

# AUA American University of Armenia

## TURPANJIAN SCHOOL of PUBLIC HEALTH



**STUDENT INFORMATION MANUAL  
MASTER OF PUBLIC HEALTH (MPH) PROGRAM  
2019-2021**



*Master of Public Health Program*  
August 2019

Dear Students:

We welcome you to the 2019-2021 Master of Public Health (MPH) program! You represent our 16<sup>th</sup> MPH cohort and join a distinguished line of health care professionals who since 1995 have chosen to seek this graduate degree. Here is an advice from a recent graduate: *“The two years [of the MPH program] will be transformative for you both professionally and personally, if you let it happen. Try to explore every option you will be given (be open for that), do not restrict yourself with the fear of making mistakes. Enjoy these two years ☺.”*

We believe that AUA and this program are different from other universities and programs you may have attended. The diverse backgrounds of the faculty and their different teaching methodologies, coupled with the up-to-date curriculum, are designed to challenge you to:

- think critically and reason analytically;
- present compelling and cogent arguments for interpretation of presented information, situations, and scenarios;
- excel as an individual *and* as a member of a team;
- acquire the tools and experiences necessary to assume key roles in the development of public health and health care delivery systems; and
- adapt to new and innovative teaching strategies and technologies;

You have been selected from among a highly competitive pool of applicants and, as such, face the high expectations of our faculty. We have confidence that you will meet and exceed these expectations. However, we also predict it will take a great deal of effort on your part – both individually and collectively – to achieve the goals you have set for yourselves and those we have established for you.

The following documents are intended to supplement information on the AUA website and other official university publications. They describe and provide considerable detail about the organization, administration, and philosophy of the MPH Program. We ask you to read and study this document in the coming days and ask any questions that you may have. Other supplemental information will be conveyed to you in the coming months and can be added to this binder. We look forward to sharing an exciting academic experience with you!

Varduhi Petrosyan, MS, PhD  
Dean, SPH

## **Table of Contents**

A GUIDING PARADIGM FOR THE MPH PROGRAM .....	1
LEARNING OBJECTIVES AND COMPETENCIES .....	3
MASTER OF PUBLIC HEALTH PROGRAM .....	10
CURRICULUM.....	13
CURRICULUM MATRIX FOR THE MPH PROGRAM .....	14
ROLES AND RESPONSIBILITIES OF MPH STUDENTS .....	21
MPH PROGRAM FACULTY AND STAFF CONTACT INFORMATION .....	23
GRADING IN THE MPH PROGRAM.....	24
ACADEMIC CALENDAR 2019 – 2020 .....	25
ZVART AVEDISIAN ONANIAN CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT .....	27
APPENDIX A.....	29
MPH INTEGRATING EXPERIENCE PROJECT .....	42

## A Guiding Paradigm for the MPH Program

The Institute of Medicine in the United States of America has defined the core functions of Public Health as *assessment, assurance, and policy/program development*. The Johns Hopkins University Bloomberg School of Public Health and the American University of Armenia Gerald and Patricia Turpanjian School of Public Health recognize *communication* as the fourth major function. These four functions are vital to managing the health of a population.

It is the goal of the AUA MPH program to provide all students with a firm understanding of the disciplines underpinning these functions. All core program requirements serve to provide the knowledge and skill base for professional practice in the diverse field of Public Health. The guiding framework for approaching all public health issues developed at Johns Hopkins and used at the American University of Armenia has been coined the “Problem Solving Paradigm.” It is this paradigm that forms the basis of the course “Problem Solving in Public Health.” This six-step paradigm provides the principles around which the required curriculum is organized and sequenced.

The steps of the paradigm are the following:

1. **Define the problem:** To define a Public Health problem, one must be able to acquire an understanding of why a particular issue is of concern for a particular population. One must also be able to see a problem from its many perspectives to determine from which vantage point (and from what depth) a problem is best approached. To do this, one must be able to describe the characteristics of the populations and exposures involved. One must also be able to understand the issue in a historical context. Defining a Public Health problem is an iterative process – and is often the most challenging part the paradigm as the other steps will undoubtedly influence the way one sees and defines a problem. Additional challenges and opportunities are evident when groups – and not just individuals – engage in this process.
2. **Measure the magnitude:** Once a Public Health problem is defined, it is imperative to measure its parameters. Thus, the need for biostatistics, vital statistics, and demography, as well as the skills to store, process, manipulate, and report data.
3. **Understand the key determinants:** Once a public health problem is defined and quantified, it must be decided whether the issue(s) should be addressed. It then becomes important to understand the key determinants of the problem:
  - a. biologic etiology: host → agent → vector
  - b. environmental influences
  - c. socio-cultural and behavioral practices of the at-risk population

This step involves both an understanding of the natural history of the disease process and the identification of risk-factors and at-risk populations.

4. **Develop intervention/prevention strategies:** With a clear understanding of the determinants of the Public Health problem, a number of alternate interventions can be proposed at the cellular/microbial, individual, family, community, and/or population level.

5. **Set policy/priorities:** Once the broad range of alternatives are identified and their relative merits considered, policy must be set bringing into play a variety of communication, leadership, and management skills, as well as ethical and financial assessments.
6. **Implement and evaluate:** Having set policy, it must be implemented and evaluated, again invoking many of the same quantitative and analytic skills used in the problem definition and measurement phases.

In addition to the core Public Health skills and knowledge that are integral to the MPH curriculum, students will gain communication skills necessary to affect change. These skills are acquired from the preparation and participation in such activities as written papers, oral persuasive speaking exercises, team activities, scientific presentations, budget preparation, and grant/proposal preparation.

Students will use individual and group assignments as well as self-directed study to develop areas of concentration. There is a responsibility to attend classes, comply with academic guidelines and standards, and complete assignments.

In the last term of the MPH Program, all students will present their “Integrating experience projects” (Master Thesis), which has been developed over the two-year program. The project integrates the core public health knowledge and skills, the knowledge and skills that have been acquired as students seek breadth and depth in their chosen area, and professional practice skills. This will culminate in the submission of a scholarly paper and a public presentation.

As is evident, the Problem Solving Paradigm that serves as the common theme throughout the MPH curriculum is both iterative and cyclic. The paradigm will serve as a framework for organizing and connecting sometimes seemingly disparate disciplines and perspectives. In the end, all share the goal of improving the health of a population.

**Working Document**  
**Learning Objectives and Competencies**  
**MPH Program**

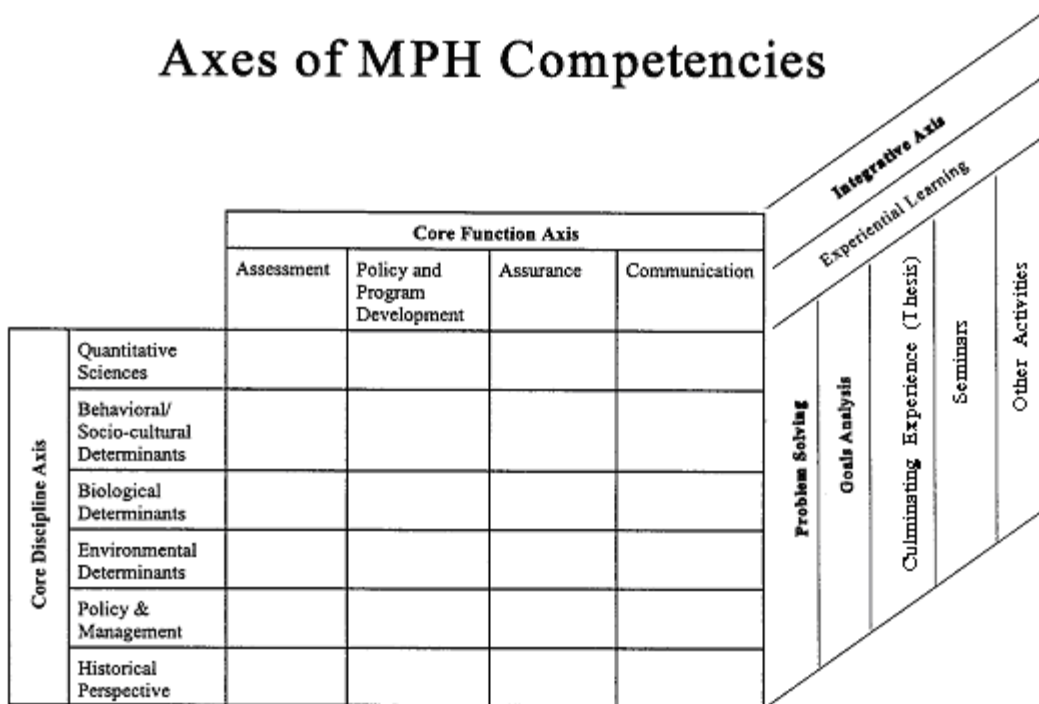
This section describes a multi-dimensional view of MPH competencies used in the development of the MPH program. This organization facilitates the conceptualization of the course content in ways, which assure requisite knowledge, and skills are addressed across the breadth of the core curriculum within a context, which promotes the rapid integration of these skills into professional practice behaviors. This organizational framework also guides the future development and evaluation of the program. Currently, the learning objectives and competencies for the MPH program are organized along the following 3 axes:

**Core Function Axis:** describes the core functions of professional practice as defined by the US Institute of Medicine and as enhanced by Johns Hopkins Bloomberg School of Public Health: assessment, policy and program development, assurance, and communication. These functions are embodied within the program's Problem Solving Paradigm. This integrative paradigm, described in detail elsewhere in this manual, serves as an organizing principle for the structure and sequencing of the core (discipline-based) curriculum in the form of a professional practice paradigm which progresses through each of these core functions.

**Core Discipline Axis:** encapsulates the discipline base underpinning the specific knowledge and skills to be conveyed by each of the core discipline requirements (courses or combination of courses). Within each discipline area, a set of competencies define the level of mastery expected of all MPH graduates, regardless of the student's intended focus of study. These competencies are also used by the MPH faculty in determining the suitability of courses for the MPH curriculum.

**Integrative Axis:** defines the competencies and objectives, which transcend disciplinary boundaries and demonstrate synthesis, analysis, and integration of multiple cognitive, attitudinal, and behavioral domains. This axis is characterized by activities which are inherently integrative in nature, requiring students to simultaneously draw upon and selectively and critically utilize the array of knowledge and skills in their possession. This axis is most closely associated with the behavioral outcomes MPH graduates are expected to manifest in their professional practice activities.

