Joint Master's Programme in "Applied Public Health"
Petre Shotadze Tbilisi Medical Academy and GIPA – Georgian Institute of Public Affairs

Name of the Programme	Applied Public Health
Step of Education	Second stage of academic education / Master's Degree
Programme ECTS Volume	120 credits
Duration of the Programme	2 years (4 semesters)
Awarded Degree	Master of Public Health
Language of Instruction	English
Programme Heads	Lela Sturua - Petre Shotadze Tbilisi Medical Academy - Affiliated Professor Vano Tsertsvadze – Professor of Georgian Institute of Public Affairs (GIPA, NNLE)

Programme Description:

- The programme is based on the needs of the population and requirements of contemporary public health, which was clearly highlighted through analyzing findings of labor market research and prospective employer surveys. The programme is designed with particular focus on the integration of the directions, characteristic for modern education.
- The programme provides students with a unique opportunity to obtain experience both at the university space, as well as in the field, through implementing obligatory internships. Internships are conducted at affiliated organizations, which carry out research, programs, and work out policies in the field of public health. During internship periods students will be able to develop further relevant skills in analytical and quantitative research methodologies, laboratory methodologies, problem identification and solving strategies and practical application of public health directions in real life situations, thus will deepen their knowledge and gain experience in various areas of public health.
- Majority of academic staff, which is appointed to deliver educational programmes, is represented by valued members and specialists from different areas of public health, who possess exhaustive knowledge and vast experience in terms of development and implementation of public health programmes and interventions, including key areas, such as intervention planning, management and implementation. Academic personnel, who are appointed to implement each particular study course of the aforementioned Master's Degree, are leaders in the general disciplines of public health, as well as scientific-research areas.

Admission prerequisites:

The Master's Programme in Applied Public Health is intended for individuals, who already possess a higher education degree and wish to continue their studies in the field of Applied Public Health.

The obligatory prerequisites for enrolling the Master's Degree are:

- Bachelor's degree or equivalent academic degree;
- Successfully passing Unified National Master's Examinations;
- Successfully passing internal admission procedure, which in its turn consists of following steps:
  - Analyzing candidate's documentation
    - Analysis of the application form, submitted by the candidate, which considers assessment of the applicant's professional biography;
  - Successfully passing English language test organized by the program (demonstrating B2 level of competence at least)

- The candidate, who by the moment of the application can either demonstrate a valid language certificate, confirming their corresponding level of fluency (TOEFL IELTS), or proof of graduation from an English-taught undergraduate or postgraduate programme, is not required to pass the English language test.

- Successfully passing examination in subject specific discipline, which in its turn aims to assess the candidate's knowledge of the field.
  - Sample examination questions (in English language and field specific disciplines) will be posted in advance on the websites of higher educational institutions.

Enrollment in a master's degree program without passing Unified National Master's Examinations is possible in a higher educational institution "On the approval of the procedure for submission and review of documents by Applicants/Master's Degree Candidates/Students who have the right to study without passing the Unified National Exams/Unified Master's Exams" in accordance to the Decree N224/N of the Minister of Education and Science of Georgia, issued at December 19, 2011, for the following persons:

a) For candidates for master's degree, who received a document confirming the academic degree of the relevant higher education in a foreign country;

b) For citizens of a foreign country (except for students participating in a joint higher education program), who study/studied and received credits/qualifications in a foreign country in the master's degree of a higher educational institution recognized in accordance with the legislation of this country;

b1) For citizens of Georgia (except of the students, enrolled to the joint higher education degree and students, participating in the exchange programmes), who reside/resided, study/studied and obtained credits/qualification, at a foreign (or recognized by the legislation of a foreign country) Master's programme in accordance to the Paragraph D1 of the Decree 224/N of the Minister of Education and Science of Georgia (issued at December 19, 2011);

c) For master's degree candidates who were enrolled in a higher educational institution in accordance with the first paragraph of this article;

d) For citizens of foreign countries who obtained the right to continue their studies at a higher educational institution of Georgia before the implementation of the Law of Georgia "On Higher Education" and have a certificate of higher education recognized by the state issued in Georgia.

