



TEHRAN UNIVERSITY  
OF  
MEDICAL SCIENCES  
School of Public Health  
National Center of Excellence for  
Public Health Education

In the Name of God

Islamic Republic of Iran  
Ministry of Health and Medical Education  
Deputy for Education



Centre of Excellence  
for Global Health

**Title of program: Global Health, Master of Science (MSc)**

**Total Course Credits: 32**

General Courses: -

Core Courses: 24

Elective Courses: 4

Thesis: 4

Total: 32

**Program Description:**

Global health pertains to the population's health on a global scale. It can be defined as a comprehensive field of study, research, and practice that places paramount importance on advancing health and ensuring health equity for individuals across the globe. In essence, global health is a multidisciplinary area of expertise encompassing both theoretical and practical foundations, with a focus on promoting concepts linked to sustainable development and achieving social justice through upholding human rights and principles of fairness.

**Introduction:**

In the realm of global health studies at the master's level, efforts are directed towards addressing health and welfare challenges for individuals and populations in the context of globalization and 21st-century global health issues. Graduates of this program are equipped to work across various professional domains related to global health. These domains encompass roles within the Ministry of Health, focusing on deputies responsible for health, treatment, education, and development, as well as positions within universities, international bodies, and organizations such as the Food and Drug Administration, Ministry of Foreign Affairs, Red Crescent Organization, World Health Organization office in the country, United Nations Population Fund in the country, United Nations High Commissioner for Refugees in the country, educational hospitals, health networks and centers, and pharmaceutical companies. Graduates adeptly identify and analyze health and welfare issues affecting diverse populations, aiming to address national, regional, and global challenges.

The phenomenon of globalization, driven by the rapid and extensive transfer of technology development, communication expansion, global media proliferation, and information exchange, along with countries' increasing inclination to join regional organizations and institutions, has intensified the interactions between nations. As a result, societies are now putting more effort into resolving regional and global challenges to promote equity in response to global health challenges. Consequently, preparing competent graduates capable of working in diverse fields pertaining to global health issues and challenges plays a pivotal role in this endeavor.

Undoubtedly, enhancing the accountability of medical sciences universities in this regard requires the formulation and implementation of educational programs tailored to meet the existing needs for training capable graduates. To this end, a curriculum committee, comprising specialists and experts from various domains such as epidemiology, health policy, health management and economics, medical education, nutrition, health in disasters and crises, and pharmacy economics, was assembled. The committee developed a competency-based curriculum model, following the steps outlined in Harden's model.

### **Course duration:**

2 years

### **The Aims of the Course:**

#### **GOAL**

The goal is to educate a generation that is aware of global health and capable of serving as policy-makers, managers, and researchers in the field of global health.

#### **Specific Objectives:**

- To ensure the provision of skilled and capable workforce for activities related to policymaking, planning, implementation, and evaluation of global health programs.
- To educate specialized professionals capable of participating in international assemblies and establishing Iran's central role in health-related initiatives at the regional level.
- To collaborate and utilize the experiences of countries in the region to develop specialized educational and research programs in the field of global health.
- To effectively employ research findings and transform them into policies and practical programs aimed at enhancing global health in Iran and the region.

### **Admission Requirements:**

- a) Passing the entrance exam is in accordance with the rules and regulations of the Ministry of Health and Medical Education.
- b) Candidates for this field must have one of the following degrees:
  - **Bachelor's:** public health, Midwifery, nursing, nutrition science, health information technology, health services management, environmental health, social and cooperative planning, sociology, anthropology, economics, economic security, political science.
  - **Non-Continuous Master's:** biostatistics, health education and promotion, epidemiology, health economics, human ecology, health and food safety, international relations in health, health psychology, medical journalism, health in disasters, aging health, health and social welfare, nutrition, food science and industry, health information technology, food and beverage control, health services management, health management, safety and environment, environmental health, air quality management, social studies on health,

climate change in meteorology, geo-politics, economic development and planning as well as environmental economics and economic systems planning in economic sciences, anthropology, sociology, social welfare planning, regional development planning, regional studies, diplomacy and international organizations, public policy, social psychology and environment.

- **General Doctorate:** medicine, pharmacy and dentistry

	TITLE	EXAM COEFFICIENTS
1	EPIDEMIOLOGY	2
2	PUBLIC HEALTH	2
3	GLOBAL HEALTH	3
4	ENGLISH LANGUAGE	3

To access the most up-to-date information regarding accepted academic degrees, exam materials, and entrance exam coefficients for each academic year, please consult the non-continuous master's degree exam booklet for medical sciences corresponding to that specific academic year.

