

PROGRAM POLICY STATEMENT

MASTER OF PUBLIC HEALTH (MPH) WITH A CONCENTRATION IN EPIDEMIOLOGY COLLEGE OF HEALTH SCIENCES

MASTER OF PUBLIC HEALTH (MPH) WITH A CONCENTRATION IN HEALTH POLICY AND MANAGEMENT

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I: EXECUTIVE SUMMARY

Public health is the science of protecting and improving the health of individuals, families, and communities by addressing social and environmental determinants of health; conducting research for disease and injury prevention; and detecting and controlling of infectious and chronic diseases (Centers for Disease Control and Prevention Foundation (CDC) 2015). As noted by University of Delaware President Assanis, development of programs in public health is a top priority that will help to grow our graduate enrollment for both domestic and international students. The University of Delaware currently has in place many strengths in public health-related research, teaching, and service. Drawing on these strengths, the College of Health Sciences (CHS) and the Joseph R. Biden, Jr. School of Public Policy and Administration (Biden School) sought to develop a Master of Public Health (MPH) degree with concentrations in Epidemiology in the College of Health Sciences and in Health Policy and Management in the Biden School of Public Policy and Administration.

Across the U.S., local and state public health agencies provide a wide range of population-based public health services for their jurisdictions, including 10 Essential Public Health Services (EPHS) defined by CDC (CDC, 2017). The provision of the 10 EPHS requires a dynamic and highly trained workforce prepared to constantly meet new challenges. From changes in chronic disease morbidity and mortality to emerging infectious diseases and natural and man-made disasters, the public health workforce must be trained to capably response and continuously improve (Lurie 2004; Hyde & Shortell 2012).

State-level data on the public health workforce is somewhat limited; however, assessments by national organizations such as the Association of Public Health Laboratories (APHL), Association of State and Territorial Health Officials (ASTHO), Council of State and Territorial Epidemiologists (CSTE), and National Association of County and City Health Officials (NACCHO) have shown that there are approximately 8,000 epidemiology positions in governmental public health across the U.S., which represents only 3% of the entire public health workforce (Beck, Boulton, & Coronado, 2014). The fact that this 3% of the workforce is responsible for the provision of 4 of the 10 EPHS is one factor demonstrating the urgent need for the MPH in Epidemiology. In addition, little is known about the epidemiology-specific education and training of the current public health workforce (O'Keefe, Shafir, and Shoaf 2013). In many public health agencies, epidemiology functions, including disease surveillance, study design, data collection and analysis, and designing disease control methods are carried out by public health nurses or environmental health specialists. In fact, one-third of epidemiology staff in small and medium jurisdictions lack formal academic training in epidemiology, limiting the overall epidemiologic capacity of the public health system (O'Keefe et al., 2013; Moehrle 2008).

Similarly, workforce studies, assessments by professional organizations, and studies published in the peer-reviewed literature point to the need to increase public health education in policy-related fields (Rosenstock et al. 2008). In its 2011 report, *For the Public's Health*, the Institute of Medicine (IOM) pointed out ways in which policy tools should be utilized to improve public health practice around a range of issues, from smoking bans to school nutrition standards. Studies of the complex challenges facing healthcare organizations of the future have consistently noted the need for leadership development in health policy and management (Christensen 2009). The transformation of the U.S. healthcare system will require students with skills in collaborative research, design, implementation, and evaluation of health policy to ensure the public's health. In hospitals and healthcare facilities and

in other settings, such as local, state, and Federal government, students with graduate level training in health policy and management are needed to address issues related to paying for health care, building healthy and more equitable communities, improving the quality of and access to health care, and using health data as part of health services research to improve health (Academy Health 2018).

Not only are there documented needs for a larger and more competent public health workforce in these two areas, but according to the Association of Schools and Programs of Public Health's Statement on the Public Health Workforce, additional programs are particularly needed to deliver cross-disciplinary public health education (Rosenstock et al. 2008).

Local needs are consistent with national data. Currently, the overall health status of the State of Delaware ranks 30th in the nation, a ranking that has been holding steady since 2017 after improving two places from 2015 (America's Health Rankings, 2019). Limiting progress toward improvement is the fact that Delaware is the most populous among only three states without an accredited graduate-level program or school of public health. As such, students and working public health professionals in Delaware lack access to accredited, innovative, and rigorous public health education and training opportunities. The provision of this education and training is essential not only for the development of the current workforce, but also to address anticipated shortages in the public health workforce (NACCHO, State Public Health Worker Shortage Report, 2011). The establishment of the MPH at the University of Delaware in 2019 has begun to address these critical gaps.

In the field of public health, the MPH is the professional credentialing degree, analogous to the MBA for business or MFA for the arts. The MPH is the central degree program around which public health accreditation, which is managed by the Council on Education for Public Health (CEPH), is based. Beginning with the MPH in Epidemiology and the MPH in Health Policy and Management will allow us to expand the public health program at the University of Delaware systematically into other degree programs in the future, such as a baccalaureate in public health (BSPH), dual degrees, and additional Ph.D programs.

