

University Geomedi LLC

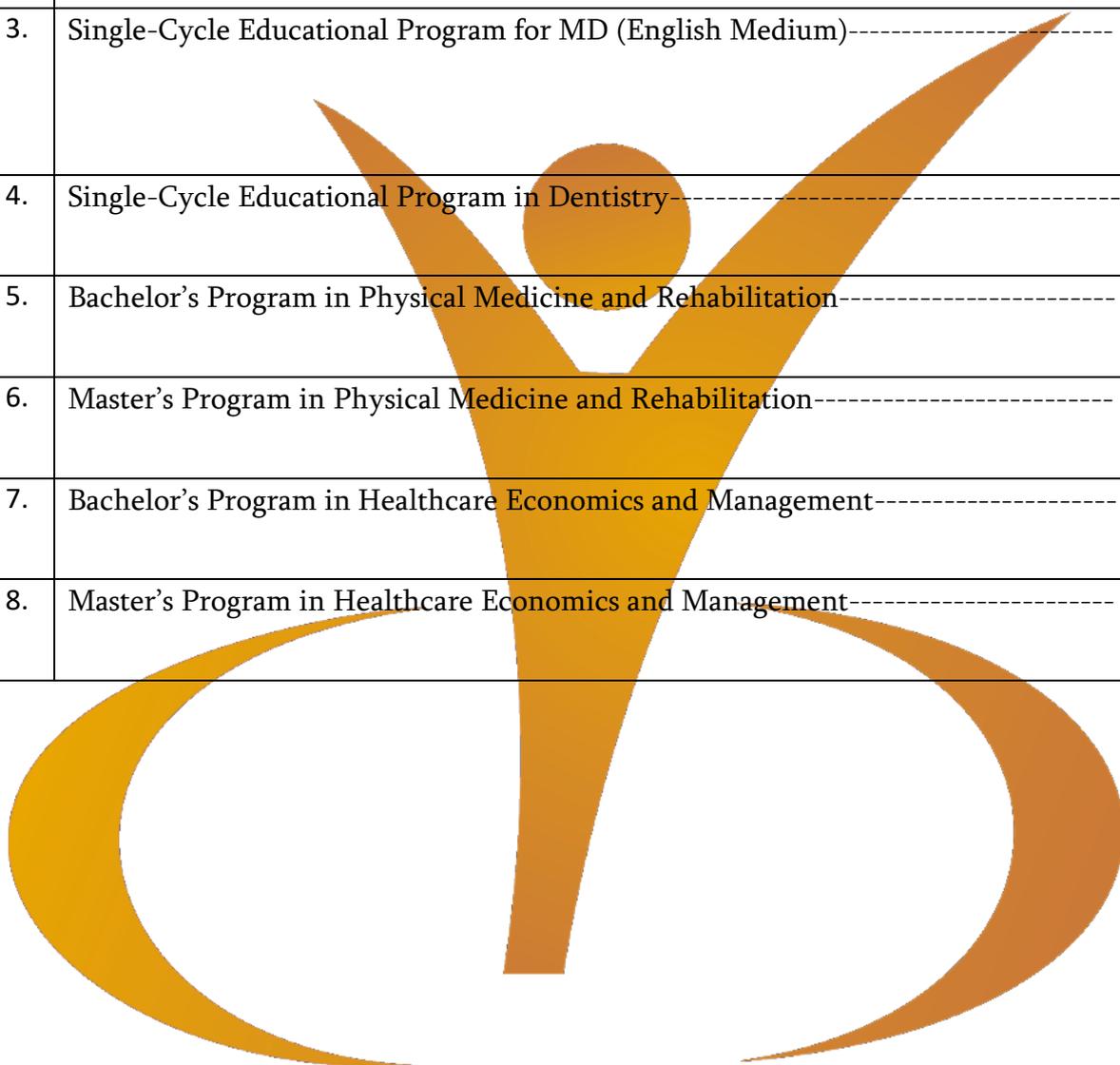


Description of Educational Programs (Catalogue)

Tbilisi 2024

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General Information About University

University Geomedi is an authorized higher education institution. Its founder and rector is Professor Marina Pirtskhalava. The University successfully implements accredited higher education programs since 1998.

The main objectives of the University are the inculcation of the national and universal values in the field of education, promotion of research activities and the development of higher and continuing education adequate to international standards. The main goal of the University is to train qualified specialists with the competencies that meet the modern requirements and conduct medical activities with professional and ethical standards recognized in the country.

University provides students, academic and administrative staff with well-equipped auditoriums, high-tech laboratories, and modern clinical bases, where they receive a quality education. Geomedi has a library rich in print and electronic resources, with free access to scientific databases (EBSCO, SCOPUS), integrating thousands of scientific publications. The educational process is conducted by highly qualified Georgian and foreign educators, who impart deep and fundamental knowledge to their students. Graduates, equipped with this knowledge, successfully continue their career path in the leading clinics or medical institutions both in Georgia and abroad.

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One Step Educational Program for Medicine

Program Supervisor – Associate Professor Nino Otarishvili, MD, PhD

Program Co-Supervisor – Doctor of Medicine Wolf Christopher J. A. (Germany)

Qualification to be awarded - Medical Doctor (MD)

Program Volume by ECTS – 360 ECTS

Language of Instruction - English

Preconditions for admission to the program

One Step Undergraduate Educational Program for MD can be attended by a person holding a state certificate confirming the completion of full basic educational level (National School Leaving Certificate) or its equivalent, who will pass the Unified National Examination and based on the obtained scores, will gain the right to study at university on the specialty of medicine, or the applicants under the Law of Georgia on Higher Education, Article 52, para 3.

In accordance with the law of Georgia on Higher Education, Article 52, para 3, foreign citizen candidates seeking for admission to educational program are required to pass the exam organized by the university, ensuring the knowledge of Georgian language at not less than B1 level (including the components or listening, reading and analyzing of text, speaking), or presenting the document certifying the knowledge of Georgian language at B1 level.

Admission of foreign citizens is regulated according to legislation established by the Ministry of Education and Science of Georgia.

Structure of the program

The medical doctor education program takes 6 years of undergraduate study. This involves 360 credits, from which 330 credits are compulsory. The latter itself includes the following:

Specialty basic compulsory courses: 17 credits for the sciences studying the normal development, structure and functioning of human body (Principles of genetics, medical chemistry, medical physics, general biochemistry, cytology and embryology), which are incorporated into one comprehensive educational block named “Life Sciences”.

Specialty basic compulsory integrated courses: 63 credits; it involves thematically integrated biomedical sciences and normal structure and functioning of human body (normal organ system modules, each of them including normal human anatomy, physiology, biochemistry, histology and clinical skills components).

Specialty pre-clinical compulsory integrated courses: 52 credits; it involves pathology of organ systems modules (each of them including pathology, pharmacology and clinical skills / propedeutics components); this also includes general pathology, general pharmacology, general surgery, microbiology, virology and immunology subjects.

Specialty clinical compulsory courses: 157 credits

Specialty compulsory courses: 28 credits

Scientific skills compulsory courses: 13 credits

Free elective courses: 30 credits; from these, the student has freedom to choose practice in clinic max. 10 credits and/or scientific work for max. 10 credits, and other credits can be filled by other elective study courses offered by the program.

1 ECTS = 25 academic hours.

1 academic year: 42 weeks

Duration of semester: 21 weeks (including: lectures and seminars – 15 weeks, exams – 4 weeks; Additional exams – 2 weeks).

Semesters VII, VIII, IX, X, XI, XII – teaching by clinical rotations.

Precondition for awarding the qualification

The medical doctor qualification is earned by a student who collects not less than 360 credits after completion of the education program.

The goal of the education program

The goal of MD undergraduate higher education program is consistent with the University mission, which implies the training of qualified competitive medical graduates, able to get employed easily both at local or international market, according to their qualifications.

The program goals include: development of competencies relevant to international standards which are indispensable for the graduates to perform their practice; the latter implies acquiring of theoretical knowledge as well as development of scientific and clinical skills, ethical values and professional responsibilities inherent for doctor's profession. In addition, the program also prepares the graduates to pursue their further professional career, in residency, at doctorate degree, or at alternative postgraduate study courses; the program encourages the scientific activity in theoretical fields of medicine and other healthcare areas, which do not imply independent medical activity.

Program goals also imply the giving of medical education indispensable for the implementation of medical doctor activities which is compatible with World Federation of Medical Education (WFME) standards, national qualification frame and field descriptors of higher education.

The program goal is to give the medical graduate the knowledge, competencies and skills of the field needed for their independent activity as a doctor; these include: **medical knowledge** – fundamental knowledge of biomedical, behavioral, social and clinical sciences; **clinical reasoning** – ability to assess clinical cases, develop the investigation plan, differentiate the diagnosis, develop the disease treatment plan, participate in medical board; **practical skills** – providing the emergency medical care, development of skills for drug prescription, providing practical medical procedures, communication skills with patients, their families and colleagues, guide their medical activity by legal and ethical principles, providing individual approach to patients, considering the psycho-social aspects of their disease, application of evidence-based principles and knowledge, searching, collecting, treating and effective application of analyzed information within medical context, application of scientific-research principles and methods in practical activity, involvement in public health issues and effective collaboration within healthcare system, providing a quality medical service and readiness for professional growth, high responsibility for professional ethics, tolerance, empathy and confidentiality, critical thinking and self-criticism, gaining the skills of independent as well as group working with multidisciplinary team, communication skills both in their mother language as well as in foreign languages.

Study outcomes:

Knowledge and understanding

The medical graduate has sectoral knowledge which includes biomedical, behavioral, social, clinical sciences and fundamental sectoral principles of the field.

The medical graduate has fundamental and profound knowledge in the following fields:

Biomedical sciences:

- Normal function of human body (physiology)
- Normal structure of human body (anatomy, histology)
- Normal metabolism and hormonal function of human body (biochemistry)
- Normal immune function of human body and microbiology
- Normal cell biology
- Normal molecular biology
- Normal human development (embryology)

Behavioral and social sciences:

- Psychology
- Human development (infant, adolescent, adult, elderly)
- Sociology

Clinical sciences:

- Pathological structure and mechanism of disease (pathology)
- Infection (microbiology)
- Immunity and immune disorders
- Clinical immunology
- Genetics and inherited disorders
- Knowledge of clinical sciences in different medical specialties and subspecialties;
- Clinical access and experience gained by clinical practice in the following fields of medical service:
 - Treatment of patients with acute disorders on site of accident and in emergency department
 - Treatment of internal diseases in ambulatory department
 - Practice in primary health care setting
 - Treatment of elderly patients
 - Treatment of pediatric patients
 - Treatment of patients in terminal stage, palliative care
 - Treatment of psychiatric patients
 - Treatment of gynecological disorders, management of physiological delivery
 - Treatment of critical states in intensive care unit
 - Treatment of different profile disorders (cardiology, nephrology, pulmonology etc.)
 - Anesthesiology
 - Rehabilitation medicine
 - Treatment of different surgical profile disorders (e.g. urology, traumatology)

Medications and their administration

- Use of antibiotics and antibiotic resistance
- Principles of drug administration
- Specificities of drug administration in elderly
- Specificities of drug administration in small age
- Drug side effects

- Drug interrelations
- Transfusion of blood and blood products
- Action of drugs, pharmacokinetics
- Pharmacogenomics
- Drug groups
- Special drugs

Public health:

- Prevention of disease
- Life style, diet and meals
- Public health support
- Disease screening and surveillance
- Healthcare for the elderly
- Gender issues in public health
- Epidemiology
- Influence of cultural and ethical factors on healthcare
- Distribution of resources and healthcare economy
- Global health and inequality

Ethical and legal issues in medical practice:

- Patient rights
- Rights of individuals with limited capacities in medical service field
- Principles of attitude and collaboration with colleagues

Doctor's role in public health:

- Legislation related with medicine
- Professional regulation systems
- Clinical audit principles
- Healthcare availability routes

Medical graduate understands:

- Psychological aspects related to the patient's disease
- Importance of public health and healthcare measures, involvement in public health issues and effective working in healthcare system.

