## **Tbilisi State Medical University**

Faculty	Public Health
Program Title	Master's Program - "Public Health"
Awarded academic	Master of Public Health
qualification/degree	
Program Director	Professor Levan Baramidze
Credit Value of the	120 ECTS Credits
Program	
Language of Instruction	Georgian
Program Objectives	The aim of the Master's program "Public Health " is to prepare highly
	qualified, adept specialist capable of contributing to public health,
	providing individual and community health care, conducting research
	and other activities, who will have a diverse set of skills and
	knowledge, with an approach focused on learning outcomes and the
	use of professional competencies to organize activities as follows:
	- Regular and systematic data collection, analysis and generation of
	information pertinent to health needs.
	- Comprehensive, evidence-based, and informed decision-making,
	coupled with the adept development and implementation of effective
	policies.
	- Provision of necessary services to the population, ensuring
	appropriate organization of service planning. The objectives of the
	master's program are in line with the mission and values declared by
	Tbilisi State Medical University.
	- The program essence resonates with respect for human rights and
	freedoms, health protection, health protection, enhancing the quality
	of life, and generally, promoting social responsibility and service
	principles.
Prerequisites	The prerequisites for admission to the Master's program requires
/Requirements for	candidates to possess specific knowledge, skills, and competencies
admission to the program	that align with the program requirements, ensuring the inclusion of

individuals for involvement in the program.

Admission to the program is regulated by the rules established by the Georgian legislation and the provision of the master's degree approved by the academic council of Tbilisi State Medical University: persons with a minimum of Bachelor's academic degree (higher education), or an academic credential, equivalent to a Master's degree in health care have the right to study in the master's degree. Access to the program is based on the successful passing of the unified national MA's exam and exams established by the higher educational institution; in specialty and B2 level of English (overcoming the threshold of 50%+1). Internal university exams are held at the TSMU examination and skills assessment center, using test system;

Only the candidates of master's degree who have successfully passed the minimum competence limit established by the legislation of Georgia for the general MA examination, is allowed to take the exam/exams determined by the higher educational institution.

Enrollment in the master's degree is done within the framework of the pre-announced admission quota, by competition; Admission to the program is based on mobility in accordance with Georgian legislation and TSU regulations.

The Enrollment in the master's degree is done within the framework of the pre-announced admission quota, through a competitive selection. Acceptance into the program is conditional upon meeting mobility requirements, in accordance with both Georgian legislation and the regulations stipulated by TSMU.

The admission criteria to the program are public, all relevant information related to admission process is posted annually on the website of the National Assessments and Examination Center, in the directory and on the university website: www.tsmu.edu

#### **Teaching Methods**

Teaching-Learning methods used in study process:

- Lecture, Seminar;
- Learning and practical training;
- Project;

- Master's Thesis:
- Consultation.

**Lecture** is a creative process of interaction where both the lecturer and the students actively engage in the learning process simultaneously.

The primary objective of the lecture is to facilitate a comprehensive understanding of the key concepts within the studied subject, encouraging a creative and active assimilation of the material presented. Furthermore, it is essential to focus on the fundamental principles, definitions, designations, and assumptions of the material conveyed. Critical analysis of key issues, facts and ideas is required.

The lecture should be designed to provide a scientific and logically coherent introduction to the basic principles of the studied subject, ensuring a comprehensive understanding without delving into unnecessary details and, consequently, maintaining logical completeness. Moreover, facts, patterns, diagrams, drawings, experiments, and other visual aids are employed to elucidate the concepts presented in the lecture.

The lecture should provide a correct analysis of the dialectical process of science and should be designed for a specific environment by orienting on students' capacity for independent / free-thinking, as well as fostering a comprehensive understanding of basic scientific problems. The student's independent work leads and contributes to the formation of the lecture material into a cohesive knowledge system.

The student's emerging interest in books and other informational sources, coupled with the eagerness to explore issues independently, serves as a catalyst for fostering independent thinking, analysis, and the ability to draw meaningful conclusions.

Aligned with the main purpose of the lecture, exclusive permission to deliver it should be granted solely to experienced teachers, as combination of theoretical knowledge, practical experience, and pedagogical skill serves as the assurance for conducting the lecture at a high level.