Programme Objectives:

Main objective of the degree programme is to prepare Public Health specialists, which will carry out practical activities towards various directions of public health, including the fields of disease control, prevention and health promotion. The program is also focused on training specialists with knowledge of local and international standards.

Main objectives of the Master's Degree is to ensure that students obtain and develop the following:

- Structured and in-depth knowledge and corresponding practical skills, necessary for ensuring public health through application of basic healthcare tools (epidemiology, biostatistics, behavioral sciences, health promotion and communication)
- Relevant skills in independent research planning, data collection, analysis and interpretation, as well as formulating relevant conclusions, through application of the latest methods and advancements of the field, in accordance with the requirements of applied public health discipline.
- Necessary skills for research project preparation and application, project development, planning and management at the regional, national and international levels through application of interdisciplinary teaching methods and involvement in scientific-research activities.
- Ability to design and implement relevant health policies, in order to address actual challenges of public health, in accordance with the evidence-based findings; as well as skills for evaluating and communicating results, while advocating for public health/health promotion policies and programmes.

Learning outcomes of the programme :

Knowledge and understanding

Master:

Learning outcome 1 – Provides a deep and thorough definition to the influence of behavioral, biological, social, cultural and political factors on the health of the population.

Learning outcome 2 - Identifies and provides in depth descriptive outlines to elaborate practical and scientific ways for problem-solving in the process of public health policy making and administering.

Learning outcome 3 - In the process of public health policy development, he/she establishes and describes in a structured manner the main strengths and limitations of different approaches in terms of multiple disciplines .

Skill:

Master:

Learning outcome 4 - Prepares a plan for scientific research activity, analyzes qualitative and quantitative data using most up-to-date information technologies and relevant biostatistical and epidemiological methodologies and develops appropriate recommendations in accordance with the evidence-based decisions.

Learning outcome 5 - Plans and develops budget of the intervention in accordance with the principles and theories of financial management independently, while systematically classifies and analyzes relevant expenses and draws financial forecasts, in order to choose and employ the best possible alternative.

Learning outcome 6 - Develops criteria for managing, monitoring, and evaluating public health programmes, as well as plans a public health policy, programme, project, or intervention in accordance to the actual needs of the target population.

Learning outcome 7 - Presents his/her conclusions, arguments and research findings in English, using modern information technologies both to the academic and professional communities, in accordance with the standards of academic conduct.

Responsibility and autonomy:

Master:

Learning outcome 8 - Makes independent decisions in order to solve actual problems of Public Health, while adhering to the norms of professional ethics corresponding legal regulations.

Learning outcome 9 - Determines prospective vision independently, effectively delegates duties and tasks during team work and promotes mutual cooperation, through employing the principles of leadership, guidance and management in the process of independent decision-making.

Relation of Program Learning objectives and Learning Outcomes

	Learning Objectives			
Learning Outcomes	Structured and in-depth knowledge and corresponding practical skills, necessary for ensuring public health through application of basic healthcare tools (epidemiology, biostatistics, behavioral sciences, health promotion and communication)	Relevant skills in independent research planning, data collection, analysis and interpretation, as well as formulating relevant conclusions, through application of the latest methods and advancements of the field, in accordance with the requirements of applied public health discipline.	Necessary skills for research project preparation and application, project development, planning and management at the regional, national and international levels through application of interdisciplinary teaching methods and involvement in scientific-research activities.	Ability to design and implement relevant health policies, in order to address actual challenges of public health, in accordance with the evidence-based findings; as well as skills for evaluating and communicating results, while advocating for public health/health promotion policies and programmes.
LO 1 – Provides a deep and thorough definition to the influence of behavioral, biological, social, cultural and political factors on the health of the population	**x**	**x**		
LO 2 - Identifies and provides in depth descriptive outlines to elaborate practical and scientific ways for problem-solving in the process of public health policy making and administering			x	x
LO 3 - In the process of public health policy development, he/she establishes and describes in a structured manner the main strengths and limitations of different approaches in terms of multiple disciplines			**x**	x
LO 4 - Prepares a plan for scientific research activity, analyzes qualitative and quantitative data using most up-to-date	**x**	**x**	**x**	