In the U.S., there are currently 107 Schools and Programs of Public Health, with approximately 60,000 students enrolled at the undergraduate, masters, and doctoral level (Association of Schools & Programs of Public Health, 2018). In October, 2016, CEPH made major changes to their public health program accreditation criteria (Kirsberg, 2017), with the goal of creating a workforce that has attained proficiency not only in specific competencies, but is able to take a broader look at issues and become leaders in the field of public health by fostering flexibility and innovation. Job task analyses of public health professionals led to a clear consensus that traditional academic public health silos are not working. The revised criteria presented a unique opportunity for the development of the new MPH degree at the University of Delaware, which was designed to meet these new guidelines and to address the critical public health training gap in Delaware through a competency-based approach (See **Appendices I and II**). By designing courses *de novo* that meet foundational knowledge and competencies, the University of Delaware will be positioned ahead of programs that have a longer history of delivering instruction in public health. Laura Rasar King, the Executive Director of CEPH, has said that the University of Delaware is in "an ideal position" to design a program now that can meet all the new criteria in innovative, integrative ways (Personal Communication, October 16, 2016).

This MPH degree was initiated with the full support of the College of Health Sciences and the College of Arts and Sciences (the previous home of the Biden School) and the Biden School of Public Policy and Administration as well as other programs throughout the University and stakeholders across the State (See

Letters of Support). The MPH degree contributes directly to several critical goals for the University of Delaware, including: 1) increasing professional graduate enrollment; 2) meeting a critical workforce development goal for Delaware; 3) creating a fully accredited program in public health for the State of Delaware that can be directly leveraged for additional tuition revenue streams (e.g., BSPH, Ph.D., and dual-degree offerings) as the program grows; and 4) serving as a model for interdisciplinary graduate education within the University of Delaware.

II: PROGRAM HISTORY AND PURPOSE

A. Context, Planning Process, and Expectations

A.1 Context

In 2017-18, the University of Delaware's public health minor program enrolled approximately 180 students. Additionally, we are working with Delaware State University to build linkages with their BSPH program and feed the pipeline for the MPH Program. In the future, there are many potential programs that could be offered within the MPH umbrella at the University of Delaware beyond the MPH in Epidemiology and the MPH in Health Policy and Management, including other MPH concentrations, as well as online, hybrid, and certificate programs for working professionals.

New accreditation guidelines from CEPH aim to ensure that the next generation of public health professionals graduate having attained foundational knowledge areas (**Appendix I**) and foundational competencies (**Appendix II**) that have been determined to be critical to meeting the public health needs of the future. Delaware's strengths as a small state with robust linkages between the University and State government position us well to create an MPH degree that addresses the new CEPH accreditation guidelines by ensuring students attain competency in 8 domains, including: evidence-based approaches to public health; public health & health care systems; planning & management to promote health; policy in public health; leadership; communication; interprofessional practice; and systems thinking. This degree will expand UD's community engagement and presence, and serve Delawareans through partnerships with healthcare systems, nonprofit organizations, city and county governments, and the State of Delaware (See **Letters of Support**).

A. 2 Planning Process

Beginning in Fall 2016, the Dean of CHS appointed Dr. Melissa Melby from the Department of Anthropology as Coordinator for Population Health Initiatives to work on developing an MPH degree for the University of Delaware. A cross-college MPH planning committee was formed and met bimonthly to evaluate the need for the proposed program and identify existing strengths at the University of Delaware. The MPH planning committee's work included evaluating similar MPH programs across the country, attending the meeting on the rollout of the new CEPH accreditation guidelines, and networking with MPH directors at the American Public Health Association (APHA) Annual Meeting in 2016 and 2017. In addition, the committee received input from relevant stakeholders within the University of Delaware, public health practitioners involved in the Delaware Academy of Medicine, the Delaware Public Health Association, the Delaware Health Sciences Alliance, the Department of Health and Social Services, and Christina Care, and with other academic public health programs in the region (e.g., Thomas Jefferson University). Instead of focusing primarily on inputs and content

delivery of public health programs, the new CEPH guidelines focus on outputs. By building an interdisciplinary core curriculum across the Colleges of Health Sciences and Arts and Sciences as the foundation for the MPH degree, the University of Delaware will have an opportunity to position itself ahead of public health schools and programs that have a longer history of delivering instruction in public health.

Using the information gathered, expectations and design for the MPH degree were conceptualized. Existing courses in relevant public health areas were reviewed and documented (**Appendix III**). The planning committee applied for and received a grant from the Provost's Initiative for Excellence and Innovation in E-Learning to develop a core curriculum that would meet all CEPH foundational knowledge and competency requirements (**Appendices I and II**). The founding director of the epidemiology program joined CHS in August 2018 and the following August the Biden School added a senior faculty member to facilitate the growth of the Health Policy and Management Program. 1.

A. 3 Expectations

The MPH constitutes the professional degree for public health professionals, preparing graduates for careers in many settings, including federal, state, or local governmental public health agencies, non-governmental organizations, the pharmaceutical industry, intergovernmental organizations, allied health fields, hospitals and healthcare providers, academic research, and public service. The curriculum for the MPH degree will provide students with the training needed to become effective public health practitioners with the capacity to understand, integrate, and apply tools and approaches from many sub-disciplines in various settings. Case studies integrated throughout the core courses, and completion of high-quality Applied Practice Experiences (APEs) and Integrative Learning Experiences (ILEs), as required by CEPH, are key features of this professional graduate program. Students' capacity to complete meaningful APEs and ILEs will be facilitated in part through close collaborations with the University of Delaware's Partnership for Healthy Communities, Delaware Division of Public Health, and other regional public health entities. Combined with a rigorous, applied curriculum, APEs and ILEs will bring students to the forefront of their discipline and support students in fully attaining competencies as outlined by CEPH.