Skills

The medical graduate has sectoral skills including the following:

1. Patient consultation:

- Collects the medical history (anamnesis)
- Applies the physical examination
- Applies clinical reasoning and decision making
- Gives definitions and advices
- Provides patient support and keeping their rights
- Evaluates the patient's psychoemotional state

2. Assessment of clinical cases, setting the clinical investigation plan, making differential diagnosis, discussion about disease management plan

- Understands and assesses the difficulty of clinical manifestation of disease
- Administers the respective investigations and interprets the results
- Makes differential diagnosis

- Leads the discussion of disease management plan with patients and their caregivers
- Defines risks and benefits of treatment outcomes for the patient
- Provides care for patients in terminal stage and their families
- Provides the management of chronic diseases

3. Provision of first aid in medical emergencies (first aid and resuscitation skills), ability to define priorities

- Detects and evaluates emergency medical states (DRSABCDE)
- Provides age-specific basic first aid in neonates, infants and elderly
- Applies basic life support and CPR techniques according to recent guidelines
 - Provides first aid in traumas according to guidelines (performed on simulator)
 - Provides first aid in anaphylactic shock

4. Knowledge of drug prescription

- Provides correct and clear prescription of drugs, considering age-related aspects
- Correlates respective drugs with clinical context
- Discusses the relevance of drug or alternative treatment and evaluation of potential benefits and risks for the patient
 - Provides treatment of pain and distress
 - Considers the drug interrelations during administration of treatment

5. Application of practical procedures

- Implements the assessment of vital signs: pulse, respiration, temperature
- Implements blood pressure measurement (on patient)
- Implements saturation measurement (on patient)
- Implements washing of hands and dressing of gloves
- Implements peripheral venipuncture (on simulator)
- Implements insertion of peripheral vein catheter (on simulator)
- Implements venous injections and application of infusion set (on simulator)
- Implements subcutaneous and intramuscular injections (on simulator)
- Implements oxygen support (oxygenotherapy – on patient)
- Implements transportation of patients and their treatment (simulator / simulated patient)
- Implements application of sutures (simulator)
- Provides treatment of wounds and application of bandages (simulated patient)
- Implements urinary bladder catheterization (simulator)
- Implements performing urinalysis
- Implements recording of ECG (on patient)
- Implements ECG interpretation
- Applies functional respiratory tests
- Applies inhalation drugs
 - Implements sampling of nasal and nasopharyngeal swab test (on simulator)
 - Implements utilization and disposal of individual protective supplies (gloves, suit, medical glasses, shield, mask, respirator, footwear, cap)

6. Effective communication skills within medical context

- Guides effective communication with patients
- Guides effective communication with colleagues
- Guides effective communication for bad news

- Guides effective communication with relatives
- Guides effective communication with disabled persons
- Guides effective communication for getting informed consent
- Guides effective written communication (including medical records)
- Guides effective communication in case of conflict
- Guides effective communication via mediator
- Guides effective communication with legal officers and masmedia
- Guides effective communication with any person, despite of their social, cultural, religious or ethnic roots

7. Application of ethical and legal principles in medical practice

- Provides confidentiality
- Provides application of ethic principles and analysis skills during medical treatment
- Provides informed consent and making of respective records
- Provides issuance of death certificate
- Provides application for autopsy (according to Georgian legislation standards)
- Provides application of Georgian and international law principles during medical treatment
- Provides guidance of medical activity in multicultural society

8. Assessment of psychological and social aspects related to patient's disease

- Provides assessment of disease manifestation and its psychological burden on patient
- Provides assessment of disease manifestation and its social burden on patient
- Provides evaluation of disease-related stress
- Provides evaluation of alcohol and drug-related stress

9. Application of evidence-based principles, skills and knowledge

- Provides application of evidence-based principles in medical practice
- Provides correct definition and application of respective literature review
- Provides critical assessment of published literature, making of conclusions and its application in practice

10. Effective use of information and information technologies within medical context

- Provides adequate recording and filing of clinical notes
- Provides application of modern information technologies in practice
- Provides search for specific information resources
- Files of information and its application as needed;
- Has skills for portfolio making (personal records)

11. Application of biomedical scientific principles, methods and knowledge in medical practice and research

- Knows the methodology for scientific research and its application
- Knows the prevention of communicable and non-communicable diseases
- Has skills for making research hypothesis, study design, detailed planning, treatment of acquired data and making of conclusions
- Knows how to use biomedical science research novelties in clinical practice
- Knows how to produce scientific review/resume based on critical analysis of scientific literature in biomedical field
- Knows the ethic principles in scientific research

12. Implementation of health supporting measures, involvement in public health issues, effective collaboration in healthcare system

- Applies the treatment which minimizes the risk of any harm for the patient
- Applies the measures to prevent the infection breakout
- Understands their own health issues with regard to professional duties
- Assesses of their own health
- Participates in public health support measures and events as an individual as well as on population scale.

13. Professionalism

- Can lead the doctor-patient relationship with regard to responsibility and altruism
- Observes the ethic principles
- Shows proper attitude to colleagues
- Shows Empathy
- Shows time management skills
- Shows interprofessional skills
- Shows creativity
- Shows Leadership skills
- Shows Team working abilities
- Shows Readiness for continuous professional development

Responsibility and autonomy

The medical graduate is able to:

- Consult the patient independently
- Independently evaluate the clinical cases and administer the investigations, make differential diagnoses, develop and take responsibility for disease management plan
- Take responsibility on undertaking the medical practice considering the ethical and legal principles
- Independently evaluate the psycho-social aspects related to patient's disease
- Undertake medical practice without bias and based on ethical principles, work both independently and within team, creative thinking, propose initiative, work with multidisciplinary team, understand their own limits, take responsibility to search for assistance, proceed continuous self-development and life-long learning independently
- Reveal professional behavior and attitude in every aspect of medical practice, have fair, unbiased, modest attitude, reveal responsibility, empathy, respect, altruism, respect differences and keep confidentiality
- Have responsibility for providing high quality medical service and keeping high competence
- Understand and discuss ethical issues related to cases in practice
- Understand and manage conflict of interests
- Reveal professionalism in communication and its technologies
- Regularly judge and evaluate their own actions using internal or external data resources, in order to achieve perfection of learning and knowledge capacities
- Communicate by patient-oriented approach, which increases the trust and autonomy sense in patient, reveal empathy, respect and sympathy;

- Own the skills of optimizing physical environment for patient comfort, dignity, privacy, inclusion and safety
- Understand the situations when values, errors or views of patients, doctors or other medical professionals may have influence on patient care quality and respectively modifies the approach to patient
- Use innovatively the knowledge, technologies and methods
- Have their own self-esteem, initiative and pragmatism
- Have short and long term career and personal plans, aiming and working on precise direction with realistic development plan and respective actions
- Have positive relations with doctors and other colleagues, in order to substantiate and collaborational management of patient
- Participate in professional social life, within professional and other working frames
- Discuss and agree with doctors and other colleagues from healthcare system about overlapping and common responsibilities during episodic and ongoing management of patient
- Get involved in the process of common decision making together with doctors and other colleagues
- Reveal respect to other colleagues
- Develop strategies for mutual understanding, management of different point of views and conflict resolution in order to support collaborative environment
- Perform effective verbal and written communication for safe transfer of patient to other specialist, other environment or other management step.

Professionalism during work:

- Is able to define when there is a time to refer the patient management to other doctor of specialist
- Understands his/her own expertise frames and demonstrates the need of involving other professionals in the process for optimal care of the patient, which may include effective, respective and timely consultations

Is able to define, analyze and interpret the data, deal with informational and personal limits and taking respective decisions.

Student assessment system

The student assessment at single-level undergraduate medical education program provided by University Geomedi LLC is guided by the European Credit Transfer System (ECTS), law of Georgia on Higher Education and by order #03 of January 5, 2007 of Minister of Science and Education of Georgia on the Approval of the Procedures for Calculating Higher Education Programs with Credits and the assessment system defined by the above, which implies the following:

- **5 types of positive assessment:**
 - a.a) (A) excellent-91%-100%
 - a.b) (B) very good-81-90%
 - a.c) (C) good-71-80%
 - a.d) (D) satisfactory-61-70%
 - a.e) (E) acceptable-51-60%
- **2 types of negative assessments:**
 - b.a) (FX) couldn't pass- 41-50%-Which means that more work is needed. The student can enroll in independent work and is given the right of an additional test.

b.b) (F) Fail-Less than 40% Work carried out by the student is not enough and the student must retake the subject.

The term assessment of the student is defined by the sum of midterm assessment and final exam scores and is max. 100.

The summary assessment implies two components – midterm and final assessments. Each element has its percentage in overall assessment system, which is independently defined by the lecturer; (1) 70/30 or (2) 60/40, which means that in first case, intermediate assessment accounts for 70% of total summary scores, while the final exam gives only 30%; in second case, intermediate assessment accounts for 60% of total scores, while the final exam give only 40%.

Intermediate assessment is divided into several components (midterm exam, activity on seminars/practical classes, presentation, quiz, situational tasks, essays etc.); percentage of these components in total assessment is defined by the lecturer except for midterm exam itself, which is indispensable component of intermediate assessment (exceptions are clinical skills and clinical practice assessments) and its percentage in total scores: (1) in case of 70/30 system, midterm exam should account for 30 points, whereas in (2) case of 60/40 system – it must account for 20 points.

There is no minimal competency limit to midterm exam. Students is not allowed to retke midterm exam, except for the special cases due to which the exam was missed.

The minimal competency limit of intermediate assessment which also is the precondition for admission to final exam, is minimum 50% of intermediate assessment scores.

Final exam is an essential condition for final assessment. The minimal competency limit for passing the final exam is 50%+1 of total max. points; in case of getting less than minimal competency scores, the final exam assessment is nullified and if students term assessment is between 41-50, then they are granted the second chance to retake the final exam. If the student's intermediate assessment score is less than 41, then they must take this subject again. In case if student's intermediate assessment score is 51 or higher, they must overcome the minimal competency limit on final exam, otherwise the subject will be considered as failed.

Student can retake a second chance final exam in the same semester, not later than 5 days after the date of first final exam.

Assessment components are defined by the course supervisor according to the subject specificities.

Specific changes in assessment system was applied to following disciplines:

Life Science Block (including cell biology and genetics, medical chemistry, medical physics/biophysics, general biochemistry, cytology/embryology):

The assessment of a student will be held by 100 grade point system for each subject that is composed of: 60 grade points for intermediate assessments and 40 grade points for the final exam. The block will be considered as passed if arithmetic mean of summary points from final exam is > 51 points.

- The term activity points for each subject is composed of following assessment components:
- Term activity: participation in discussions, discussion about covered material, involvement in group, portfolio performance – 10 points
- **Summary quiz** – is done 2 times for each subject during the duration of this subject course, with test format; quizzes are 5 points for each, total – 10 points. Tests are present with multiple choice question format (usually 4 answer options) with one correct answer only.

- **Midterm exam** – Midterm exam is held for each subject separately by test format, with maximum of 20 points; the tests paper includes 20 tests with 1 point for each correct answer.
- The overall intermediate assessment score is max 60 points; the overall intermediate assessment score is calculated for each subject by summarizing the term activity (seminar activity – 20 points; summary quiz – 10 points, taken twice, total – 20 points; midterm exam – 20 points). For each subject, minimum competency score to be allowed to sit final exam, is 30 points.
- **Final exam** – Final exam in each subject is taken by test format, which is assessed by 40 points; exam paper includes 40 tests for each subject, which are represented by 4 possible answers, with only 1 correct answer. Each correct answer is assessed by 1 point. Final exam for each subject included in the block is assessed max by 40 points. Final assessment for each subject is calculated by summarizing the intermediate assessment and final exam assessment for each subject.

The passing minimum for final exam is 21 points (out of 40)

In order for the student to be admitted to final exam, their intermediate assessment points for the subject should be minimum 30.

In case of failing at final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must take the whole subject from beginning.

The student can retake the second chance exam in same semester (20th -21st week), not more than 5 days after 1st final exam.

Assessment of normal organ system modules is structured as given below:

The assessment of a student will be held by 100 point grade system that is composed of 60 points – including 40 points of intermediate assessments and 20 points of midterm exam, plus 40 grade points of the final exam.

❖ The term activity points include the following components:

Summary quiz – is done 1 time during the module, by test format, in each subject of the module separately, after completion of the full course topics, by respective lecturer of the subject; it is based on clinical case format and assessed by max 5 points (share value from the total max score – 2.8 points). The total summed score of quizzes held in all 5 subject components is max **14 points (2.8 x 5 = 14)**.