While addressing methodological aspects of the lecture, the teacher should concentrate on the sequence of material delivery, presentation style, and fostering a meaningful connection with the audience.

The effective delivery of the lecture involves encouraging active participation of the students, utilizing systematic methods, and incorporating a wide range of visual aids. Seminars, laboratory sessions, and practical trainings serve as effective means for enhancing the understanding of the theoretical material presented in lectures.

**Seminar** (group work) aims to afford students the opportunity to delve deeper into the topics covered during the lecture.

Under the guidance of the leading professor or the seminar instructor, students or students' group will explore and process additional information, prepare presentations, write essays, etc. During the seminar, participants present reports, engage in discussions, and draw conclusions of the as part interactive learning process. The teacher leading the seminar coordinates the intentional management of these processes. Educational and production practices contribute significantly to deepening and strengthening the knowledge acquired by the students.

It develops the ability to apply theoretical knowledge in practical situations and employ subject-specific methods to solve problems, the project is a creative process.

The development of every new building, machine, tool, automatic device, and similar entities adheres to a predefined project plan. The design process is a combination of theory and practice.

During the study period, students engage in graphic assignments and course projects, marking their initial experiences with independent work, even though such endeavors are conducted under the supervision of the teacher.

A master's thesis is the final stage of a distinct level of education within a higher educational institution, aiming at systematical organisation of theoretical and practical knowledge acquired in the specialty and to substantiate the resolution of specific scientific, technical, economic, or production-related issues.

The MA thesis is expected to demonstrate a high level of proficiency in research methods and experiments pertinent to the subject matter, reflecting the student's readiness for independent work in their future professional activities. The supervision of this work is conducted by an experienced teacher.

The master's thesis should exemplify the student's competence in research and experimental methods addressing the pertinent issues, highlighting their readiness for autonomous engagement in future professional pursuits. The thesis preparation process is supervised by an experienced teacher.

Consultations are structured to actively involve the teacher in assisting the student to acquire the essential skills for independent work, proper handling of study literature and other sources, along with addressing and clarifying any issues that may arise during the independent work.

Teaching and learning methods encompass a variety of activities: studying a specific issue in the teaching process cannot be achieved adequately using only one method and activity. Teachers are required to employ various methods and activities, often combining them, to ensure a comprehensive and effective learning experience. During the teaching process, the activities complement each other.

- Discussion/debate is one of the most common interactive learning activities. The process of discussion significantly enhances the quality of student engagement and activity.
   Discussions have the potential to evolve into debates and this process is not confined to questions initiated by the teacher. This dynamic fosters the development of students' abilities to reason and substantiate their own opinions.
- Case study the teacher will discuss specific cases with the

- students, encouraging a thorough and comprehensive study of the issue from various perspectives.
- Verbal or oral. This activities encompass reciting/narration, conversations, and similar approaches. In the described process, the teacher communicates and clarifies the learning material through spoken words. Students actively absorb and assimilate the information by engaging in listening, memorization, and understanding.
- Project development and presentation While working on the project, the students apply acquired knowledge and skills to address/solve real problems. Engaging in project-based teaching has the effect of enhancing students' motivation and responsibility. Project work includes stages of planning, research, practical activity and presentation of results in accordance with the issue chosen. The successful implementation of a project is contingent upon the clear and convincing presentation of its results in the appropriate format. Projects can be executed individually, in pairs, or in groups, and may span one or multiple subjects (subject integration). Upon completion, the project can be shared with a broader audience through presentation.
- Inductive method defines a form of transfer of any knowledge, that is, when conveying material, the process proceeds from specific to general.
- Deductive method is a form of knowledge transfer that entails a logical process of deriving new knowledge based on existing general knowledge. that is, the process proceeds from the general to the specific.
- Method of analysis allows the subdivision of the entire learning material into its constituent parts. thereby facilitating the detailed coverage of the issues within a complex problem.
- Method of synthesis entails combining certain issues to create a

cohesive entity, fostering the development of the capacity to view a problem holistically.