The MPH enrolled students beginning in Fall 2019 and will apply for accreditation following graduation of the first student in each concentration. The interdisciplinary degree awarded to those who complete this program will be a Master of Public Health (MPH) with a major in Public Health and a concentration in Epidemiology or in Health Policy and Management. Students completing the concentration in Epidemiology will be awarded in the College of Health Sciences and those with a concentration in Health Policy and Management will be awarded in the Biden School of Public Policy and Administration.

III: ADMISSION

A. Admission Criteria and Requirements

A1. Criteria

Applicants from diverse educational and professional backgrounds who have a strong interest in public health are encouraged to apply. Each application will be evaluated individually on the basis of three key areas:

- 1) Academic record/achievement;
- 2) Work, research, and/or community experience;
- 3) Commitment to, and, interest in working to improve the public's health.

A2. Requirements

Prior to application for CEPH accreditation, applicants will submit all materials directly to the University of Delaware's Graduate College using the online admission process (https://grad-admissions.udel.edu/apply/). Following the submission of an application for CEPH accreditation by the program (following the first graduation of a student with the MPH degree in each concentration), applicants will apply through SOPHAS (http://sophas.org/), a centralized application service used by all public health programs that are accredited (or seeking accreditation) from CEPH.

Admission decisions will be made by the MPH Program Committee. Students will be admitted to the program based on enrollment availability, the availability of faculty mentorship, and their ability to meet the following recommended entrance requirements:

- 1. A Bachelor's Degree from an accredited college or university with an undergraduate GPA \geq 3.0
- 2. TOEFL (Test of English as a Foreign Language) score of at least 550 (paper based), or TOEFL IBT minimum score of 79 for international applicants

Complete applications for the MPH Program will be reviewed on a rolling basis for admission either for fall semester or for the summer term. The materials required for the application to be considered complete are: application form, official undergraduate and graduate transcripts, at least two letters of recommendation, resume, and a personal statement that includes a description of the applicant's prior experience, specific interest in public health, and career goals. The committee reserves the right to admit students provisionally. Provisional acceptance will be made with performance requirements for full standing detailed in the admission letter. Failure to satisfy the stated requirements in the allotted time constitutes a failure to meet admissions requirement and the student will be dismissed from the program.

Admission to the MPH Program is competitive. Those who meet stated requirements are not guaranteed admission, nor are those who fail to meet all of those requirements necessarily precluded from admission if they offer other appropriate strengths as determined by the MPH Program Committee.

B. University of Delaware Diversity Statement

The University of Delaware's educational mission is to prepare students to live in an increasingly interconnected and diverse world. To do so, we are committed to fostering a robust educational environment that supports critical thinking, free inquiry, and an understanding of diverse views and values. We see diversity as a core value and guiding principle for our educational mission and thus must work to make diversity an integral part of everyday life on campus. To this end, we take diversity

to mean both the recognition and appreciation of the different backgrounds, values, and ideas of those who comprise our campus, as well as a commitment to ensuring that all people on our campus are treated according to principles of fairness, civility, dignity, and equity. We are committed to building an educational community that understands people from different backgrounds and economic circumstances, with different needs, and from diverse personal and philosophical beliefs. We want to make all people who are part of the University feel welcome and valued in campus life.

IV: ACADEMIC DEGREE: MASTER OF PUBLIC HEALTH PROGRAM (MPH)

A. <u>Degree Requirements</u>

A1. Coursework and Credit Hours

The MPH degree requires completion of a minimum of 42 semester credits that are designed to be completed during full-time study. The completion of 42 credit hours ensures that graduates are grounded in 12 foundational public health knowledge areas, 22 foundational competencies and 5 concentration-specific competencies. Lists of the foundational knowledge areas and competencies are provided in **Appendices I and II**.

An outline of the 42 required credits for the MPH in Epidemiology are provided in **Table 1**. An outline of the 42 required credits for the MPH in Health Policy and Management are provided in **Table 2**. Both MPH degrees share the core courses (15 credit hours), elective courses (3-6 credit hours), and the APE and ILE (6 credit hours), reducing costs for degree development and maintenance. Descriptions of new courses proposed for the MPH are provided in **Appendix IV**.