# Axes of MPH Competencies



## FUNCTIONAL AXIS

### 1. Assess the health needs of a defined population.

Competency
Characterize the major national and international public health problems
Describe risk factors for major causes of morbidity and mortality
Define and apply the leading conceptualizations of health and health indicators to the population
Identify, define, and measure a public health problem using both quantitative and qualitative measures
Utilize demographic and epidemiologic assessment techniques to characterize the distribution and burden of disease on a population
Use and critically evaluate health information systems
Understand the key biological, environmental, behavioral, cultural, and/or economic determinants of a given public health problem
Determine appropriate use of data and statistical methods for problem identification and measurement

## 2. Develop, analyze, and implement targeted health policies and programs.

<b>Competency</b>
Identify the scope of public health issues and policies applicable to defined populations and to vulnerable subgroups of those populations
Describe and critique the government's role in health policy development and implementation
Analyze and evaluate the process of public policy-making and how it affects the design, implementation and performance of health policies
Identify policies and services appropriate to promote and maintain health or prevent injury and disease, for communities, families, and individuals
Articulate the fiscal, administrative, legal, social, and political implications of a strategy developed to solve a health problem
Relate how advocacy, biases, politics, and information influence policy-making and program implementation
Make relevant scientific, ethical, health and human rights, economic, administrative and/or political decisions based in light of available data
Develop a plan to implement a policy that addresses organizational design and management; leadership; communication; financial planning and management; ethics, values, and human rights; and human resources management

## 3. Assure the appropriateness and effectiveness of a given public health intervention.

<b>Competency</b>
Design a program evaluation that is methodologically sound
Develop processes to monitor and evaluate programs for their effectiveness, quality, and freedom from unintended harms
Apply principles important in managing and improving health services organizations
Apply key concepts of human resource management to achieving the strategic objectives of health service organizations
Demonstrate facility with appropriate database management and reporting systems for evaluation and monitoring of interventions



#### 4. Communicate public health messages to targeted audiences.

<b>Competency</b>
Use basic word processing, statistical/graphical, spreadsheets, and relational database software to convey the results of quantitative and qualitative analyses
Prepare and deliver effective oral and written presentations
Present demographic, statistical, programmatic, and technical information accurately and effectively for professional and lay audiences
Develop and use team-building skills that facilitate work team performance
Organize and participate in groups to address specific public health issues
Solicit input from individuals, organizations, government agencies, and communities to assure comprehensiveness of information
Demonstrate effective advocacy for programs and resources that further the health of the public

### **CORE DISCIPLINE AXIS**

#### 1. Behavioral Sciences

<b>Competency</b>
Integrate the psychologic and sociologic conceptualization of health, health behavior and illness
Describe the concepts of stress, coping and social support, their inter-relationships and assess their impact on health, health behavior and illness
Analyze and predict the influence of major social structural divisions such as gender, socioeconomic status, and ethnicity on health, health behavior and the treatment of illness
Compare theories and principles of behavior change. Analyze their applicability to different types of health behavior problems.
Formulate behavioral, communication, educational, and advocacy strategies for improving the health of communities and individuals
Evaluate processes and outcomes of social and behavioral interventions on the health of communities and individuals

## 2. Biological Sciences (Disease Biology)

Competency
Differentiate the biology, pathophysiology, modes of transmission and methods of prevention and control of the most important infectious diseases.
Describe the pathophysiology and etiology of genetic and environmentally-induced diseases of public health importance
Compare host responses to major environmental exposures (physical, chemical, biological)
Describe biologic host responses to vaccines, chemoprophylactic, and pharmacologic methods of prevention and treatment of diseases of public health importance
Select ecologic principles directly relevant to major public health diseases
Select and apply biological principles to developing disease prevention, control, or management programs.

## 3. Environmental Health Sciences

Competency
Identify, describe and differentiate the various environments that produce opportunities for exposures to environmental toxicants
Appraise target populations at risk for such environmental exposures, with emphasis on identification of susceptible groups
Characterize environmental factors (agents, vectors, and conditions) that influence transfer to the host and the agents' toxicokinetics, with emphasis on route of entry
Analyze the interaction of environmental toxicants with biological systems, with emphasis on their toxicodynamics
Prepare a simple risk assessment/risk management analysis based on the problem-solving paradigm

#### 4. Management Sciences

<b>Competency</b>
Describe the organization and structure of a health service system
Evaluate basic models of health delivery systems
Assess major approaches to managing and improving health services organizations (including approaches to process improvement, strategic planning, organizational design)
Apply performance improvement concepts and tools in revising a specific process within an organizational setting
Apply key concepts of human resource management to achieving the strategic objectives of health service organizations
Prepare a basic budget

#### 5. Quantitative Sciences\*

<b>Competency</b>
Identify, retrieve, and organize available data relevant to disciplines of public health
Select appropriate data and statistical methods to address a public health question
Compare and contrast basic study designs used in public health
Interpret descriptive and inferential statistics in data analysis
Evaluate the integrity and comparability of data and identify gaps in data sources
Plan a surveillance system for a disease/condition of public health importance
Critique the quantitative methods used in published literature
Explain findings presented in the public health literature

\* includes biostatistics, epidemiology, information systems, and computing

#### 6. Historical Perspective

<b>Competency</b>
Critically analyze basic assumptions and conceptual frameworks used to analyze health issues
View contemporary problems in historical perspective
Conduct historical research relevant to contemporary problems affecting the public's health
Communicate about historical issues through rhetoric, debate and prose
Examine and critically assess recent scholarship on the social history of health care.

**INTEGRATIVE AXIS**

Demonstrate integration of new knowledge and skills with previous training and experience by critical and selective application within a personally and professionally relevant context.

<b>Competency</b>
Critically apply the problem solving framework to a public health problem
Conduct a needs analysis of personal/professional skills and competencies and design a curriculum to meet those needs
Develop habits which foster life-long learning and collegial exchange
Justify/defend facility with core MPH competencies by the critical application of an appropriate professional practice framework
Orally and in writing, present and defend a proposed response to a public health problem in a public (professional or lay) setting

Students develop breadth/depth in areas of personal interest through the selection of topics for individual and group assignments and self-directed study.

## **Gerald and Patricia Turpanjian School of Public Health Master of Public Health Program**

The Master of Public Health (MPH) program within the Gerald and Patricia Turpanjian School of Public Health is affiliated with the Johns Hopkins University Bloomberg School of Public Health and represents an integrated effort to develop expertise in managing health programs, assessing the health needs of the people, and translating that knowledge into improved health by designing, implementing, and evaluating programs to meet those needs.

The primary goal of the program is to train and develop health professionals in the disciplines of public health and management of health care facilities. Currently, the MPH program is a two-year graduate program. Upon satisfactory completion of the first year, there is an opportunity for students to leave the program with a Certificate in Public Health (CPH). However, recommendations are for students to complete the full two-years of concentrated course work and acquire the MPH degree.

In 1995, the Zvart Avedisian Onanian Center for Health Services Research and Development (CHSR) was established to respond to the research and development needs in the multi-disciplinary field of Public Health, and provides hands-on training for students and graduates. Staff within the CHSR often serve as Teaching Associates and work with the students on many practical aspects of the research process.

The MPH curriculum provides a conceptual and theoretical grounding in the core disciplines of public health. The second year consists of advanced studies in core disciplines and provides the students an opportunity to apply their knowledge and skills to problems of importance in a supervised setting. *The following description of courses is subject to modification as the program continues to adapt to the dynamic field of public health education. Changes may occur in response to faculty advisory executive committee recommendations or through peer review processes.*

The first year curriculum is sequenced around a guiding professional practice paradigm which integrates core competencies and knowledge within a framework of professional practice. The curriculum is divided into two modules, each consisting of several courses:

### **Module I: Public Health Problem Solving & Techniques of Problem Investigation**

General Principles of Public Health Problem Solving (Core Required)

Epidemiology (Core Required)

Social & Behavioral Sciences in Public Health (Core Required)

Inferential Biostatistics (Core Required)

Comparative Health Systems (Core Required)

## **Module II: Program Planning, Implementation & Evaluation**

Economics & Finance (Core Required)

Program Planning (Core Required)

Health Services Management (Core Required)

Program Development and Evaluation (Core Required)

Problem Investigation in Environmental Health (Core Required)

MPH Thesis Project Planning (*this is an on-going activity arranged through the MPH Program*)

The required courses during the second year will concentrate on advanced methods and preparation of the integrating experience projects. The MPH Program may also offer elective courses not mentioned below.

## **Module III: Advanced Methodology**

Qualitative Research Methods (Required)

Survey Research Methods (Required)

Intermediate Epidemiology (Required)

Biostatistics: Modeling & Sampling (Required)

Data Management Systems (Required)

Master's Project Implementation – I (Core Required)

## **Module IV: Synthesis**

Training of Trainers (Core Required)

Graduate Research Seminar (Required)

Public Health Internship (Core Required)

Master's Project Implementation- II (Core Required)

The **Masters Project** (or “**Integrating Experience Project**”) is an integrating experience, an opportunity for students to pursue a public health issue of professional relevance in a supervised, supportive setting that incorporates the core tools of public health in the identification or solution of a “real-world” problem or situation.

MPH students are required to complete an integrating experience project as part of their core requirements. The objective of this requirement is to provide the students with an opportunity to demonstrate their ability to integrate and apply core MPH competencies within a personally and professionally relevant context.

The integrating experience project is a two-year process which begins with skills and knowledge learned in the Problem Solving course. The Problem Solving course provides the basic conceptual model for the organization and sequencing of the MPH core curriculum as well as a generic framework for professional practice activities. During the Problem Solving course, students are encouraged to think about and begin planning their integrating experience project.

Possible frameworks for the project include:

Problem Solving Analysis  
Research Grant Application  
Community Service Grant Application  
Program Implementation Plan  
Program Evaluation Plan  
Professional Publication

During the Spring Term of 2020, additional detailed documentation will be conveyed to you to supplement the information in this manual. Group and individual meetings will be arranged so that you can begin planning your project. During the Spring Term of 2020, students will be required to submit a preliminary project plan to the Resident Faculty of the SPH for review.

It is important that you keep up with the individual deadlines to allow sufficient time for a thorough literature review, instrument acquisition and development, IRB submission and approval, pilot testing, data collection, analysis, and preparation of the final paper. Throughout much of this process, courses are ongoing and require consistent attendance and substantial effort to complete.

Reflective of the diverse constituent professions of public health, the program uses a variety of teaching approaches, emphasizes active learning in both individual and group settings, and evaluates students in terms of knowledge and skills and their ability to synthesize, integrate, and apply this knowledge and skill in a practical setting.

**Curriculum**  
**Academic Year 2019-2020**

Classes will be held from 15:30 to 19:00 or 19:30, Monday-Friday except for designated university holidays or as otherwise announced for a specific course.