At TSMU, a set of guidelines of creating individual student curricula has been developed and implemented, aimed at providing support for students with special educational needs and facilitating the continuity of their academic pursuits. Individual curricula (schedule) is tailored to each student's specific requirements and circumstances. Creating an individualized curriculum (schedule) is driven by various factors:

- Special educational needs;
- Considering the challenges posed by the structure of educational curricula and the unique requirements of special educational needs;
- For the students with diverse requirements (such as those enrolled with mobility and internal mobility, students participanting in exchange programs or completing individual internships abroad, students with disabilities, and those who missed the program due to respected reasons, etc.), special educational needs and diverse academic backgrounds, a procedure for formulating individual study plans, fostering the smooth integration of each student into the educational process, has been implemented at Tbilisi State Medical University. Upon enrollment of an applicant with specific needs into the master's program, the aforementioned protocol will be activated immediately and
- An individual study plan will be created for the student.

### Student Knowledge Assessment System

Assessment methodology for student achievements at Tbilisi State Medical University aligns with the regulatory rules of Georgia and the administrative-legal acts of TSMU governing the evaluation of student performance. The evaluation process encompasses both midterm

assessments and final exams.

Student academic achievement is assessed by a 100-grading scale - the cumulative scores of midterm evaluation and final exams. The evaluation of the work done by the student is performed according to the Order #3 of January 5, 2007 of the Minister of Education and Science of Georgia.

At Tbilisi State Medical University, the student's learning outcomes in the course/module is determined by the cumulative scores obtained from both midterm and final exam assessments. The assessment system is transparent, ensured by publicity of criteria, and the application of suitable methods and strategies for evaluating both knowledge and skills. Grading criteria are tailored to the student with average academic performance and are based on the overall academic grade point average.

The evaluation system for student knowledge and achievements at Tbilisi State Medical University is transparent, designed to eliminate conflicts of interest, and considers the unique characteristics of each field and study course. It encompasses the use of suitable forms, components, and methods to assess both theoretical knowledge and practical skills essential for professional activities. The program wholeheartedly adopts and implements the following approaches established at Tbilisi State Medical University:

Evaluation forms - a variety of evaluation forms, including oral and written surveys, practical assignments, theoretical work, and etc., are utilized in the assessment process.

Evaluation methods – encompass diverse means utilized to assess the learning outcomes within the educational program components. These methods include tests, demonstrations, presentations, discussions, audiovisual work presentations, practical and theoretical assignments, group work, participation in discussions/debates, and rapid-fire questions (blitz questions). Rapid-fire questions (blitz questions) -

primary objective of using blitz questions is to assess the thorough understanding of the material that has been covered, delivered, and assimilated by the student. These questions serve to evaluate the depth to which the student comprehends the essence of the delivered material and gauges their understanding of the significance of the theoretical content, envisaging the context of the specific discipline as well as public health at large. Blitz questions are administered to students without specific reference to the material covered on that particular study day; rather, they are generally based on the entirety of the material provided throughout the course of study.

The maximum points for a study course/module - 100. The intermediate/midterm assessment is the sum of the points obtained according to the knowledge assessment components envisaged by the syllabus of the study course/module and is determined by 60 points.

The evaluation system comprises midterm and final assessment forms, with a predetermined ratio. The ratio between midterm and final grades is as follows: 60+40=100. Final exam assessment is determined by 40 points.

Evaluation of the final exam: positive if the student receives 24 or more points (60% or more of the maximum evaluation of the exam) in the study component of the MA program in a separate form of student evaluation (intermediate, final). Evaluation system of each study course, its components and methods envisage the course specificity and correspond to the learning outcomes of the course.

Intermediate and final assessment are carried out according to several components: Intermediate - max. 60 points and the final exam - maximum 40 points. The evaluation forms, methods and criteria of program study courses are transparent. To ensure the above, the rubrics are formulated for each component within the evaluation system and a gradation of points according to the rubrics is given.

This information is detailed in the syllabus of all study courses, ensuring transparency and accessibility for students. It is provided in advance, allowing students to be aware of the assessment components, associated rubrics, and point gradations.

Five types of positive grades

- (A) Excellent 91 100 points;
- (B) Very good -81-90 points;
- (C) Good 71-80 points;
- (D) Satisfactory 61-70 points;
- (E) Acceptable 51-60 points.

Two types of negative grades

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

The MA student is entitled to take an additional exam in the same semester. The interval between the final exam and the corresponding additional exam must be a minimum of 5 days. Upon completion of the exam, the student receives immediate notification of exam and final grade.