- The quiz includes **5 clinical cases** (each of them assessed by 1 point for correct answer). Clinical case is presented by multiple-choice test format with 4 options, with only 1 correct answer - **total - 5 points (1 x 5 = 5 points) in each subject component;**

- **Seminar activity** – for each component of the module, except for clinical skills (anatomy, physiology, histology, biochemistry) assessment is done on weekly basis, by 4 points every week. The final overall score will be counted by arithmetic mean principle, automatically, by dividing the total score on the number of weeks. **Total - 16 points;**

- **Seminar component must be assessed by the whole number:** 4 points – full, comprehensive answer; 3 points – good answer; 2 points – satisfactory answer; 1 point – incomplete answer; 0 point – no answer;

- **In order to be allowed to sit the final exam, minimum 1 point (out of 4) must be collected each subject component seminar activity (except for clinical skills);**

Clinical skills component assessment (total max 10 points) includes practical exam, which is held by situational tasks, on weekly basis throughout the module, with respective percentage of scores from

total 10 points; students are given situational tasks that they must manage independently and is evaluated by **0-5 points**. **The student can collect 0-10 points during the module. In order to be allowed to sit the final exam, the minimum competency score for clinical skills component is 5 points (out of 10).**

The clinical skills seminar component must be assessed by the whole number (0-5 points).

5 points – Student manages situational task very well (responds rapidly, is not confused in given situation, works in coordinated manner with colleagues, reveals very good clinical skills according to the case);

4 points – Student manages situational task well (responds in time, is not confused in respective situation, tries to work in coordinated manner with colleagues, reveals good clinical skills according to clinical case);

3 points – Student manages situational task in satisfactory manner (little confused due to given situation and cannot respond in time, tries to manage situation on expense of colleagues, reveals satisfactory clinical skills according to clinical case);

2 points – Student cannot manage situational task independently (is dependent on colleagues, reveals minimal clinical skills according to given clinical case);

1 points - Student cannot manage the situational task adequately, reveals clinical skills but not accordingly with the given case;

0 points - Student cannot manage situational task neither independently nor with colleagues, cannot reveal any clinical skills at all.

❖ **Midterm exam** – midterm exam is held in test format, in exam center, assessed by **max. 20 points**; the test is based on clinical cases, built on the knowledge of all subject components of the module. Each test includes 20 clinical cases in test format, with only one correct answer. Each of them is assessed by 1 point for correct answer.

❖ **Final exam – theory part of final exam is held in test format in exam center and is assessed by 28 points**; the test is based on clinical cases, built on the knowledge of all 5 subject components of the module, except for clinical skills. Theory test exam includes 28 tests, each test gives 4 answer options with only 1 correct answer. Each correct answer yields 1 point.

❖ **Final exam in clinical skills part:** is held in OSCE format (objectively structured clinical exam), at clinical simulation center of the university. The students give exam in OSCE stations, constructed accordingly with the module topics with respective number of stations, with 4 minutes given to each station. **OSCE exam total max score is 12 points. The number of stations and respectively, the shared value of points for each station will be individually defined for each module.**

Note: Several procedures (e.g. ABP measurement, basic first aid) must be implemented by all graduates at its full range (min. Competence score is 100%).

Minimum grade for passing final exam is 21 points (out of 40). Minimum grade for passing the test part of final exam is 15 points (out of 28) and 6 points (out of 12) for OSCE part of final exam.

Minimum competence score for admission to final exam is 30 points from intermediate assessments of module (out of 40, term activities + midterm exam). Therefore, in order for the student to be allowed to sit the final exam, the intermediate assessment score of the module must be minimum 30 points (out of 60). **The student who has less than 1 point in seminar assessment component of any of the subject of the module, also, if they have less than 5 points in seminar assessment of clinical skills component in the module, will not be allowed to sit the final exam.**

In case of failing the final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. If the student could not pass the minimal competence score in test part of the final exam, they will retake the test part only of Fx exam. If the student could not pass the minimum competence score in OSCE part of final exam, they will retake the OSCE part of the exam only. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must retake the whole module from new.

The student can retake the second chance exam in the same semester (20th -21st week), not earlier than 5 days following the initial final exam date.

Assessment of organ system pathology modules is structured as given below:

The assessment of a student will be held by 100 point grade system that is composed of 60 points – including 40 points of intermediate assessments and 20 points of midterm exam, plus 40 grade points of the final exam.

❖ The term activity points include the following components:

- **Summary quiz** – is done 1 time during the module, by test format, in each subject of the module separately, after completion of the full course topics, by respective lecturer of the subject; it is based on clinical case format and assessed by max 5 points (share value from the total max score – 4.6 points). The total summed score of quizzes held in all 5 subject components is max **14 points (4.6 x 3 = 14)**.
- The quiz includes **5 clinical cases** (each of them assessed by 1 point for correct answer). Clinical case is presented by multiple-choice test format with 4 options, with only 1 correct answer -**total - 5 points (1 x 5 = 5 points) in each subject component;**
- **Seminar activity** – for each component of the module, except for clinical skills (pathology, pharmacology) assessment is done on weekly basis, by 8 points every week. The final overall score will be counted by arithmetic mean principle, automatically, by dividing the total score on the number of weeks. **Total - 16 points;**
- **Seminar component must be assessed by the whole number:**
 - 8 points – full, comprehensive answer with correct and logical clinical reasoning;
 - 7 points – full answer, however, cannot substantiate with comprehensive clinical reasoning;
 - 6 points – correct answer, with general clinical reasoning;
 - 5 points – satisfactory answer, with simple clinical reasoning;
 - 4 points – satisfactory answer, with incomplete clinical reasoning;
 - 3 points – very general and superficial answer, without clinical reasoning;
 - 2 points – the material is not studied, however, student can participate in logical course of discussion;
 - 1 point – the material is not studied at all, however, can participate in discussion to minimal degree;
 - 0 point – absence of the answer, no participation in discussion.
- **In order to be allowed to sit the final exam, minimum 2 points (out of 8) must be collected each subject component seminar activity (except for clinical skills);**

Clinical skills component assessment (total max 10 points) includes practical exam, which is held by situational tasks, on weekly basis throughout the module, with respective percentage of scores from total 10 points; students are given situational tasks that they must manage independently and is

evaluated by 0-5 points. The student can collect 0-10 points during the module. In order to be allowed to sit the final exam, the minimum competency score for clinical skills component is 5 points (out of 10).

The clinical skills seminar component must be assessed by the whole number (0-5 points).

5 points – Student manages situational task very well (responds rapidly, is not confused in given situation, works in coordinated manner with colleagues, reveals very good clinical skills according to the case);

4 points – Student manages situational task well (responds in time, is not confused in respective situation, tries to work in coordinated manner with colleagues, reveals good clinical skills according to clinical case);

3 points – Student manages situational task in satisfactory manner (little confused due to given situation and cannot respond in time, tries to manage situation on expense of colleagues, reveals satisfactory clinical skills according to clinical case);

2 points – Student cannot manage situational task independently (is dependent on colleagues, reveals minimal clinical skills according to given clinical case);

1 points - Student cannot manage the situational task adequately, reveals clinical skills but not accordingly with the given case;

0 points - Student cannot manage situational task neither independently nor with colleagues, cannot reveal any clinical skills at all.

❖ **Midterm exam** – midterm exam is held in test format, in exam center, assessed by **max. 20 points**; the test is based on clinical cases, built on the knowledge of all 3 subject components of the module. Each test includes 20 clinical cases in test format, with only one correct answer. Each of them is assessed by 1 point for correct answer.

❖ **Final exam – theory part of final exam is held in test format in exam center and is assessed by 24 points**; the test is based on clinical cases, built on the knowledge of all subject components of the module, except for clinical skills. Theory test exam includes 24 tests, each test gives 4 answer options with only 1 correct answer. Each correct answer yields 1 point.

❖ **Final exam in clinical skills part:** is held in OSCE format (objectively structured clinical exam), at clinical simulation center of the university. The students give exam in OSCE stations, constructed accordingly with the module topics with respective number of stations, with 4 minutes given to each station. **OSCE exam total max score is 16 points. The number of stations and respectively, the shared value of points for each station will be individually defined for each module.**

Note: Several procedures (e.g. ABP measurement, basic first aid) must be implemented by all graduates at its full range (min. Competence score is 100%).

Minimum grade for passing final exam is 21 points (out of 40). Minimum grade for passing the test part of final exam is 13 points (out of 24) and 8 points (out of 16) for OSCE part of final exam.

Minimum competence score for admission to final exam is 30 points from intermediate assessments of module (out of 40, term activities + midterm exam). Therefore, in order for the student to be allowed to sit the final exam, the intermediate assessment score of the module must be minimum 30 points (out of 60). **The student who has less than 2 points in seminar assessment component of any of the subject of the module, also, if they have less than 5 points in seminar assessment of clinical skills component in the module, will not be allowed to sit the final exam.**

In case of failing the final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. If the student could not pass the minimal competence score in test part of the final exam, they will retake the test part only of Fx exam. If

the student could not pass the minimum competence score in OSCE part of final exam, they will retake the OSCE part of the exam only. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must retake the whole module from new.

The student can retake the second chance exam in the same semester (20th -21st week), not earlier than 5 days following the initial final exam date.

In clinical disciplines.

Mini-CEX exam has the minimum competency barrier (5 point out of 10 max) and represents the mandatory component of intermediate assessment for clinical rotation-based academic courses. The student that cannot surpass the minimum competency barrier of Mini-CEX exam, is not allowed to sit final exam of the academic course.

Midterm exam is assessed by 20 points, minimum competency score – 10 points; midterm exam is held in complex manner:

- 1) Test-based part, including clinical-case based MCQ questions – assessed by 10 points, minimum competency barrier – 5 points;
- 2) Mini-CEX exam – held at clinical department, assessed by 10 points, minimum competency barrier – 5 points; (see the attached Mini-CEX formative assessment checklist).

The student that cannot pass the minimum competency barrier, will not be allowed to sit the final exam.

The minimum grade point for the positive intermediate assessment is 30 points (the student is allowed to sit final exam only if they have collected minimum 30 points from intermediate assessment).

❖ **Final exam** is assessed with 40 points; it is held in complex manner, including: 1) test format exam, including tests based on clinical cases, is held in exam center – assessed by 20 points; 2) OSCE – is held in clinical simulation center, The students give exam in OSCE stations, constructed accordingly with the module topics with respective number of stations, with 4 minutes given to each station. **OSCE exam total max score is 20 points.**

❖ **The number of stations and respectively, the shared value of points for each station will be individually defined for each clinical rotation.**

Note: Several procedures (e.g. ABP measurement, basic first aid, catheterization, ECG recording technique etc.) must be implemented by all graduates at its full range (min. Competence score is 100%).

Minimum competence score for admission to final exam is 30 points from intermediate assessments of clinical rotation (out of 40, term activities + midterm exam). Therefore, in order for the student to be allowed to sit the final exam, the intermediate assessment score of the module must be minimum 30 points (out of 60).

The test part of final exam will be held immediately after completion of clinical rotation, with 1-day interval, and the OSCE part of final exam will be held at the end of the semester, within the dates of final exams period, defined by the academic semester frames.

Minimum grade for passing final exam is 21 points (out of 40). Minimum grade for passing the test part of final exam is 11 points (out of 20) and 10 points (out of 20) for OSCE part of final exam.

In case of failing the final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. If the student could not pass the minimal competence score in test part of the final exam, they will retake the test part only of Fx exam. If the student could not pass the minimum competence score in OSCE part of final exam, they will retake

the OSCE part of the exam only. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must retake the whole module from new.

The student can retake the second chance exam in the same semester (20th -21st week), not earlier than 5 days following the initial final exam date.

Employment field

The medical graduate can be employed as Doctor Assistant (“Junior Doctor”), performing their function under the supervision, guidance and responsibility of the person legally empowered to do the independent medical activity (law of Georgia about “Medical Activity” art.5). the graduate of the educational program has the legal right to: a) take the postgraduate residency course (in Georgia or abroad on the equivalent professional program, which is approved by the legislation of that country) and after passing the unified national certification exam, gain the official right of independent medical activity (law of Georgia about “Medical Activity” art. 17); b) continue their study at doctorate level as PhD student, take on the lecturing or the scientific activity; c) get employed in healthcare organizations which do not require independent medical activity.

One Step Educational Program for Medicine (English Medium)

One Step Educational Program for Medicine

Program Supervisor – Associate Professor Nino Otarishvili, MD, PhD

Program Co-Supervisor – Doctor of Medicine Wolf Christopher J. A. (Germany)

Qualification to be awarded - Medical Doctor (MD)

Program Volume by ECTS – 360 ECTS

Language of Instruction - English

Preconditions for admission to the program

One Step Undergraduate Educational Program for MD can be attended by a person holding a state certificate confirming the completion of full basic educational level (National School Leaving Certificate) or its equivalent, who will pass the Unified National Examination and based on the obtained scores, will gain the right to study at university on the specialty of medicine, or the applicants under the Law of Georgia on Higher Education, Article 52, para 3.

