### **Tbilisi State Medical University**

Faculty of Public Health

The First Cycle of Higher Education/Bachelor's in Public Health (BPH) Program

### **Public Health and Management**

Program Director - Professor Bidzina Zurashvili

Academic degree to be granted – Bachelor of Public Health

Program duration/volume – 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**

The aim of the bachelor's program "Public Health and Management" is to prepare specialists with appropriate competence, who will

- Possess the capability to assess the health status of both population and environment, based on the knowledge of the basics of business administration, biomedical and professional sciences, to identify the factors affecting health status and participate in managing measures aimed at preserving health and enhancing the quality of life.
- Participate in the planning, organization and administration of medical services for the population, using modern principles of healthcare organization and management.
- Participate in determining the financial and economic policy of public health institutions services, as well as monitoring and developing the management of medical facilities.

### **Expediency of Program Development**

The expediency for development of the undergraduate educational program "Public Health and Management" stemmed from the need for an educational program based on international standards in medical education. This program is designed to prepare specialists whose competence, along with the issues of disease control and prevention, creating a safe living environment for the population and promoting a healthy lifestyle, monitoring medical services and assessing economic efficiency, is more focused on modern principles of healthcare organization and management in order to improve the efficiency of the country's health care system. In order to

achieve this goal, the Bachelor's Program in "Public Health and Management" was developed in cooperation with French side on the basis of the agreement between the Tbilisi State Medical University (TSMU) and UniMan "Academy of International Management and Performance" (France).

On the basis of mutual agreement, an important place in the curriculum of the Bachelor's program was given to the teaching of disciplines associated with health management issues and the French language.

Based on the above, graduates, upon successful completion of the program, receive a Diploma of Bachelor's degree in public health along with a certificate of higher education recognized by French legislation. All the mentioned guarantees the preparation of qualified personnel for healthcare system of Georgia, drawing on European experience.

The basis for the implementation of the educational program of "Public Health and Management" is the agreement signed between TSMU (Tbilisi State Medical University) and UniMan - Academy of International Management and Performance. Both institutions are authorized higher education institutions in accordance with the laws of Georgia and France, possessing the capability and will to conduct educational activities.

### Prerequisites/Requirements for Admission to the program

Prerequisites for admission to the Bachelor's program "Public Health and Management": for citizens of Georgia - the results obtained on the unified national exams, taking into account designated priorities of subjects, as established and duly announced by TSMU, along with their corresponding coefficients. Enrollment of foreign citizens in the program is carried out according to the procedure determined by the Ministry of Georgia. Foreign citizens are enrolled in the program following the regulations determined by the Ministry of Education, Science, and Youth of Georgia. Subjects, their priority and coefficients are determined by the level of knowledge needed to commence the program. Subject adjustments and corresponding coefficient modifications can be made in alignment with the strategy aimed at enhancing program quality. These changes are published annually, following the established rules.

Admission to the bachelor's program - "Public Health and Management" is based on mobility

accordance with the procedure established by the legislation of Georgia and regulations set forth by TSMU. The terms of admission to the program, along with other pertinent information, are annually published on the website of the National Center for Assessment and Examinations., the reference book and the website of the TSMU.

### **Learning Outcomes**

### **Competences**

## **Knowledge and**

# Graduate should possess a thorough knowledge and understanding of:

# Understanding

- Principles guiding the organization and assessment of administrative, managerial, and commercial endeavors within institutions associated with efficient delivery of medical services to the population.
- Basic regularities of physical, chemical and biological processes in both the environment and biological systems; importance of interconnectedness of these elements within an ecosystem.
- Regularities of the macro- and micro-morphology and functionality of human body at norm and pathology; the importance of laboratory diagnostics for the protection and assessment of environmental and population health.
- Importance and essence of epidemiological surveillance, control and prevention of diseases; methods of epidemiological research, determining the causes of infectious diseases and epidemic outbreaks, and investigating the epidemic focus.
- Methods of studying working conditions and professional suitability of the workforce in industrial facilities.
- Principles of monitoring morbidity, implementing preventive measures,
  and conducting supervision within educational institutions.
- Basic principles of conducting sociological researches, analysis of morbidity data and elaboration of remedial and preventive measures.

### **Ability**

A graduate student can prepare medical and reporting documents, use biostatistics methods and software bases for addressing professional tasks,

conduct activities using professional knowledge in accordance with the sectoral and adjacent legislative normative acts, and participate in:

- Organization of population medical health care/services; planning, organization and management of medical services at all levels, including primary health care facilities.
- Studying the production-management as well as personnel and economic activities of medical facilities, assessment of the quality and efficiency of the work carried out in their structural units.
- Development of disease prevention plan and implementation of preventive measures; surveillance of immunoprophylaxis and biological safety.
- Identification of detrimental environmental and specific risk factors, development and implementation of sanitary-hygienic preventive measures.
- Planning and implementation of periodic medical check-ups and preventive medical examinations, as well as developing, implementing, and monitoring rehabilitation measures for patients with occupational diseases.
- Examining adolescent population health status and documenting recommendations for preventive measures.