Table 1. MPH with a concentration in Epidemiology

	Credits	Semester(s) Taught	
CORE COURSES (5 courses, 15 credit hours)			
Biostat for Health Sciences I (EPID 603) NEW COURSE	3	Fall 1	
Introduction to Epidemiology (EPID 605)	3	Fall 1	
Social and Environmental Determinants of Health (BHAN 820)	3	Spring 1	
Environment and Public Health (SPPA/EPID 606) – NEW COURSE	3	Spring 1	
Policy for Population Health (SPPA 620)	3	Fall 1	
EPIDEMIOLOGY & STATISTICS COURSES (5 courses, 15 cm	EPIDEMIOLOGY & STATISTICS COURSES (5 courses, 15 credit hours)		
Epidemiology Methods II (required) – EPID 610	3	Spring 1	
Biostat for Health Sciences II (required) - EPID 613 NEW COURSE	3	Spring 1	
Choose 1 from 7 Below (or any statistics course above STAT 608)			
EPID 614 Biostat for Health Sciences III (NEW COURSE)	3	Variable	
HLPR 632 Health Science Data Analysis	3	Variable	
STAT 609 Regression and Experimental Design	3	Variable	
STAT 611 Regression Analysis	3	Variable	
STAT 674 Applied Database Management	3	Variable	
STAT 675 Logistic Regression	3	Variable	
SPPA 704 Advanced Quantitative Methods	3	Variable	
Choose 2 from 17 Below (Epidemiology Content Courses)			
Public Health Surveillance – EPID 623	3	Variable	
Methods in Field Epidemiology – EPID 621	3	Variable	
Disaster Epidemiology – EPID 622	3	Variable	

Infectious Disease Epidemiology – EPID 620	3	Variable
Cancer Epidemiology – EPID 624	3	Variable
Environmental Epidemiology – EPID 625	3	Variable
Perinatal and Reproductive Health Epidemiology – EPID 626	3	Variable
Social Epidemiology – EPID 627	3	Variable
Epidemiology of Aging – EPID 628	3	Variable
Injury Epidemiology – EPID 629	3	Variable
Cardiovascular Disease Epidemiology – EPID 630	3	Variable
Statistical Programming in R for Epidemiologic Research – EPID 631	3	Variable
Nutritional Epidemiology - EPID 632	3	Variable
Clinical and Translational Epidemiology - EPID 633	3	Variable
Pharmacoepidemiology - EPID 634	3	Variable
Concussion Pathology and Management - KAAP 609	3	Variable
EPID 667 Special Topics in Epidemiology - No limit on number of courses		Variable
ELECTIVE COURSES (2 courses, 6 credit hours)		
Elective 1: Additional epidemiology content courses or choose from list in Appendix III with permission of the MPH Program Director		Variable
Elective 2: Same as above.	3	Variable
APE & ILE (2 courses, 6 credit hours)		
Can take many forms; 3 credits each; practica and culminating		Variable
experiences		
Applied Practice Experience - EPID 689		
Integrative Learning Experiences - EPID 699		
TOTAL CREDITS	42	

Table 2. MPH with a concentration in Health Policy and Management

	Credits	Semester(s) Taught
CORE COURSES (5 courses, 15 credit hours)		Tuugiit
Biostat for Health Sciences I (EPID 603) NEW COURSE	3	Fall 1
Introduction to Epidemiology (EPID 605)	3	Fall 1
Social and Environmental Determinants of Health (BHAN 820)	3	Spring 1
Environment and Public Health (SPPA/EPID 606) NEW COURSE	3	Spring 1
Policy for Population Health (SPPA 620)	3	Fall 1
POLICY & MANAGEMENT COURSES (5 courses, 15 cred	it hours)	
Health Policy (required) – UAPP 657	3	Fall 2
Health Systems, Policy and Economics (required) – SPPA 621	3	Spring 1
Choose 3 from below (Management Track Content Courses):	3	Variable
UAPP 684 Performance Management and Program Evaluation	3	Variable
UAPP 694 Financial Management in Public and Nonprofit Sectors	3	Variable
UAPP 696 Human Resources in Public and NonProfit Organizations	3	Variable
UAPP 697 Leading Organizations in Public and NonProfit Sectors	3	Variable
UAPP673 Governing Nonprofit Organizations	3	Variable
UAPP 761 Conflict Resolution and Collaborative Problem Solving	3	Variable
Choose 3 from below (Policy Track Content Courses):		
UAPP 652 Geographic Information Systems in Public Policy	3	Variable
UAPP 663 Decision Tools for Policy Analysis	3	Variable
UAPP 701 Public Policy	3	Variable
UAPP 707 Public Policy Analysis	3	Variable
UAPP 709 Advanced Economics in Public and Nonprofit Sectors	3	Variable

ELECTIVE COURSES (2courses, 6 credit hours)		
Elective 1 & 2: Additional health policy or management content courses or	6	Variable
choose from list in Appendix III with permission of the MPH Program		
Director		
APE & ILE (2 courses, 6 credit hours)		
Can take many forms; 3 credits each; practica and culminating experiences	6	Variable
Applied Practice Experience – SPPA 858 NEW COURSE		
Integrative Learning Experiences – UAPP685 CORRECTED COURSE #		
TOTAL CREDITS		

B. Applied Practice Experiences (APEs) Requirement

MPH students demonstrate competency attainment through Applied Practice Experiences (APEs). APEs may involve governmental, non-governmental, non-profit, industrial, and for-profit settings or appropriate university-affiliated settings, as long as they are primarily focused on community engagement with external partners. APE sites are identified by the student and any proposed project must consider and be sensitive to the needs of the agencies or organizations involved. APE activities should be mutually beneficial to both the site and the student. We expect to work closely with the University of Delaware's Partnership for Healthy Communities to identify potential host sites, however, students are responsible for securing an APE site.