Admission of foreign citizens is regulated according to legislation established by the Ministry of Education and Science of Georgia. In accordance with the law of Georgia on Higher Education, Article 52, para 3, foreign citizen candidates seeking for admission to educational program are required to hold the document certifying the knowledge of English (not less than B1 level), by internationally recognized certificate (IELTS, TOEFL, Cambridge English, UNICert®, EnglishScore etc.)

Or

Present the document certifying the education covered in English language for foreign citizens (e.g. school leaving certificate, college diploma etc.), also Georgian citizens, having covered the full basic education in English abroad, or its equivalent, who have studied last 2 years at the basic education level abroad, must present respective document certifying the latter (e.g. school leaving certificate, college diploma etc.)

Or

Pass the exam organized by the university for foreign citizen candidate, certifying the knowledge competency level in English, minimum at the abovementioned (B1) level (exam must include the following components: listening, reading and reasoning / analysis of the text, speaking).

Structure of the program

The medical doctor education program takes 6 years of undergraduate study. This involves 360 credits, from which 330 credits are compulsory. The latter itself includes the following:

Specialty basic compulsory courses: 17 credits for the sciences studying the normal development, structure and functioning of human body (Principles of genetics, medical chemistry, medical physics, general biochemistry, cytology and embryology), which are incorporated into one comprehensive educational block named “Life Sciences”.

Specialty basic compulsory integrated courses: 63 credits; it involves thematically integrated biomedical sciences and normal structure and functioning of human body (normal organ system modules, each of them including normal human anatomy, physiology, biochemistry, histology and clinical skills components).

Specialty pre-clinical compulsory integrated courses: 52 credits; it involves pathology of organ systems modules (each of them including pathology, pharmacology and clinical skills / propedeutics components); this also includes general pathology, general pharmacology, general surgery, microbiology, virology and immunology subjects.

Specialty clinical compulsory courses: 157 credits

Specialty compulsory courses: 28 credits

Scientific skills compulsory courses: 13 credits

Free elective courses: 30 credits; from these, the student has freedom to choose practice in clinic max. 10 credits and/or scientific work for max. 10 credits, and other credits can be filled by other elective study courses offered by the program.

1 ECTS = 25 academic hours.

1 academic year: 42 weeks

Duration of semester: 21 weeks (including: lectures and seminars – 15 weeks, exams – 4 weeks; Additional exams – 2 weeks).

Semesters VII, VIII, IX, X, XI, XII – teaching by clinical rotations.

Precondition for awarding the qualification

The medical doctor qualification is earned by a student who collects not less than 360 credits after completion of the education program.

The goal of the education program

The goal of MD undergraduate higher education program is consistent with the University mission, which implies the training of qualified competitive medical graduates, able to get employed easily both at local or international market, according to their qualifications.

The program goals include: development of competencies relevant to international standards which are indispensable for the graduates to perform their practice; the latter implies acquiring of theoretical knowledge as well as development of scientific and clinical skills, ethical values and professional responsibilities inherent for doctor's profession. In addition, the program also prepares the graduates to pursue their further professional career, in residency, at doctorate degree, or at alternative postgraduate study courses; the program encourages the scientific activity in theoretical fields of medicine and other healthcare areas, which do not imply independent medical activity.

Program goals also imply the giving of medical education indispensable for the implementation of medical doctor activities which is compatible with World Federation of Medical Education (WFME) standards, national qualification frame and field descriptors of higher education.

The program goal is to give the medical graduate the knowledge, competencies and skills of the field needed for their independent activity as a doctor; these include: **medical knowledge** – fundamental knowledge of biomedical, behavioral, social and clinical sciences; **clinical reasoning** – ability to assess clinical cases, develop the investigation plan, differentiate the diagnosis, develop the disease treatment plan, participate in medical board; **practical skills** – providing the emergency medical care, development of skills for drug prescription, providing practical medical procedures, communication skills with patients, their families and colleagues, guide their medical activity by legal and ethical principles, providing individual approach to patients, considering the psycho-social aspects of their disease, application of evidence-based principles and knowledge, searching, collecting, treating and effective application of analyzed information within medical context, application of scientific-research principles and methods in practical activity, involvement in public health issues and effective collaboration within healthcare system, providing a quality medical service and readiness for professional growth, high responsibility for professional ethics, tolerance, empathy and confidentiality, critical thinking and self-criticism, gaining the skills of independent as well as group working with multidisciplinary team, communication skills both in their mother language as well as in foreign languages.

Study outcomes:

Knowledge and understanding

The medical graduate has sectoral knowledge which includes biomedical, behavioral, social, clinical sciences and fundamental sectoral principles of the field.

The medical graduate has fundamental and profound knowledge in the following fields:

Biomedical sciences:

- Normal function of human body (physiology)
- Normal structure of human body (anatomy, histology)
- Normal metabolism and hormonal function of human body (biochemistry)
- Normal immune function of human body and microbiology

- Normal cell biology
- Normal molecular biology
- Normal human development (embryology)

Behavioral and social sciences:

- Psychology
- Human development (infant, adolescent, adult, elderly)
- Sociology

Clinical sciences:

- Pathological structure and mechanism of disease (pathology)
- Infection (microbiology)
- Immunity and immune disorders
- Clinical immunology
- Genetics and inherited disorders
- Knowledge of clinical sciences in different medical specialties and subspecialties;
- Clinical access and experience gained by clinical practice in the following fields of medical service:
 - Treatment of patients with acute disorders on site of accident and in emergency department
 - Treatment of internal diseases in ambulatory department
 - Practice in primary health care setting
 - Treatment of elderly patients
 - Treatment of pediatric patients
 - Treatment of patients in terminal stage, palliative care
 - Treatment of psychiatric patients
 - Treatment of gynecological disorders, management of physiological delivery
 - Treatment of critical states in intensive care unit
 - Treatment of different profile disorders (cardiology, nephrology, pulmonology etc.)
 - Anesthesiology
 - Rehabilitation medicine
 - Treatment of different surgical profile disorders (e.g. urology, traumatology)

Medications and their administration

- Use of antibiotics and antibiotic resistance
- Principles of drug administration
- Specificities of drug administration in elderly
- Specificities of drug administration in small age
- Drug side effects
- Drug interrelations
- Transfusion of blood and blood products
- Action of drugs, pharmacokinetics
- Pharmacogenomics
- Drug groups
- Special drugs

Public health:

- Prevention of disease
- Life style, diet and meals

- Public health support
- Disease screening and surveillance
- Healthcare for the elderly
- Gender issues in public health
- Epidemiology
- Influence of cultural and ethical factors on healthcare
- Distribution of resources and healthcare economy
- Global health and inequality

Ethical and legal issues in medical practice:

- Patient rights
- Rights of individuals with limited capacities in medical service field
- Principles of attitude and collaboration with colleagues

Doctor's role in public health:

- Legislation related with medicine
- Professional regulation systems
- Clinical audit principles
- Healthcare availability routes

Medical graduate understands:

- Psychological aspects related to the patient's disease
- Importance of public health and healthcare measures, involvement in public health issues and effective working in healthcare system.

Skills

The medical graduate has sectoral skills including the following:

2. Patient consultation:

- Collects the medical history (anamnesis)
- Applies the physical examination
- Applies clinical reasoning and decision making
- Gives definitions and advices
- Provides patient support and keeping their rights
- Evaluates the patient's psychoemotional state

2. Assessment of clinical cases, setting the clinical investigation plan, making differential diagnosis, discussion about disease management plan

- Understands and assesses the difficulty of clinical manifestation of disease
- Administers the respective investigations and interprets the results
- Makes differential diagnosis
- Leads the discussion of disease management plan with patients and their caregivers
- Defines risks and benefits of treatment outcomes for the patient
- Provides care for patients in terminal stage and their families
- Provides the management of chronic diseases

3. Provision of first aid in medical emergencies (first aid and resuscitation skills), ability to define priorities

- Detects and evaluates emergency medical states (DRSABCDE)
- Provides age-specific basic first aid in neonates, infants and elderly

- Applies basic life support and CPR techniques according to recent guidelines
- Provides first aid in traumas according to guidelines (performed on simulator)
- Provides first aid in anaphylactic shock

4. Knowledge of drug prescription

- Provides correct and clear prescription of drugs, considering age-related aspects
- Correlates respective drugs with clinical context
- Discusses the relevance of drug or alternative treatment and evaluation of potential benefits and risks for the patient
- Provides treatment of pain and distress
- Considers the drug interrelations during administration of treatment

6. Application of practical procedures

- Implements the assessment of vital signs: pulse, respiration, temperature
- Implements blood pressure measurement (on patient)
- Implements saturation measurement (on patient)
- Implements washing of hands and dressing of gloves
- Implements peripheral venipuncture (on simulator)
- Implements insertion of peripheral vein catheter (on simulator)
- Implements venous injections and application of infusion set (on simulator)
- Implements subcutaneous and intramuscular injections (on simulator)
- Implements oxygen support (oxygenotherapy – on patient)
- Implements transportation of patients and their treatment (simulator / simulated patient)
- Implements application of sutures (simulator)
- Provides treatment of wounds and application of bandages (simulated patient)
- Implements urinary bladder catheterization (simulator)
- Implements performing urinalysis
- Implements recording of ECG (on patient)
- Implements ECG interpretation
- Applies functional respiratory tests
- Applies inhalation drugs
- Implements sampling of nasal and nasopharyngeal swab test (on simulator)
- Implements utilization and disposal of individual protective supplies (gloves, suit, medical glasses, shield, mask, respirator, footwear, cap)

6. Effective communication skills within medical context

- Guides effective communication with patients
- Guides effective communication with colleagues
- Guides effective communication for bad news
- Guides effective communication with relatives
- Guides effective communication with disabled persons
- Guides effective communication for getting informed consent
- Guides effective written communication (including medical records)
- Guides effective communication in case of conflict
- Guides effective communication via mediator
- Guides effective communication with legal officers and mass media

- Guides effective communication with any person, despite of their social, cultural, religious or ethnic roots
- 8. Application of ethical and legal principles in medical practice**
- Provides confidentiality
 - Provides application of ethic principles and analysis skills during medical treatment
 - Provides informed consent and making of respective records
 - Provides issuance of death certificate
 - Provides application for autopsy (according to Georgian legislation standards)
 - Provides application of Georgian and international law principles during medical treatment
 - Provides guidance of medical activity in multicultural society
- 8. Assessment of psychological and social aspects related to patient's disease**
- Provides assessment of disease manifestation and its psychological burden on patient
 - Provides assessment of disease manifestation and its social burden on patient
 - Provides evaluation of disease-related stress
 - Provides evaluation of alcohol and drug-related stress
- 9. Application of evidence-based principles, skills and knowledge**
- Provides application of evidence-based principles in medical practice
 - Provides correct definition and application of respective literature review
 - Provides critical assessment of published literature, making of conclusions and its application in practice
- 11. Effective use of information and information technologies within medical context**
- Provides adequate recording and filing of clinical notes
 - Provides application of modern information technologies in practice
 - Provides search for specific information resources
 - Files of information and its application as needed;
 - Has skills for portfolio making (personal records)
- 11. Application of biomedical scientific principles, methods and knowledge in medical practice and research**
- Knows the methodology for scientific research and its application
 - Knows the prevention of communicable and non-communicable diseases
 - Has skills for making research hypothesis, study design, detailed planning, treatment of acquired data and making of conclusions
 - Knows how to use biomedical science research novelties in clinical practice
 - Knows how to produce scientific review/resume based on critical analysis of scientific literature in biomedical field
 - Knows the ethic principles in scientific research
- 12. Implementation of health supporting measures, involvement in public health issues, effective collaboration in healthcare system**
- Applies the treatment which minimizes the risk of any harm for the patient
 - Applies the measures to prevent the infection breakout
 - Understands their own health issues with regard to professional duties
 - Assesses of their own health

- Participates in public health support measures and events as an individual as well as on population scale.