information technologies and relevant biostatistical and epidemiological methodologies and develops appropriate recommendations in accordance with the evidence-based decisions				
LO 5 - Plans and develops budget of the intervention in accordance with the principles and theories of financial management independently, while systematically classifies and analyzes relevant expenses and draws financial forecasts, in order to choose and employ the best possible alternative			**x**	**x**
LO 6 - Develops criteria for managing, monitoring, and evaluating public health programmes, as well as plans a public health policy, programme, project, or intervention in accordance to the actual needs of the target population			x	x
LO 7 - Presents his/her conclusions, arguments and research findings in English, using modern information technologies both to the academic and professional communities, in accordance with the standards of academic conduct	x	**x**		
LO 8 - Makes independent decisions in order to solve actual problems of Public Health, while adhering to the norms of professional ethics corresponding legal regulations	x	**X**		**x**

LO 9 -Determines prospective vision independently, effectively delegates duties and tasks during team work and promotes mutual cooperation, through employing the principles of leadership, guidance and management in the process of independent decision-making			x	x

Employment opportunities:

The graduate of the programme represents a specialist of Public Health, who is able to get employed at the governmental, non-governmental organizations, international and/or private enterprises, academic institutions and healthcare providing facilities. Career development opportunities consider particular focus on collection of epidemiological research and evidence-based data, development of larger or smaller scale projects in health promotion, project administration, supervision, monitoring and evaluation, as well as communicating findings and so on.

Volume, structure and content of the educational programme

Master's Degree in Applied Public Health considers following core directions: Epidemiology and Biostatistics, Social and Behavioural Aspects of Health, Health Policy and Management, Health Budgeting and Assessment of Effectiveness.

- The part of Epidemiology and Biostatistics covers following material: general concepts of statistics and methods of statistical analysis, tools of statistical analysis, environmental factors, which cause disease, environmental health, occupational risks, epidemiological research design, quantitative and qualitative research methods, indicators of disease prevalence and incidence, data collection and interpretation, critical reading and evaluation of epidemiological reports.
- The part of Social and Behavioural Aspects of Health addresses effective planning and implementation of interventions in terms of behavior change in the field of health care, as well as different models of changing behavior and their essential components;
- Throughout the Health Policy and Management part are taught: global health, health policy and determinants of health, evidence-based public health, policy monitoring and assessment, as well as project management, including operation management,
- The part of Budgeting and Effectiveness provides knowledge around the following key areas: general principles of financial management and budgeting and main approaches towards cost-efficiency in healthcare.

The elective study component includes a variety of applied public health directions, which facilitate master's programme graduates to draw professional focus on a range of various public health problems, from policy management of non-communicable and infectious diseases to maternal and child health and environmental health issues.

Duration of the educational programme is 2 years, 4 semesters and includes 120 credits. In accordance with the European Credit Transfer and Accumulation System (ECTS), a student's credit load per each academic year consists of 60 credits, divided to 30 credits per semester respectively. 1 credit for this programme is equivalent to 25 astronomical hours.

Learning Plan

Status	Learning Course	Precondition	Load			Semesters			
			ECTS Credits	Contact hrs.	Independent hrs.	I	II	III	IV
Mandatory	**Public Health Statistics**	**Without Precondition**	**6**	32	118	6			
	Statistical analysis in SPSS	**Without Precondition**	**4**	32	68	4			
	Epidemiology	**Without Precondition**	**6**	60	90	6			
	Academic Writing	**Without Precondition**	**4**	32	68	4			
	Qualitative Research Methods	**Without Precondition**	**6**	30	120	6			
	Health information systems	**Without Precondition**	**4**	32	68	4			

