmacodynamics. • Principles of public health, disease prevention mechanisms, lifestyle, proper nutrition, health promotion tools, disease screening and surveillance mechanisms, disability, gender issues in health, culture and ethics impact on
--	--

	health, resource allocation and health management, etc. (B) Defines the importance of ethical and legal principles in medical practice, the rights of the patient, the principles of relations with colleagues, as well as the role of the physician in the health care system.
The aim of the program is to develop the student's ability to counsel the patient, assess a clinical case, schedule examinations, conduct a differential diagnosis, discuss a disease management plan, provide first aid and emergency resuscitation, prescribe medication, and perform practical procedures.	Completing the Medical Doctor educational programme, the student: C. Consults the patient: collects medical history, conducts physical examination of the patient, demonstrates clinical thinking and decision-making skills, gives explanations and advice to the patient, supports the patient and protects his / her rights, assesses the patient's psycho-emotional status; D. Evaluates the clinical case, appoints examinations, makes a differential diagnosis, discusses the disease management plan: identifies and evaluates the complexity of the clinical manifestation of the disease, appoints appropriate examinations and interprets the results, conducts differential diagnosis, treats On the condition of the patient and his family, manages the chronic disease; E. Provides first aid and resuscitation services to the patient in case of emergency medical conditions: Recognizes and evaluates (DRSABCDE) emergency medical condition, provides basic first aid to the patient according to his / her age characteristics (newborn, child, elderly); Carries out basic life-sustaining and cardiopulmonary resuscitation measures in accordance with the guidelines, conducts extended life-sustaining measures in accordance with the guidelines, provides emergency care to the patient in case of trauma; F. Prescribes medications: Understands and correctly prescribes medications

	according to age-related aspects, links relevant medications to the clinical context, reviews the appropriateness of medications and other treatments, and assesses potential benefits and potential risks to the patient; Treats pain and distress, provides medication compatibility when prescribing treatment; G. Performs practical procedures: determines vital signs: pulse, respiration, temperature, measures blood pressure, determines saturation, performs peripheral venous venipuncture, as well as subcutaneous and intramuscular injections, administers intravenous drugs and uses infusion device. Transportation and therefore treats them, performs blood transfusion and oxygen supply to the patient, treats the wound and inserts the suture, inserts and opens the suture, performs bladder catheterization and urinalysis, receives electrocardiogram and interprets the electrocardiogram, performs functional inhalation tests of the respiratory system.
The aim of the programme is to develop the student's ability to communicate effectively in a medical context, to apply ethical and legal principles in medical practice, as well as to assess the psychological and social aspects of a patient's illness.	Completing the Medical Doctor educational programme, the student: H. Communicates effectively in a medical context: communicates effectively orally and in writing, including through a support person, patient, relatives, colleagues, law enforcement, the media, and any individual, regardless of social, cultural, religious, or ethnic background. chooses a communication model when reporting unpleasant news to the addressee, as well as obtaining informed consent from the patient or his / her legal representative, resolves conflicts between colleagues and / or other third parties through negotiation; I. Applies ethical and legal principles in medical practice: protects the confidentiality of information available to the patient, adheres to the norms of professional ethics and the interests of the patient in the conduct of medical practice, obtains informed consent from the patient, his relative or legal representative, including written consent, fills in and issues death certificates,

	requests autopsies (autopsy to determine the cause of death or for scientific purposes) in cases provided by law, uses Georgian and international law to treat a patient, conducts medical activities in a multicultural society; J. Assess the psychological and social aspects of the patient's illness: Assess the psychological and social factors of disease manifestation and impact on the patient, identify disease-related stress, and identify the patient's alcohol and drug dependence.
The aim of the programme is to develop the student's ability to apply evidence-based principles, skills and knowledge, to effectively use information and information technology in the medical context, to apply the scientific principles, methods and knowledge of biomedicine in medical practice and research.	Completing the Medical Doctor educational programme, the student: K. Uses evidence-based principles, skills and knowledge: applies internationally recognized scientific evidence in practice, defines the research process and, in accordance with the standards of academic ethics, develops a scientific research project; Draws conclusions and uses them in practical activities; L. effectively uses information and information technology in a medical context: maintains and maintains clinical records correctly, uses state-of-the-art information technology in practice, finds industry-specific information resources, stores necessary information, including personal records (portfolio); M. applies the scientific principles, methods and knowledge of biomedicine in medical practice and research: reveals knowledge of the methodology of scientific research, develops research design and detailed research plan, analyses the results obtained and develops relevant conclusions; uses achievements in biomedical sciences in practical activities, critically analyzes the existing scientific literature in the field of biomedicine and writes an abstract / review / research project.
The aim of the programme is to develop students' implementation of health promotion activities, involvement in public health issues,	Completing the Medical Doctor educational programme, the student:

effective work in the healthcare system	N. Participates in health promotion activities, engages in public health issues, demonstrates the ability to work effectively in the health care system: conducts treatment that minimizes the risk of harm to the patient, takes measures to prevent the spread of infection; Aware of his / her own health problems and evaluates his / her health in relation to his / her professional duties, participates in health promotion activities both at the level of the individual and the population
Develop skills of self-responsibility, autonomy, professionalism, ethics, scientific research and work in a global context.	Completing the Medical Doctor educational programme, the student: O. Adheres to the principles of ethics and norms of professional conduct, expresses readiness to provide quality medical care and constant striving for professional perfection, evaluates his / her abilities, makes decisions, is able to solve problems, plans and manages work time, finds solutions to unpredictable situations and is able to adapt to new situations, adheres to the norms of interpersonal communication, takes responsibility for one's own and others' activities and professional development, assists others in learning and practical activities; seeks help from others when needed, adheres to the basic principles of teamwork, and participates in a multidisciplinary team; P. Automatically finds the latest information from various sources, analyses the first data, develops a scientific research project in accordance with the standards of academic ethics and conducts studies independently, Adhering to the principle of "lifelong learning", expresses respect for democratic and professional values, works in accordance with the international context and respect for cultural diversity.

The programme aims	Learning Outcomes															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
The aim of the programme is to provide the student with in-depth and systematic knowledge about the fundamental principles of the field, as well as in the field of biomedical, behavioral, social, clinical sciences.	✓	✓														
The aim of the programme is to develop the student's ability to counsel the patient, assess a clinical case, schedule examinations, conduct a differential diagnosis, discuss a disease management plan, provide first aid and emergency resuscitation, prescribe medication, and perform practical procedures.			✓	✓	✓	✓	✓									
The aim of the programme is to develop the student's ability to communicate effectively in a medical context, to apply ethical and legal principles in medical practice, as well as to assess the psychological and social aspects of a patient's illness.								✓	✓	✓						
The aim of the programme is to develop the student's ability to apply evidence-based principles, skills and knowledge, to effectively use information and information technology in the medical context, to apply the scientific principles, methods and knowledge of biomedicine in medical practice and research											✓	✓	✓			
The aim of the programme is to develop students' implementation of health promotion activities, involvement in public health issues, effective work in the healthcare system														✓		
Develop skills of self-responsibility, autonomy, professionalism, ethics, scientific research and work in a global context.															✓	✓

Curriculum Map

Teaching courses	Programme Learning Outcomes															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Biomedical teaching courses																
Cell Biology (Cell Biology and Biochemistry)	✓														✓	
Molecular Biology and Genetics	✓															
Body Systems I (Anatomy, Histology, Imaging)	✓												✓		✓	
Body Systems II (Anatomy, Histology, Imaging)	✓												✓		✓	
Body Systems III (Anatomy, Histology, Imaging)	✓												✓		✓	
Body Systems IV (Anatomy, Histology, Imaging)	✓												✓		✓	
Body Function I (Physiology, Biochemistry)	✓														✓	
Body Function II (Physiology, Biochemistry)	✓														✓	
Body Function III (Physiology, Biochemistry)	✓														✓	
Biophysics and Medical Physics	✓															
Bioethics	✓	✓													✓	
Neuroscience (Physiology, Biochemistry)	✓														✓	
Immunology	✓														✓	
Preclinical integrated courses																