APE opportunities may include the following:

- A practicum or internship of approximately 200 hours completed during a summer, winter, or other regular semester academic term
- Course-based activities (e.g., performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students)
- Activities linked to service learning, as defined by the program, school or university

The APE requires each student to demonstrate attainment of at least five competencies, of which at least three must be foundational competencies (as defined in CEPH Criterion D2). The competencies need not be identical from student to student, but the applied experiences must be structured to ensure that all students complete experiences addressing at least five competencies. APEs must also address concentration-specific competencies, if appropriate. Each student's competency attainment in practical and applied settings will be assessed through an e-Portfolio approach, which demonstrates and allows assessment of competency attainment. It must include at least two products. Examples include: written assignments, projects, videos, multi-media presentations, spreadsheets, websites, posters, photos or other digital artifacts of learning.

C. <u>Integrative Learning Experiences (ILEs) Requirement</u>

MPH students complete an Integrative Learning Experience (ILE) that demonstrates synthesis of foundational and concentration competencies. The ILE represents a culminating experience and may take many forms, such as a practice-based project, essay-based comprehensive exam, capstone course, or integrative seminar. Regardless of form, the student produces a high-quality written product that might include: program evaluation report, training manual, policy statement, a comprehensive essay exam, or legislative testimony with accompanying supporting research. Products are assessed by the faculty member assigned to teach the ILE course. Ideally, the written product is developed and delivered in a manner that is useful to external stakeholders, such as non-profits or governmental organizations. Professional certification exams (e.g., CPH, CHES/MCHES, REHS, RHIA) may serve as an element of the ILE, but are not in and of themselves sufficient to satisfy this criterion. The ILE is completed at or near the end of the program of study.

D. Timetable and Definition of Satisfactory Progress

D1. Time Limit for Completing the Degree

The time limit for completion of the MPH degree begins with the date of matriculation and is specifically detailed in the student's letter of admission. It is anticipated that full-time students

entering the MPH Program will complete degree requirements within four consecutive regular semesters (including one summer term to complete APEs). Student's may, with permission from the MPH Program Director, develop a Plan of Study that extends beyond two years up to a maximum time limit of ten consecutive semesters as set by Graduate College policy. An extension may be granted for extenuating circumstances. Requests for time extensions must be made in writing and approved by the MPH Program Director. The MPH Program Director will forward the request to the Graduate College.

D2. Submission of Required University Forms

To initiate the process for degree conferral, candidates must submit an Application for Advanced Degree to the Graduate College. Application deadlines are January 15 for Winter candidates, February 15 for Spring candidates, May 15 for Summer candidates, and September 15 for Fall candidates. The application must be signed by the MPH Program Director. An application fee for MPH degree students is required when the application is submitted. Upon completion of the graduation application, the Graduate College notifies students in writing that they have met all degree requirements.

D3. Grade Requirements for Satisfactory Progress

The MPH Program requires students to achieve a GPA of 3.0 or higher in the five Core Courses and a grade of Satisfactory in the APE and ILE or exit the program. Students must also maintain a GPA of 3.0 in all courses required by the degree. Failure to satisfactorily progress in the program will be based on the University Graduate Policy. The Graduate College monitors the academic progress of all graduate students and notifies students in writing of all academic deficiencies. The cumulative GPA after each semester determines academic standing.

D4. Reasons for Dismissal from the Program

The Graduate College notifies students when they are dismissed from graduate programs without completing a degree. Dismissals usually take place at the end of a term. Students may be dismissed for the following reasons:

- Upon the failure to meet the grade point average requirements as stated in the policy on Academic Deficiency and Probation.
- Upon written notice to the Graduate College of voluntary withdrawal from the MPH Program.

 Upon the failure to meet the stated minima in specific course requirements (e.g., Core Courses, APE, and ILE) as identified by the MPH Program.
- Upon the determination by the MPH Program faculty that the student has failed to make satisfactory progress towards meeting required academic standards, other than the failure to achieve a cumulative grade point average of 3.0 upon the completion of the five Core Courses.
- Upon violation of University of Delaware regulations regarding academic honesty. All students are subject to University of Delaware regulations regarding <u>academic honesty</u>. Violations of these regulations or other forms of gross misconduct may result in immediate dismissal from the MPH Program.

In the case of dismissal, the MPH Program Director is required to send a report to the Graduate College that states the faculty vote on the decision causing dismissal and the justification for the action. The Graduate College will notify the student in writing when they are being dismissed.

D5. Procedures for Student Appeals

Students who receive what they perceive as an unfair evaluation by a faculty member or faculty committee may file grievances in accordance with University of Delaware policies. Students are encouraged to contact the MPH Program Director prior to filing a formal grievance in an effort to resolve the situation informally.

In the case of academic dismissal, the student may appeal the termination by writing to the Graduate College. This appeal must be made within ten class days from the date on which the student has been notified of academic dismissal. If the Vice Provost for Academic Affairs grants reinstatement, the student must meet the conditions of the reinstatement. Failure to meet these conditions will result in dismissal from the MPH Program. A graduate student may be reinstated only once. The student's academic transcript will reflect the reinstatement with academic probation status.