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### **Expected Competencies at the End of the Program: General Competencies<sup>1</sup>:**

The anticipated general competencies for graduates at this level encompass:

- Effective communication skills
- Proficiency in research and scientific article writing
- Critical thinking and problem-solving abilities
- Evidence-based management skills, including policymaking, planning, organizing, monitoring, supervising, controlling, and evaluating
- Strong sense of professionalism

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1. General competencies expected of the graduates such as communication skills, critical thinking & problem-solving skills, professionalism ....

**Comparative Table of Professional Responsibilities and Expected Specific Competencies of Graduates, along with the Relevant Course Codes**

SPECIFIC COMPETENCIES	DESCRIPTIONS OF PROFESSIONAL DUTIES	COURSE CODES
Communication and advocacy skills	<ul style="list-style-type: none"> <li>○ Effective role-playing in negotiation teams with different stakeholders at the national, regional, and global levels.</li> <li>○ Establishing effective communication with national, regional and international networks involved in health.</li> <li>○ Effective role-playing in cross-sectoral and intra-sectoral groups as a member or group leader.</li> <li>○ Establishing constructive communication with mass media to promote health.</li> <li>○ Lobbying and advocacy with target centers/ organizations/ individuals to identify key stakeholders involved in health system decision-making.</li> </ul>	18,21,13,17
Systems thinking, analytical analysis, and problem-solving management skills	<ul style="list-style-type: none"> <li>○ Preparation of specialized reports resulting from the analysis of the impact of contextual factors, including political, economic, philosophical, socio-cultural, technological, geopolitical, and ecological aspects, on health.</li> <li>○ Analysis and identification of the functions, opportunities, and threats of existing health systems, providing appropriate solutions in normal and crisis situations.</li> <li>○ Presentation of strategies to capitalize on opportunities and reduce institutional threats or functional challenges of key stakeholders in global health programs.</li> <li>○ Identification of the roles and contributions of involved stakeholders in advancing and analyzing various global health programs.</li> <li>○ Analysis of health system issues, considering their complexities and available capacities, to offer</li> </ul>	,06,07,08,09,10,03,19,22

Policy-making and planning

systematic solutions for problem-solving.

12,14,15,20

- Evaluating and analyzing the characteristics, components, and performance of health systems.
- Analyzing, identifying, prioritizing, and selecting appropriate solutions to overcome health challenges and issues at national, regional, and international levels.
- Identifying the impact of climate change on health and its decision-making considerations.
- Identification of vulnerable and at-risk groups and considering the influential factors on their health in health policymaking.
- Collaborating in strategic and targeted planning to enhance health systems, considering the performance and experiences of health systems in different countries and through interdisciplinary/ interprofessional collaborations.
- Active participation in the development, implementation, and establishment of health programs and initiatives.
- Monitoring and evaluating health policies and the performance of health systems using national, regional, and global databases, and providing feedback to stakeholders.
- Assessing and analyzing the successes and failures of programs and health system reforms, considering the political, economic, and social structures of countries.
- Analyzing issues, policy-making, and planning through effective use of contemporary technologies, including software, databases, artificial intelligence, social networks, etc.
- Policymaking in determining interventions or analyzing ongoing policies and interventions by precisely and comprehensively identifying the

	<p>geographical and temporal distribution of diseases and understanding populations at risk of diseases at the national and global levels.</p> <ul style="list-style-type: none"> <li>○ Prioritizing global health needs using knowledge of disease epidemiology patterns.</li> </ul>	
Searching, translating, and applying evidence	<ul style="list-style-type: none"> <li>○ Identifying the best solution in dealing with possible problems in the health field by differentiating between the need to conduct research and providing other solutions and managerial-executive operational plans.</li> <li>○ Providing research proposals for needed studies in case research is required to solve a problem, in collaboration with other relevant stakeholders.</li> <li>○ Searching, evaluating, and summarizing relevant literature for analysis and problem-solving.</li> <li>○ Collaborating in health studies as a member of interdisciplinary teams.</li> <li>○ Actively participating in the knowledge translation process and drafting study reports for various stakeholders.</li> </ul>	01,02,16,23
Ethical and cultural competency	<ul style="list-style-type: none"> <li>○ Recognizing cultural differences and social values and considering them in professional performance.</li> <li>○ Incorporating the principle of justice in health into professional practice.</li> <li>○ Taking into account the principles of conflict of interest in team and interpersonal performance.</li> <li>○ Respecting the principles of intellectual property rights in professional practice.</li> </ul>	04,11