Pathology I (Pathology, Pharmacology)	✓															✓	
Pathology II (Pathology, Pharmacology)	✓															✓	
Methods of Diagnosis I (Physical Diagnosis, Radiology, Laboratory Medicine)	✓		✓	✓			✓	✓				✓				✓	
Methods of Diagnosis II (Physical Diagnosis, Radiology, Laboratory Medicine)	✓		✓	✓			✓	✓				✓				✓	
Microbiology I (Microbiology, Pharmacology)	✓															✓	
Microbiology II (Microbiology, Immunology, Pharmacology)	✓															✓	
Clinical courses																	
Surgery I (General)	✓		✓	✓	✓		✓	✓	✓		✓					✓	
Surgery II	✓		✓	✓	✓	✓	✓	✓	✓		✓					✓	
Surgery III	✓		✓	✓	✓	✓	✓	✓	✓		✓					✓	
Surgery IV	✓		✓	✓	✓	✓	✓	✓	✓							✓	
Surgery V	✓		✓	✓	✓	✓	✓	✓	✓							✓	
Surgery VI	✓		✓	✓	✓	✓	✓	✓	✓		✓					✓	
Surgery VII	✓		✓	✓	✓	✓	✓	✓	✓							✓	
Surgery VIII	✓		✓	✓		✓		✓								✓	
Internal Medicine I	✓		✓	✓		✓		✓	✓	✓	✓	✓	✓			✓	
Internal Medicine II	✓		✓	✓				✓	✓	✓	✓	✓	✓			✓	
Internal Medicine III	✓		✓	✓				✓	✓	✓	✓	✓	✓			✓	
Internal Medicine IV	✓		✓	✓				✓	✓	✓	✓	✓	✓			✓	
Internal Medicine V	✓		✓	✓				✓	✓	✓	✓	✓	✓			✓	

Internal Medicine VI (Clinical pharmacology)	✓			✓											✓	✓
Dermatology	✓		✓	✓		✓		✓	✓	✓	✓	✓			✓	
Pediatrics	✓		✓	✓		✓		✓	✓		✓	✓			✓	
Infectious diseases	✓		✓	✓		✓		✓	✓	✓	✓	✓			✓	
Neurology	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓			✓	
Forensic Medicine	✓	✓					✓		✓							
Psychiatry	✓		✓	✓				✓	✓			✓			✓	
Obstetrics & Gynaecology I (Obstetrics)	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	
Obstetrics & Gynaecology II (Gynaecology)	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	
Medical Rehabilitation and Physical Therapy	✓		✓	✓											✓	
Clinical Radiology				✓								✓				✓
Palliative Medicine	✓		✓	✓				✓	✓	✓	✓	✓			✓	
Anesthesiology and Intensive Care	✓		✓	✓	✓	✓	✓	✓	✓						✓	
Family Medicine and Geriatrics	✓		✓	✓		✓		✓	✓			✓		✓	✓	
Clinical and Professional Skills																
Clinical and Professional skills I					✓		✓	✓							✓	
Clinical and Professional skillsII							✓	✓							✓	
Clinical and Professional skillsIII					✓		✓	✓							✓	
Clinical and Professional Skills IV (Clinical Skills, Communication Skills)		✓					✓	✓	✓						✓	
Clinical and Professional skills V							✓	✓	✓						✓	
Clinical and Professional skills VI							✓	✓	✓						✓	
Clinical and Professional skills VII							✓	✓	✓						✓	

Clinical and Professional skills VIII							✓	✓	✓						✓	
Clinical and Professional skills IX				✓			✓	✓	✓						✓	
Clinical and Professional skills X							✓	✓	✓						✓	
Research Skills																
Research Skills I	✓													✓		
Research Skills II (Epidemiology and Biostatistics)	✓													✓		
Research Skills III (Evidence-Based Medicine)	✓											✓				
Research Skills IV	✓													✓		✓
Public Health																
Public Health I	✓														✓	✓
Public Health II	✓											✓		✓	✓	
Public Health III	✓													✓		
Public Health IV	✓											✓		✓	✓	
Public Health V	✓											✓		✓	✓	
Leadership in Healthcare	✓														✓	
General courses																
Introduction to Information Technologies												✓				
Introduction to Psychology	✓										✓					
Skills for Academic Study													✓			✓
Foreign language I								✓								
Foreign language II								✓								
Foreign language III								✓								

Information about learning and learning methods and activities

The Medical Doctor educational programme is based on the principles of student-centered teaching, which is achieved through interactive teaching. Interactive learning is focused not only on acquiring ready-made knowledge, but also on developing skills. The teaching methods and activities used in the learning process are aimed not only at mastering specific material, but also at developing general / transfer skills.