Students wishing to review their program file must submit a written request to the MPH Program Director at least 24 hours in advance. Students must review the file in the presence of program staff or faculty and are not permitted to remove a file but may photocopy documents from their folder. All access to student records is in accordance with the Family Educational Rights and Privacy Act.

V: ASSESSMENT PLAN

A variety of internal and external mechanisms will be used to evaluate the curriculum and overall effectiveness of the MPH Program.

Internally, the MPH Program Director and the MPH Program Committee will review student progress, grades, and pass/fail rate on coursework, enrollments, and advising contracts on an annual basis. This information will be used to evaluate the extent to which students are developing critical competencies in public health, and to assess and adjust student flow through the MPH Program.

Markers of students' competency attainment will be evaluated through a portfolio approach (e-Portfolio with links to projects, reflections, and other documents) documenting attainment of foundational knowledge and competencies. In addition, we will track how effectively the MPH Program advances students by tracking the following:

- 1. Graduation rates and program attrition (dropouts, dismissals)
- 2. Time to complete the MPH degree
- 3. Post-graduation outcomes (80% or greater employment or enrollment in further education within a specified time frame)
- 4. Alumni perceptions of curricular effectiveness

Finally, we will use a variety of mechanisms for tracking students' perceptions of the program, including:

- 1. Teaching evaluations
- 2. Anonymous student surveys to assess different aspects of the program including: mentoring, funding, and research opportunities
- 3. Unsolicited student feedback
- 4. Alumni perceptions of curricular effectiveness

Externally, the MPH Program will be subject to review every three to seven years after initial accreditation by external reviewers in the field of public health who are assigned by CEPH.

VI: FINANCIAL AID

As a professional degree, funding support is not typically provided for MPH students. However, students may be funded by faculty research, start-up funding, or funds from the College of Health Sciences or the Biden School of Public Policy and Administration. Any graduate assistantships will be awarded to full-time students (registered in at least 9 graduate credits each semester) based on admission ranking, needs of the program, and experience and expertise of the graduate student. Students with full assistantships (tuition and stipends) will be obligated to work up to 20 hours per week in an assigned position during the fall, winter session, and spring semesters. Depending on the pool of applicants and the availability of funds, assistantships may be divided out into partial assistantships (tuition or stipend only). The student must remain in good academic standing to be eligible for the continuation of the award.

Students can also apply for university or external funding. For example, students can apply for any of the competitive awards offered through the University of Delaware's Research and Graduate Studies Office. This includes the University Graduate Scholar Award.

VII: PROGRAM ADMINISTRATION AND ORGANIZATION

A. Program Faculty

As the MPH Program is launched, it will be supported by current faculty from across the University, supplemented by new faculty hired as part of searches in the Epidemiology Program and the Biden School. It is expected that the MPH Program will be housed at the STAR Tower.

Appendix V provides a list of affiliated faculty. **Appendix V** also provides a list of potential affiliated faculty, many of whom have participated on working groups during the development of the MPH Program Policy Statement and who have research and teaching expertise relevant to the implementation and administration of the MPH Program. The MPH Program Directors will evaluate the CV of any faculty member interested in becoming affiliated with the MPH Program due to their teaching, research, or service.

B. MPH Program Leadership

The MPH leadership will consist of Program Directors representing the different concentrations within the MPH program. These individuals will be professional staff or faculty members affiliated with the MPH Program. The Directors will typically be from the Biden School of Public Policy and Administration or the College of Health Sciences, but other Colleges are possible provided the candidate has experience with related courses, projects, or subject matter. The approval of the Program Directors' home Department Chair, with appropriate course release or other support for the Program, is required. The term of service for the MPH Program Director is three years. Re-appointment shall be at the discretion of the appropriate Department Chairs and/or Deans.

The MPH Program Directors are the central representatives of the program to CEPH and external evaluators. Additional responsibilities of the MPH Program Directors include:

- 1) Providing leadership and oversight for the Program;
- 2) Organizing and leading meetings of affiliated faculty and the MPH Program Committee;
- 3) Approval of student programs of study, including approval of electives;
- 4) Reviewing annual MPH student progress reports;
- 5) Communicating as necessary with the University's Graduate College;
- 6) Serving as the first point of contact for issues arising with MPH Program students and faculty;

- 7) Corresponding with prospective students and overseeing MPH Program recruitment and admission decisions;
- 8) Approval of fieldwork sites, APEs, and ILEs; and
- 9) Program evaluation and assessment.

C. MPH Program Committee

The MPH Program Committee will consist of at least one member from the Biden School of Public Policy and Administration and one member from the College of Health Sciences plus two at-large members and will be responsible for the administrative duties needed to implement the MPH Program at the University of Delaware. The Program Committee will consist of at least 4 MPH Program affiliated faculty and staff and will be chaired by the MPH Program Directors. Responsibilities of the MPH Program Committee include (but are not limited to):

- 1) Admission of students into the MPH Program;
- 2) Approval of student selection of a new faculty advisor after admission to the MPH Program;
- 3) Oversight of student progress in the program, including dismissal of students who fail to make satisfactory progress;
- 4) Identifying contacts for projects and data for both on- and off-campus experiences;
- 5) Attending events as required for the MPH Program, such as for recruiting;
- 6) Other tasks required for the continued success of the program.

