

**LEHMAN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK**

DEPARTMENT OF HEALTH EQUITY, ADMINISTRATION & TECHNOLOGY

CURRICULUM CHANGE

Name of Program and Degree Award: Public Health, BS

Hegis Number: 1214.00

Program Code: 37993.00

Effective Term: Spring 2024

1. **Type of Change:** Degree Requirements, Distance Education

2. **From:**

Public Health, B.S. (48 Credit Major)

~~The Bachelors of Science in Public Health (BSPH) program prepares students for the professional practice, service and advance training like graduate school. The program trains students in core methods, theories and concepts so that they may apply these to improve health access and equity. The program has a particular emphasis on the health needs of global communities, and through international collaborations at Lehman College, students may add a global experience to their training.~~

~~Students complete a core course series, program track courses, and an internship experience to apply their knowledge in a local or global setting. Also, students take a capstone seminar as a culminating learning experience for the program.~~

~~The program is designed to prepare students for careers in public health such as: Peace Corps, city health agencies, nonprofit organizations, international organizations, and higher educational institutions. After completing the program, students will be able to develop, manage, and evaluate public health programs while working with communities in diverse settings. Additionally, the program provides foundational training to prepare students for graduate school including law school and masters and doctoral programs in public health.~~

~~The basic distribution of credits for this major appears in Table 1, followed by course lists.~~

Table 1: Distribution of credits for the Public Health major.

Component	Credits
Core Courses	24
Specialization Courses: GISc or Global Health	18
Fieldwork and Capstone	6

Degree Requirements

24 credits in Required Core Courses

		Credits
HEA 300	Introduction to Public Health	3
	Or	
PHE 304	Fundamentals of Global Health	3
HSD 269	Fundamentals of Biostatistics for Health Professionals	3
HSD 306	Epidemiology	3
HEA 267	Human Behavior and Health	3
HSD 266	The U.S. Health Care Delivery System	3
HEA 400	Program Planning and Evaluation	3
PHE 302	Social and Environmental Determinants of Health	3
PHE 303	Approaches to Public Health Research	3
	Students may take either HEA 300 or PHE 204	

18 credits in Geographic Information Science (GIS) Specialization

12 Credits in Required Specialization Courses

		Credits
GEP 204	Basic Mapping: Applications and Analysis	3
GEP 205	Principles of Geographic Information Science	3
GEH 320	Population Geography	3

GEP 310	Geography of Urban Health	3
6 credits in GIS Specialization Electives selected from the following:		
		Credits
GEH 240	Urban Geography	3
GEH 232	Medical Geography	3
GEP 324	Introduction to Remote Sensing	4
GEP 330	Spatial Statistics and Advanced Quantitative Methods in Geography	3
GEP 360	Geovisualization and Analytic Cartography	4
GEP 350	Special Projects in Geographic Information Systems	4
GEH 490	Honors in Geography	One semester, 2, 3, or 4 credits (may be repeated for a maximum of 6 credits).
18 Credits in Global Health Specialization		
12 Credits in Required Specialization Courses		
		Credits
PHE 305	Community-based Participatory Research Methods	3
PHE 306	Global Burden of Communicable and Non-Communicable Disease	3
PHE 307	Emergency Preparedness at the Community Level	3
PHE 360	Special Topics in Public Health	3
6 Credits in Global Health Specialization Electives selected from		
		Credits
HEA 302	Women and Health	3
HEA 211	Perspectives on AIDS	3
POL 343	International and Regional Organizations	3
HEA 348	Latino Health	3

PHE 340	Global Nutrition and Disease	3
GEH 232	Medical Geography	3
6 Credits in Required Fieldwork and Capstone for both Specializations		Credits
PHE 470	Public Health Field Experience	3
PHE 472	Public Health Capstone	3

Admission Requirements

To be considered for admission to the B.S. in Public Health, an application must:

- ~~1. Have a minimum GPA of 3.0.~~

To: Public Health B.S. 57-61 credits (credits in the major)

The 57-61 credit Bachelor of Science (BS) in Public Health will focus on environmental and global health. The emphasis on these two critical areas is in line with Lehman College's mission, vision, and strategic plan "**Lehman 2025, Road Map to the Future,**" (5) which focuses on environmental and social justice issues. The proposal builds on the most effective components of the 2016 major, which was approved and implemented. The proposal highlights innovations that are key to educating the next generation of public health professional.

Table 1: Distribution of credits for the Public Health major.