13. Professionalism

- Can lead the doctor-patient relationship with regard to responsibility and altruism
- Observes the ethic principles
- Shows proper attitude to colleagues
- Shows Empathy
- Shows time management skills
- Shows interprofessional skills
- Shows creativity
- Shows Leadership skills
- Shows Team working abilities
- Shows Readiness for continuous professional development

Responsibility and autonomy

The medical graduate is able to:

- Consult the patient independently
- Independently evaluate the clinical cases and administer the investigations, make differential diagnoses, develop and take responsibility for disease management plan
- Take responsibility on undertaking the medical practice considering the ethical and legal principles
- Independently evaluate the psycho-social aspects related to patient's disease
- Undertake medical practice without bias and based on ethical principles, work both independently and within team, creative thinking, propose initiative, work with multidisciplinary team, understand their own limits, take responsibility to search for assistance, proceed continuous self-development and life-long learning independently
- Reveal professional behavior and attitude in every aspect of medical practice, have fair, unbiased, modest attitude, reveal responsibility, empathy, respect, altruism, respect differences and keep confidentiality
- Have responsibility for providing high quality medical service and keeping high competence
- Understand and discuss ethical issues related to cases in practice
- Understand and manage conflict of interests
- Reveal professionalism in communication and its technologies
- Regularly judge and evaluate their own actions using internal or external data resources, in order to achieve perfection of learning and knowledge capacities
- Communicate by patient-oriented approach, which increases the trust and autonomy sense in patient, reveal empathy, respect and sympathy;
- Own the skills of optimizing physical environment for patient comfort, dignity, privacy, inclusion and safety
- Understand the situations when values, errors or views of patients, doctors or other medical professionals may have influence on patient care quality and respectively modifies the approach to patient
- Use innovatively the knowledge, technologies and methods
- Have their own self-esteem, initiative and pragmatism

- Have short and long term career and personal plans, aiming and working on precise direction with realistic development plan and respective actions
- Have positive relations with doctors and other colleagues, in order to substantiate and collaborational management of patient
- Participate in professional social life, within professional and other working frames
- Discuss and agree with doctors and other colleagues from healthcare system about overlapping and common responsibilities during episodic and ongoing management of patient
- Get involved in the process of common decision making together with doctors and other colleagues
- Reveal respect to other colleagues
- Develop strategies for mutual understanding, management of different point of views and conflict resolution in order to support collaborative environment
- Perform effective verbal and written communication for safe transfer of patient to other specialist, other environment or other management step.

Professionalism during work:

- Is able to define when there is a time to refer the patient management to other doctor of specialist
- Understands his/her own expertise frames and demonstrates the need of involving other professionals in the process for optimal care of the patient, which may include effective, respective and timely consultations

Is able to define, analyze and interpret the data, deal with informational and personal limits and taking respective decisions.

Student assessment system

The student assessment at single-level undergraduate medical education program provided by University Geomedi LLC is guided by the European Credit Transfer System (ECTS), law of Georgia on Higher Education and by order #03 of January 5, 2007 of Minister of Science and Education of Georgia on the Approval of the Procedures for Calculating Higher Education Programs with Credits and the assessment system defined by the above, which implies the following:

- **5 types of positive assessment:**
 - a.a) (A) excellent-91%-100%
 - a.b) (B) very good-81-90%
 - a.c) (C) good-71-80%
 - a.d) (D) satisfactory-61-70%
 - a.e) (E) acceptable-51-60%
- **2 types of negative assessments:**
 - b.a) (FX) couldn't pass- 41-50%- Which means that more work is needed. The student can enroll in independent work and is given the right of an additional test.
 - b.b) (F) Fail-Less than 40% Work carried out by the student is not enough and the student must retake the subject.

The term assessment of the student is defined by the sum of midterm assessment and final exam scores and is max. 100.

The summary assessment implies two components – midterm and final assessments. Each element has its percentage in overall assessment system, which is independently defined by the lecturer; (1) 70/30 or (2) 60/40, which means that in first case, intermediate assessment accounts for 70% of total summary scores,

while the final exam gives only 30%; in second case, intermediate assessment accounts for 60% of total scores, while the final exam give only 40%.

Intermediate assessment is divided into several components (midterm exam, activity on seminars/practical classes, presentation, quiz, situational tasks, essays etc.); percentage of these components in total assessment is defined by the lecturer except for midterm exam itself, which is indispensable component of intermediate assessment (exceptions are clinical skills and clinical practice assessments) and its percentage in total scores: (1) in case of 70/30 system, midterm exam should account for 30 points, whereas in (2) case of 60/40 system – it must account for 20 points.

There is no minimal competency limit to midterm exam. Students is not allowed to retake midterm exam, except for the special cases due to which the exam was missed.

The minimal competency limit of intermediate assessment which also is the precondition for admission to final exam, is minimum 50% of intermediate assessment scores.

Final exam is an essential condition for final assessment. The minimal competency limit for passing the final exam is 50%+1 of total max. points; in case of getting less than minimal competency scores, the final exam assessment is nullified and if students term assessment is between 41-50, then they are granted the second chance to retake the final exam. If the student's intermediate assessment score is less than 41, then they must take this subject again. In case if student's intermediate assessment score is 51 or higher, they must overcome the minimal competency limit on final exam, otherwise the subject will be considered as failed.

Student can retake a second chance final exam in the same semester, not later than 5 days after the date of first final exam.

Assessment components are defined by the course supervisor according to the subject specificities.

Specific changes in assessment system was applied to following disciplines:

Life Science Block (including cell biology and genetics, medical chemistry, medical physics/biophysics, general biochemistry, cytology/embryology):

The assessment of a student will be held by 100 grade point system for each subject that is composed of: 60 grade points for intermediate assessments and 40 grade points for the final exam. The block will be considered as passed if arithmetic mean of summary points from final exam is > 51 points.

- The term activity points for each subject is composed of following assessment components:
- Term activity: participation in discussions, discussion about covered material, involvement in group, portfolio performance – 10 points
- **Summary quiz** – is done 2 times for each subject during the duration of this subject course, with test format; quizzes are 5 points for each, total – 10 points. Tests are present with multiple choice question format (usually 4 answer options) with one correct answer only.
- **Midterm exam** – Midterm exam is held for each subject separately by test format, with maximum of 20 points; the tests paper includes 20 tests with 1 point for each correct answer.
- The overall intermediate assessment score is max 60 points; the overall intermediate assessment score is calculated for each subject by summarizing the term activity (seminar activity – 20 points; summary quiz – 10 points, taken twice, total – 20 points; midterm exam – 20 points). For each subject, minimum competency score to be allowed to sit final exam, is 30 points.
- **Final exam** – Final exam in each subject is taken by test format, which is assessed by 40 points; exam paper includes 40 tests for each subject, which are represented by 4 possible answers, with

only 1 correct answer. Each correct answer is assessed by 1 point. Final exam for each subject included in the block is assessed max by 40 points. Final assessment for each subject is calculated by summarizing the intermediate assessment and final exam assessment for each subject.

The passing minimum for final exam is 21 points (out of 40)

In order for the student to be admitted to final exam, their intermediate assessment points for the subject should be minimum 30.

In case of failing at final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must take the whole subject from beginning.

The student can retake the second chance exam in same semester (20th -21st week), not more than 5 days after 1st final exam.

Assessment of normal organ system modules is structured as given below:

The assessment of a student will be held by 100 point grade system that is composed of 60 points – including 40 points of intermediate assessments and 20 points of midterm exam, plus 40 grade points of the final exam.

❖ The term activity points include the following components:

Summary quiz – is done 1 time during the module, by test format, in each subject of the module separately, after completion of the full course topics, by respective lecturer of the subject; it is based on clinical case format and assessed by max 5 points (share value from the total max score – 2.8 points). The total summed score of quizzes held in all 5 subject components is max **14 points (2.8 x 5 = 14)**.

- The quiz includes **5 clinical cases** (each of them assessed by 1 point for correct answer). Clinical case is presented by multiple-choice test format with 4 options, with only 1 correct answer - **total - 5 points (1 x 5 = 5 points) in each subject component;**

- **Seminar activity** – for each component of the module, except for clinical skills (anatomy, physiology, histology, biochemistry) assessment is done on weekly basis, by 4 points every week. The final overall score will be counted by arithmetic mean principle, automatically, by dividing the total score on the number of weeks. **Total - 16 points;**

- **Seminar component must be assessed by the whole number:** 4 points – full, comprehensive answer; 3 points – good answer; 2 points – satisfactory answer; 1 point – incomplete answer; 0 point – no answer;

- **In order to be allowed to sit the final exam, minimum 1 point (out of 4) must be collected each subject component seminar activity (except for clinical skills);**

Clinical skills component assessment (total max 10 points) includes practical exam, which is held by situational tasks, on weekly basis throughout the module, with respective percentage of scores from total 10 points; students are given situational tasks that they must manage independently and is evaluated by **0-5 points**. **The student can collect 0-10 points during the module. In order to be allowed to sit the final exam, the minimum competency score for clinical skills component is 5 points (out of 10).**

The clinical skills seminar component must be assessed by the whole number (0-5 points).

5 points – Student manages situational task very well (responds rapidly, is not confused in given situation, works in coordinated manner with colleagues, reveals very good clinical skills according to the case);

4 points – Student manages situational task well (responds in time, is not confused in respective situation, tries to work in coordinated manner with colleagues, reveals good clinical skills according to clinical case);

3 points – Student manages situational task in satisfactory manner (little confused due to given situation and cannot respond in time, tries to manage situation on expense of colleagues, reveals satisfactory clinical skills according to clinical case);

2 points – Student cannot manage situational task independently (is dependent on colleagues, reveals minimal clinical skills according to given clinical case);

1 points - Student cannot manage the situational task adequately, reveals clinical skills but not accordingly with the given case;

0 points - Student cannot manage situational task neither independently nor with colleagues, cannot reveal any clinical skills at all.

❖ **Midterm exam** – midterm exam is held in test format, in exam center, assessed by **max. 20 points**; the test is based on clinical cases, built on the knowledge of all subject components of the module. Each test includes 20 clinical cases in test format, with only one correct answer. Each of them is assessed by 1 point for correct answer.

❖ **Final exam – theory part of final exam is held in test format in exam center and is assessed by 28 points**; the test is based on clinical cases, built on the knowledge of all 5 subject components of the module, except for clinical skills. Theory test exam includes 28 tests, each test gives 4 answer options with only 1 correct answer. Each correct answer yields 1 point.

❖ **Final exam in clinical skills part:** is held in OSCE format (objectively structured clinical exam), at clinical simulation center of the university. The students give exam in OSCE stations, constructed accordingly with the module topics with respective number of stations, with 4 minutes given to each station. **OSCE exam total max score is 12 points. The number of stations and respectively, the shared value of points for each station will be individually defined for each module.**

Note: Several procedures (e.g. ABP measurement, basic first aid) must be implemented by all graduates at its full range (min. Competence score is 100%).

Minimum grade for passing final exam is 21 points (out of 40). Minimum grade for passing the test part of final exam is 15 points (out of 28) and 6 points (out of 12) for OSCE part of final exam.

Minimum competence score for admission to final exam is 30 points from intermediate assessments of module (out of 40, term activities + midterm exam). Therefore, in order for the student to be allowed to sit the final exam, the intermediate assessment score of the module must be minimum 30 points (out of 60). **The student who has less than 1 point in seminar assessment component of any of the subject of the module, also, if they have less than 5 points in seminar assessment of clinical skills component in the module, will not be allowed to sit the final exam.**

In case of failing the final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. If the student could not pass the minimal competence score in test part of the final exam, they will retake the test part only of Fx exam. If the student could not pass the minimum competence score in OSCE part of final exam, they will retake the OSCE part of the exam only. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must retake the whole module from new.

The student can retake the second chance exam in the same semester (20th -21st week), not earlier than 5 days following the initial final exam date.

Assessment of organ system pathology modules is structured as given below:

The assessment of a student will be held by 100 point grade system that is composed of 60 points – including 40 points of intermediate assessments and 20 points of midterm exam, plus 40 grade points of the final exam.