The graduate possesses the ability to synthesize administrative and epidemiological information, offering a multifactorial assessment of the situation through a critical analysis of biomedical and business data.

Consequently, the graduate is capable to participate in:

- Evaluation of activities carried out by medical institutions and their structural facilities, determination of service pricing, pricing policy and action objectives.
- Development of measures maintaining and facilitating the provision of patient care services.

- Carrying out retrospective and operational analysis and determining the regularities of the spread of diseases, developing preventive strategies to mitigate risk factors associated with chronic diseases.
- ❖ Examining the impact of both natural and artificial factors of living and working environment on human health and assessing the effectiveness primary hygienic-ecological measures.
- Early diagnosis of occupational pathology and assessment of the results of monitoring preventive measures.
- Evaluation of the results of monitoring the compliance with food safety standards, including specialized food categories such as dietary, diabetic, fortified and nutrition for infants and children.
- Conducting scientific research, primary analysis of results and development of methodical recommendations within his/her competence and specialty.

The graduate possesses the ability of:

- Interpersonal communication and application of teamwork principles, demonstrating competence to organize and manage medical services, within a professional environment.
- Effective transmission of information regarding identified patterns, existing challenges, and proposed measures related to health and medical services and communication within an environment of both specialists and nonspecialists.
- Processing and analysis of information acquired through biomedical and business information management and information technologies as well as modern methods of learning/understanding.

Responsibility and autonomy

The graduate is aware of his/her own role in advancing the rights and safety of both patients and employees within medical facilities.

The graduate is capable of actively engaging in the organization and implementation of anti-epidemic (preventive) initiatives among the population, defining their position and role, conducting activities in accordance with ethical principles, advocating for medical-preventive measures, and fostering the adoption of a healthy lifestyle. The graduate is proficient in making well-informed decisions within their competence, responding promptly and appropriately in crisis situations, and, when required, effectively delegate responsibilities, demonstrate organizational, management and leadership qualities, promptly and accurately generate relevant documentation.

### **Teaching and Learning Methods**

Education in the Bachelor of "Public Health and Management" 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, Colloquiums

Laboratory teaching

Practical – Seminar Trainings

Teaching in clinical environment

Presentations

Participation in scientific research

Project development

Case-based learning (CBL)

Teaching using Simulators and Moulages

Discussion, Debates

Data analysis

Group working

### **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.

In accordance with the legislation of Georgia, components of student evaluation include intermediate assessments - max. 60 points (summarizing the points obtained according to the knowledge assessment methods/components: attendance, student academic activity, colloquium, presentation, etc., envisaged by the syllabus of the study course/module) and the final exam assessment - max. 40 points.

According to the program, the methods/components of intermediate assessments, criteria and their share in different subjects are different and correspond to the interest of effective teaching tailored to the specific requirements of the subject. A student with a score of at least 51 points (minimum 31 points of the midterm assessment) is allowed to take the final exam.

# **Employment Opportunities**

Upon successful completion of the "Public Health and Management" educational program, with the skills and qualifications acquired within the framework of this program, graduates have the opportunity to pursue further studies in Master's programs and advance to Doctoral programs by meeting relevant requirements. The sustainable development of the competencies set in the educational program promotes their employment across diverse sectors of the healthcare system, public health protection services, medical and scientific research institutions and organizations of varying ownerships, engaged in activities related to the implementation of preventive measures, prevention population health, service provision and management, including the National Food Agency and its affiliated units.

## **Program Structure**

According to the curriculum of the bachelor's (BA) program of public health and management, semester teaching in the I, II, III semesters is monocyclic, while in the IV, V, VI, VII, VIII semesters - curation system is involved, respectively. Curriculum combines the study courses of fundamental

and biomedical sciences, preclinical, clinical, social sciences as well as profile mandatory and elective study courses.

The program implies sectoral benchmarks of higher education in public health and consists of 180 ECTS credits for the main specialty and professional specialization/development (including: mandatory courses - 132 credits, elective courses - 20 credits, module "Practical Public Health Care" - 26 credits and practice in primary health care - 2 credits) and 60 credits for general component and research (including: obligatory courses - 58 credits and elective - 2 credits). In particular, the mandatory courses of basic specialization and professional development: N- 2, 4-6, 10-12, 17, 19-24, 26, 30-34, 37-43, 45-51, 53, 55-59. Elective courses: N- 1-12, 13-15, 17, 21-30. Compulsory study courses of general component and research: N- 1, 3, 7-9, 13-16, 18, 25, 27-29, 35, 36, 44, 52, 54, 60. Elective courses: N- 16, 18-20.