## Specific Competencies and Skills:

### Comparative Table of Specific Competencies Expected from Graduates and Learning Outcomes for Achieving each Competency

EXPECTED COMPETENCIES AT THE END OF THE COURSE	LEARNING OUTCOMES FOR ACHIEVING EACH COMPETENCY DURING THE COURSE
Communication and advocacy skills	<p>At the end of the course, the graduates will be able to:</p> <ul style="list-style-type: none"><li>○ Effectively play a role in negotiating teams with different stakeholders at the national, regional, and global levels.</li><li>○ Establish effective communication with national, regional, and international networks involved in health.</li><li>○ Act effectively as a member or leader in cross-sectoral and intra-sectoral groups.</li><li>○ Establish constructive communication with mass media and utilize it for promoting health.</li><li>○ Identify key stakeholders involved in health system decision-making, in order to secure the necessary support and resources (human resources, budget, facilities, equipment, etc.) through negotiation and advocacy with relevant centers, organizations, and individuals</li></ul>
Systems thinking, analytical thinking, and problem-solving skills	<p>At the end of the course, the graduates will be able to:</p> <ul style="list-style-type: none"><li>○ Analyze the impact of contextual factors, including political, economic, philosophical, socio-cultural, technological, geopolitical, and ecological aspects, on health.</li><li>○ Analyze the functions, objectives, performance, opportunities, and threats of global health systems in normal and crisis situations and collaborate with interdisciplinary team members to identify solutions.</li><li>○ Propose strategies for capitalizing on opportunities and reducing institutional threats or challenges faced by key stakeholders in global health programs.</li><li>○ Identify and analyze the roles and contributions of involved stakeholders in various global health programs.</li><li>○ Demonstrate an awareness of system insights in analyzing health system issues, considering their complexities and available capacities, and be able to search for systematic solutions for problem-solving.</li><li>○ Recognize the significance and impact of interdisciplinary elements derived from other knowledge domains and utilize interdisciplinary approaches in solving complex global health issues.</li></ul>

## Policy-making and planning

At the end of the course, the graduates will be able to:

- Evaluate and analyze the characteristics, components, and functioning of health systems.
- Analyze health challenges at national, regional, and international levels using social determinants of health approach, and identify, prioritize, and select solutions.
- Identify the impact of climate change on health and consider it in policy-making.
- Identify disadvantaged and vulnerable groups and take their health factors into account in health policy-making.
- Propose strategic and targeted planning for improving the health system by considering the performance and experiences of health systems in different countries and through interdisciplinary collaboration with relevant stakeholders.
- Actively participate in the development, implementation, and deployment of health programs and interventions by collaborating with interdisciplinary and interprofessional stakeholders.
- Monitor and evaluate health policies and system performance using national, regional, and global databases and provide feedback to stakeholders.
- Evaluate the successes and failures of existing health programs and reforms in different countries, considering their political, economic, and social structures.
- Effectively utilize current and up-to-date technologies, including software, databases, artificial intelligence, social networks, etc., for analyzing issues, policy-making, and planning.
- Conduct policy-making and planning based on precise and comprehensive knowledge of the geographic and temporal distribution of diseases and populations at risk at national and global levels.
- Prioritize global health needs using knowledge of epidemiological patterns of diseases.

## Searching, translating, and applying evidence

At the end of the course, the graduates will be able to:

- Differentiate between the need for research and the presentation of other practical managerial-executive solutions and operational programs to address a health problem.
- Propose necessary research studies, if needed, in collaboration with relevant stakeholders, to solve the problem effectively.



- Search, evaluate, and summarize relevant texts for the analysis and resolution of the problem.
- Collaborate as a member of an multidisciplinary/ interdisciplinary team in conducting health studies.
- Actively participate in the process of knowledge translation and drafting research reports for various stakeholders.
- Develop a research plan addressing global health issues while familiarizing with the principles and methods of developing a research plan and taking into account the theoretical and practical considerations of implementing various research methods

#### Ethical and Cultural Competency

At the end of the course, the graduates will be able to:

- Identify cultural differences and social values and include them in their professional practice.
- Consider the principle of justice in health in their professional practice.
- Take into account the conflict of interest considerations in their professional, team and interpersonal performance.
- Consider the principles of intellectual property right in their professional performance.

