Epidemiology Program

Master's

New Degree

Master's of Public Health (MPH)

Provide a brief summary of the proposed program and describe the rationale:\*

Interdisciplinary College of Health Sciences and School of Public Policy

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 College of Arts and Sciences (CAS) are seeking to develop a Master of Public Health (MPH) degree with concentrations in Epidemiology and in Health Policy and Management.

 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 utilitzed 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 competence 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). An internal market analysis conducted by the University of Delaware’s Office Corporate Program and Partnerships also shows demand across the Mid-Atlantic States for students with an MPH degree in epidemiology and health policy.

 Local needs are consistent with national data. Currently, the overall health status of the State of Delaware ranks 30th in the nation, with the goal of being in the top 5 by 2019 (America’s Health Rankings, 2017). Limiting progress toward achieving this goal is the fact that Delaware is the most populous among only three remaining 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).

 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 degree with specializations in Epidemiology and 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.

List only New Courses that are being currently submitted for this program:\*

Epidemiology Methods 1 (EPID 605)

Epidemiology Methods 2 (EPID 610)

Methods in Infectious Disease Epidemiology (EPID620)

Methods in Field Epidemiology (EPID621)

Disaster Epidemiology (EPID622)

Public Health Surveillance (EPID623)

Applied Practice Experience (HLTH 689)

Integrative Learning Experience (HLTH699)

Policy for Population Health (SPPA620)

Economics of Health Policy (SPPA621)

Introduction to Environmental Health (ANTH605)

 List any courses from outside departments being utilized in the curriculum:\*

BHAN609, DISA650, GEOG622, GEOG630, GEOG670, GEOG671, HLPR605, HLPR610, HLPR630, HLPR632, HLPR803, HLPR807, HLPR820, HLPR823, KAAP609, SOCI605, SOCI 633, SOCI647, STAT608, STAT609, STAT611, STAT617, STAT656, STAT674, STAT675, UAPP619, UAPP653, UAPP657, UAPP672, UAPP684, UAPP691, UAPP694, UAPP697, UAPP701, UAPP702, UAPP704, UAPP707, UAPP761, UAPP823, SPPA808

Resolution:\*

WHEREAS, the Masters in Public Health (MPH) Program in the College of Health Sciences and the College of Arts and Sciences has successfully initiated a new degree program for training students with a master of public health with a specialization in epidemiology and a master of public health with a specialization in health policy and management, and

WHEREAS, Public Health as a field has a significant shortage of qualified individuals trained in applied public health who can work in research, government, industry, and other settings, and

WHEREAS, the Public Health Program has assembled a nationally recognized faculty who are qualified to provide interdisciplinary training to students and has funding, research space, and staff to support a MPH program

RESOLVED, that the Faculty Senate recommends provisionally for seven years the approval of the establishment of a Masters of Public Health degree with a specialization in epidemiology and a Masters of Public Health degree with a specialization in health policy and management.

Prospective Curriculum:\*

MPH Core

Description

15 credit hours. Required for all  MPH Specializations.

EPID605

ANTH605

SPPA620

HLPR820

Courses

STAT 608 Statistical Research Methods (3cr.)

Specialization Requirements

15 credit hours.

Epidemiology Specialization:

15 credit hours. EPID610 and STAT656 are required. Choose 1 additional statistics course and 2 epidemiology specialization courses.

EPID610

EPID620

EPID621

EPID622

EPID623

Courses

STAT 656 Biostatistics (3cr.)

HLPR 632 Health Science Data Analysis (3cr.)

STAT 609 Regression and Experimental Design (3cr.)

STAT 611 Regression Analysis (3cr.)

STAT 674 Applied Data Base Management (3cr.)

STAT 675 Logistic Regression (3cr.)

UAPP 704 Advanced Quantitative Methods (3cr.)

KAAP 609 Concussion Pathology & Management (3cr.)

Epidemiology Specialization Electives:

6 credit hours.

Courses

BHAN 609 Survey Research Methods (3cr.)

DISA 650 Overview of Disaster Science and Management (3cr.)

GEOG 622 Resources, Development and the Environment (3cr.)

GEOG 630 Food Geographies & Food Justice (3cr.)

GEOG 670 Geographic Information Systems and Science (3cr.)

GEOG 671 Advanced Geographic Information Systems (3cr.)

HLPR 605 Concepts of Chronic Disease Management (3cr.)

HLPR 610 Health and the Media (3cr.)