Component	Credits
<u>Core Courses</u>	<u>35</u>
<u>Clinical Public Health Concentration OR</u>	<u>20</u>
<u>Environmental/Global Health Concentration</u>	<u>16</u>
Fieldwork and Capstone	6
<u>Total Credits</u>	<u>57-61</u>

Degree Requirements

57-61 credits in Required Core Foundation and Advanced Courses _____ Credits
 Public Health Major Degree Map

Public Health Core Classes (20 credits)

Core Foundational Courses	Credit Hours
MAT 132 Introduction to Statistics	4
BIO 181 Anatomy and Physiology I	4
HSD 266 US Health Care System	3
PSY 166 General Psychology	3
PHE 302 Social and Environmental Determinants of Health	3
PHE 304 Fundamentals of Global Health	3
Advanced Core Courses (15 credits)	
HSD 269 Fundamentals of Biostatistics for Health Professions	3
HSD 306 Epidemiology	3
PHE 303 Approaches to Public Health Research	3
PHE 306 Global Burden of Communicable and Non-Communicable Disease	3
PSY 335 Health Psychology	3
Public Health Capstone and Field Experiences (6 credits)	
PHE 470 Public Health Field Experiences	3
PHE 472 Public Health Capstone	3

*******Choose one of the following concentrations*******

Clinical Public Health Concentration Courses: (20 credits)

BIO 182 Anatomy and Physiology II	4
BIO 230 Microbiology	4
CHEM 114/115 General Chemistry Lecturer and Lab I	4.5
CHEM 120/121 General Chemistry Lecturer and Lab II	4.5
HIN 268 Growth & Development	3

Environmental & Global Health (16 credits):

ENV 235 Conservation of the Environment	3
ENV 270 Environmental Pollution	4
ENV 326 Environmental Policy	3
HEA 301 Environmental Health	3
PHE 340 Global Nutrition & Disease	3

Program Electives: Students may need 15 to 30 credits or more of electives to meet the 120 credit hours. Choose any 300-600 PHE or ENV course electives which can be the focus of a minor or a pre-health pre-requisite.

HEA 348 Latino Health
 HEA 400 Program Planning and Evaluation
 PHI 336 Disability, Ethics & Body
 SOC 309 Sociology & Equality
 HEA 307 Human Sexuality
 ENW 307 Health and Science Writing

PHE 307 Emergency Preparedness at the Community Level
PHE 360 Special Topics in Public Health
PUBH 610 Public Health Leadership & Management
PUBH 611 Health Equity, Communication, and Advocacy
PUBH 612 Designing and Evaluating Public Health Interventions
PUBH 613 Designs, Concepts, and Methods in Public Health Research

Admission Requirements

To be considered for admission to the B.S. in Public Health, an application must:

1. GPA standard at “B-” (minimum 2.7 to 2.9) for admission into the major.
Approved by CAEAS on 2/8/2023
2. At least 50% of this program can be completed online; however, the public health internship is a required component which cannot be done online. Internship has a face-to-face requirement.

4. Rationale: Re-introduction of the BS in Public Health Major:

The Bachelor of Science in Public Health (BSPH) intends to prepare graduates with skills and competencies needed to advance population health in the New York City (NYC) region and to meet both national and global demands of current and emerging public health trends (1). A shortage of properly trained public health workers has been recognized for some time now, relative to the growing and aging U.S. population. Meanwhile, the health and health care sectors are the largest employers in the Bronx. As such, there is an ever-growing need to prepare students who live locally to enter this workforce. In partnership with CUNY School of Public Health, Lehman College can fulfill this role since the majority of Lehman’s undergraduate students are from the Bronx and surrounding areas.

This re-introduction of the undergraduate degree program in public health will align with the Associate degree programs at our community colleges and be a direct feeder to the CUNY SPH 4+1 partnership, where students can begin their public health education at the community college and complete an MPH within 5 years. Entry to practice in public health requires a Master’s in Public Health. The degree program will be housed within the Lehman College Department of Health Equity, Administration & Technology within the School of Health Sciences, Human Services and Nursing. The revised curriculum focuses on environmental and global health, two worldwide public health priorities.

In March 2020, the Lehman College community experienced the effects of COVID-19, a pandemic affecting citizens in nearly every corner of the world (2,3). During this time, New York City was considered the epi-center of this pandemic reporting the highest morbidity and mortality rates in the country (4). Government agencies at all levels recognized that the department of health agencies at all levels recognized that health

agencies were not prepared to manage a crisis of this magnitude. The pandemic highlighted the dire need for trained public health professionals who could direct policy, devise strategies, and deliver interventions that would decrease COVID-19 incidence rates. Public Health became a national imperative, especially for government agencies who were motivated to invest in public health education at many levels. While the decision in 2019 to terminate the BS in Public Health was made under different circumstances, it is our goal to re-introduce the undergraduate public health major at Lehman College in the Department of Health Equity, Administration & Technology (HEAT), a new created department with the School of Health Sciences, Human Services, and Nursing (HS2N). The re-introduction of this major is both timely, relevant, and in line with the mandate to train more public health practitioners.