Students have the option to appeal against exam results after they are announced, within the specified time frame and through a designated process known to the students. Evaluation of the MA program professional practice component follows a distinct format (outlined in the relevant syllabus).

The members of the qualification committee responsible for the MA thesis defense assign a score ranging from 0 to 100 points. MA thesis receiving 51 points or more is deemed satisfactory. If the evaluation scoring falls within 41 - 51 points, thesis redefense is permitted in the subsequent MA thesis defense session, subject to the approval of the

Council of the Faculty of Public Health.

It is crucial to emphasize that the assessment process for MA students is public. The rule for evaluating the MA thesis includes:

- The MA theses committees consist of faculty/school members, professional MA program directors, reviewers and scientists of the relevant field/specialty. The number of members of the commission is determined by at least 5 members. MA thesis defense committee session is authorized to commence its proceedings when at least 2/3 of the commission members are present.
- Upon submission of the master's thesis, the faculty/school council appoints 2 reviewers. The reviewer cannot be the of MA program director and/or a person involved in the implementation of the scientific component.
- The reviewers are required to submit a written report no later than two weeks after receiving the MA thesis for review. The conclusion should assess the extent to which the presented work fulfills the established requirements. It must confirm that the declared results are not a duplication of findings from any previously defended work. Furthermore, the conclusion should assess the feasibility of allowing the work to proceed to public defense.
- The MA thesis can be accepted for public review if it receives a positive opinion from at least one reviewer.

The procedure for the public defense of the MA thesis includes the following components:

- Master's thesis report (15-20 minutes),
- Discussion,
- MA thesis assessment by reviewers,
- Final assessment.

In case both reviewers provide a negative conclusion or if the master's thesis receives less than 51 points during the public defense, a repeat

defense is allowed in the subsequent master's thesis defense session. However, this is subject to the approval of the relevant faculty/school council.

During the master's thesis completion process, MA students are provided with a qualified supervisor, approved by the Council of the Faculty of Public Health.

The supervisor is nominated to the faculty council by the MA program administration in agreement with the MA student; MA students are required to work with their supervisors throughout the MA thesis preparation process; consultations with supervisors are predetermined and scheduled by the MA program administration.

The consultation schedule is developed in advance, following the approval of the MA theses at the faculty council, according to the number of master's students and supervisors.

#### **Learning Outcomes**

In alignment with the recommendations of the Association of Schools of Public Health in the European Region (ASPHER) and international organizations in other fields, education in public health comprises five main directions: biostatistics, social and behavioral sciences, environmental health, epidemiology, and health policy and management. Based upon these five main directions, the basic competencies of public health are created. The learning outcomes of the MA program in "Public Health" are defined in alignment with these competencies.

According to the Association of Schools of Public Health in the European Region (ASPHER, representing 73 European schools of public health, counts the International School of Public Health of Tbilisi State Medical University as one of its members since 2008. As a member, the university pays a membership fee, actively participates in conferences and workshops organized by ASPHER, and consistently incorporates the recommendations and professional insights of this organization into its training processes), the list of public health competencies was developed in a complex approach, with the involvement of public health decision-makers and managers on the one hand, and schools of public health on

the other.

It's important to highlight that the formulation of learning outcomes has considered the approach: public health professionals are dedicated to improving the well-being of individuals and communities. Population health challenges vary over time and across borders and these differences are evident among European countries.

The program learning outcomes are in alignment with the program's objectives. The content and structure of the program are designed to facilitate the attainment of these learning outcomes, encompassing fundamental knowledge, skills, responsibility, and autonomy. Upon completion, the Master of Public Health should be capable of independently applying the acquired knowledge and practical skills in organizations of the relevant profile. The learning outcomes also include a profound understanding of new ideas, along with the ability to quantitatively and qualitatively characterize information and perform statistical processing.

#### **Knowledge and Understanding**

The program graduate, holding a Master of Public Health degree, demonstrates a profound and systematic understanding of the field of activity along with critical insights.

