**Tbilisi State Medical University**

Faculty of Public Health

One Step Educational Program /Bachelor's in Public Health (BPH) Program

**Public Health**

Program Director - Associate Professor Marina Tsimakuridze

**Academic degree to be granted –** Bachelor of Public Health

**Program duration and credit value –** Credit Value of Bachelor of Public Health educational program - 240 ECTS credits (1 ECTS credit= 30 hours); Program duration - 4 years (8 semesters, each semester - 30 ECTS credits).

**Instruction/Teaching Language:** Georgian

**Program Objectives**

Aligned with the declared mission of TSMU and guided by contemporary educational principles, focusing on result-oriented teaching and resonating with national health policy, to prepare a specialist with relevant competences, who in terms of activities and further skills in the field of public health, will have the opportunity to participate in:

- Developing and implementing essential measures for disease control and prevention;
- Creating a safe environment for the population and establishing a healthy lifestyle;
- Monitoring and evaluating the effectiveness and appropriateness of medical services.

**Prerequisites/Requirements for Admission to the program**

Prerequisites for access to the educational program: for Citizens of Georgia - the results obtained at the unified national exams, taking into account the priorities of the subjects and their respective coefficients established and announced by the TSMU. Foreign citizens will be admitted to the program according to the rules determined by the Ministry of Education, Science and Youth of Georgia.

Based on the requirements/prerequisites for access to the educational program, the subjects, their priority and coefficients are determined by the level of knowledge required to commence the program. Subjects and coefficients are the subject to annual revisions based on the strategy aimed at enhancing the quality of program outcomes and are announced annually, according to the rules established.

Enrollment in the Bachelor's program is also possible through a mobility basis aligning with Georgian legislation and the Internal Regulations set forth by the TSMU. The terms of admission to the program along with other pertinent information are annually published on the website of the National

Assessment and Examinations Center as well as in the reference book and the TSMU website.

**Learning Outcomes**

| **Competencies** | |
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| Knowledge and Understanding | Bachelor of Public Health<br>- Knows the fundamental principles governing physical, chemical, and biological processes in both the environment and biological systems and comprehends the significance of their interrelationships within the ecosystem.<br>- Knows the regularities of macro- and micromorphology and functionality of the human body at norm and pathology, comprehends the importance of laboratory diagnostics in protection and assessment of environment and population health.<br>- Knows the fundamental principles for conducting the analysis of morbidity, developing healing and preventive measures, conducting sociological research. Methods of determining the causes of contagious/communicable diseases and epidemic outbreaks and investigating the epidemic focus. Basic principles of preventive and anti-epidemic activity of nosocomial infections. Particular relevance, content and essence of epidemiological surveillance, disease control and prevention, methods of epidemiological research/investigation.<br>- is acquainted with the methods utilized to investigate the professional suitability of the able-bodied population, as well as the assessment of working conditions within production facilities. Modern principles for assessing the performance of facilities engaged in delivering medical services to the population. Guiding principles for monitoring morbidity, implementing preventive measures and conducting surveillance in educational institutions. |
| Ability | Bachelor of Public Health shall:<br>• Demonstrate the ability in applying evidence-based principles to both research and practice, as well as proficiency in critical analysis and synthesis and ensuring timely and accurate generation of documentation.<br>• Have the ability to conduct activities in compliance with the sectoral and adjacent normative acts, as stipulated by legislation and participate in the solution of professional tasks using professional knowledge (including biostatistical methods and software platforms):<br>- Development and implementation of preventive measures |