Fall Semester [16 units]

- PH302      General Principles of Public Health Problem Solving (3)  
*Thompson / Harutyunyan A*
- PH322      Epidemiology (3)  
*Khachadourian*
- PH321      Inferential Biostatistics (5)  
*Khachadourian*
- PH310      Social & Behavioral Sciences in Public Health (3)  
*Harutyunyan Ts*
- PH331      Comparative Health Systems (2)  
*Petrosyan*

Spring Semester [18 Units]

- PH330      Health Economics & Finance (4)  
*McLean*
- PH332      Program Planning (3)  
*Tuli*
- PH340      Health Services Management (3)  
*TBA*
- PH350      Project Development and Evaluation (4)  
*Petrosyan*
- PH311      Problem Investigation in Environmental Health (3)  
*Bartrem*
- PH390      MPH Project Planning (1) [Pass/No Pass]  
*Petrosyan*  
*(Will run throughout the year; specific meeting dates TBA)*



## Curriculum Matrix for the MPH Program

### FUNCTIONAL AXIS

#### 1. Assess the health needs of a defined population.

<b>Competency</b>
Characterize the major national and international public health problems
Describe risk factors for major causes of morbidity and mortality
Define and apply the leading conceptualizations of health and health indicators to the population
Identify, define, and measure a public health problem using both quantitative and qualitative measures
Utilize demographic and epidemiologic assessment techniques to characterize the distribution and burden of disease on a population
Use and critically evaluate health information systems
Understand the key biological, environmental, behavioral, cultural, and/or economic determinants of a given public health problem
Determine appropriate use of data and statistical methods for problem identification and measurement

#### **Courses covering the learning outcome:**

PH302	General Principles of Public Health Problem Solving (3)
PH320	Data Management Systems (1)
PH321	Inferential Biostatistics (5)
PH322	Epidemiology (3)
PH310	Social & Behavioral Sciences in Public Health (3)
PH311	Problem Investigation in Environmental Health (3)
PH330	Health Economics & Finance (4)
PH351	Qualitative Research Methods (3)
PH352	Survey Research Methods (3)
PH323	Biostatistics: Modeling & Sampling (4)
PH324	Intermediate Epidemiology (3)
PH390	MPH Project Planning (1)
PH391	Master's Project Implementation – I (3)
PH392	Master's Project Implementation- II (4)
PH393	MPH Internship (3 credit units)

#### 2. Develop, analyze, and implement targeted health policies and programs.

<b>Competency</b>
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Identify the scope of public health issues and policies applicable to defined populations and to vulnerable subgroups of those populations
Describe and critique the government's role in health policy development and implementation
Analyze and evaluate the process of public policy-making and how it affects the design, implementation and performance of health policies
Identify policies and services appropriate to promote and maintain health or prevent injury and disease, for communities, families, and individuals
Articulate the fiscal, administrative, legal, social, and political implications of a strategy developed to solve a health problem
Relate how advocacy, biases, politics, and information influence policy-making and program implementation
Make relevant scientific, ethical, health and human rights, economic, administrative and/or political decisions based in light of available data
Develop a plan to implement a policy that addresses organizational design and management; leadership; communication; financial planning and management; ethics, values, and human rights; and human resources management

**Courses covering the learning outcome:**

PH302	General Principles of Public Health Problem Solving (3)
PH330	Health Economics & Finance (4)
PH331	Comparative Health Systems (2)
PH332	Program Planning (3)
PH340	Health Services Management (3)
PH390	MPH Project Planning (1)
PH393	MPH Internship (3 credit units)

**3. Assure the appropriateness and effectiveness of a given public health intervention.**

<b>Competency</b>
Design a program evaluation that is methodologically sound
Develop processes to monitor and evaluate programs for their effectiveness, quality, and freedom from unintended harms
Apply principles important in managing and improving health services organizations
Apply key concepts of human resource management to achieving the strategic objectives of health service organizations
Demonstrate facility with appropriate database management and reporting systems for evaluation and monitoring of interventions

**Courses covering the learning outcome:**

PH302	General Principles of Public Health Problem Solving (3)
PH350	Project Development and Evaluation (4)
PH340	Health Services Management (3)
PH324	Intermediate Epidemiology (3)
PH351	Qualitative Research Methods (3)
PH352	Survey Research Methods (3)

#### 4. Communicate public health messages to targeted audiences.

<b>Competency</b>
Use basic word processing, statistical/graphical, spreadsheets, and relational database software to convey the results of quantitative and qualitative analyses
Prepare and deliver effective oral and written presentations
Present demographic, statistical, programmatic, and technical information accurately and effectively for professional and lay audiences
Develop and use team-building skills that facilitate work team performance
Organize and participate in groups to address specific public health issues
Solicit input from individuals, organizations, government agencies, and communities to assure comprehensiveness of information
Demonstrate effective advocacy for programs and resources that further the health of the public

#### Courses covering the learning outcome:

PH302	General Principles of Public Health Problem Solving (3)
PH350	Project Development and Evaluation (4)
PH390	MPH Project Planning (1)
PH360	Training of Trainers (3)
PH381	Graduate Research Seminar (3)
PH390	MPH Project Planning (1)
PH391	Master's Project Implementation – I (3)
PH392	Master's Project Implementation- II (4)
PH393	MPH Internship (3 credit units)

### CORE DISCIPLINE AXIS

#### 1. Behavioral Sciences

<b>Competency</b>
Integrate the psychologic and sociologic conceptualization of health, health behavior and illness
Describe the concepts of stress, coping and social support, their inter-relationships and assess their impact on health, health behavior and illness

Analyze and predict the influence of major social structural divisions such as gender, socioeconomic status, and ethnicity on health, health behavior and the treatment of illness
Compare theories and principles of behavior change. Analyze their applicability to different types of health behavior problems.
Formulate behavioral, communication, educational, and advocacy strategies for improving the health of communities and individuals
Evaluate processes and outcomes of social and behavioral interventions on the health of communities and individuals

**Courses covering the discipline:**

- PH310          Social & Behavioral Sciences in Public Health (3)  
 PH350          Project Development and Evaluation (4)

**2.      Biological Sciences (Disease Biology)**

<b>Competency</b>
Differentiate the biology, pathophysiology, modes of transmission and methods of prevention and control of the most important infectious diseases.
Describe the pathophysiology and etiology of genetic and environmentally-induced diseases of public health importance
Compare host responses to major environmental exposures (physical, chemical, biological)
Describe biologic host responses to vaccines, chemoprophylactic, and pharmacologic methods of prevention and treatment of diseases of public health importance
Select ecologic principles directly relevant to major public health diseases
Select and apply biological principles to developing disease prevention, control, or management programs.

**Courses covering the discipline:**

- PH311          Problem Investigation in Environmental Health (3)  
 PH322          Epidemiology (3)  
 PH324          Intermediate Epidemiology (3)

**3.      Environmental Health Sciences**

<b>Competency</b>
Identify, describe and differentiate the various environments that produce opportunities for exposures to environmental toxicants
Appraise target populations at risk for such environmental exposures, with emphasis on identification of susceptible groups

Characterize environmental factors (agents, vectors, and conditions) that influence transfer to the host and the agents □ toxicokinetics, with emphasis on route of entry
Analyze the interaction of environmental toxicants with biological systems, with emphasis on their toxicodynamics
Prepare a simple risk assessment/risk management analysis based on the problem-solving paradigm

**Courses covering the discipline:**

- PH311          Problem Investigation in Environmental Health (3)  
 PH302          General Principles of Public Health Problem Solving (3)

**4. Management Sciences**

<b>Competency</b>
Describe the organization and structure of a health service system
Evaluate basic models of health delivery systems
Assess major approaches to managing and improving health services organizations (including approaches to process improvement, strategic planning, organizational design)
Apply performance improvement concepts and tools in revising a specific process within an organizational setting
Apply key concepts of human resource management to achieving the strategic objectives of health service organizations
Prepare a basic budget

**Courses covering the discipline:**

- PH330          Health Economics & Finance (4)  
 PH331          Comparative Health Systems (2)  
 PH332          Program Planning (3)  
 PH340          Health Services Management (3)

**5. Quantitative Sciences\***

<b>Competency</b>
Identify, retrieve, and organize available data relevant to disciplines of public health
Select appropriate data and statistical methods to address a public health question
Compare and contrast basic study designs used in public health
Interpret descriptive and inferential statistics in data analysis
Evaluate the integrity and comparability of data and identify gaps in data sources

Plan a surveillance system for a disease/condition of public health importance
Critique the quantitative methods used in published literature
Explain findings presented in the public health literature

\* includes biostatistics, epidemiology, information systems, and computing

**Courses covering the discipline:**

- PH320 Data Management Systems (1)
- PH321 Inferential Biostatistics (5)
- PH322 Epidemiology (3)
- PH323 Biostatistics: Modeling & Sampling (4)
- PH324 Intermediate Epidemiology (3)
- PH352 Survey Research Methods (3)

**6. Historical Perspective**

<b>Competency</b>
Critically analyze basic assumptions and conceptual frameworks used to analyze health issues
View contemporary problems in historical perspective
Conduct historical research relevant to contemporary problems affecting the public's health
Communicate about historical issues through rhetoric, debate and prose
Examine and critically assess recent scholarship on the social history of health care.

**Courses covering the discipline:**

- PH302 General Principles of Public Health Problem Solving (3)
- PH381 Graduate Research Seminar (3)

**INTEGRATIVE AXIS**

**1. Demonstrate integration of new knowledge and skills with previous training and experience by critical and selective application within a personally and professionally relevant context.**

<b>Competency</b>
Critically apply the problem solving framework to a public health problem
Conduct a needs analysis of personal/professional skills and competencies and design a curriculum to meet those needs
Develop habits which foster life-long learning and collegial exchange
Justify/defend facility with core MPH competencies by the critical application of an appropriate professional practice framework
Orally and in writing, present and defend a proposed response to a public health problem in

a public (professional or lay) setting

Students develop breadth/depth in areas of personal interest through the selection of topics for individual and group assignments and self-directed study.

**Courses covering the learning outcome:**

- PH302 General Principles of Public Health Problem Solving (3)
- PH360 Training of Trainers (3)
- PH382 Master's Project Implementation – I (3)
- PH392 Master's Project Implementation- II (4)
- PH381 Graduate Research Seminar (3)
- PH393 MPH Internship (3 credit units)

## **Roles and Responsibilities of MPH Students**

Over and above the expectations made of all students at AUA, it is the responsibility of each student in the MPH Program to meet the following expectations:

1. Share responsibility with the rest of the class to uphold the law and respect the rights of others. This includes living honorably, holding other members of the community to the same high standard of conduct, and taking action when necessary to safeguard the interest of the University and its community.
2. Read and comply with all rules and regulations of the University as stated in the AUA Catalog, AUA Student Handbook, and other official documents.
3. Take responsibility to assure understanding of the academic policies and procedures regarding the MPH curriculum and graduation requirements, registration and advising processes, and grading policies.
4. Accept responsibility for the maintenance of the academic integrity of the institution and for preserving an environment conducive to the safe pursuit of the program's educational, research, and professional practice missions.
5. Attend all classes unless previously excused. In addition, each student is expected to be on time for the start of class, submit assignments by due dates, prepare papers and reports in a scholarly manner, and participate in classroom discussions and activities. In an unusual situation such as an emergency when this is not possible, timely communication with the course instructor, the MPH Program Coordinator, or the Associate Dean as soon as possible is required.
6. Adhere to a high standard of academic ethics which includes individual performance on homework, examinations, written reports, and assignments. Exceptions are when projects are assigned to teams and when quoted sources receive proper citation (referencing). Cheating or copying work from other people or materials are unacceptable behaviors and constitute serious offenses which could result in dismissal from the program. Carefully read the AUA Student Handbook, particularly the section on the Student Code of Ethics.
7. Engage in constructive dialogue with faculty and administration in resolving problems.
8. Identify and develop professional career goals and interests. If they are compatible with course objectives, include relevant or related subject material when selecting projects or study areas.
9. Anticipate and discuss major issues or questions concerning the academic program and pertinent non-academic concerns. Heed reminder notices and other academic advisement information.