The range of teaching courses provided in the curriculum involves the use of problem-based and research-based teaching approaches that help students develop the ability to independently plan and implement research.

The following teaching-learning methods and activities are used in the educational process:

- **Lecture** - systematically and consistently delivering teaching materials to students, explaining the topic or issue to be discussed. A lecture is interactive when it takes the form of a dialogue and engages students in the process of discussing theoretical material; The lecture is conducted within the teaching course using demonstration materials (atlases, posters, preparations, tabulations, etc.) and modern computer technology.
- **Seminar** - deepening the topics heard at the lecture. At the instruction of the teacher, the student or group of students will find and process additional information, prepare a presentation, write an essay and more. At the seminar, reports are heard, discussions are held, conclusions are made. The seminar combines all the teaching methods that develop the practical skills of the student.
- **Practical work** - its purpose is the gradual study of theoretical materials through the solution of specific tasks, which is the basis for the development of skills in the practical application of theoretical material. The head of practical trainings should focus on understanding the discussed topics and issues, methodology of problem solving, execution of schemes, practical procedures, manipulations, etc.
- **Laboratory work** - involves the direct observation and implementation of theoretical topics covered in lectures / seminars. It facilitates the practical application of the acquired knowledge, discussion and in-depth understanding, the formation of critical thinking and the development of experimental skills. During laboratory training, the student should be able to maintain, adjust and operate the equipment. It also includes the following types of actions: setting up experiments, displaying video material, dynamic material, and more.

- **Teaching in clinical environment**- is a contact activity that includes practical teaching in a clinical setting, along with a lecture and / or seminar, which involves teaching in a clinical setting when a student and teacher discuss a clinical case with a patient and / or perform a clinical procedure. This is an opportunity for the student to attend doctor-patient interaction, physical examination, and consultation by the physician. Students have the opportunity to master the humanistic aspects of medicine while teaching in the presence of the patient. Provides the ability to observe the dynamics of the patient, which is an important point in the study of clinical courses.
- **Discussion / Debate** - One of the most common methods of interactive teaching. The discussion is based on some theoretical knowledge - experience. Its accompanying components are problem identification and solution. The discussion process dramatically enhances the degree of student engagement, activity, and can turn into a healthy debate. This process is not limited to the questions asked by the teacher / professor. It develops students' reasoning and reasoning skills. Discussion helps the student develop self-esteem, logical reasoning and critical thinking skills.
- **Group work (collaboration)** - teaching using this activity involves dividing students into groups and giving them study assignments. Depending on the set task, it is possible to redistribute functions among members during the group work process. This activity ensures maximum involvement of all students in the learning process. Students develop the skills of collaboration and independent work.
- **Analysis** - includes in-depth study of the problem / thematic issue; It helps to highlight specific details, break down the material into its component parts, identify its components, thus simplifying the detailed coverage of individual issues within a complex problem. Mentioned within the program; also involves a discussion around the clinical case - analysis of the results of physical, instrumental and laboratory examinations, differential diagnosis, diagnosis, treatment plan, etc.
- **Synthesis** - means the creation of an idea of a whole by bringing together / combining individual issues. It helps to develop the ability to see problems as "whole", which in turn helps to develop students' creative skills.
- **Induction** - defines the form of transfer of any knowledge, when the flow of thought in the learning process is directed from facts to generalisation, the process takes place from the specific to the general.
- **Deduction** - Deduction defines the form of transfer of any knowledge, which is a logical process of discovering new knowledge based on general knowledge or the process is going from general to specific.
- **Working on a book** - assigning independent work in the form of working on a book; Also, the methods of working on the book include individual, group and explanatory reading methods.
- **Written work** - Written work involves the following activities: making excerpts and notes, compiling material, composing abstracts, completing an abstract or essay, and more.