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| Responsibility and Autonomy | affecting disease risk factors, organization of immuno-preventive initiatives, overseeing biological safety and control of nosocomial infections;<br>- Identification of harmful environmental factors and specific risk factors; development, implementation and control of sanitary-hygienic preventive measures; development and implementation of rehabilitation measures for patients with occupational diseases; planning and implementation of periodic medical examination and preventive medical examination; examining the health status of the adolescent generation and preparing the documentation containing recommendations/advisory information;<br>- Organization and management of medical services at health care facilities of all level, including primary care; preparation of medical and financial - accounting documentation.<br>- Have the ability to consolidate epidemiological, environmental protection and administrative circumstances in the field of public health providing multi-factor assessment of the situation and engaging on the basis of critical analysis of information (analyzing the effects of natural and artificial factors of the living and working environment on human health):<br>- Gathering data on the health status of the population and conducting both retrospective and real-time analyses; identifying the factors contributing to the development of infectious diseases and the occurrence of epidemic outbreaks.<br>- Assessment of primary hygienic-ecological measures; monitoring of preventive measures and early diagnosis of occupational pathologies. Monitoring compliance with food safety standards regarding special nutrition (dietary, diabetic, fortified) and nutrition for infants and children.<br>- Evaluation of the activities carried out by the structural units of medical-preventive facilities.<br>- Conducting scientific research, primary analysis of research data |

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| | and development of methodological recommendations.<br>- Proficiency in applying teamwork principles and interpersonal communication; adequate dissemination of information on issues related to the health and medical services of the population coupled with the measures to be implemented, across both specialist and non-specialist environments. Processing and analysis of information using modern methods of information technology and comprehension in the field of public health.<br>Bachelor of Public Health shall:<br>- Have the proficiency in decision-making within his/her competence, effective delegation of functions, taking timely and adequate actions in crisis situations.<br>- Have an awareness of the importance of his/her activities in promoting the health and well-being of the population and the ability to: conduct activities in alignment with ethical principles, determine his/her place and role in preventive and anti-epidemic activities, popularize therapeutic and preventive activities, and promote a healthy lifestyle and development.<br>- Strive for professional excellence and continuing academic education in the respective field.<br>- Possess the capacity for postgraduate education and demonstrates a commitment to continuous professional development. Proficiently assess the necessity for further education by conducting a thorough and multifaceted evaluation of knowledge and skills in the field of public health. |

**Teaching and Learning Methods**

**Teaching forms used in study process:**

Education in the Bachelor of Public Health educational program is based on student-centered/oriented methods envisaging students' active involvement in the academic process.

Teaching forms used in study process:

- ❖ Lectures
- ❖ Practical Trainings
- ❖ Seminars
- ❖ Practical sessions – Seminars
- ❖ Colloquiums
- ❖ Case-based learning (CBL)
- ❖ Laboratory teaching
- ❖ Teaching using Simulators and Moulages
- ❖ Group working
- ❖ Data analysis
- ❖ Discussion, Debates
- ❖ Demonstration method
- ❖ Teaching in clinical environment
- ❖ Presentations
- ❖ Participation in scientific research

**Student Knowledge Assessment System**

The method used for assessing student knowledge aligns with the stipulations outlined in the relevant regulatory rules and administrative-legal acts of TSMU. This approach ensures transparency and fairness in the evaluation of student performance. Components of student evaluation - intermediate/midterm assessment and final assessment, summarize student's final evaluation. Maximum assessment of the study course is 100 points envisaging intermediate assessment, summarizing the points obtained according to the knowledge assessment methods/components (attendance, daily student activity, colloquium, presentation, etc.) under syllabus of the training course/module determined by 60 points (minimum 31 points of the midterm assessment) and the final exam assessment determined by 40 points.

The methods/components of midterm assessments, criteria and their share in various subjects are different and correspond to the interest of effective teaching of the subject. The student, who collects no less than 51 points by summarizing the marks obtained through overstepping the minimal margin of intermediate evaluations and final examination, is entitled to take a final exam.

**Employment Opportunities**

The graduates have a broad range of employment prospects, encompassing public health protection services, medical facilities, scientific research institutions, and various organizations with diverse forms of ownership, the activities of which are related to the protection of population health, the provision of healthcare services, as well as the management and implementation of preventive measures. A bachelor of public health can continue his/her studies at the second level of higher education - a master's (MA) degree, serving preparation

of specialists in specific areas of public health.