	Health Policy	**Without Precondition**	**4**	30	70		4		
	Behavioral science and health education	**Public Health Statistics; Qualitative Research Methods**	**5**	32	93		5		
	Global Health	**Epidemiology**	**5**	32	93		5		
	Laboratory Practice in Public Health	**Epidemiology**	**4**	30	70		4		
	Project management	**Without Precondition**	**4**	30	70		4		
	Leadership and professionalism	**Without Precondition**	**4**	42	58		4		
	Financial management in public health	**Without Precondition**	**6**	45	105			6	
	Public Health Ethics and Legislation	**Qualitative Research Methods; Global Health**	**4**	30	70			4	
	Health Economics	**Health Policy**	**4**	32	68			4	
	Public health communication and marketing	**Without Precondition**	**4**	32	68			4	
	Practice	**All mandatory courses of I and II Semesters**	**8**	147	53			8	
	Master's Thesis	**90 ECTS Credits**	**30**	30	720				30
			112			**30**	**26**	**26**	**30**
Electives	**Maternal and Child health, Reproductive Health**	**Epidemiology; Public Health Statistics**	**2**	16	34		2	2	
	Planetary Health	**Global Health**	2	25	25			2	

	Public Health and Non-communicable Diseases	**Epidemiology; Public Health Statistics**	2	24	26		2	2	
	Public Health and Infectious Diseases	**Epidemiology; Public Health Statistics**	2	27	23		2	2	
	Mental health	**Behavioral Science and Health Education**	2	33	17			2	
	Substance use prevention, treatment and policy	**Health Policy**	2	23	27			2	
	Tobacco control	**Health Policy**	2	25	25			2	
	Public Health Nutrition	**Epidemiology**	2	24	26		2	2	
	Public Health and Aging	**Epidemiology**	2	24	26		2	2	
	Basics of Geographical information Systems	**Without Precondition**	2	30	20			2	

Study courses

Each study course of the programme corresponds to the nine learning outcomes or the programme, described in the learning outcomes section of the programme. The table below presents the learning outcomes in relation to mandatory courses, practical and research components, which in turn are divided into three levels: I, D, M, where I denotes the exit of the given subject at the introductory level (Introduction), D denotes Development, M is oriented towards mastering (Master). Also, P denotes a given result of a given subject in practice (Practice). A subject can be taught at Introductory and Practice (IP), Practice and Development (DP) or Practice and Mastering (PM) levels.

Curriculum Map

Mandatory learning courses	Program Learning Outcomes								
	Learning Outcome 1	Learning Outcome 2	Learning Outcome 3	Learning Outcome 4	Learning Outcome 5	Learning Outcome 6	Learning Outcome 7	Learning Outcome 8	Learning Outcome9
Public Health Statistics				IP			IP		
Statistical analysis in SPSS				IP			IP		
Epidemiology	IP	I	I	IP			IP		I
Academic writing				I			I	I	I
Health information systems				DP		D	DP	D	
Qualitative Research Methods				DP			DP	D	
Health Policy		IP	IP	IP		IP	IP	IP	
Behavioral science and health education	DP			DP			DP	DP	DP
Global Health	DP	DP	DP	DP		DP	DP	DP	
Laboratory Practice in Public Health			D	DP		DP	DP		D

Project management				D	I	DP		D	DP
Leadership and professionalism								DP	PM
Financial management in public health		D			M	DP			
Public health communication and marketing							DP	D	DP
Public Health Ethics and Legislation							DP	M	PM
Health Economics		D	D		DP				
Practice	DP	DP	DP	M		D	DP	DP	DP
Master's Thesis	M	M	M	M		M	M	M	M

Teaching methodologies:

Teaching process will be implemented using two types of classroom-based activities, namely in the form of lectures and seminars, as well as student independent work. Student independent work considers both individual and group assignments.

Aside from classroom-based teaching, the study process considers development of practical skills and their application to particular situations. During mandatory practical placements, students will develop necessary skills in analytical and quantitative research methodologies, as well as problem-solving and adapting obtained knowledge to real-life situations around the fields of public health. During practical placements, students will be able to work at the affiliated public health organizations and take active part in the ongoing research projects or contribute to planning of prospective research activities. In addition, students will obtain experience in the field of applied research

Lectures: Lectures aim to address and review the main key points of the topic. Lectures will be conducted using a variety of visual means, in an interactive format. Lectures are included in both obligatory and elective courses. The details and content of the lectures are represented from diverse areas and their scope varies from one course to another

Seminars: Throughout the seminars will be carried out following activities: a) detailed and in-depth revision of the key points, which were covered at the lectures; b) enhancement and promotion of student engagement; c) discussion of topics, distributed throughout individual and group presentations, as well as other course assignments and papers; d) assessment of students' participation in the study process. The aforementioned is implemented using various teaching-learning methods, which are indicated in the syllabus of each training course.