10. Follow through on obligations to understand administrative policies and procedures affecting payment of tuition and fees, academic eligibility for scholarship, and other financial aspects of the course. Observe registration and payment deadlines; complete and submit appropriate forms.

For more information see the AUA Policies at <http://policies.aua.am/> .

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## Grading in the MPH Program

The MPH curriculum is broad-based and multi-disciplinary. In addition to the resident faculty, the visiting professors or lecturers come from universities located throughout the United States. The academic preparation and professional experiences of the faculty are not the same. Therefore, they will use different styles and approaches to education and the evaluation of their courses. It is important that MPH students are aware of the variability and interpretation of scores and evaluation instruments used for each course.

Each faculty member, at the start of his/her course, will clearly define the evaluation criteria for the course. Evaluations can consist of written assignments, term papers, problem sets, in-class exercises, presentations, and examinations, and other modalities. Due to the team-oriented nature of public health practice, participation is often an explicitly graded component.

What may not be clear is that the expected performance indicators necessary to receive a specific letter grade may differ among faculty. Some instructors may take away credit when a student is consistently late for class or does not turn in assignments on time. In some courses a numerical score of 75 may indicate acceptable or superior accomplishment; but in others, this numerical score may indicate poor or unacceptable performance. The faculty will explain to the students their grading criteria and the typical distribution of grades. They will provide an interpretation of their expectations and scores for a particular assignment. Students must be alert to the grading differences among the faculty. Ultimately, it is the student who is responsible for performing to the best of his or her ability on every assignment: The faculty do not give grades, the student *earn* them.

Please remember that it is very important that should a student not understand the assignment of a grade on a particular item, he or she should direct inquiries to the faculty member or the course Teaching Assistant as soon as possible. The intent of grading exercises is not only to assess abilities, but to provide constructive information for improvement in subsequent evaluations.

### Resolving Grade Disputes

Should a student believe he or she has been unfairly graded on an assignment or a course, this concern must first be raised with the course faculty. The AUA Policy Appeal policy suggests “A grade may be changed only to correct a mathematical error or misapplication of a grading standard previously announced in the syllabus. Students may petition for a grade review by following the procedure outlined below within 30 calendar days after the official publication of grades.” (<http://policies.aua.am/policy/11>)

If the appealing student truly feels an injustice has occurred and lower grading is a result of biased assessment the grievance may be filed with the Ethics and Grievance Committee of the Faculty Senate at AUA. This process is NOT to be abused to seek a higher letter grade for any reason other than rectifying an incorrect or biased assessment.

For more details see the AUA Policies at <http://policies.aua.am/> .

### Academic Calendar 2019 – 2020

Fall 2019	
Semester begins	Monday, August 19, 2019
Classes Begin	Monday, August 26, 2019
Last Day to Add/Drop a Class (15-week courses)	Sunday, September 1, 2019
Armenian Independence Day*	Saturday, September 21, 2019
Last Day to Withdraw from Class with a Grade of W for 15-week courses	Tuesday, October 15, 2019
Thanksgiving Holiday	Thursday, November 28, 2019
	Friday, November 29, 2019
Last Day to Petition to Graduate for January Conferral	Thursday, October 31, 2019
Classes End	Friday, December 6, 2019
Final Exams	Monday, December 9, 2019
	Tuesday, December 10, 2019
	Wednesday, December 11, 2019
	Thursday, December 12, 2019
	Friday, December 13, 2019
	Saturday, December 14, 2019
Grades Due	Monday, December 16, 2019
Christmas Day*	Wednesday, December 25, 2019
Registration for Spring 2020 starts (subject to change)	Monday, December 23, 2019
Spring 2020	
New Year and Armenian Christmas Holiday*	1/1/2020-1/6/2020
Commemoration Day*	Tuesday, January 7, 2020
Semester begins	Monday, January 13, 2020
Classes Begin	Monday, January 20, 2020
Last Day to Add/Drop a Class (15-week courses)	Sunday, January 26, 2020
Army Day*	Tuesday, January 28, 2020

Women's Day*	Sunday, March 8, 2020
Last Day to Withdraw from Class with a Grade of W for 15-week courses	Tuesday, March 10, 2020
Spring Break (subject to change)	Monday, March 23, 2020
	Saturday, March 28, 2020
Last Day to Petition to Graduate for June Conferral	Tuesday, March 31, 2020
Easter Memorial Day (Monday)*	Monday, April 13, 2020
Genocide Commemoration Day*	Friday, April 24, 2020

\* Armenian Holidays and Memorial Days – No Classes.

**Gerald and Patricia Turpanjian School of Public Health**  
**Zvart Avedisian Onanian Center for Health Services Research and Development**

Applied learning is central to the MPH Program. Students are encouraged to gain practical experience in applying their newly acquired knowledge and skills over the course of their two years of study. A number of opportunities for supervised/mentored applications are available through the Zvart Avedisian Onanian Center for Health Services Research and Development (CHSR). Students are strongly encouraged to apply for temporary research positions, which periodically will be advertised. In general, these are paid opportunities, but should be considered an adjunct to your formal educational experience.

The CHSR is an applied research center located within the College of Health Sciences at the American University of Armenia (AUA). The center was established in 1995 to respond to the research and development needs in the multi-disciplinary field of Public Health in Armenia. Included within the CHSR is the Garo Meghriyan Institute for Preventive Ophthalmology located at the AUA Center.

The staff within the CHSR offers their expertise as a resource to support and facilitate the existing public health infrastructure. The guiding principles of the center are to:

- Provide supervised field training for students enrolled in the AUA Master of Public Health Program;
- Serve as a venue for linkages between the Ministry of Health, donor agencies, and the expertise of the program's faculty;
- Respond to requests for technical assistance from local Armenian ministries and research institutes;
- Support programmatic development of health services in conjunction with the Ministries of Health of the region;
- Respond to the requests for technical assistance from international organizations working on health projects in Armenia and the region.

Among some of the organizations with whom the CHSR has worked are the following:

- American International Red Cross
- American International Health Alliance
- AmeriCares
- Armenian Health Alliance
- Armenian International Dental Association
- Armenian Medical International committee
- Armenian National Center for AIDS Control and Prevention
- Armenian National Institute of Health
- Armenian Social Transition Project (PADCO/Abt)
- Catholic Relief Society
- FAMRI Center of Excellence in Translational Research at Johns Hopkins University
- Georgetown University Institute for Reproductive Health
- Grand Challenges Canada

- Institute for Global Tobacco Control, Johns Hopkins University
- Jinishian Memorial Program
- Lions Club International Foundation
- Management Sciences for Health
- Nork Marash Medical Center
- Open Society Institute
- Population Communications Service, Johns Hopkins University
- Primary Care Center, Gyumri
- Primary Health Care Reform Project
- Project Harmony
- Project NOVA
- United Methodist Committee on Relief (UMCOR)
- UNICEF
- University of Pennsylvania
- University of Texas, Medical Branch
- USAID
- Wellstart International
- World Bank
- World Health Organization and others.

The reputation of CHSR has led to an increase of research projects and staff. The two Institutional Review Boards (IRB) of AUA registered with the US Department of Health and Human Services. In addition, the university filed and completed the process for a Federalwide Assurances of Protection for Human Subjects. As a result the CHSR may now compete for US federally funded projects, and it is anticipated there will be an increase in the number and scope of research studies. Currently, there are numerous proposals in different stages of development within the Center.

For further details visit the CHSR website at <http://chsr.aua.am/> and/or review the SPH Newsletters.

**Appendix 1** lists inventories of the CHSR projects, including several which were initiated before the formal launch of the center. [This listing does not include projects completed as part of academic (classroom) exercises nor does it include student integrating experience projects. Copies of student integrating experience projects (MPH Projects) are available for public review at the MPH website at [http://sph.aua.am/master-projects\\_2018/](http://sph.aua.am/master-projects_2018/) and [https://sph.aua.am/master-projects\\_2019/](https://sph.aua.am/master-projects_2019/).]

## APPENDIX A

*A comprehensive listing of the works of the  
Center for Health Services Research  
and Development 2017-2019*

### Reports

1. Giloyan A, Harutyunyan T, Petrosyan V. Garo Meghrigian Institute for Preventive Ophthalmology – 2016 Annual Report. Garo Meghrigian Institute for Preventive Ophthalmology, Zvart Avedisian Onanian Center for Health Services Research and Development, Gerald and Patricia Turpanjian School of Public Health, American University of Armenia. Yerevan, Armenia 2017.
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8. Atanyan A, Lylozian H, Petrosyan V. “Entrepreneurs in Health” Program- 2018 Annual Report, Avedisian Onanian Center for Health Services Research and Development, Gerald and Patricia Turpanjian School of Public Health, American University of Armenia. Yerevan, Armenia 2019.

### **Educational Materials**

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2. Demirchyan A, Melkom Melkomian D. *Main barriers to optimal breastfeeding practices in Armenia: A qualitative study*. *Journal of Human Lactation*. 2019 Jun 20:890334419858968. doi: 10.1177/0890334419858968. [Epub ahead of print]
3. Anderson G, Hussey P, Petrosyan V. *US Spending On Health Care: The Authors Reply*. *Health Affairs (Millwood)*. 2019 Apr, 38 (4): 696. DOI: 10.1377/hlthaff.2019.00139
4. Anderson G, Hussey P, Petrosyan V. *It’s Still The Prices, Stupid: Why The US Spends So Much On Health Care, And A Tribute To Uwe Reinhardt*. *Health Affairs (Millwood)*. 2019 Jan; 38 (1): 87–95. DOI: <https://doi.org/10.1377/hlthaff.2018.05144>
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2. Harutyunyan A, Abrahamyan A, Hayrumyan V, Danielyan A, Petrosyan V. Effectiveness of Smoking Cessation Training in Armenia. The 7th European Conference on Tobacco or Health (ECToH). Abstract Book, page 73. Porto, Portugal, 2017.
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30. Abrahamyan A, Harutyunyan A, Petrosyan V. Missed teachable moments for promoting smoking cessation in primary care: a qualitative study in Armenia. *Tob. Induc. Dis.* 2018;16 (Suppl 1):A871, DOI: <https://doi.org/10.18332/tid/84433>
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### **Conference/Professional Presentations**

1. Abrahamyan A, Hayrumyan V, Harutyunyan A. Primary Healthcare Physicians' Practice and Confidence in Smoking Cessation: A Cross-Sectional Study in Armenia, the 7th European Conference on Tobacco or Health (ECToH), Porto, Portugal, March 22-25, 2017 [oral presentation].
2. Harutyunyan A, Abrahamyan A, Hayrumyan V, Danielyan A, Petrosyan V. Effectiveness of Smoking Cessation Training in Armenia, the 7th European Conference on Tobacco or Health (ECToH), Porto, Portugal, March 22-25, 2017 [oral presentation].
3. Hayrumyan V, Harutyunyan A, Harutyunyan Ts. Smoking Cessation at 6 to 12 Months After Myocardial Infarction: A Cross-Sectional Study in Armenia, the 7th European Conference on Tobacco or Health (ECToH), Porto, Portugal, March 22-25, 2017 [oral presentation].
4. Harutyunyan A, Abrahamyan A, Hayrumyan V, Petrosyan V. Discrepancy between primary healthcare physicians' attitude and practice in providing smoking cessation. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [oral presentation].
5. Harutyunyan A. Tobacco and Tuberculosis: Two Global Epidemics. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [oral presentation].
6. Harutyunyan A. Making treatment available and affordable. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [oral presentation].
7. Abrahamyan A, Harutyunyan A, Hayrumyan V, Petrosyan V. Missed opportunities for smoking cessation counseling in primary healthcare settings: a qualitative study in Armenia. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [oral presentation].
8. Hayrumyan V, Harutyunyan A, Harutyunyan Ts. The use of five "A's" tobacco cessation strategy among patients hospitalized for myocardial infarction in Armenia. European Network of

Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [oral presentation].