**Program Structure**

The bachelor's (BA) program is designed to encompass biomedical sciences, preclinical and clinical profile mandatory and elective study courses.. As per the curriculum, the educational approach involves semester teaching during the I, II, and III semesters, while the curation system for the IV, V, VI, VII, and VIII semesters, respectively. The educational program for Bachelor's in "Public Health" envisages sectoral benchmarks of higher education in public health, consequently: out of 180 credits of the basic specialty and professional specialization, 118 credits are compulsory courses, 34 credits are elective courses, 26 credits - the module in "Practical Public Health" and 2 credits - Practice in primary health care, while out of 60 credits of the general component and research, 39 credits – compulsory study courses and 21 credits - elective courses, respectively.

Compulsory study courses for basic specialty and professional specialization: N- 2, 4-6, 10-12, 18-23, 26-38,

40-43, 45-49. Elective study courses: N- 1-15, 18, 19, 23, 24, 29-31, 33, 34. Compulsory study courses of general component and research.: N- 1, 3, 7-9, 13-17, 24, 25, 39,

44. Elective study courses: N- 16, 17, 20-22, 25-28, 32, 35, 36-38.

**Curriculum**

| **Course Title** | **ECTS Credits** | **Semester** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course Title | | I | II | III | IV | V | VI | VII | VIII |
| Obligatory /Basic Disciplines | 185 | | | | | | | | |
| 1. Medical Chemistry | 5 | χ | | | | | | | |
| 2. Medical Biology and Parasitology | 3 | | | | | | | | |
| 3. Medical Physics | 3 | χ | | | | | | | |
| 4. Human Anatomy | 5 | χ | | | | | | | |
| 5. Histology | 4 | χ | | | | | | | |
| 6. Sectoral Orientation Course | 2 | χ | | | | | | | |
| 7. Computer Programs/Software Application | 2 | χ | | | | | | | |
| 8. Basics of Academic Writing | 2 | χ | | | | | | | |
| 9. Foreign Language 1 | 2 | χ | | | | | | | |
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| 10. Basics of Biochemistry | 4 | | χ | | | | | | |
| 11. Fundamentals of human physiology 1 | 4 | | χ | | | | | | |
| 12. Microbiology 1 | 4 | | χ | | | | | | |

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| 13. Basics of Medical Sociology | 3 | | χ | | | | | | |
| 14. Foreign Language 2 | 2 | | χ | | | | | | |
| 15. Basics of Higher Mathematics | 2 | | χ | | | | | | |
| 16. Communication Skills | 2 | | χ | | | | | | |
| 17. Ecological Chemistry | 3 | | χ | | | | | | |
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| 18. Fundamentals of human physiology 2 | 4 | | | χ | | | | | |
| 19. Pathophysiology | 4 | | | χ | | | | | |
| 20. Microbiology 2 | 4 | | | χ | | | | | |
| 21. Basics of Hygiene | 4 | | | χ | | | | | |
| 22. Medical Ecology | 2 | | | χ | | | | | |
| 23. Phsychohygiene | 3 | | | χ | | | | | |
| 24. Foreign Language 3 | 2 | | | χ | | | | | |
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| 25. Biostatistics and Basics of Research | 3 | | | | χ | | | | |
| 26. Natural Environment and Health | 5 | | | | χ | | | | |
| 27. Nutrition Hygiene | 4 | | | | χ | | | | |
| 28. Health Care Services and Health Indicators | 3 | | | | χ | | | | |
| 29. General Therapy | 4 | | | | χ | | | | |
| 30. Family Medicine | 3 | | | | χ | | | | |
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| 31. Artificial Environment and Health | 4 | | | | | χ | | | |
| 32. Special course of Nutritionology | 3 | | | | | χ | | | |
| 33. Infectious Diseases | 3 | | | | | χ | | | |
| 34. Basics of Epidemiology | 4 | | | | | χ | | | |
| 35. Radiation Hygiene | 2 | | | | | χ | | | |
| 36. Practices in Primary Health Care | 2 | | | | | χ | | | |
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| 37. Applied Public Health | 3 | | | | | | χ | | |
| 38. Epidemiologic Surveillance | 4 | | | | | | χ | | |
| 39. Health Care Policy and Management | 4 | | | | | | χ | | |
| 40. Child and Adolescence Hygiene | 4 | | | | | | χ | | |
| 41. Labor Hygiene 1 | 4 | | | | | | χ | | |
| 42. Basics of Occupational Pathology | 4 | | | | | | χ | | |
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| 43. Applied Epidemiology | 4 | | | | | | | χ | |
| 44. Program Management and Information Systems in Public Health | 4 | | | | | | | χ | |
| 45. Healthcare Prognosis and Planning | 2 | | | | | | | χ | |
| 46. Labor Hygiene 2 | 4 | | | | | | | χ | |
| 47. Occupational Pathology | 4 | | | | | | | χ | |
| 48. Health Promotion | 4 | | | | | | | χ | |
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| 49. Public Health in Practice | 26 | | | | | | | | χ |