The 57-61 credit Bachelor of Science (BS) in Public Health will focus on environmental and global health. The emphasis on these two critical areas is in line with Lehman College's mission, vision, and strategic plan "***Lehman 2025, Road Map to the Future,***" (5) which focuses on environmental and social justice issues. The proposal builds on the most effective components of the 2016 major, which was approved and implemented. The proposal highlights innovations that are key to educating the next generation of public health professional.

The Lehman College Department of Health Equity, Administration & Technology (HEAT) is re-introducing the Bachelor of Science in Public Health (BSPH) at a critical time locally, nationally, and globally. Satisfying this major will require 44 general education/pathway/college option credits and 57-61 core credits, 3 credits of fieldwork and 3 credits capstone, and 15 to 30 or more elective credits to meet the 120 credits. The degree will provide students with key competencies and technical skills for entry-level professional positions in public health, or continued graduate studies, particularly in a Masters of Public Health program. This public health degree option is also a pathway into nursing by completing all of the nursing pre-requisite courses. A student interested in nursing can complete the nursing pre-requisite courses in the first four (4) semesters, make application to the nursing program and take the required nursing entrance examination as a part of the nursing admission processes. Students who want to complete the public health undergraduate degree will remain on track to a BS in Public Health after which they may proceed to an MPH program or apply to an accelerated nursing program. Students must meet the admission criteria for either program chosen.

Educational goals:

Expanding on the existing public health minor in the Department of Health Science, the BSPH will prepare students for either 1) entry-level jobs in the public health field, or 2) acceptance into an accredited MPH program, which are entry to practice public health 3) acceptance into an accelerated nursing program and/or 4) acceptance into a Direct-Entry Master of Nursing program. Students in this undergraduate degree have multiple pathways to professional careers in public health and nursing. The Bureau of Labor Statistics (BLS) has indicated a need for trained professionals in both of these areas. Specific learning goals are based on the mastery of the following core competencies, which are derived from recommendations by the Association of Schools and Programs

of Public Health (ASPPH) and the mission of the CUNY School of Public Health (SPH). Upon completion of the

Lehman College BS in PUBLIC HEALTH, student will be able to:

1. Define the history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society.
2. Identify the underlying science of human health and disease including opportunities for promoting and protecting health across the life course.
3. Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities.
4. Describe the fundamental characteristics and organizational structures of the U.S. health system as well as the differences in systems in other countries.
5. Describe the basic concepts, methods, and tools of public health data collection, use, and analysis; and why evidence-based approaches are an essential part of public health practice.
6. Implement the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology.
7. Apply the fundamental concepts and features of project implementation, including planning, assessment, and evaluation.
8. Recognize the concepts of population health, and the basic processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations

Brief Rationale for Program:

1. Public health and related health care fields are among the fastest growing employment sectors in the New York City region, where the New York State Department of Labor has projected employment rate increases across all health-related occupations as “very favorable” (6).
2. Nationally, the ASPPH estimates that 250,000 new public health workers will be needed by 2024. More than 25% of public health workers have retired in the past decade and only 20% of the current workforce has formal training in public health (7).
3. National and international organizations are increasingly turning to public health initiatives and interventions to address recurrent natural and anthropogenic disasters, which require responses by well-trained and skilled public health professionals (8).
4. The City University of New York has the potential to meet these educational and workforce needs. Currently, seven public health programs at four campuses are affiliated with the CUNY Graduate School of Public Health and Health Policy (SPH). The proposed BSPH will help to link Lehman College undergraduates to this expanding network and to contribute to the workforce needs to address population health issues. In a statement from the White House, the Biden-Harris administration supported plans to invest 7.4 billion dollars to train more public health workers and provide grants to state and local health departments to hire more public health staff to contain the COVID-19 pandemic crisis (9).

Distance Education

BS in Public Health had previously been a traditional face-to-face course; however, this proposal will formally add the distance format per New York State Department of Education requirements that >50% or more of course sections are offered in synchronous online modality that can be completed through distance education.

Dual Credit Option

Public Health majors interested in pursuing an MPH in Health Management & Policy at the School of Public Health (SPH) through an articulation agreement can earn 12 credits to be used for both undergraduate and graduate program of study. Students interested in this pathway, must be conditionally accepted as matriculating students in the SPH graduate program.

Undergraduate students majoring in Public Health with 60 or more credits and a minimum of a (3.2) cumulative grade point average may be permitted to enroll in up to 12 credits of graduate coursework at CUNY Graduate School of Public Health. The student must speak with the faculty advisor to determine elective courses that will satisfy the undergraduate and graduate degree requirement:

The student conditionally admitted to the School of Public Health, must commit to the program once admitted, and must graduate from Lehman College with Bachelor degree to be fully admitted as a Graduate Student. The student must also receive permission from the program and/or dean's office prior to registration.

5. **Date of departmental approval: September 6, 2022;
reapproved on January 17, 2023**