9. Hayrumyan V. Treating tobacco dependence in myocardial infarction patients. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [oral presentation].
10. Grigoryan Z, Musheghyan L, Harutyunyan A, Truzyan N, Petrosyan V. To What Extent the National Tuberculosis Control Center in Armenia Follows the Smoke-free Standards and Policies. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2017, Athens, Greece, May 24-26, 2017 [poster presentation].
11. Mnatsakanyan A, Demirchyan A, Armenian H, Akopyan K. Determinant of Iron Deficiency Anemia among Hospitalized Children Aged 6-59 Months in Armenia: A Case-Control Study. World Summit on Pediatrics, Rome, Italy, June 22-25, 2017 [oral presentation]
12. Thomas MS, Demirchyan A, Khachadourian V. The association between iron supplementation during pregnancy and childhood and anemia status among one to five year old children in India. ASPHER Young Researchers Forum, 10th European Public Health Conference. Stockholm, Sweden, November 1-4, 2017 [oral presentation].
13. Hayrumyan V, Harutyunyan A. Social Support and Smoking Cessation among Patients with Myocardial Infarction in Armenia. 10th European Public Health Conference, Stockholm, Sweden, November 1-4, 2017 [pitch presentation].
14. Harutyunyan A, Abrahamyan A, Hayrumyan V, Petrosyan V. Training impact on physicians' knowledge in smoking cessation in Armenia. 10th European Public Health Conference, Stockholm, Sweden, November 1-4, 2017 [pitch presentation].
15. Abrahamyan A, Harutyunyan A, Hayrumyan V, Petrosyan V. Limited availability of smoking cessation products in the Armenian pharmaceutical market. 10th European Public Health Conference, Stockholm, Sweden, November 1-4, 2017 [pitch presentation].
16. Grigoryan Z, Musheghyan L, Truzyan N, Petrosyan V. Patients and family rights in an inpatient tuberculosis facility in Armenia: Varduhi Hayrumyan. 10th European Public Health Conference, Stockholm, Sweden, November 1-4, 2017 [poster display].
17. Abelyan G, Movsisyan NK, Petrosyan V. Current and past smokers' beliefs, attitudes and experiences related to quitting smoking. Varduhi Hayrumyan. 10th European Public Health Conference, Stockholm, Sweden, November 1-4, 2017 [poster display].
18. Lylozian H, Petrosyan V, Demirchyan A. Health Component of The Social Package in Armenia: A Cross-Sectional Survey of Beneficiaries. 10th European Public Health Conference, Stockholm, Sweden, November 1-4, 2017 [pitch presentation].
19. Giloyan A, Harutyunyan T, Petrosyan V. Visual outcome and vision related quality of



life among patients after cataract surgery in Armenia. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Pitch Presentation]

20. Sahakyan S, Akopyan K, Petrosyan V. Exploring nursing profession in Armenia from nurses prospective: a qualitative study. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Poster Display]

21. Sahakyan S, Petrosyan V, Abrahamyan L. Retrospective cohort study of lost to follow up predictors among TB patients in Yerevan, Armenia. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Pitch Presentation]

22. Truzyan N, Petrosyan V. Population mobility and Tuberculosis-HIV/AIDS co-morbidity rates in Armenia. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Poster Presentation]

23. Sargsyan A, Petrosyan V, von Braun M. Reproductive Hazards and Metal Smelting. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Poster Presentation]

24. Sardaryan Y, Thompson M, Truzyan N. Risk factors impeding help-seeking behaviors among victims of domestic violence. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Poster Display]

25. Muradyan S, Bagramian R, Akopyan K. Qualitative description of experiences of temporomandibular disorder symptoms in Yerevan. 10th European Public Health Conference. Stockholm, Sweden, November 01-04, 2017. [Poster Display]

26. Truzyan N, Musheghyan L, Grigoryan Z, Petrosyan V. Bridging the Gap between International Standards of Quality of Care and Practices in the Inpatient Unit of the National TB Control Center in Armenia. International Society for Pharmacoeconomics and Outcomes Research [ISPOR] 20th Annual European Congress, Glasgow, Scotland, November 4-8, 2017 [poster presentation].

27. Mnatsakanyan S, Demirchyan A, Khachadourian V. Hepatitis B and C infection-related knowledge, attitude and practices of dentists practicing in Yerevan: a cross sectional study. MediPIET Annual Scientific Conference: Regional Contributions and Synergies for Global Health Security, Brussels, Belgium, Nov 27-Dec 1, 2017 [poster presentation].

28. Mnatsakanyan S, Demirchyan A, Khachadourian V. Knowledge on Standard Precautions During Accidental Exposure to Blood and Body Fluids among Dentists in Yerevan, Armenia. American Society for Microbiology Biothreats Meeting, Baltimore, Maryland, USA, Feb 12-14, 2018 [oral presentation]

29. Harutyunyan A. Tobacco and tuberculosis: Two global epidemics. The 17<sup>th</sup> World Conference on Tobacco or Health (WCTOH), Cape Town, South Africa, March 7-9, 2018. [oral presentation].

30. Hayrumyan V, Harutyunyan A, Harutyunyan Ts. Self-efficacy predicts the outcome of smoking cessation attempts. The 17<sup>th</sup> World Conference on Tobacco or Health (WCTOH), Cape Town, South Africa, March 7-9, 2018. [pitch presentation].
31. Abrahamyan A, Harutyunyan A, Petrosyan V. Missed teachable moments for promoting smoking cessation in primary care: a qualitative study in Armenia. The 17<sup>th</sup> World Conference on Tobacco or Health (WCTOH), Cape Town, South Africa, March 7-9, 2018. [poster presentation]
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34. Harutyunyan A. Challenges and Opportunities for Integrating Tobacco Dependence Treatment into TB care in Armenia. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2018, Madrid, Spain, June 14-16, 2018 [oral presentation].
35. Hayrumyan V, Harutyunyan A, Girvalaki Ch. Price and Affordability of Cigarettes among 14 European Countries. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2018, Madrid, Spain, June 14-16, 2018 [oral presentation].
36. Grigoryan Z, Harutyunyan A, Abrahamyan A, Hayrumyan V. Smoking Cessation Services Provided by Tuberculosis Physicians in Armenia: A Qualitative Study. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2018, Madrid, Spain, June 14-16, 2018 [poster presentation].
37. Abrahamyan A, Grigoryan Z, Harutyunyan A, Hayrumyan V. Tuberculosis and Tobacco in Armenia: Physicians' perspective on two global epidemics. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2018, Madrid, Spain, June 14-16, 2018 [poster presentation].
38. Abelyan G, Movsisyan NK, Petrosyan V. Prerequisites, components and barriers to the implementation of a smoking cessation training course for medical residents in Armenia. European Network of Smoking and Tobacco Prevention (ENSP) International Conference on Tobacco Control 2018, Madrid, Spain, June 14-16, 2018 [oral presentation].
39. Giloyan A, Harutyunyan T, Petrosyan V. Uncorrected refractive error and associated risk factors among socially vulnerable older adult population living in Armenia. European

Association for Vision and Eye Research Congress. Nice, France, October 4-6, 2018. [short oral presentation]

40. Giloyan A, Harutyunyan T, Petrosyan V. Uncorrected refractive error and associated risk factors among socially vulnerable older adult population living in Armenia. European Association for Vision and Eye Research Congress. Nice, France, October 4-6, 2018. [Poster presentation]

41. Harutyunyan A. Opportunities and threats of smoking cessation counseling for TB patients: a qualitative study in Armenia. 49<sup>th</sup> Union World Conference On Lung Health, Hague, Netherlands, October 24-27, 2018 [short oral presentation].

42. Thomas MS, Demirchyan A, Khachadourian V. The association between iron supplementation during pregnancy and childhood and anemia status among six to fifty-nine month old children in India. XXI Annual Conference of IAPSM UP & UK CHAPTER: Strengthening of Health System and Primary Health Care for Universal Health Coverage, Aligarh, Uttar Pradesh, India, Oct 26-27, 2018 [oral presentation]

43. Harutyunyan A. Smoking and Sexual Health. The 10th International Conference of Armenian Association of Sexologists, Yerevan, Armenia, November 2-3, 2018 [oral presentation].

44. Hayrumyan V, Harutyunyan A, Grigoryan Z, Sargsyan Zh, Petrosyan V. Tobacco dependence treatment provision by tuberculosis physicians in Armenia. The 4th European Network of Smoking and Tobacco Prevention (ENSP)-SRP International Conference on Tobacco Control 2019, Bucharest, Romania, March 27-29, 2019 [oral presentation].

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46. Abrahamyan A, Harutyunyan A, Hites L. Needs and Gaps in Services Provided for Children with Down Syndrome in Yerevan, Armenia. Perspectives of Parents and Healthcare Providers: a Qualitative Research. Operational Research Capacity Building with SORT IT, Satellite Symposium of the 5th International Medical Congress of Armenia in collaboration with Turpanjian School of Public Health, American University of Armenia, Yerevan, Armenia, June 3, 2019 [poster presentation].

47. Mkrtchyan M, Thompson M, Hites L, Papiieva I. Dental Care in Yerevan, Armenia: Assessing Quality and Patient Experience. Operational research capacity building with SORT IT, Satellite Symposium of the 5th International Medical Congress of Armenia in collaboration with Turpanjian School of Public Health, American University of Armenia, Yerevan, Armenia, July 3, [poster presentation].

This listing does not include projects completed as part of academic (classroom) exercises nor does it include student thesis projects. Copies of recent student theses are available for public review at the [http://sph.aua.am/master-projects\\_2018/](http://sph.aua.am/master-projects_2018/) and [https://sph.aua.am/master-projects\\_2019/](https://sph.aua.am/master-projects_2019/).