### **Educational Strategies, Methods and Techniques**

This curriculum is based on the following educational strategies:

- The academic program is designed with a competency-based approach aiming to educate graduates capable of meeting the existing needs in this field.
- Through the use of active teaching methods and engaging students in the teaching-learning process, a student-centered approach will be employed alongside teacher-centered instruction, depending on the educational topics.
- Furthermore, problem-based learning (PBL) and Case Based Learning methods will be strengthened and utilized in some of the courses.

Training in real work environments will be provided through internships in the field, offering educational opportunities in various relevant settings related to global health. These settings include the Ministry of Health (Departments of Health, Treatment, Education, and Development), University Headquarters (Departments of Health, Treatment, Education, Development, and International Affairs), Food and Drug Administration, Ministry of Foreign Affairs, Red Crescent Society, World Health Organization Office in the country, United Nations Population Fund Office in the country, United Nations High Commissioner for Refugees Office in the country, teaching hospitals, health networks, centers, etc.

## **In general, the aim of this form is to strengthen the following educational strategies in this course**

1. **Student-Centered and Teacher-Centered Learning:** In the student-centered approach, learners take greater responsibility for their own learning. This approach involves students participating in group activities during problem-based learning sessions, engaging in debates, group discussions, etc., and also being responsible for pre-reading materials in flipped classroom sessions. The instructional content will be delivered by the instructor using interactive teaching methods and techniques.
2. **Problem-Based Education:** This educational course provides instruction based on scenarios and cases related to various situations in global health that learners may encounter.
3. **Community-Based Teaching:** This strategy involves learners visiting various relevant settings related to global health, such as the Ministry of Health (Departments of Health, Treatment, Education, and Development), University Headquarters (Departments of Health, Treatment, Education, Development, and International Affairs), Food and Drug Administration, Ministry of Foreign Affairs, Red Crescent Society, World Health Organization Office in the country, United Nations Population Fund Office in the country, United Nations High Commissioner for Refugees Office in the country, teaching hospitals, health networks, centers, etc. Learners will also receive necessary training through seminars and feedback sessions as a result of their presence in the Center of Excellence for Global Health and becoming familiar with issues related to global health.

## **TEACHING METHODS AND TECHNIQUES**

To maximize interaction in the teaching-learning process, this educational program will strive to use various teaching methods.

- 1) Interactive Lecturing (utilizing different techniques to make lectures interactive, such as using films, relevant media, questions and answers, in-class quizzes, etc.).
- 2) Flipped Classroom (pre-reading the instructional content before attending the session and then solving problems and addressing global health issues in small learning groups during class).
- 3) Group Discussions and Debates on Challenging Topics (using simulated scenarios for debates and discussions on challenging global health issues).
- 4) Case-Based Discussions<sup>9</sup> (using scenarios to apply the instructional content practically).
- 5) Narration (using narrative writing, storytelling, and explaining critical and risky experiences).
- 6) Role-Playing<sup>11</sup> (developing scenarios and then having learners act out roles).
- 7) E-learning (utilizing synchronous and asynchronous virtual learning systems like the Novid system, Skyroom platform, etc.).

- 8) Field-Based Learning (gaining experience by being present in various community settings related to active entities in global health).
- 9) Self-study (reading resources, articles, guidelines, etc., by learners).

#### **Formative Assessment<sup>1</sup>:**

- Active participation in class and group discussions
- Presentation of various parts of the developed proposal
- Timely and accurate completion of class assignments
- Presentation of designated topics in the class as a seminar
- Active participation in discussions and ethical analyses during the class
- Seminar presentation or teaching the assigned content in the class
- Periodic Exam and quizzes.
- Question and answer sessions and topic analysis
- How to present the project or teach the assigned content in class
- Active participation at the internship site and the WHO Center of Excellence in Global Health.
- Understanding the internship field from various perspectives.
- Active engagement in activities in the internship field under the supervision of an instructor.
- Proposing at least one solution for their project topic with the collaboration of stakeholders.
- Writing a scientific article in English and presenting it as a speech in English

#### **Summative Assessment<sup>2</sup>:**

- Final exam (including multiple-choice questions, descriptive questions, short-answer questions, etc.)

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1. During the course, the residents are evaluated by monitoring their activities and how all the activities are carried out, reviewing the residents' reports, including the number of absences and leave days, medical and ethical errors, assessing by workplace-based assessment methods such as Mini-CEX, Direct Observation of Procedural Skills (DOPS), etc.