#### Curriculum

Course Title	ECTS Credits	Semester									
Course Title	Credits	I	II	Ш	IV	v	VI	VII	VIII		
Obligatory Disciplines	218										
1. Medical Chemistry	5	χ									
2. Medical Biology and Parasitology	3	χ									
3. Medical Physics	3	χ									
4. Human Anatomy	5	χ									
5. Histology	4	χ									
6. Sectoral Orientation Course	2	χ									
7. Computer Programs	2	χ									
8. Basics of Academic Writing	2	χ									
9. French Language 1	4	χ									
10. Basics of Biochemistry	4		χ								
11. Fundamentals of human physiology 1	4		χ								
12. Microbiology 1	4		χ								
13. Basics of Medical Sociology	3		χ								
14. French Language 2	3		χ								

15. Basics of Higher Mathematics	2		χ					
16. Communication Skills	2		χ					
17. Business Fundamentals	3		χ					
18. Ecological Chemistry	3		χ					
19. Fundamentals of human physiology 2	4			χ				
20. Pathophysiology	4			χ				
21. Microbiology 2	4			χ				
22. Basics of Hygiene	4			χ				
23. Medical Ecology	2			χ				
24. Phsychohygiene	3			χ				
25. French Language 3	4			χ				
26. Fundamentals of Management	3			χ				
27. Financial Management I	3				χ			
28. French language 4	3				χ			
29. Biostatistics and Basics of Research	3				χ			
30. Natural Environment and Health	5				χ			
31. Nutrition Hygiene	4				χ			
32. Health Care Services and Health Indicators	3				χ			
33. General Therapy	4				χ			
34. Family Medicine	3				χ			
35. Human resources management in healthcare	2					χ		
36. French Language 5	3					χ		
37. Artificial Environment and Health	4					χ		
38. Special course of Nutritionology	3					χ		
39. Infectious Diseases	3					χ		
40. Basics of Epidemiology	4					χ		
41. Radiation Hygiene	2					χ		
42. Practices in Primary Health Care	2					χ		
43. Operations management	2						χ	
44. French Language 6	3	† †					χ	
45. Applied Public Health	3						χ	
46. Epidemiologic Surveillance	4						χ	
47. Health Care Policy and Management	4						χ	
48. Child and Adolescence Hygiene	4						χ	
49. Labor Hygiene 1	4						χ	
50. Basics of Occupational Pathology	4						χ	

51. Healthcare financing systems	2				χ	
52. French Language 7	2				χ	
53. Applied Epidemiology	4				χ	
54. Program Management and Information Systems in Public Health	4				χ	
55. Healthcare Prognosis and Planning	2				χ	
56. Labor Hygiene 2	4				χ	
57. Occupational Pathology	4				χ	
58. Health Promotion	4				χ	
59. Public Health in Practice	26					χ
60. Financial Management II	2					χ

Course Title	ECTS Credits	Semeste r							
Course Title	22	I	Ш	III	IV	V	VI	VII	VIII
Elective									
			2						
Molecular and Medical Genetics	2		χ						
2. Bioethics	2		χ						
3. Medical Psychology	2		χ						
4. Leadership	2		χ						
5. Professional Latin Language	2		χ						
6. History of Medicine	2		χ						
				2					
7. Pharmacology	2			χ					
8. Immunology	2			χ					
9. English Language I	2			χ					
					2				
10. Basics of Insurance Medicine	2				χ				
11. Phthisiatry	2				χ				
12. English Language II	2				χ				
						7			
13. Skin and Venereal Diseases	3					χ			
14. General Surgery with Traumatology	3					χ			
15. Psychiatry	2					χ			

16. Forensic Medicine and Legal Basics of Doctor Activity	2			χ			
17. English Language III	2			χ			
18. Balneology	2			χ			
19. Tolerance and Diversity	2			χ			
20. Laws and regulations of healthcare	2			χ			
					2		
21. Neurology	2				χ		
22. Otorhinolaryngology	2				χ		
23. Patient education	2				χ		
						4	
24. Information Systems in Health Care	2					χ	
25. Oncology	2					χ	
26. Emergency First Aid	2					χ	
27. Eye Diseases	2					χ	
28. Pediatrics	2					χ	
29. Laboratory Management and Organization	2						
30. Pharmacy Management	2						