Many of the CHSR reports listed above are available on line at <http://chsr.aua.am/> as PDF files and may be freely used for academic purposes as long as proper credit/citation is given to AUA CHSR for its original work.

## **Master of Public Health Program 2019-2021**

### **MPH Integrating Experience Project**

#### **Overview/Timelines**

The following information summarizes the MPH IEP requirements for MPH students:

#### **Rationale**

The MPH Program attracts students who have graduated from health related professional programs and/or have two years of practical experience in health care administration or public health service. This provides the basis upon which new skills learned in the MPH program are integrated. The highly compressed and intensive nature of the MPH Program provides few opportunities for students to apply their newly acquired skills and knowledge into professional practice. Therefore, the IEP allows the students to demonstrate the application of the core public health competencies to a problem of personal and professional relevance. Expectations are for this stringent academic exercise to result in lifelong learning and application behaviors relevant to evidenced-based medicine.

#### **Objectives**

The overarching objective of the MPH IEP is for each student to produce a substantial and scholarly product which:

- demonstrates substantive knowledge, addressing, at a minimum, the core disciplines, preferably utilizing the problem solving or other relevant paradigm
- requires interpretation and analysis of data in the support of a decision or conclusion
- demonstrates oral and written communication and presentation skills
- withstands critique by an appropriate audience
- matures under the supervision and mentorship of faculty advisors
- develops empirical understanding of need for adherence to schedule/time frame
- demonstrates *practical* consideration of conducting public health projects or research

It is desirable for the experience to:

- accommodate the diverse interests, backgrounds, and capabilities of students and faculty
- provide prescriptive guidelines with flexibility to enable creativity
- capitalize on existing courses content and materials where at all possible
- incorporate initial planning of project into goals analysis course
- ensure that there are sufficient resources available and in place.

### **The MPH Thesis Project or Integrating Experience Project**

Students will **independently** produce two tangible products: a scholarly paper and public presentation. See the following page for information about both products.

**Paper:** Each student will prepare an individual paper. **The paper will be a maximum of 20 typed, double-spaced pages using a font of not less than 12 point and 1" margins.** The paper will summarize a student's investigation into a public health problem of personal, professional relevance and interest. Selection of the topic should begin early in the MPH Program and culminate at the end of the second year.

The paper will be presented in accordance with one of several prescribed formats found in subsequent pages, e.g. Problem Solving, Research Grant Proposal, or Professional Publication.

At a minimum, the paper will demonstrate the appropriate and sufficiently thorough application or consideration of **each of the core area competencies** in relation to the problem under analysis and the framework selected. Each of the acceptable frameworks detailed below include specific associated evaluation considerations to guide student preparation and faculty evaluations.

The paper *may* be an adaptation of work previously submitted for other courses or for professional practice, but must have been prepared since matriculating as an MPH student. Students and faculty mentors will be provided detailed guidelines for each of the acceptable frameworks.

Critical use of references is required. References must be cited in accordance with a standardized format (e.g. AMA, APA) appropriate to the framework and identified audience. Students would be advised to consider the distinction between advocacy documents (now easily accessible on the World Wide Web) and peer-reviewed literature.

**Presentation:** In addition to producing a paper, each student will be expected to prepare an effective 15 minute presentation of the paper as if appearing before an appropriate decision-making body such as a state or federal legislature, a grant review board, or a congressional hearing. The presentation will be advertised and open to the public. There must be adherence to the presentation guidelines provided later in this document. The presentation will be followed by a 5 minute summary in Armenian or Russian and a 5 minute question and answer session. Evaluation will include the professional manner in which the presenter responded to the audience. In addition, evaluation includes the academic quality of the slide presentation.

*[Note: Students may collaborate during the preparation and collection phases and should seek peer input/critique, but each student must independently prepare a product with a unique focus.]*

### Format/Evaluation Guidelines for MPH Integrating Experience Project

As part of the requirements for the Master of Public Health degree, all students must complete an MPH Thesis Project, both a paper and a presentation.

The following are guidelines for the output of this project/presentation and the grading criteria:

### Format for Project Papers

- a. About 20 pages (excluding appendices and references).
- b. Typed; 1" margins on all sides; 12 point font; double-spaced; double blank space between sentences; pages numbered.
- c. Include cover page, 1 page [double-spaced] abstract/summary, and table of contents, references, tables, and figures {these do not count against the page limit}.
- d. Provide an electronic copy [use file names which identify you]
- e. Specific criteria for each format follow.

### 3. Grading Criteria for Papers

- a. Two readers will review each paper. One of the readers will be your primary Master Project advisor.
- b. After independently reviewing the papers and listening to the presentation, the reviewers reach consensus on scoring each domain of the selected framework using a 4-point Likert-type grading system. (*The different types of frameworks are presented later in this section*). The basis for the evaluation will be the level of competence expected of an MPH graduate within the context of the framework and problem/topic selected by the student. The ratings with respect to expectations are as follows:

1 (not met/missing)	the element was omitted or not adequately addressed
2 (partially met)	the element was addressed, but not to the level of competence expected
3 (fully met)	meets/exceeds expected level of competence
4 (exceptional)	clearly exceeds the expected level of competence

- c. Each format will have a minimum of 14 grading components. All formats include the 6 core domains and are supplemented with framework specific domains.
- d. Students receiving scores of 3 or 4 in all domains receive a “Pass Unconditionally”. Students receiving scores less than 3 in any domain must address the deficiencies within the specified revision period. Depending on the severity, nature, and distribution of the deficiencies, remediation may range from a written addendum addressing the concern to revising the entire paper. Specific guidance will be provided by the student’s advisor or the Associate Dean of the SPH.

*(Note: Students who do not meet the minimum acceptable standards for the MPH Thesis Project by the given deadlines will be given a grade of “Incomplete” and WILL NOT graduate with their class. In rare situations, the paper, in combination with the student’s overall academic record, may be deemed of such poor quality that the student will be counselled to opt for a Certificate in Public Health).*

All students will be required to complete a final edit for English language/technical writing. Revisions will be completed prior to public presentation.

#### 4. Format for Presentations

- a. 15 minutes in length for presentation/5 minute Armenian or Russian summary/5 minutes for questions.
- b. Use of appropriate visual aids (power point slides or overheads) required.
- c. A similar Likert-type numerical grading system will be used to assess presentations.
- d. There will be two graders for each presentation. Criteria for evaluation of the presentation are included in this document.

*Note: Competencies must be appropriately addressed within the context of the selected framework. Students selecting frameworks other than Problem Solving are strongly encouraged to use the Problem Solving framework as an organizational framework for their Background and/or Discussion sections as appropriate.*



## **MPH Integrating Experience Project Demonstration of Core Area Competencies: Evaluation Guidelines**

The primary educational objective of the project is to demonstrate appropriate consideration and application of core concepts, skills, and knowledge in analyzing a public health problem within any of the proscribed frameworks. The core area competencies must be addressed in each project.

These competency areas cut across the domains identified for each specific framework. For example, quantitative competence may be demonstrated in the literature review and/or methodology section and/or results and/or discussion section of a publication framework. All papers are required to demonstrate minimum competence, **but are held accountable to a level of competence consistent with the problem and framework as defined by the student.** An example of this is when a student refers to an advanced statistical analysis in his/her design. Although the statistical test may exceed the competence expected of an MPH graduate, by virtue of having introduced it, that student is accountable to correctly describe and apply it.

1. History: Appropriate and sufficiently thorough consideration of relevant historical information surrounding the problem ranging from trend information to assessments of previous efforts and related research. Some basic questions include: How has this problem impacted human population in the past? What, if anything, has been done to from a societal, public health, and scientific perspective to *study or solve* this problem in the past? How has this problem – or the definition of the problem - changed over time?
2. Quantitative Sciences (assessment/analysis): Appropriate and sufficiently thorough consideration of epidemiology, demography, vital statistics, and biostatistics (analytical planning, sample size, etc.). Some basic questions include: What quantitative (or qualitative) evidence has been generated to study or solve this problem? What is the strength of the evidence? What types of evidence need to be applied or generated? What types of systems have existed (or need to exist) to study or solve this problem? What assurances are there that the evidence that will be applied or generated in this project (or study) will be sound? Reproducible?
3. Biological considerations (determinants): Appropriate and sufficiently thorough consideration of biologic concepts (genetics, physiology, immune response, life cycles, processes such as aging, growth, and development, and physiologic measurements). Some basic questions include: In the chain of causation for this public health problem, what are the potential roles of biology, both causes and impacts? What is happening with the human organism (or other species) that needs to be considered when studying or solving this problem?
4. Social/cultural/behavioral considerations (determinants): Appropriate and sufficiently thorough consideration of socio-cultural and behavioral factors which directly or indirectly impact on the problem under consideration. Some basic questions include: In the chain of causation for this public health problem, what are the potential societal/cultural/behavioral causes and impacts? What is happening with human groups

that needs to be considered when studying or solving this problem? In what ways does human behavior (i.e., thing we do) need to be considered when studying or solving this problem?

5. Environmental and/or occupational considerations (determinants/impacts): Appropriate and sufficiently thorough consideration of the role and interaction of the physical environment -- which can include both the “man-made” physical environment and natural environment. Some basic questions include: In the chain of causation for this public health problem, what are the potential environmental causes and impacts? What is it about the environment outside of the human organism (either the natural environment or man-made environment) that needs to be considered when studying or solving this problem? What impacts humans when they are in their homes, their cities, their work places, or in transit between these “places.”
6. Management and/or policy and/or resource utilization considerations: Appropriate and sufficiently thorough consideration of management precepts ranging from the domains of administration to leadership to financial planning (budgeting) to policy setting to implementation and planning (logistics). Some basic questions include: From an organizational standpoint, what must be done when creating systems for studying or solving this problem? What is the best (and most efficient) way to study or solve this problem? What resources must be organized to study or solve this problem? Information? Human resources? Capital? In the chain of causation for this public health problem, what are the potential management or policy causes and impacts?

## **MPH Integrating Experience Project 2019-2021 Problem Solving Framework: Paper Format Guidelines**

### ***Heading*** {cover sheet}

Who is the intended audience; who is presenting the information?

### ***Executive Summary***

A one-page synopsis summarizing the key point. For the synopsis, emphasis should include the major recommended actions as well as the nature and magnitude of the problem with a brief discussion of the rationale.

### ***Statement of Problem***

Define Problem

Define problem, assumptions, magnitude and distribution, limitations of data, introduce issue, terminology.

State Goals/Objectives

What is the desired result? What criteria will be used in evaluating 'success'?

### ***Magnitude of the Problem***

Describe what is known about problem, incidence, prevalence, economic impact, human impact {justify why it is a public health problem and why it is important to solve}

### ***Key Determinants***

Describe risk factors & risk behaviors, the natural history of the disease process, other knowledge about the nature of the problem.