❖ The term activity points include the following components:

- **Summary quiz** – is done 1 time during the module, by test format, in each subject of the module separately, after completion of the full course topics, by respective lecturer of the subject; it is based on clinical case format and assessed by max 5 points (share value from the total max score – 4.6 points). The total summed score of quizzes held in all 5 subject components is max **14 points (4.6 x 3 = 14)**.
- The quiz includes **5 clinical cases** (each of them assessed by 1 point for correct answer). Clinical case is presented by multiple-choice test format with 4 options, with only 1 correct answer -**total - 5 points (1 x 5 = 5 points) in each subject component;**
- **Seminar activity** – for each component of the module, except for clinical skills (pathology, pharmacology) assessment is done on weekly basis, by 8 points every week. The final overall score will be counted by arithmetic mean principle, automatically, by dividing the total score on the number of weeks. **Total - 16 points;**
- **Seminar component must be assessed by the whole number:**
 - 8 points – full, comprehensive answer with correct and logical clinical reasoning;
 - 7 points – full answer, however, cannot substantiate with comprehensive clinical reasoning;
 - 6 points – correct answer, with general clinical reasoning;
 - 5 points – satisfactory answer, with simple clinical reasoning;
 - 4 points – satisfactory answer, with incomplete clinical reasoning;
 - 3 points – very general and superficial answer, without clinical reasoning;
 - 2 points – the material is not studied, however, student can participate in logical course of discussion;
 - 1 point – the material is not studied at all, however, can participate in discussion to minimal degree;
 - 0 point – absence of the answer, no participation in discussion.
- **In order to be allowed to sit the final exam, minimum 2 points (out of 8) must be collected each subject component seminar activity (except for clinical skills);**

Clinical skills component assessment (total max 10 points) includes practical exam, which is held by situational tasks, on weekly basis throughout the module, with respective percentage of scores from total 10 points; students are given situational tasks that they must manage independently and is evaluated by **0-5 points**. **The student can collect 0-10 points during the module. In order to be allowed to sit the final exam, the minimum competency score for clinical skills component is 5 points (out of 10).**

The clinical skills seminar component must be assessed by the whole number (0-5 points).

5 points – Student manages situational task very well (responds rapidly, is not confused in given situation, works in coordinated manner with colleagues, reveals very good clinical skills according to the case);

4 points – Student manages situational task well (responds in time, is not confused in respective situation, tries to work in coordinated manner with colleagues, reveals good clinical skills according to clinical case);

3 points – Student manages situational task in satisfactory manner (little confused due to given situation and cannot respond in time, tries to manage situation on expense of colleagues, reveals satisfactory clinical skills according to clinical case);

2 points – Student cannot manage situational task independently (is dependent on colleagues, reveals minimal clinical skills according to given clinical case);

1 points - Student cannot manage the situational task adequately, reveals clinical skills but not accordingly with the given case;

0 points - Student cannot manage situational task neither independently nor with colleagues, cannot reveal any clinical skills at all.

❖ **Midterm exam** – midterm exam is held in test format, in exam center, assessed by **max. 20 points**; the test is based on clinical cases, built on the knowledge of all 3 subject components of the module. Each test includes 20 clinical cases in test format, with only one correct answer. Each of them is assessed by 1 point for correct answer.

❖ **Final exam – theory part of final exam is held in test format in exam center and is assessed by 24 points**; the test is based on clinical cases, built on the knowledge of all subject components of the module, except for clinical skills. Theory test exam includes 24 tests, each test gives 4 answer options with only 1 correct answer. Each correct answer yields 1 point.

❖ **Final exam in clinical skills part:** is held in OSCE format (objectively structured clinical exam), at clinical simulation center of the university. The students give exam in OSCE stations, constructed accordingly with the module topics with respective number of stations, with 4 minutes given to each station. **OSCE exam total max score is 16 points. The number of stations and respectively, the shared value of points for each station will be individually defined for each module.**

Note: Several procedures (e.g. ABP measurement, basic first aid) must be implemented by all graduates at its full range (min. Competence score is 100%).

Minimum grade for passing final exam is 21 points (out of 40). Minimum grade for passing the test part of final exam is 13 points (out of 24) and 8 points (out of 16) for OSCE part of final exam.

Minimum competence score for admission to final exam is 30 points from intermediate assessments of module (out of 40, term activities + midterm exam). Therefore, in order for the student to be allowed to sit the final exam, the intermediate assessment score of the module must be minimum 30 points (out of 60). **The student who has less than 2 points in seminar assessment component of any of the subject of the module, also, if they have less than 5 points in seminar assessment of clinical skills component in the module, will not be allowed to sit the final exam.**

In case of failing the final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. If the student could not pass the minimal competence score in test part of the final exam, they will retake the test part only of Fx exam. If the student could not pass the minimum competence score in OSCE part of final exam, they will retake the OSCE part of the exam only. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must retake the whole module from new.

The student can retake the second chance exam in the same semester (20th -21st week), not earlier than 5 days following the initial final exam date.

In clinical disciplines.

Mini-CEX exam has the minimum competency barrier (5 point out of 10 max) and represents the mandatory component of intermediate assessment for clinical rotation-based academic courses. The student that cannot surpass the minimum competency barrier of Mini-CEX exam, is not allowed to sit final exam of the academic course.

Midterm exam is assessed by 20 points, minimum competency score – 10 points; midterm exam is held in complex manner:

- 3) Test-based part, including clinical-case based MCQ questions – assessed by 10 points, minimum competency barrier – 5 points;
- 4) Mini-CEX exam – held at clinical department, assessed by 10 points, minimum competency barrier – 5 points; (see the attached Mini-CEX formative assessment checklist).

The student that cannot pass the minimum competency barrier, will not be allowed to sit the final exam.

The minimum grade point for the positive intermediate assessment is 30 points (the student is allowed to sit final exam only if they have collected minimum 30 points from intermediate assessment).

- ❖ **Final exam** is assessed with 40 points; it is held in complex manner, including: 1) test format exam, including tests based on clinical cases, is held in exam center – assessed by 20 points; 2) OSCE – is held in clinical simulation center, The students give exam in OSCE stations, constructed accordingly with the module topics with respective number of stations, with 4 minutes given to each station. **OSCE exam total max score is 20 points.**
- ❖ **The number of stations and respectively, the shared value of points for each station will be individually defined for each clinical rotation.**

Note: Several procedures (e.g. ABP measurement, basic first aid, catheterization, ECG recording technique etc.) must be implemented by all graduates at its full range (min. Competence score is 100%).

Minimum competence score for admission to final exam is 30 points from intermediate assessments of clinical rotation (out of 40, term activities + midterm exam). Therefore, in order for the student to be allowed to sit the final exam, the intermediate assessment score of the module must be minimum 30 points (out of 60).

The test part of final exam will be held immediately after completion of clinical rotation, with 1-day interval, and the OSCE part of final exam will be held at the end of the semester, within the dates of final exams period, defined by the academic semester frames.

Minimum grade for passing final exam is 21 points (out of 40). Minimum grade for passing the test part of final exam is 11 points (out of 20) and 10 points (out of 20) for OSCE part of final exam.

In case of failing the final exam: if the sum of intermediate assessment and final exam points is between 41-50, then the student is given one chance to retake a final exam. If the student could not pass the minimal competence score in test part of the final exam, they will retake the test part only of Fx exam. If the student could not pass the minimum competence score in OSCE part of final exam, they will retake the OSCE part of the exam only. In case if the sum of intermediate assessments and final exam points is 40 or less, then the student must retake the whole module from new.

The student can retake the second chance exam in the same semester (20th -21st week), not earlier than 5 days following the initial final exam date.

Employment field

The medical graduate can be employed as Doctor Assistant (“Junior Doctor”), performing their function under the supervision, guidance and responsibility of the person legally empowered to do the independent medical activity (law of Georgia about “Medical Activity” art.5). the graduate of the educational program has the legal right to: a) take the postgraduate residency course (in Georgia or abroad on the equivalent professional program, which is approved by the legislation of that country) and after passing the unified national certification exam, gain the official right of independent medical activity (law of Georgia about “Medical Activity” art. 17); b) continue their study at doctorate level as PhD student, take on the lecturing or the scientific activity; c) get employed in healthcare organizations which do not require independent medical activity.

Name of the program: Single-Cycle Educational Program in Dentistry

Program Supervisor – Associate Professor Khatuna Tvildiani

Program Scope: 300 ECTS

Qualification to be awarded: Doctor of Dental Medicine

Preconditions for admission to the program

Single-Cycle Educational Program in Dentistry can be attended by a person holding a state certificate confirming the completion of full basic educational level (National School Leaving Certificate) or its equivalent, who will pass the Unified National Examination and based on the obtained scores, will gain the right to study at university, or the applicants under the Law of Georgia on Higher Education, Article 52, para 3.

In accordance with the law of Georgia on Higher Education, Article 52, para 3, foreign citizen candidates seeking for admission to educational program are required to pass the exam organized by the university, ensuring the knowledge of Georgian language at not less than B1 level (including the components or listening, reading and analyzing of text, speaking), or presenting the document certifying the knowledge of Georgian language at B1 level.

Admission of foreign citizens is regulated according to legislation established by the Ministry of Education and Science of Georgia.

Language of instruction– Georgian.

The goal of the program. The aim of the program is to develop the competencies in graduates required by the national and international standards necessary for the dental practice, which implies the knowledge of the theoretical foundations of the field and the mastery of clinical skills. The graduate will also study the diagnosis and treatment of diseases and disorders of the teeth and gums; the development, manufacture and repair of dentures and orthodontic appliances, and the assistance of a dentist.

The goal of the program is to train competitive and competent certified dentists who will be able to further professional development, In particular, continue residency studies, take an alternative postgraduate education (vocational training) course, work as a junior doctor or conduct research in theoretical fields of medicine or other areas of healthcare that do not involve independent medical practice.

The goal of the dentistry program is in line with the University's mission.

The goals of the program are:

Provide the graduate with the knowledge of basic, clinical, behavioral and social sciences, necessary for medical practice in the field.

Develop general clinical skills in graduates;

Give the knowledge of methodology and professional ethics of the field.

To give knowledge of making the diagnosis and prevention of dental diseases; Ability to use this knowledge in practice; the principles of treatment of dental diseases.

Develop motivation for continuing medical education;

Develop the ability to independently obtain and critically evaluate medical information;

Develop the sense of respect for the patients in future dentists, to take into account their interests, regardless of their social, cultural, religious and ethnic background;

Provide training for medical personnel with relevant medical education of modern scientific knowledge and technological advancement.

Learning Outcome. The graduate will know: Biochemical processes, bio compounds, classification and metabolism in a living organism; Metabolic processes and cycles in the human body;

Embryology of the oral cavity organs and teeth, pathological anatomy, topographic anatomy, physiology, pathological physiology.

Inflammatory and non-inflammatory, hard and soft tissue, tumors, orthopedic and traumatic lesions, peripheral nervous system, specific, infectious, allergic and systemic diseases of the jaw area of children and adults, classification, clinical course, Differential diagnostics, conservative and surgical treatment methods;

Restoration of teeth in children and classification of restoration materials; Orthodontics, anomalies of the jaw-tooth system, and pediatric prosthetics. Pediatric and Adult Dental Service and Disease Prevention; Hygienic measures; Etiology, pathogenesis, clinical course and treatment methods of major therapeutic and surgical diseases.

The graduate will be able to: examine the patient, differentiate oral pathologies; Determine the quality of injuries; Conduct laboratory tests, functional samples and methods according to the display.

Diagnosis of carious and non-carious diseases and development of treatment scheme;

Select dental restoration/filling material, preparation and filling on the phantoms, assistance to dentist.

Prepare prosthetics and select material. Mold making, preparation of prosthetic models. Differential diagnosis and diagnostics on the basis of analysis of examination of therapeutic and surgical patients.

Conduct therapeutic and prophylactic manipulations. Effective verbal and nonverbal communication with the patient, taking into account the psychological and behavioral characteristics of the patient. Data collection and integration, analysis, reasoning. Finding, processing and using information from various sources through information technologies. Ability to realize the acquired knowledge and experience in a new environment.

Program structure.

The educational program in Dentistry is 5 years, consisting of ten semesters. Training over five years includes 300 credits.

Of these 300 credits, 286 credits are compulsory, while 14 credits are elective courses.

1. Basic compulsory courses - 64 credits;
2. Compulsory courses in dentistry - 44 credits;
3. Clinical compulsory courses in dentistry – 106 credit;
4. Compulsory clinical courses - 35 credits;
5. General compulsory courses - 27 credits;
6. Compulsory courses of scientific skills - 10 credits;
7. Elective courses - 14 credits.

30 credits per semester, 60 credits per year.

1 credit = 25 hours

One academic year: 42 weeks.

Duration of the semester: 21 weeks (including: study-15; session-4; additional exams -2).

VI, VII, VIII, IX and X semesters - teaching by the curative system.

Student Knowledge Assessment System.

The student assessment at single-cycle dental education program provided by University Geomedi LLC is guided by the European Credit Transfer System (ECTS), law of Georgia on Higher Education and by order #03 of January 5, 2007 of Minister of Science and Education of Georgia on the Approval of the Procedures for Calculating Higher Education Programs with Credits and the assessment system defined by the above, which implies the following:

5 types of positive assessment:

a.a) (A) excellent-91%-100%

a.b) (B) very good-81-90%

a.c) (C) good-71-80%

a.d) (D) satisfactory-61-70%

a.e) (E) acceptable-51-60%

a) 2 types of negative assessments:

b.a) (FX) couldn't pass- 41-50%-Which means that more work is needed. The student can enroll in independent work and is given the right of an additional test.

b.b) (F) Fail-Less than 40% Work carried out by the student is not enough and the student must retake the subject.