2. Residents should take part in the final exam at the end of the course. Summative assessment is conducted using multiple methods like clinical reasoning tests including key feature exam, script concordance test, performance-based assessments can include a variety of objective structured tests such as OSCE (Objective Structured Clinical Examination), workplace-based assessments by the means such as Portfolio, Logbook, Global Rating Form (GRF), Multi Source Feedback (MSF), etc.

- Writing a 2000-word article
- Practical examination of role-playing in simulated situations.
- Portfolio assessment, which includes evaluations of reports prepared by students during their internships and their presentation at the WHO Center of Excellence in Global Health.
- Individual completion of the project
- Practical exam
- Submission of an analytical and critical essay
- Preparation of a qualitative proposal.

### **Student Assessment (Types and Methods)**

#### **Students' Assessment:**

##### **A. Assessment Method:**

Students will be evaluated using the following assessment methods:

- Assessment through presentation of problem-based projects aimed at applying the acquired knowledge in practical work settings.
- Assessment through conducting formative and summative exams tailored to different levels of knowledge, attitude, and skills.
- Assessment of students' performance during their presence in the fields related to global health.

In this regard, the following types of exams will be used:

- Written exams (descriptive, short-answer, etc.).
- Portfolio assessment (showcasing students' active activities and reflections).
- Seminar presentations.
- Practical role-playing exams in simulated situations.
- Assessment based on projects and practical assignments.

##### **B. Frequency of Assessment:**

- Monthly classroom assignments and quizzes will be conducted for formative assessment.
- A comprehensive end-of-term exam will be held, comprising various types of questions relevant to the course.

- ❖ Intra-group exams are available to the educational group.
- ❖ National exams will be conducted in accordance with the country's regulations.

### **Ethical Considerations**

Students are expected to:

- Precisely adhere to the Patients' Bill of Rights (1).
- Strictly follow regulations related to the safety and protection of patients, staff, and the workplace (these regulations are formulated by the relevant educational group).
- Observe Dress Code regulations (2).
- Demonstrate professionalism.
- Safeguard the resources and equipment they work with under all circumstances.
- Respect to instructors, staff, peers, and other students, contributing to a friendly and respectful atmosphere in the workplace.
- Consider social and professional ethics when critiquing programs.
- Adhere to research ethics when conducting studies relevant to their field.

**Note:** The related document(s) can be found at <http://hcmep.behdasht.gov.ir/>.

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**The overall structure of the course:**

**General Courses/ Compensatory Courses (... Credits)**

Code	Title of the Course	Number of Credits			Teaching Hours			Pre-requisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
<b>Total</b>								

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### Core Courses (... Credits)

Code	Title of the Course	Number of Credits			Teaching Hours			Pre-requisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
6	Health Policy	1.5	0.5	2	26	17	43	07
7	Principles Of Global Health	2.5	0.5	3	43	17	60	-
8	Global Health Diplomacy	1	0.5	1.5	17	17	34	11, 07
9	Health Systems Strengthening	2	1	3	34	34	68	07
10	Climate Change and Global Health	1.5	0.5	2	26	17	43	-
11	Culture and Global Health	1.5	-	1.5	26	-	26	07
12	Global Disease Burden and Risk Factors	2	-	2	34	-	34	09, 07
13	Health And Media	0.5	0.5	1	9	17	26	-
14	Internship (1)	-	1.5	1.5	-	78	78	06,07,09,15
15	Internship (2)	-	1.5	1.5	-	78	78	06,07,09
16	Knowledge Translation And Application	0.5	0.5	1	9	17	26	-
17	Communication Skills	1	1	2	17	34	51	-
18	Specialized English	2	-	2	34	-	34	-
<b>Total</b>		<b>16</b>	<b>8</b>	<b>24</b>	<b>275</b>	<b>326</b>	<b>601</b>	

### Elective Courses (... Credits)

Code	Title of the Course	Number of Credits			Teaching Hours			Pre-requisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
19	Governance and Leadership in Global Health	1	1	2	17	34	51	06, 07, 09
20	Digital Health and Global Health	1	1	2	17	34	51	13
21	Community-Centered Development	1	1	2	17	34	51	-
22	Health of Migrants	1	1	2	17	34	51	-
23	Qualitative Research Methodology	1	1	2	17	34	51	-
<b>Total</b>		<b>5</b>	<b>5</b>	<b>10</b>	<b>85</b>	<b>170</b>	<b>255</b>	

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