- **Independent work** - the material heard in the lecture is formed as a whole system of knowledge by the student's independent work. The student should have an interest in books and other sources of information and a desire to study issues independently, which will stimulate independent thinking, analysis and inference.
- **Teaching using simulators** - Simulation teaching is a teaching and training technique that develops students' ability to play a certain role in an artificially created situation, to work independently. The learning process is carried out in a simulation laboratory or clinic. The method promotes the development of practical skills and the ability to perform manipulations.
- **Case Study (Analysis)**- an interactive teaching method, which belongs to the problem-based teaching method. The method develops the student analytical, critical thinking and decision-making skills independently. The teacher discusses the specific clinical case with the students, the students thoroughly study the issue and present a conclusion about the patient's condition.
- **Brain Storming** - Students are required to boldly express their opinions and ideas without prior preparation and judgment. The method involves forming as much as possible radically different opinion about the issue / problem within the topic. The next step is to group, review, and study the ideas and opinions presented. The method helps to develop critical, creative thinking and analytical skills.
- **Oral presentation** - demonstration of knowledge of theoretical issues, discussing specific issues that can be done in the form of a narrative or answering questions.
- **Demonstrate practical skills** - test the patient and make notes, read and interpret the test results, make a differentiated diagnosis and make a diagnosis, develop a treatment plan, implement practical procedures, and more.
- **Simulation or role play** - is one of the methods of collaborative learning, which makes the learning process interesting for the student, involves creating an artificial situation that is similar to reality. In particular, it implies that students play the role of patient or doctor according to a pre-designed scenario; allows students to look at issues from different perspectives and helps them develop an alternative perspective, helping to develop and demonstrate practical / clinical skills.
- **Communication with patients** - involves patient-centered examination and collection of medical history, understanding of the patient's condition in a psychological and social context, explaining the disease within the taxonomy of the disease, sharing / agreeing information about the patient's perspective, problems and treatment issues.
- **Working with patients / patient simulation** - involves communicating with them, gathering medical history, physical examination, scheduling clinical examinations, reading and analysing examination results, gaining patient trust, etc.
- **Production of medical documentation** - includes registration of patient examination results, issuance of prescription sheets, making preoperative records, obtaining informed consent of the patient, etc.

- **Bedside-Teaching** - is conducted in the clinic, directly next to the patient's bed. A small group of students complete clinical assignments under the supervision of a teacher with the patient's consent. The method helps to gain practical experience based on theoretical knowledge.
- **Learning with Outpatient and inpatient** - involves performing clinical tasks under the supervision of a teacher with the patient's consent. The method helps to gain practical experience based on theoretical knowledge.
- **Active Learning** – Requires active involvement of the teacher and the student in the teaching process, where the practical interpretation of the theoretical material acquires a special load. At this time, the doctor-student-patient interaction takes place, in particular, the student directly observes the process of tasting, managing the patient at the patient's bedside and then performs it under his / her supervision, which contributes to the development of practical and clinical skills.
- **Problem-based learning (PBL)** -A student-centered learning and teaching method that allows the student to focus on what and how to learn. During this type of teaching, students gain significant experience by researching real-life problems. The purpose of problem-based teaching is to give students a foreign, complex, problematic issue / assignment. which they have to work on independently and solve in a variety of approaches / ways. Problem solving requires the adoption of alternatives, analytical, creative and critical thinking. This allows the student to apply existing knowledge within the course. This helps to develop the skills of critical analysis of complex problems, information synthesis, evaluation and decision-making in a multidisciplinary environment, team collaboration.
- **Case-based learning (CBL)** - A form of teaching in which a student uses knowledge to discuss a real case and which helps to improve the student's cognitive skills. Clinical cases, specific cases are discussed by students in the group work process. Students under the guidance of the teacher discuss the field problem and discuss for decision making. The method facilitates collaboration, Integrated teaching increases students' motivation to learn, promotes self-reflection and critical reflection, develops research skills, integrates knowledge and practice, and promotes the development of a variety of learning skills.
- **Case-based clinical reasoning (CBCR)** – This is a mental process when a student meets a patient and has to make a conclusion: a) about the possible causes of the patient's complaints or deviations from the norm, b) the probable diagnosis, and c) the patient management. The goal of clinical thinking is to gather information about the disease and make recommendations or prescribe treatment