Student's knowledge is assessed by the 100-point system.

The semester assessment includes the necessary components-Midterm assessment and Final exam. Each component has its percentage of the overall system of assessment, which determines the course author/authors. For example: (1) 70/30 or (2)60/40, which means that in the first case midterm assessments include assessment's 70 %, final exam 30%, in the other case Midterm assessments include assessment's 60%, and Final exam 40%.

The assessment of the midterm is divided into the components

The assessment of the midterm is divided into the following components: (midterm exam, oral presentation on seminars/practical classes, presentation, quiz, situational tasks, cases etc.); percentage of these components in total assessment is defined by the lecturer except for midterm exam itself, which is indispensable component of midterm assessment (exceptions are clinical skills and clinical practice assessments) and its percentage in total scores: (1) in case of 70/30 system, midterm exam should account for 30 points, whereas in (2) case of 60/40 system – it must account for 20 points.

There is no minimal competency limit to midterm exam. Students is not allowed to retake midterm exam, except for the exam missed for excusable reason.

The minimal competency limit of midterm assessment which also is the precondition for admission to final exam, is minimum 50% of intermediate assessment scores.

Final exam is an necessary component for final assessment. The minimal competency limit for passing the final exam is 50%+1 of total max. points; in case of getting less than minimal competency scores, the final exam assessment is nullified and if students term assessment is between 41-50, then they are granted the second chance to retake the final exam. If the student's midterm assessment score is less than 41, then they must take this subject again. In case if student's midterm assessment score is 51 or higher, they must overcome the minimal competency limit on final exam, otherwise the subject will be considered as failed.

Student can retake the final exam in the same semester, not later than 5 days after the date of first final exam.

Name of the program: Physical Medicine and Rehabilitation Bachelor Program

Program Supervisor – Professor Lela Aptsiauri

Program Scope: 240 credits

Qualifications to be awarded: Bachelor of Physical Medicine and Rehabilitation

Preconditions for admission to the program

Physical Medicine and Rehabilitation Bachelor Program can be attended by a person holding a state certificate confirming the completion of full basic educational level (National School Leaving Certificate) or its equivalent, who will pass the Unified National Examination and based on the obtained scores, will gain the right to study at university, or the applicants under the Law of Georgia on Higher Education, Article 52, para 3.

In accordance with the law of Georgia on Higher Education, Article 52, para 3, foreign citizen candidates seeking for admission to educational program are required to pass the exam organized by the university, ensuring the knowledge of Georgian language at not less than B1 level (including the components or listening, reading and analyzing of text, speaking), or presenting the document certifying the knowledge of Georgian language at B1 level.

Admission of foreign citizens is regulated according to legislation established by the Ministry of Education and Science of Georgia.

Language of instruction: Georgian

The goal of the Bachelor's program in physical medicine and rehabilitation, is to prepare highly qualified, competitive specialists in the field of physical medicine and rehabilitation, who will know the modern theories, principles, methods, and means of physical medicine and rehabilitation, methods of adaptation of the human body to physical activity, cognitive and practical skills in the rehabilitation of behavioral disorders, orthopedic diseases, its clinical detection, stages of development, methods of diagnosis and rehabilitation.

Be able to competently conduct research and practical activities in physical medicine and rehabilitation in accordance with the international standards and mission of the university.

Impact on the athlete's body, injury prevention, first aid during sports injuries, management of the rehabilitation process, athletes Nutrition principles, kinesiocorrection measures, and rehabilitation mean. Can competently conduct practical activities in physical medicine and rehabilitation.

Learning Outcomes - The graduates have extensive knowledge of physical medicine and rehabilitation as well as cognitive and practical skills specific to this field. Knowledge of modern methods and remedies in physical medicine and rehabilitation, including a critical understanding of theories and principles, and some recent aspects of knowledge.

The graduates are familiar with modern theories, principles, methods, and tools of physical medicine and rehabilitation; physiological and biochemical factors related to physical exercise and their impact on human health; Types and features of physiotherapy, indications, and contraindications for physiotherapy procedures. Determining the diet of an athlete and non-

athlete person, basic principles of rational and balanced nutrition, and the methods of evaluation. Classification of various types of exercise and the clinical and physiological significance of physical exercise on the human body.

The graduate is able to: Identify and successfully implement rehabilitation activities according to the types of sports and the terms of rehabilitation using physical medicine and rehabilitation methods and approaches; Develop an individual rehabilitation plan based on the needs of people with physical and cognitive impairments; Selection and use of individual recommendations for disease prevention, proper planning of preventive measures, timely and safe use of therapeutic and rehabilitation items;

Based on the knowledge gained, the graduate is able to identify deviations and risks in a timely manner. Based on the patient's conditions make appropriate conclusions and act adequately if necessary. Effective communication with various social groups, including those with problems communicating. Apply the acquired knowledge in the process of conducting professional activities. Planning their own learning process and identifying their learning needs in a certain direction. Act in accordance with the values inherent in professional activities in different situations. Understand the importance of the social integration of people with disabilities.

Program structure.

The bachelor program is 4 years long, consisting of eight semesters. Tuition over four years includes 240 credits, 30 credits per semester, 60 credits per year.

from here:

General Required: 29 credits

Basic Compulsory Specialty: 79 credits

Compulsory specialty: 119 credits (including an internship in the specialty - 16 cr.; Bachelor's thesis - 14 cr.)

Free Elective: 13 credits

1 credit = 25 hours

One academic year: 42 weeks.

Semester duration: 21 weeks (including: study-15; session-4; additional exams -2).

Knowledge assessment system. assessment is done on a 100-point scale, 60 points - midterm assessments, 40 points - final exam. The minimum competency threshold for mid-term assessments is set at 21 points. The minimum competency threshold for the final exam is set at 14 point

The student's educational program learning outcomes assessed by 100-point system.

Grading system allows:

A) Five types of positive grade:

- a.a) (A) excellent – 91%-100% of maximal point;
- a.b) (B) very good – 81-90% of maximal point;
- a.c) (C) good – 71-80% of maximal point;
- a.d) (D) satisfactory – 61-70% of maximal point;
- a.e) (E) sufficient – 51-60% of maximal point.

B) Two types of negative grade:

- b.a) (FX) – couldn't pass – 41-50% of maximal point, some work required before the credit can be earned and by the independent work is given a right to retake an exam.
- b.b) (F) -Failed- 40% or less of maximal point, considerable further work is required and student has to retake the course.

Student's term assessment is regulated by midterm assessment and final examination points graded out of 100 points.

The two elements midterm assessment and final assessment are considered at the summary assessment. Each element has its percentage value and minimum competence margin in general assessment system and is determined by the professor: : (1) 70/30 or (2)60/40, which means that in the first case midterm assessments include assessment's 70 %, final exam 30%, in the other case Midterm assessments include assessment's 60%, and Final exam 40%.

The midterm assessment is divided by the components (midterm examination, seminar/practical, quiz, cases, essays and etc.) except the midterm examination. Percentage of these components in total assessment is determined by the lecturer except for midterm exam itself, which is indispensable component of intermediate assessment (exceptions are clinical skills and clinical practice assessments) and its percentage in total scores: (1) in case of 70/30 system, midterm exam should account for 30 points, whereas in (2) case of 60/40 system – it must account for 20 points.

The bachelor's thesis Evaluation System:

Thesis is evaluated on a 100-point scale:

a) 5 types of positive assessments:

- a.a) (A) excellent – 91 –100 points of max. assessment;
- a.b) (B) very good – 81-90 points of max. assessment;
- a.c) (C) good – 71-80 points of max. assessment;
- a.d) (D) satisfactory – 61-70 points of max. assessment;
- a.e) (E) sufficient – 51-60 points of max. assessment.

b) 2 types of negative assessments:

- b.a) (FX) couldn't pass – 41-50 points of max. assessment, some more work is required before the credit can be awarded and student is given a right to retake the examination, preparing independently.
- b.b) (F) Failed– 40 points of max. assessment considerable further work is required and student has to take the course again.

The bachelor's thesis Evaluation a 100-point system is divided into:

- Preliminary review of the bachelor's thesis -60 points;
- Public defense of the bachelor's thesis - 40 points.

To be eligible for the bachelor's thesis, a student must have accumulated at least 30 points in the pre-examination for the undergraduate thesis.

The bachelor's thesis will be considered completed by the student if he / she accumulates 51 or

more points in the assessment.

Name of the program: Physical Medicine and Rehabilitation Master Program

Program Supervisor – Professor Lela Aptsiauri

Program Scope: 120 ECTS

Qualifications to be awarded: Master of Physical Medicine and Rehabilitation

Prerequisite for admission to the program

Physical Medicine and Rehabilitation Master Program can be attended by a person holding a bachelor academic degree or its equivalent, who will successfully pass the Unified Master Program Examinations and the specialty exams defined by the university, as well as English language test (B2 level), also the applicants under the Law of Georgia on Higher Education, Article 52^{1-e}, para 7.

In accordance with the law of Georgia on Higher Education, Article 52^{1-e}, para 7, foreign citizen candidates seeking for admission to educational program are required to pass the exam organized by the university, ensuring the knowledge of Georgian language at not less than B1 level (including the components or listening, reading and analyzing of text, speaking), or presenting the document certifying the knowledge of Georgian language at B1 level. Candidate must also pass the specialty exams defined by the university, as well as English language test (B2 level). In case of presenting the English Language B2 certificate, the candidate can be exempted from the latter exam.

Language of instruction: Georgian

The goal of the educational program: The goal of the master's program in physical medicine and rehabilitation, is to prepare competitive, highly qualified personnel, who will have knowledge, skills and experience based on modern theoretical, practical and research components of the field; Be able to competently conduct scientific research and practical activities in physical medicine and rehabilitation in accordance with the international standards and mission of the university.

Learning Outcomes: The graduate will: have in-depth knowledge of general and social sciences necessary for practical work in the field of physical medicine and rehabilitation and its critical understanding, which includes the latest achievements in the field and creates a basis for innovation, development of new, original ideas. Understand and deepen knowledge in modern theories and approaches to rehabilitation; Learn modern approaches, strategies, techniques and innovative methods of physical medicine and rehabilitation at an in-depth and systemic level; Determining rehabilitation measures; Regularities of health, physical development and functional abilities of athletes and non-athletes. know orthopedic diseases, its clinical detection, stages of development, methods of diagnosis and rehabilitation. Have in-depth, systematic knowledge in nutrition that will help them independently manage exercise load regime, monitor athlete and non-athlete health status in order to avoid possible health and life-threatening risks. know the classification of human health conditions, evaluation scales, models of psycho-social rehabilitation. characteristics of the process of physical rehabilitation of people with various disorders and pathologies. Basic means of occupational therapy, methods and characteristics of their conduct;

The graduate will be able to: Independently manage exercise routine, observe and monitor health status to avoid possible health and life risks. Search for new, original ways of solving complex problems in an unfamiliar or multidisciplinary environment and/or conduct research independently, adhering to the

principles of academic good faith, using the latest methods and approaches. Identify the degree of motor skills impairment and/or physical development disorders, assessment of their severity, determination of the range of motion and ability; Behavior management strategies Based on the analysis of the development dynamics of physical medicine and rehabilitation and other indicators, to make reasoned conclusions in order to increase the efficiency of the sanative-rehabilitation process; identify deviations and risks in a timely manner, select ways of solving problems and manage the rehabilitation process; take responsibility for the activities and professional development of others and conduct his/her own learning process independently. Therefore, the learning outcomes of the program ensure the graduates' competitiveness in the labor market and the opportunity to continue their studies on the next level.

Program structure.

The Master's degree educational program in Physical Medicine and Rehabilitation takes 2 years of postgraduate study, consisting of 4 semesters and includes 120 credits.

The latter itself includes the following:

Specialty basic compulsory courses: - 15 credits;

Compulsory courses in the specialty - 99 credits (including internship in the specialty - 4 credits; Master's thesis - 26 credits)

Elective courses - 6 credits.

30 credits per semester, 60 credits per year.

1 ECTS = 25 hours

One academic year: 42 weeks.

Duration of semester: 21 weeks (including: lectures and seminars – 15 weeks, exams – 4 weeks; additional exams – 2 weeks).