| **Course Title** | **ECTS Credits** | **Semester** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course Title | ECTS | I | II | III | IV | V | VI | VII | VII |

| | Credits | | | | | | | | I |
|---|---|---|---|---|---|---|---|---|---|
| Elective | 55 | | | | | | | | |
| | | 2 | | | | | | | |
| 1. Professional Latin Language | 2 | χ | | | | | | | |
| 2. History of Medicine | 2 | χ | | | | | | | |
| | | | 6 | | | | | | |
| 3. Molecular and Medical Genetics | 2 | | χ | | | | | | |
| 4. Bioethics | 2 | | χ | | | | | | |
| 5. Medical Psychology | 2 | | χ | | | | | | |
| 6. Leadership | 2 | | χ | | | | | | |
| | | | | 7 | | | | | |
| 7. Pathologic Anatomy | 4 | | | χ | | | | | |
| 8. Pharmacology | 2 | | | χ | | | | | |
| 9. Business Fundamentals/Basics | 3 | | | χ | | | | | |
| 10. Immunology | 2 | | | χ | | | | | |
| | | | | | 8 | | | | |
| 11. General Surgery with Traumatology | 3 | | | | χ | | | | |
| 12. Skin and Venereal Diseases | 3 | | | | χ | | | | |
| 13. Phthisiatry | 2 | | | | χ | | | | |
| 14. Patient education | 2 | | | | χ | | | | |
| | | | | | | 12 | | | |
| 15. Psychiatry | 2 | | | | | χ | | | |
| 16. Forensic Medicine and Legal Basics of Doctor Activity | 2 | | | | | χ | | | |
| 17. Medical tourism | 2 | | | | | χ | | | |
| 18. Basics of Insurance Medicine | 2 | | | | | χ | | | |
| 19. Otorhinolaryngology | 2 | | | | | χ | | | |
| 20. Fundamentals of Laboratory Investigations in Sanitary Microbiology | 2 | | | | | χ | | | |
| 21. Basics of Physical and Chemical Research in Practical Sanitary | 2 | | | | | χ | | | |
| 22. Laws and regulations of healthcare | 2 | | | | | χ | | | |
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| 23. Neurology | 2 | | | | | | χ | | |
| 24. Laboratory Management and Organization | 2 | | | | | | χ | | |
| 25. Sports Medicine and Rehabilitation | 3 | | | | | | χ | | |
| 26. Fundamentals of Management | 3 | | | | | | χ | | |
| 27. Etiology, Pathogenesis and Prevention of Extreme Conditions | 2 | | | | | | χ | | |
| | | | | | | | | 8 | |
| 28. Balneology | 2 | | | | | | | χ | |
| 29. Emergency First Aid | 2 | | | | | | | χ | |
| 30. Eye Diseases | 2 | | | | | | | χ | |
| 31. Oncology | 2 | | | | | | | χ | |
| 32. Tolerance and Diversity | 2 | | | | | | | χ | |
| 33. Pediatrics | 2 | | | | | | | χ | |
| 34. Information Systems in Health Care | 2 | | | | | | | χ | |
| 35. Fundamentals of Clinical Skills | 2 | | | | | | | χ | |
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| 36. Human Recourses Management in Health Care | 2 | | | | | | | | χ |

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| 37. Pharmacy Management | 2 | | | | | | | | χ |
| 38. Tolerance and Diversity | 2 | | | | | | | | χ |