D. External Stakeholder Input

The MPH program works closely with the University of Delaware's Partnership for Healthy Communities (PHC) and PHC's Steering Committee, as well as the Biden Institute, with the latter two consisting of members from diverse disciplines both internal and external to the university. The MPH program, minimally on an annual basis, seeks input and feedback from these stakeholder groups to inform ongoing development and improvement of the MPH program and curriculum.

E. MPH Program Timetable

The first cohort of students began the MPH in Epidemiology and the MPH in Health Policy and Management in Fall 2019. The goal is to incrementally increase enrollment with a planned growth to a cohort of approximately 40 students by the start of the MPH Program's fifth year, Fall 2023. Market research conducted by the University of Delaware's Office Corporate Program and Partnerships shows that the labor market in the Mid-Atlantic States for students with an MPH is strong and would support a program of this size.

Appendix I. CEPH Accreditation Foundational Knowledge Areas

Foundational Knowledge

Profession & Science of Public Health

- 1. Explain public health history, philosophy and values
- 2. Identify the core functions of public health and the 10 Essential Services
- 3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- 4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
- 5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
- 6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health

- 7. Explain effects of environmental factors on a population's health
- 8. Explain biological and genetic factors that affect a population's health
- 9. Explain behavioral and psychological factors that affect a population's health
- 10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
- 11. Explain how globalization affects global burdens of disease
- 12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

Appendix II. CEPH Accreditation Foundational Competencies and Concentration Competencies

Foundational Competencies

Evidence-based Approaches to Public Health

- 1. Apply epidemiological methods to the breadth of settings and situations in public health practice
- 2. Select quantitative and qualitative data collection methods appropriate for a given public health context
- 3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
- 4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems

- 5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
- 6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health

- 7. Assess population needs, assets and capacities that affect communities' health
- 8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- 9. Design a population-based policy, program, project or intervention
- 10. Explain basic principles and tools of budget and resource management
- 11. Select methods to evaluate public health programs

Policy in Public Health

- 12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
- 13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
- 14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
- 15. Evaluate policies for their impact on public health and health equity

Leadership

- 16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
- 17. Apply negotiation and mediation skills to address organizational or community challenges

Communication

- 18. Select communication strategies for different audiences and sectors
- 19. Communicate audience-appropriate public health content, both in writing and through oral presentation

20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice

21. Perform effectively on interprofessional teams

Systems Thinking

22. Apply systems thinking tools to a public health issue

Concentration Competencies – Epidemiology

- 1. Select an epidemiologic method appropriate to address an epidemiologic research question.
- 2. Analyze strengths and limitations of a study design for providing evidence for a causal association.
- 3. Apply an appropriate advanced data analysis and management technique to analyze epidemiologic data.
- 4. Compare at least two reporting formats used to communicate epidemiologic data to a variety of audiences.
- 5. Explain the role of epidemiology in developing public health policy.

Concentration Competencies – Health Policy and Management

- 1. Use policy and management tools to make recommendations and evaluate implications of specific programs, policies, and interventions on organizations and populations.
- 2. Interpret and leverage economic analysis tools to inform policy and program implementation.
- 3. Apply knowledge of the US healthcare system to develop or improve public health programs and policies.
- 4. Communicate evidence-based options to address public health management and policy problems.
- 5. Apply project management and strategic management tools to create public health program goals, strategies, and objectives.

Appendix III. Potential Courses for Electives

The MPH degree includes flexibility for a student to select two electives. Courses from the concentration electives outside of a student's declared concentration may be taken as electives or approved courses outside of the MPH program may also be taken. Courses from some external areas are listed below as a sample (**Table A1**). This list is not meant to be exhaustive. The electives taken by the student must be approved by the MPH Program Director.

This list includes the course number, title, and typical semesters in which the course is offered. The typical semester the course is offered is subject to change. Additional courses are likely to be added as they are requested by students or departments and subsequently approved by the MPH Program Director.

Table A1. Potential Courses for Electives

Course ID and Number	Course Title	Department / College	Semester Offered
BHAN609	Survey Research Methods	Behavioral Health and Nutrition/ Health Sciences	Fall
DISA650	Overview of Disaster Science and Management	Biden School	Fall
GEOG622	Resources, Development and the Environment	Geography/ Earth, Ocean and Environment	Spring
GEOG630	Food Geographies & Food Justice	Geography/ Earth, Ocean and Environment	Spring
GEOG670	Geographic Information Systems and Science	Geography/ Earth, Ocean and Environment	Spring, Fall
GEOG671	Advanced Geographic Information Systems	Geography/ Earth, Ocean and Environment	Spring
HDFS870	Prevention Intervention and Policy	Human Development and Family Studies	
HLPR605	Concepts of Chronic Disease Management	Behavioral Health and Nutrition/ Health Sciences	Fall
HLPR610	Health and the Media	Behavioral Science and Nutrition/ Health Sciences	Winter
HLPR630	Behavior Change Strategies and Tactics	Behavioral Health and Nutrition/ Health Sciences	Fall
HLPR632	Health Science Data Analysis	Behavioral Health and Nutrition/ Health Sciences	Fall
HLPR803	Advanced Health Promotion Programming	Behavioral Health and Nutrition/ Health Sciences	Fall
HLPR807	Topics and Issues in Health Promotion	Behavioral Health and Nutrition/ Health Sciences	Spring
HLPR823	Human Response to Stress	Behavioral Health and Nutrition/ Health Sciences	Spring