Student Knowledge Assessment System. The assessment of student's knowledge at Master of Education program in Physical Medicine and Rehabilitation is based on a 100-point system, 60 points Midterm assessments, 40 points final exam. assessment system:

a) 5 types of positive assessments:

a.a) (A) excellent – 91 –100 points of max. assessment;

a.b) (B) very good – 81-90 points of max. assessment;

a.c) (C) good – 71-80 points of max. assessment;

a.d) (D) satisfactory – 61-70 points of max. assessment;

a.e) (E) sufficient – 51-60 points of max. assessment.

b) 2 types of negative assessments:

b.a) (FX) couldn't pass – 41-50 points of max. assessment, some more work is required before the credit can be awarded and student is given a right to retake the examination, preparing independently.

b.b) (F) Failed– 40 points of max. assessment considerable further work is required and student has to take the course again.

Student's term assessment is regulated by midterm assessment and final examination points graded out of 100 points.

The two elements midterm assessment and final assessment are considered at the summary assessment. Each element has its percentage value and minimum competence margin in general assessment system and is determined by the professor: : (1) 70/30 or (2)60/40, which means that in the first case midterm assessments include assessment's 70 %, final exam 30%, in the other case Midterm assessments include assessment's 60%, and Final exam 40%.

The midterm assessment is divided by the components (midterm examination, seminar/practical, quiz, cases, essays and etc.) except the midterm examination. Percentage of these components in total assessment is determined by the lecturer except for midterm exam itself, which is indispensable component of intermediate assessment (exceptions are clinical skills and clinical practice assessments) and its percentage in total scores: (1) in case of 70/30 system, midterm exam should account for 30 points, whereas in (2) case of 60/40 system – it must account for 20 points.

The assessment components are chosen by the course supervisor/lecturer based on the specifics of the subject.

Master's Thesis Evaluation System:

The master's thesis is evaluated with a 100-point system:

- A) 91 - 100 points - excellent (summa cum laude);
- B) 81 - 90 points - very good (magna cum laude);
- C) 71 - 80 points - good (cum laude);
- D) 61-70 points - satisfactory (bene);
- E) 51-60 points - sufficient (rite);
- F) 41-50 points - insufficient;
- G) 40 points and less - completely unsatisfactory (sub Omni canone)

The final assessment is calculated by the arithmetic mean of the points awarded by the members of the Commission.

A master's thesis will be considered completed if the student accumulates 51 or more points in the assessment.

If the students accumulate 41-50 points, the student is entitled to submit a revised master's thesis during the next semester.

If the assessment is 0-40 points, the student loses the right to submit the same thesis. He/she is given the chance to select a new topic and supervisor and defend his/her master thesis for the next academic year.

**Name of the program: Healthcare Economics and
Management Bachelor Program**

Program Supervisor – Associate Professor Dimitri Kobakhidze

Credit Value of the Programme: 240 credits

Awarded Qualification: Bachelor of Business administration

Prerequisite for admission to the program:

Healthcare Economics and Management Bachelor Program can be attended by a person holding a state certificate confirming the completion of full basic educational level (National School Leaving Certificate) or its equivalent, who will pass the Unified National Examination and based on the obtained scores, will gain the right to study at university, or the applicants under the Law of Georgia on Higher Education, Article 52, para 3.

In accordance with the law of Georgia on Higher Education, Article 52, para 3, foreign citizen candidates seeking for admission to educational program are required to pass the exam organized by the university, ensuring the knowledge of Georgian language at not less than B1 level (including the components or listening, reading and analyzing of text, speaking), or presenting the document certifying the knowledge of Georgian language at B1 level.

Admission of foreign citizens is regulated according to legislation established by the Ministry of Education and Science of Georgia.

Language of instruction: Georgian.

The goal of the Bachelor's program is to equip graduates with all necessary skills in management. Which means acquiring field specific theoretical knowledge; gaining obligatory ethical values and professional responsibilities for managers; future professional development; continuing studies at master level; conducting research in the field of management; managing activities in various fields of healthcare and management.

Will learn: Theoretical and methodological principles of management, contemporary management systems, concepts and types, models, organizational and legal forms of establishing enterprises, levels and authorities of management, management of organizational structures and networks, also, accounting of healthcare entities activities, fund raising and financial sources. Constructing business plan for management and development purposes, independently monitoring its implementation and reporting, hiring qualified staff, efficiently managing income from business activities. Management, finance, innovation, investment, marketing, human resource management, other social sciences, and other management directions.

Learning outcomes: The graduate will know: the fundamentals of healthcare economics and management, theories, concepts and major principles. Healthcare system management (planning, organization, functions of motivation and control); marketing management in healthcare; Management and implementation of innovation processes. Financial management and other directions of management.

Able to: Analyze and evaluate of basic indicators of managerial activities, sort and analyze financial documentations, solve problematic situations and make decisions in logical manner in the field of management, efficient communication with employees, partners, consumers, estimate and control the quality of medical services, plan staff qualifications development programs. Communicate in Georgian and foreign languages when solving managerial issues within professional and non-professional societies.

Analyze management objectives, consumer demands; the impact of internal and external factors on management, business relationships, management related information and efficiency of business related indicators. Opportunities of innovation usage for the improvement of managerial processes; plan and support personal and others continuous professional development, plan his/her future studies, which corresponds do National Qualification Framework and higher education field related indicators.

Program structure.

Healthcare economics and management bachelor educational program duration is 4 years. Education includes 240 credits; 30 credits per semester; 60 credits in year.

General compulsory of the specialty: 50 Credits

Compulsory of the specialty: 164 Credits

Chosen of specialty: 10 Credits

Chosen free courses: 16 Credits

1 Credit = 25 Academic hours One

academic year: 42 weeks Duration

of the semester: 21 weeks

(Including: educational -15; session – 4; additional examinations-2)

Knowledge assessment system.

Student's assessment is done on a 100-point scale:

60 points - midterm assessments, 40 points - final exam. The minimum competency threshold for mid-term assessments is set at 30 points. The minimum competency threshold for the final exam is set at 21 point.

70 points - midterm assessments, 30 points - final exam. The minimum competency threshold for mid-term assessments is set at 35 points. The minimum competency threshold for the final exam is set at 16 point.

Grading system allows:

A) Five types of positive grade:

a.a) (A) excellent – 91%-100% of maximal point;

a.b) (B) very good – 81-90% of maximal point;

a.c) (C) good – 71-80% of maximal point;

a.d) (D) satisfactory – 61-70% of maximal point;

a.e) (E) sufficient – 51-60% of maximal point.

B) Two types of negative grade:

b.a) (FX) – couldn't pass – 41-50% of maximal point, some work required before the credit can be earned and by the independent work is given a right to retake an exam.

b.b) (F) failed– 40% or less of maximal point, considerable further work is required and student has to retake the course.

The bachelor's thesis is evaluated on a 100-point scale:

- Preliminary review of the bachelor's thesis -60 points;

- Public defense of the bachelor's thesis - 40 points.

To be eligible for the undergraduate thesis, a student must have accumulated at least 21 points in the pre-examination for the undergraduate thesis. The minimum competency limit for public defense of a bachelor's thesis is set at 14 points.

An undergraduate thesis will be considered completed by the student if he / she accumulates 51 or more points in the assessment.

**Name of the program: Healthcare Management
Master Program**

Program Supervisor – Associate Professor Dimitri Kobakhidze

Credit Value of the Programme: 120 credits

Awarded Qualification: Master of Business Administration

Prerequisite for admission to the program

Healthcare Management Master Program can be attended by a person holding a bachelor academic degree or its equivalent, who will successfully pass the Unified Master Program Examinations and the specialty exams defined by the university, as well as English language test (B2 level), also the applicants under the Law of Georgia on Higher Education, Article 52¹-e, para 7.

In accordance with the law of Georgia on Higher Education, Article 52¹-e, para 7, foreign citizen candidates seeking for admission to educational program are required to pass the exam organized by the university, ensuring the knowledge of Georgian language at not less than B1 level (including the components or listening, reading and analyzing of text, speaking), or presenting the document certifying the knowledge of Georgian language at B1 level. Candidate must also pass the specialty exams defined by the university, as well as English language test (B2 level).

In case of presenting the English Language B2 certificate, the candidate can be exempted from the latter exam.

Language of instruction: Georgian

The structure of the program: Healthcare Management Master Program includes two years of studies and comprises 120 credits. Each semester there is the allocation of 30 credits and 60 credit in a year consequently.

Specialty common compulsory: 111 credits

Specialty elective: 9 credits

1 credit = 25 academic hours

One academic year: 42 weeks

Semester duration: 19 weeks

(Including study period 15 weeks, 4 examination weeks and additional examinations 2 weeks).

The goal of the educational program: To prepare market oriented highly competitive master graduates in business administration who will have deep theoretical, practical, comprehensive and systematic knowledge about: Planning, organizing, motivating, controlling the activities of healthcare facilities, acknowledge and understand ways to solve health care management problems; Human resource management in healthcare facilities; Higher governance and strategy of healthcare facilities; financial management and innovative process management. use effectively and creatively the main directions of economics and management of medical facilities, to act in an unpredictable and diverse environment; Introduce senior governing management, manage effectively management and innovation processes; for practical activity purposes it is necessary to develop managerial competences in master graduates, that includes acquiring theoretical knowledge of the field, gaining obligatory ethical values and professional responsibilities for managers, future professional development continuing studies at doctoral level, conducting research in the field of management; managing activities in various fields of healthcare and management.

Learning Outcomes: The essence of economics and management of healthcare facilities, its importance, methods, principles and functions. Understand the importance of planning, organizing, motivating and controlling activities and understand ways to solve healthcare management problems. Use of modern style management and methods in the development of the healthcare system. Use business management methods in healthcare facilities, operating in uncertain and emergent environment, independently manage processes in healthcare facilities, manage innovative processes and evaluating investment potential. competently manage managerial activities in different types and

profiles of the healthcare system medical-prophylactic, health-improving and recreational facilities, in pharmaceutical and insurance companies, in companies of any direction and activity.

Critical analysis of complex and incomplete information (including recent researches) innovative synthesis of information on medical services, evaluation of the effectiveness of the use of management and drawing conclusions on development healthcare system. Making conclusions on managerial activities and its development, presenting research findings to academic and professional societies considering academic ethical standards. Managing healthcare facilities using modern approached and strategies of management, participating in development of managerial knowledge and practice. Take responsibility for developing of management and other activities. Learn independently.

Program Structure.

Health management magister educational program duration is years. Education includes 120 credits; 30 credits per semester; 60 credits in year.

Basic compulsory of the specialty: 111 Credits

Chosen of specialty: 9 Credits

1 Credit = 25 Academic hours One

academic year: 42 weeks Duration

of the semester: 21 weeks

(Including: educational-15; session – 4; additional examinations-2)

Knowledge Assessment System.

Student's assessment is done on a 100-point scale:

60 points - midterm assessments, 40 points - final exam. The minimum competency threshold for mid-term assessments is set at 30 points. The minimum competency threshold for the final exam is set at 21 point.

70 points - midterm assessments, 30 points - final exam. The minimum competency threshold for mid-term assessments is set at 35 points. The minimum competency threshold for the final exam is set at 16 point.

Grading system allows:

A) Five types of positive grade:

a.a) (A) excellent – 91%-100% of maximal point;

a.b) (B) very good – 81-90% of maximal point;

a.c) (C) good – 71-80% of maximal point;

a.d) (D) satisfactory – 61-70% of maximal point;

a.e) (E) sufficient – 51-60% of maximal point.

B) Two types of negative grade:

b.a) (FX) – couldn't pass– 41-50% of maximal point, some work required before the credit can be earned and by the independent work is given a right to retake an exam.

b.b) (F) failed– 40% or less of maximal point, considerable further work is required and student has to retake the course.

Master's Thesis Evaluation System:

The master's thesis is evaluated with a 100-point system:

A) 91 - 100 points - excellent (summa cum laude);

B) 81 - 90 points - very good (magna cum laude);

C) 71 - 80 points - good (cum laude);

D) 61-70 points - satisfactory (bene);

E) 51-60 points - sufficient (rite);

F) 41-50 points - insufficient;

G) 40 points and less - completely unsatisfactory (sub Omni canone)

The final assessment is calculated by the arithmetic mean of the points awarded by the members of the Commission.

A master's thesis will be considered completed if the student accumulates 51 or more points in the assessment.

If the students accumulate 41-50 points, the student is entitled to submit a revised master's thesis during the next semester.

If the assessment is 0-40 points, the student loses the right to submit the same thesis. He/she is given the chance to select a new topic and supervisor and defend his/her master thesis for the next academic year.