### ***Prevention/Intervention Strategies***

Describe and discuss current intervention/prevention strategies being used as well as additional options for intervention/prevention.

### ***Policy & Priority Setting***

Assess the relative advantages and disadvantages of the possible intervention/prevention strategies previously outlined. Consider potential benefit to individuals and to society, cost to individuals and to society, technical and political feasibility, ease of implementation, and potential obstacles. Presentation should be balanced and cover the range of options.

### ***Specific Recommendations***

This section specifies the recommended course(s) of action and a rationale for selecting that/those action(s).

### ***Implementation & Evaluation***

For the recommended course of action identify barriers to implementation, political steps necessary for implementation, and means of evaluating the impact of the intervention. This section should relate your stated goals with the recommended course of action.

## **MPH Integrating Experience Project 2019-2021 Problem Solving Framework: Project Critique Guidelines**

### **1. Executive Summary**

Briefly summarizes problem, magnitude, key determinants, recommended course of action

### **2. Statement of Problem**

Was the problem clearly identified and defined?

Is it an appropriate/relevant public health problem?

Is the group/organization/agency selected to hear the argument appropriate?

### **3. Magnitude of the problem**

Is the magnitude of the problem clearly identified?

Are the strengths and limitations of the measures/estimates discussed?

Does the paper make a compelling case that the problem is significant enough to warrant attention?

### **4. Key Determinants**

Are the appropriate biological, behavioral, and environmental determinants of the problem addressed?

### **5. Prevention/Intervention Strategies**

Are current efforts summarized?

Are a sufficient breadth of options/strategies considered?

Do the options follow from the key determinants discussed?

### **6. Policy & Priority Setting**

Are the relative advantages and disadvantages of each option/strategy considered?

Are the benefits/risks compared at individual, community, and societal levels?

Are political, economic, and technical feasibility considered?

### **7. Recommendations**

Are the recommendations consistent with the analysis of the problem?

### **8. Implementation & Practice**

Are the likely barriers to implementation addressed?

Are logistical/technical/resource concerns addressed?

### **9. Evaluation**

Is the impact of the proposed intervention measurable?

Is 'success' defined?

Are provisions made for evaluating the impact of the recommended course of action?

### **10. Overall Impression**

Is a compelling argument made that would convince you to adopt the recommended strategy? Is the argument presented succinctly and effectively?

**MPH Integrating Experience Project 2019-2021**  
**Problem Solving Framework: Evaluation Score Sheet**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

**A. Demonstration of Core Area  
Competencies** \_\_\_\_\_

1. History
2. Quantitative sciences  
(assessment/analysis)
3. Biological considerations
4. Social/cultural/behavioral  
considerations
5. Environmental and/or  
occupational considerations
6. Management/resource  
and/or policy considerations

**B. Framework specific criteria**

1. Executive Summary: \_\_\_\_\_
2. Statement of the problem: \_\_\_\_\_
3. Magnitude of the problem: \_\_\_\_\_
4. Key Determinants: \_\_\_\_\_
5. Prevention/Intervention  
Strategies \_\_\_\_\_
6. Policies and Priority Setting: \_\_\_\_\_
7. Recommendations: \_\_\_\_\_
8. Implementation & Practice: \_\_\_\_\_
9. Evaluation: \_\_\_\_\_
10. Overall Assessment: \_\_\_\_\_

**Result:** \_\_\_\_\_ **Unconditional Pass** \_\_\_\_\_ **Conditional Pass**

Comments/specific instructions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**MPH Integrating Experience Project 2019-2021**  
**Professional Publication Framework: Paper Format\* Guidelines**

1. Abstract
2. Introduction
3. Methods and Materials
4. Results
5. Discussion
6. References
7. Tables and Figures
8. List of appropriate journals where this might be published

\*This format may be adapted to comply with the submissions guidelines of specific journals provided a copy of those guidelines are attached as an appendix and the cover page indicates the intended journal. Otherwise, please use the format proscribed in the “uniform requirements for manuscripts.....”.

Regardless of the format, the evaluation items associated with this format must be addressed in the paper. For those formats where the core area competencies are not easily incorporated, an expanded background or discussion section is suggested.

Note: Students considering a literature review-type project need to describe the criteria by which they select articles for inclusion and the criteria for assessing/critiquing the study findings in their Methods section. Presentation of an evidence table is strongly encouraged. Policy/practice implications of the findings must be included.

Reference

International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Annals of Internal Medicine*. 1997; 126(1):36-47  
(*reprint of article included in next section*).

**MPH Integrating Experience Project 2019-2021**  
**Professional Publication Framework: Project Critique Guidelines**

1. Importance of the problem to public health
  - has the magnitude of the problem been characterized?
  - is a case made for its importance?
2. Organization/ Presentation
  - easy to read/understand
  - quality of tables and figures
  - logical progression of ideas
  - conformity with guidelines of target publication/standard format
3. Abstract appropriately structured and an adequate reflection of paper's content
4. Introduction places the current study in the context of current knowledge
  - quality/thoroughness of literature review
  - demonstrates where this project fits in
5. Design appropriate to answer the question
  - consideration given to options
  - rationale given for choosing design
  - strengths and limitations inherent in design discussed (validity)
  - strengths and weaknesses of measurements (reliability)
6. Population appropriate to answer the research question
  - considerations/advantages/disadvantages of choice
7. Analysis appropriate to answer the question
  - methods described; limitations noted
  - plan sufficient to address research question
  - level of data collection/coding sufficient
  - confounding/interaction/bias/design limitations accounted for
  - issues of power sample size addressed (**calculation shown, assumptions stated**)
8. Plausibility of results appropriately addressed
9. Public health implications appropriately addressed
10. References complete and adequately reflecting current literature on the topic; peer-reviewed sources provide adequate support for assumptions or background information.
11. Overall scientific merit
  - is the study design appropriate to the stated objectives?
  - is the appropriate level of data used?
  - has an appropriate literature review been included
  - does the project increase our understanding or to replicate inconclusive/controversial findings

**MPH Integrating Experience Project 2019-2021  
Professional Publication Framework: Evaluation Score Sheet**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

**A. Demonstration of Core Area Competencies** \_\_\_\_\_

1. History
2. Quantitative sciences (assessment/analysis)
3. Biological considerations
4. Social/cultural/behavioral considerations
5. Environmental and/or occupational considerations
6. Management/resource and/or policy considerations

**B. Framework specific criteria**

1. Public health importance: \_\_\_\_\_
2. Organization/ presentation: \_\_\_\_\_
3. Abstract: \_\_\_\_\_
4. Introduction: \_\_\_\_\_
5. Design: \_\_\_\_\_
6. Population: \_\_\_\_\_
7. Analysis appropriate to answer the question: \_\_\_\_\_
8. Plausibility of results: \_\_\_\_\_
1. Public health implications appropriately addressed: \_\_\_\_\_
10. References complete: \_\_\_\_\_
11. Overall Assessment: \_\_\_\_\_

**Result:**      \_\_\_\_\_ **Unconditional Pass**      \_\_\_\_\_ **Conditional Pass**

Comments/specific instructions: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**MPH Integrating Experience Project 2019-2021**  
**Research Grant Proposal Framework: Paper Format\* Guidelines**

1. Abstract
2. Specific Aims
3. Background
4. Methods
  - Design
  - Population
  - Sample Size (calculations, assumptions, references)
  - Analysis
5. References
6. Budget
7. Human/animal subjects

\*The format may be modified to comply with the specific requirements of the intended granting agency (please consult MPH Resident Faculty or your advisors). The specific evaluation criteria outlined for the grant proposal format, including demonstration of all core area competencies must still be addressed. For those formats where the core area competencies are not easily incorporated, an expanded background section is recommended.

**MPH Integrating Experience Project 2019-2021**  
**Research Grant Proposal Framework: Project Critique Guidelines**

1. Importance of the problem to public health: has the magnitude of the problem been characterized? Has a case been made for its importance?
2. Feasibility of the overall proposal:
  - technical;
  - logistical (*time line/research plan*);
  - administrative; political; and financial
3. Presentation of the written product:
  - organization of material
  - logical progression of ideas
  - appropriate use of graphs/tables
  - language understandable, simple
  - able to complete within page limitations
4. Design appropriate to answer the question
  - consideration given to options
  - rationale given for choosing design
  - strengths and limitations inherent in design discussed
5. Population choice reasonable and feasible
  - considerations/advantages/disadvantages of choice
6. Sample size appropriate to answer question
  - limitations, assumptions noted, calculations, references for formula chosen
7. Analysis appropriate to answer the question
  - plan sufficient to address research question
  - level of data collection/coding sufficient
  - confounding/interaction/bias/design limitations accounted for
8. Budget adequate, excessive, or in sufficient detail
9. Are ethical issues appropriately addressed
10. Overall scientific merit
  - is the study design appropriate to the stated objectives?
  - is the appropriate level of data used?
  - has an appropriate literature review been included?
  - does the project increase our understanding or replicate inconclusive/controversial findings?

**MPH Integrating Experience Project 2019-2021**  
**Research Grant Proposal Framework: Evaluation Score Sheet**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

**A. Demonstration of Core Area Competencies**

1. History
2. Quantitative sciences (assessment/analysis)
3. Biological considerations
4. Social/cultural/behavioral
5. Environmental and/or occupational considerations
6. Management/resource and/or policy considerations

**B. Framework specific criteria**

1. Public health importance: \_\_\_\_\_
  2. Feasibility of the overall proposal: \_\_\_\_\_
  3. Presentation of the written product: \_\_\_\_\_
  4. Design appropriate to answer the question: \_\_\_\_\_
  5. Population choice reasonable and feasible: \_\_\_\_\_
  6. Sample size appropriate to answer question: \_\_\_\_\_
  7. Analysis appropriate to answer the question: \_\_\_\_\_
  8. Budget appropriate: \_\_\_\_\_
  9. Ethical issues appropriately addressed: \_\_\_\_\_
- Overall Assessment: \_\_\_\_\_

**Result:**      \_\_\_\_\_ **Unconditional Pass**      \_\_\_\_\_ **Conditional Pass**

Comments/specific instructions: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**MPH Integrating Experience Project 2019-2021**  
**Community Service Grant Proposal Framework: Paper Format Guidelines**

1. **Executive Summary:** Describe the importance of the problem to public health and its magnitude; provide a brief summary / overview of the proposal and the methods that you will use.
  
2. **Specific Aims/ Objectives:** State the aims and objectives of the proposal in **measurable** terms.
  
3. **Introduction:**
  - a. Background information including a situational analysis for the community of interest;
  - b. Review of the literature regarding the topic;
  - c. Appraisal of different strategies that might address the problem;
  - d. Recommendation for a course of action, including the rationale used to make this decision.
  
4. **Methodology**
  - a. Conceptual framework
  - b. Implementation plan synopsis (who, what, when, plans for self-sufficiency)
  - a. Evaluation plan synopsis (measurable objectives; time frame; methodologies; data sources needed)
  
5. **Budget/Planning**
  
6. **Ethical Considerations, Community Support**
  - a. Indicate community acceptance/support of program
  - b. Discuss ethical/human rights considerations
  - c. Discuss linkages/integration of proposed program with existing community resources
  - d. Discuss sustainability beyond funding period.
  