KAAP609	Concussion Pathology and Management	Kinesiology and Applied Psychology/ Health Sciences	Spring
SOCI605	Data Collection and Analysis	Sociology and Criminal Justice/ Arts and Sciences	Fall, Summer
STAT609	Regression and Experimental Design	Applied Economics and Statistics/ Agriculture and Nat Resources	Spring
STAT611	Regression Analysis	Applied Economics and Statistics/ Agriculture and Nat Resources	Fall, Summer, Spring
STAT617	Multivariate Methods	Applied Economics and Statistics/ Agriculture and Nat Resources	Fall
UAPP608	Poverty, Neighborhoods, and Community Development	Biden School	
UAPP653	Politics and Healthcare	Biden School	
UAPP657	Health Policy	Biden School	Fall, Spring
UAPP672	Nonprofit Organizations: Scope, Frameworks and Dynamics	Biden School	Spring
UAPP691	Quantitative Analysis in Public and Nonprofit Sectors	Biden School	Fall
UAPP697	Leading Organizations in Public & NP Sectors	Biden School	Varies
UAPP701	Public Policy	Biden School	Spring
UAPP702	Research Methods in Urban and Public Policy	Biden School	Fall
UAPP703	Urban Society and Public Policy	Biden School	
UAPP 823	Social and Urban Policy	Biden School	
SPPA808	Qualitative Research Methods	Biden School	Spring

Appendix IV. New Course Descriptions

EPID 603 – Biostat for Health Sciences I

Academic Year: 2022-2023

Credits: 3

An introductory statistics course for graduate students in the College of Health Sciences with applications for clinical and population health. The course is taught using statistical software.

EPID 613 - Biostat for Health Sciences II

Academic Year: 2022-2023

Credits: 3

An intermediate statistics course for graduate students in the College of Health Sciences with applications for clinical and population health. The course covers research designs, ANOVA, linear regression, multiple regression, and logistic regression.

EPID 614 – Biostat for Health Sciences III

Academic Year: 2022-2023

Credits: 3

An introductory statistics course for graduate students in the College of Health Sciences with applications for clinical and population health. The course is taught using statistical software.

SPPA 606/EPID 606 – Environment and Public Health

Academic Year: 2022-2023

Credits: 3

Long Title: Environmental Health Concepts in Public Health

This course is a survey of major topic areas of Environmental Health. It will examine sources, routes, media, and health outcomes associated with biological, chemical and physical agents in the environment.

SPPA 858 -Public Policy and Admin Practicum

Academic Year: 2022-2023

Credits: variable

Long Title: Public Policy and Admin Practicum

This course is an applied practical experience for students enrolled in a professional Master's degree in the Biden School. Students will work with the relevant adviser or internship supervisor to determine the number of credit hours and requirements to meet their program's needs, as outlined in the Program Policy Statements.

Appendix V. Current and Potential Affiliated Faculty

Table A2. Current Affiliated Faculty

Name	College	Department
Jennifer Horney	CHS	EPID
Kimberly Isett	Biden	SPPA
Yendelela Cuffee	CHS	EPID
Katie Fitzpatrick	Biden	SPPA
Medina Jackson-Browne	CHS	EPID
Saira Khan	CHS	EPID
Rita Landgraf	CHS	BHAN
Freda Patterson	CHS	BHAN
Ryan Pohlig	CHS	EPID

Table A3. Potential Affiliated Faculty

Name	College	Department
Tammy Anderson	CAS	SOCI
Susan Conaty-Buck	CHS	NURS
Mieke Eeckhaut	CAS	SOCI
Mark Greene	CAS	PHIL
Bethany Hall-Long	CHS	NURS
Emily Hauenstein	CHS	NURS
Laurens Holmes	CAS	BIOS
Eric Jacobson	Biden	SPPA
Paul Jackson	CEOE	GEOG
Amy Johnson	CHS	NURS
John Jungck	CAS	BISC
Allison Karpyn	CEHD	HDFS
Laura Lessard	CHS	BHAN
Steven Metraux	Biden	SPPA
Michael Mackenzie	CHS	BHAN
Jennifer Naccarelli Reese	CAS	WOMS
Beth Orsega-Smith	CHS	BHAN
Carly Pacanowski	CHS	BHAN
Karen Parker	CAS	SOCI
Shannon Robson	CHS	BHAN
William Rose	CHS	KAAP
Laurie Ruggiero	CHS	BHAN
Chiara Sabina	CAS	WOMS
Jessica Sowa	Biden	SPPA
Kelebogile Setiloane	CHS	BHAN
Richard Suminski	CHS	BHAN
David Tulsky	CHS	PT
Christy Visher	CAS	SOCI
Changquig Wu	CANR	ANFS