They possess a comprehensive knowledge base:

- Including proficiency in data collection procedures essential for epidemiological research, population health, and risk assessment methods. Furthermore, they demonstrate a deep understanding of the impact of epidemic processes on the population, as well as, principles of exposure and health effects assessment;
- Primary factors determining the development of occupational health disorders, importance of ensuring a safe environment for human well-being, sources of environmental pollution (air, water, soil), the detrimental health effects stemming from such pollution, their negative impacts on health and ways to avoid these negative effects;

- Models addressing individual and interpersonal behavior changes, community and group healthy behavior models in healthcare, design and management of interventions, planning and implementation of social research.
- conceptual models defining healthcare systems and their evaluation, international and local trends in healthcare system development, healthcare financial management systems and healthcare service administration, sufficient funding to invest in generating resources for efficient service delivery. Also, international conventions and regulations, shaping national policy and legislation concerning public health policy and practice.

#### **Ability**

The MA graduate is capable of

- Independently conducting research to monitor and evaluate the population health status and possessing the skills to diagnose and investigate health problems.
- Mobilizing the community to address health problems and providing healthcare education tailored to specific conditions.
- solving complex problems in a multidisciplinary environment, searching for innovative problem-solving approaches, for the design and implementation of public health interventions. This includes making evidence-based decisions, formulating health policies, and evaluating healthcare services.
- Conducting research to develop innovative approaches

#### **Autonomy and Responsibility**

#### The MA graduates can:

- Determine their own continuing education vector own considering the environment and available opportunities, autonomously crafting strategies to enhance their knowledge, provide consistent and complex self-assessment of knowledge and develop future learning strategies.

- Manage and adapt to to the challenges of a complex, unpredictable, or multidisciplinary work environment, including resource allocation and conducting regulatory activities, that impact the institutional network and other stakeholders engaged in the execution of public health policy, within their own competence.

Professionals/experts specializing in public health, epidemiology, biostatistics, environmental health, health management, health financing, health policy and planning, and other relevant fields actively contributed to shaping the program and defining its learning outcomes.

Apart from the academic staff of the Faculty of Public Health of Tbilisi State Medical University, professionals with contemporary Western academic and professional backgrounds, actively employed in national health agencies, public health institutions, as well as international and/or national non-governmental organizations, have been integral contributors to the overall development of the program, from its inception.

Their role and engagement in the program are not only evident through their contribution to its conceptual framework but are also directly substantiated by execution of focused training courses that play a decisive role in achieving thematic and specific outcomes.

# Fields of Graduate Employment

Public health is a field offering a wide range of jobs that appeal to many areas of interest common in public health. MA program graduates will have the prospect of employing in diverse government institutions or national and international non-governmental organizations, formulating preventive and health-promoting programs, aimed at enhancing the overall health and quality of life of the population, through planning, implementation and consultation.

Moreover, individuals completing the master's program will have the prospect of securing employment in health and social services, with

opportunities spanning across various sectors such as insurance companies, public and private healthcare, and social security facilities.

	Status and format of study courses						
Study courses	Semester				Credit	Study course status (basic, elective)	
	1	2	3	4			
Professional English in Use Medicine	Х				7	Basic	
Epidemiology 1	Х				5	Basic	
Environmental epidemiology	Х				3	Basic	
Labor epidemiology	Х				3	Basic	
Behavioral and Social Sciences in healthcare	Х				6	Basic	
Healthcare systems	Х				4	Basic	
Biostatistics		Х			8	Basic	
Public health policy and health policy analysis		X			10	Basic	
Professional practice		Х			10	Basic	
Health economics and health care financial management			X		5	Basic	
Epidemiology 2 - Epidemiology of infectious and chronic diseases			X		5	Basic	
Analytical methods for public health			Х		10	Basic	
Monitoring and evaluation of public health programs; Research design and data analysis; Qualitative research							

methods in Public Health						
			V			
Global Health care			X		4	Basic
Organizational Behaviour	Х				2	Elective
Public Health Advocacy	X				2	Elective
Compilation of scientific project (application).	Х				2	Elective
Reproductive health issues, maternal and child health		Х			2	Elective
Basic aspects of health care economics		Х			2	Elective
Human resource management in health care		X			2	Elective
Epidemiology and Biostatistics - Course of integrated methods			Х		3	Elective
Socio-economic inequities in health care			Х		3	Elective
Public Health Law			Х		3	Elective
Master's thesis/work				Х	30	