During the seminars, students will have the opportunities to deliberate and tackle specific areas from a rather detailed perspective, which later may serve as the core topic for the student's end-of-the course paper. The lecturers will facilitate students with understanding the material, as well as help with clarifying relevant details. The seminars will include various types of student-oriented group work, such as discussions/debates, discussion of current topics, practical activities, individual and group work with the lecturer, etc.

Taking into consideration the specific needs or requirements of a particular study discipline, some courses of the programme may imply laboratory placements and field work, which in its turn considers carrying out visits to various organizations and institutions. In addition, the study courses may employ problem or demand-based learning types, real-life problem or scenario groups, project application, e-learning, internship, voluntary activities and work projects, as well as diverse and multicultural events

Student knowledge assessment system

The student will be awarded with corresponding credits for each study course, if he/she receives positive evaluations following completion of the course. The student's knowledge is assessed with a **100-point system** through intermediate assessments and a final exam

The components of intermediate assessment and distribution of points, as well as number of assessments and their criteria differ in accordance to the specifics of the particular discipline and along with a minimum competency threshold for midterm and final assessments are determined individually within the study course syllabi.

After completing the study course, a student is awarded with the ECTS credit only if he/she accumulates at least 51 points after completing the final exam. If the student's final grade is within the range of 41-50 points, he/she is allowed to retake the exam. An additional exam is scheduled at least 5 days after the final exam results are announced. If the student's final grade is less than 41 points, he/she must retake the course.

The plan of point distribution throughout the assessment system

Score	Assessment
91-100 (A)	Excellent
81-90 (B)	Very Good
71-80 (C)	Good
61-70 (D)	Satisfactory
51-60 (E)	Sufficient
41-50 (FX)	Insufficient: Failed to pass Which means that in order to pass, student needs additional work, hence he/she is allowed to retake the exam through independent work;
0-40 (F)	Negative assessment: Failed; which means that the work, carried out by the student is not sufficient, hence he/she should retake the study course..

Human Resource

The academic and invited teaching staff, who are designated to implement study courses within frames of this Master's Degree, serve as experts in the fields of statistics, epidemiology (chronic diseases and infectious diseases), healthcare management, business administration and scientific research.

The vast majority of academic staff are public health professionals with valuable experiences in designing, management and implementation of public health interventions.

Academic and invited teaching staff, involved in the implementation of the programme are actively involved in the continuous professional development process.

Infrastructure

The institution provides all the necessary spaces for implementation of the study process, namely - lecture and seminar rooms, conference halls, modern laboratory with relevant inventory and up-to-date equipment, virtual learning tools and resources, as well as the Examination center, equipped with computers and corresponding software, continuously expanding library, special spaces for student group work, work spaces of administrative staff, archive, sanitary units etc.

Aside from stated above, students will be able to employ the library resources of both TMA and GIPA. Both institutions, TMA and GIPA, have active, functioning libraries, which includes reading halls and spaces for student independent and/or group work. The reading hall is equipped with all the necessary technical devices, including computers, which are connected to fast wireless internet. The library vaults include all the core literature, indicated throughout the course syllabi, scientific-research papers, as well as other types of literature and sources of information.

The students are provided with access to following resources:

- EBSCO;
- JSTOR;
- Cambridge Journals Online,
- eDuke Journals Scholarly Collection,
- Oxford journals Collection,
- BioOne,
- SAGE Premier,
- New England Journal of Medicine,
- Royal Society Journals Collection.
- ChemSpider
- Cochrane Library

- HINARI Research for Health
- ELSEVIER (ScienceDirect, Scopus)
- Edward Elgar Publishing Journals and Development Studies e-books;
- ImechE Journals;
- Openedition Journals;