7. **References**

*\*The format may be modified to comply with the specific requirements of the intended granting agency (please consult MPH Resident Faculty or your advisors). The specific evaluation criteria outlined for the grant proposal format, including demonstration of all core area competencies must still be addressed. For those formats where the core area competencies are not easily incorporated, an expanded background section is suggested.*

**MPH Integrating Experience Project 2019-2021**  
**Community Service Grant Proposal Framework: Project Critique Guidelines**

- 1.Importance of the problem to public health
  - has the magnitude of the problem been characterized?
  - is a case made for its importance?
  
- 2.Feasibility of the overall proposal
  - technical
  - logistical
  - administrative
  - political
  - financial
  
- 3.Presentation of the written product
  - organization of material
  - logical progression of ideas
  - appropriate use of graphs/tables
  - language understandable, simple
  - able to complete within page limitations
  
- 4.Design / conceptual framework appropriate to address the problem
  - consideration given to options
  - rationale given for choosing intervention
  - strengths and limitations inherent in choice discussed
  
- 5.Implementation component adequately discussed
  
- 6.Evaluation plan appropriate (to goals; methods used; data source)
  
- 7.Budget adequate or excessive
  
- 8.Ethical issues appropriately addressed.
  
9. Integration/coordination with existing community resources
  
10. Plans for self-sufficiency/sustainability
  
11. Overall merit
  - is the design appropriate to the stated objectives?
  - is the appropriate level of data used?
  - has an appropriate literature review been included?
  - does the project appropriately apply / translate existing knowledge?

**MPH Integrating Experience Project 2019-2021  
Community Service Grant Proposal: Evaluation Score Sheet**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

**A. Demonstration of Core Area  
Competencies**

1. History
2. Quantitative sciences  
(assessment/analysis)
3. Biological considerations
4. Social/cultural/behavioral
5. Environmental and/or  
occupational consideration
6. Management/resource  
and/or policy considerations  
considerations

**B. Framework specific criteria**

1. Public health importance \_\_\_\_\_
2. Feasibility \_\_\_\_\_
3. Presentation of the  
written product \_\_\_\_\_
4. Design / conceptual  
framework \_\_\_\_\_
5. Implementation  
component \_\_\_\_\_
6. Evaluation plan \_\_\_\_\_
7. Budget \_\_\_\_\_
8. Ethical issues \_\_\_\_\_
9. Integration/coordination  
with existing community  
resources \_\_\_\_\_
10. Plans for self-sufficiency/  
sustainability \_\_\_\_\_
11. Overall merit \_\_\_\_\_

**Result:** \_\_\_\_\_ **Unconditional Pass**      \_\_\_\_\_ **Conditional Pass**

Comments/specific instructions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**MPH Integrating Experience Project 2019-2021**  
**Program Implementation Framework: Paper Format Guidelines**

1. Executive Summary
2. Situational Analysis / Priority Setting
3. Strategy Appraisal
4. Allocation of Resources
5. Programming
6. Budgeting
7. Implementation
8. Evaluation
9. Summary

**MPH Integrating Experience Project 2019-2021**  
**Program Implementation Framework: Project Critique Guidelines**

1. Executive Summary: summarizes key points; engages reader
2. Situational Analysis / Priority Setting:
  - assessment of current health situation; of relevant related factors (environmental, political, etc); of how current situation differs from desired state
  - appropriate amounts and quality of data presented
  - needs identified
  - and method of determining priority defined (burden of disease, effectiveness, etc)
3. Strategy Appraisal:
  - several feasible strategies considered; appropriate criteria considered (political, economic, impact, etc); assumptions defined; and sensitivity analysis considered
4. Allocation of Resources:
  - consideration of where resources will come from (new; divert existing)
  - feasibility of such action; and structural/systemic capacity for such allocation
5. Programming:
  - program goals clearly defined
  - organizational issues addressed (human resources, training, space assignments)
  - operational issues addressed (capital, facilities, equipment)
  - time line
6. Budgeting:
  - related to program plans; reasonable; thorough; and sufficient detail
7. Implementation:
  - responsible individuals/positions identified
  - consideration given to potential barriers
  - time lines/contingency plans (PERT/GANNT/CPM)
8. Evaluation:
  - measurable objectives identified; objectives relevant to stated goals
  - and indication of how measurements will be made
9. Organization/Presentation:
  - easy to read/understand; quality of tables and figures; logical progression of ideas
10. Overall assessment:
  - is the situational analysis appropriate for assessing the needs of the target group?
  - are appropriate strategies identified and critiqued?
  - and are program goals clear and feasible given the resources available?



**MPH Integrating Experience Project 2019-2021  
Program Implementation Framework: Evaluation Score Sheet**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

**A. Demonstration of Core Area Competencies** \_\_\_\_\_

1. History
2. Quantitative sciences (assessment/analysis)
3. Biological considerations
4. Social/cultural/behavioral
5. Environmental and/or occupational considerations
6. Management/resource and/or policy considerations

**B. Framework specific criteria**

1. Executive Summary: \_\_\_\_\_
2. Situational analysis/  
Priority setting: \_\_\_\_\_
3. Strategy appraisal: \_\_\_\_\_
4. Allocation of resources: \_\_\_\_\_
5. Programming: \_\_\_\_\_
6. Budgeting: \_\_\_\_\_
7. Implementation: \_\_\_\_\_
8. Evaluation: \_\_\_\_\_
9. Organization / presentation: \_\_\_\_\_
10. Overall assessment: \_\_\_\_\_

**Result:** \_\_\_\_\_ **Unconditional Pass**      \_\_\_\_\_ **Conditional Pass**

Comments/specific instructions: \_\_\_\_\_

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**MPH Integrating Experience Project 2019-2021**  
**Program Evaluation Proposal Framework: Paper Format Guidelines**

1. Summary
2. Introduction/Specific Aims
3. Literature review
4. Research questions/Hypotheses
5. Methods
6. Setting
7. Sources of data
8. Analysis
9. Logistical Considerations
10. Ethical considerations

## **MPH Integrating Experience Project 2019-2021 Program Evaluation Framework: Project Critique Guidelines**

1. Summary: summarizes main ideas, captures reader's interest
2. Introduction/specific aims: problem defined; goals stated; relevance of project
3. Literature review: quality/thoroughness of literature review (what is/what is not known); demonstrates where this project fits in (new methods; new approach)
4. Research questions/hypotheses: measurable objective or testable hypothesis; provide conceptual framework for inter-relationship of variables
5. Methods: design identified; appropriate to answer question (Campbell/Stanley); consideration given to options; rationale given for choosing design; strengths and limitations inherent in design discussed (validity); measurements; constructs; definition and tools (reliability)
6. Setting
  - population identified appropriate to answer the research question;
  - provide inclusion/exclusion criteria;
  - provide sampling frames, techniques for assignment (randomization);
  - considerations/advantages/disadvantages of choice
7. Sources of data
  - describe data, data forms from which variables are derived;
  - type of data (primary, secondary);
  - collection/cleaning procedures;
  - attach relevant documents as appendices (questionnaires, consent forms, etc.)
8. Analysis
  - statistical techniques identified; appropriate to answer the question;
  - methods described; limitations noted (assessment of reliability);
  - plan sufficient to address research question;
  - confounding/interaction/bias/design limitations accounted for;
  - issues of power/sample size addressed; calculations shown
9. Logistical considerations (personnel, time lines, budgets)
10. Ethical considerations
11. Overall assessment. Is the study design appropriate to the stated objectives? Appropriate level of data used? Appropriate literature review been included? Does project increase understanding or replicate inconclusive/controversial findings?

**MPH Integrating Experience Project 2019-2021  
Program Evaluation Proposal: Evaluation Score Sheet**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

**A. Demonstration of Core Area  
Competencies** \_\_\_\_\_

1. History
2. Quantitative sciences  
(assessment/analysis)
3. Biological considerations
4. Social/cultural/behavioral
5. Environmental and/or  
occupational considerations
6. Management/resource  
and/or policy considerations

**B. Framework specific criteria**

1. Summary \_\_\_\_\_
2. Introduction/specific aims: \_\_\_\_\_
3. Literature review: \_\_\_\_\_
4. Research  
questions/hypotheses: \_\_\_\_\_
5. Methods: \_\_\_\_\_
6. Setting: \_\_\_\_\_
7. Sources of data: \_\_\_\_\_
8. Analysis: \_\_\_\_\_
9. Logistical considerations: \_\_\_\_\_
10. Ethical considerations: \_\_\_\_\_
11. Overall assessment: \_\_\_\_\_

**Result:** \_\_\_\_\_ **Unconditional Pass**      \_\_\_\_\_ **Conditional Pass**

Comments/specific instructions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

# MPH Integrating Experience Project 2019-2021

## Oral Presentation Critique Score Sheet

Student's Name: \_\_\_\_\_

Grade: (4 = exceptional; 3 = fully met; 2 = partially met; 1 = not met/missing)

### 1. Content

- Was the target audience identified? \_\_\_\_\_
- Was the type of presentation clear? \_\_\_\_\_
- Was the issue clearly identified and defined? \_\_\_\_\_
- Were key features presented? \_\_\_\_\_
- Was sufficient supporting detail provided? \_\_\_\_\_
- Were the recommendations/assertions supported? \_\_\_\_\_

### 2. Organization

- Was the content organized and presented in a coherent manner? \_\_\_\_\_
- Were new or unfamiliar terms explained? \_\_\_\_\_
- Did the presentation of ideas flow smoothly? \_\_\_\_\_

### 3. Style

- Did the speaker(s) hold your interest? \_\_\_\_\_
- Was the speaker convincing/effective? \_\_\_\_\_
- Was the speakers' voice loud enough? understandable? \_\_\_\_\_
- Did the speaker make eye contact with the audience? \_\_\_\_\_

### 4. Audio-visuals

- Were visuals (graphics, transparencies/slides) used effectively? \_\_\_\_\_
- Was the quality of the slides appropriate (readable, correct spelling, not cluttered)? \_\_\_\_\_
- Was an appropriate number of visual aids used? \_\_\_\_\_
- Were visuals clearly explained? \_\_\_\_\_
- Did the visuals add to the presentation? \_\_\_\_\_

### 5. Time Utilization

- Was the time appropriately allocated to the parts of the presentation? \_\_\_\_\_
- Were the time constraints followed? \_\_\_\_\_
- Did it appear that the presentation had been rehearsed? \_\_\_\_\_

### 6. Questioning

- Were questions appropriately addressed? With confidence and knowledge? \_\_\_\_\_
- Did the speaker interact with the audience? \_\_\_\_\_

### 7. Overall Impression

- Was a compelling argument made? \_\_\_\_\_
- Was the presentation convincing? \_\_\_\_\_
- Was an understanding and application of core knowledge demonstrated? \_\_\_\_\_