HLPR 630 Behavior Change Strategies and Tactics (3cr.)

HLPR 803 Advanced Health Promotion Programming (3cr.)

HLPR 807 Topics and Issues in Health Promotion (3cr.)

HLPR 823 Human Response to Stress (3cr.)

SOCI 605 Data Collection and Analysis (3cr.)

UAPP 619 Contemporary Issues in a Global Society (3 to 6cr.)

UAPP 653 Politics and Healthcare (3cr.)

UAPP 657 Health Policy (3cr.)

UAPP 672 Nonprofit Organizations: Scope, Frameworks and Dynamics (3cr.)

UAPP 684 Performance Management and Program Evaluation (3cr.)

UAPP 691 Quantitative Analysis in Public and Nonprofit Sectors (3cr.)

UAPP 694 Financial Management in Public & Nonprofit Sectors (3cr.)

UAPP 697 Leading Organizations in Public & NP Sectors (3cr.)

UAPP 701 Public Policy (3cr.)

UAPP 702 Research Methods in Urban and Public Policy (3cr.)

UAPP 707 Public Policy Analysis (3cr.)

UAPP 761 Conflict Resolution Collab Prob Solving (3cr.)

UAPP 823 Proseminar: Social and Urban Policy (3cr.)

Health Policy and Management Specialization:

15 credit hours. UAPP657 and SPPA621 required. Choose 3 additional specialization courses.

SPPA621

Courses

SOCI 633 Sociology of Health & Illness (3cr.)

SOCI 647 Disparities in Heath & Healthcare (3cr.)

SPPA 808 Qualitative Research Methods (3cr.)

UAPP 653 Politics and Healthcare (3cr.)

UAPP 684 Performance Management and Program Evaluation (3cr.)

UAPP 694 Financial Management in Public & Nonprofit Sectors (3cr.)

UAPP 707 Public Policy Analysis (3cr.)

UAPP 761 Conflict Resolution Collab Prob Solving (3cr.)

UAPP 823 Proseminar: Social and Urban Policy (3cr.)

Health Policy and Management Specialization Electives:

6 credit hours.

Courses

BHAN 609 Survey Research Methods (3cr.)

DISA 650 Overview of Disaster Science and Management (3cr.)

GEOG 622 Resources, Development and the Environment (3cr.)

GEOG 630 Food Geographies & Food Justice (3cr.)

GEOG 670 Geographic Information Systems and Science (3cr.)

GEOG 671 Advanced Geographic Information Systems (3cr.)

HLPR 605 Concepts of Chronic Disease Management (3cr.)

HLPR 610 Health and the Media (3cr.)

HLPR 630 Behavior Change Strategies and Tactics (3cr.)

HLPR 632 Health Science Data Analysis (3cr.)

HLPR 803 Advanced Health Promotion Programming (3cr.)

HLPR 807 Topics and Issues in Health Promotion (3cr.)

HLPR 823 Human Response to Stress (3cr.)

STAT 656 Biostatistics (3cr.)

UAPP 619 Contemporary Issues in a Global Society (3 to 6cr.)

UAPP 672 Nonprofit Organizations: Scope, Frameworks and Dynamics (3cr.)

UAPP 691 Quantitative Analysis in Public and Nonprofit Sectors (3cr.)

UAPP 697 Leading Organizations in Public & NP Sectors (3cr.)

UAPP 701 Public Policy (3cr.)

UAPP 702 Research Methods in Urban and Public Policy (3cr.)

UAPP 704 Advanced Quantitative Methods (3cr.)

APE and ILE

Practicum and Capstone experience. 6 credits.

HLTH689

HLTH699

Last Revised for 2019-2020 Academic Year

BHAN - 609 - Survey Research Methods (3cr.)

DISA - 650 - Overview of Disaster Science and Management (3cr.)

GEOG - 622 - Resources, Development and the Environment (3cr.)

GEOG - 630 - Food Geographies & Food Justice (3cr.)

GEOG - 670 - Geographic Information Systems and Science (3cr.)

GEOG - 671 - Advanced Geographic Information Systems (3cr.)

HLPR - 605 - Concepts of Chronic Disease Management (3cr.)

HLPR - 610 - Health and the Media (3cr.)

HLPR - 630 - Behavior Change Strategies and Tactics (3cr.)

HLPR - 632 - Health Science Data Analysis (3cr.)

HLPR - 803 - Advanced Health Promotion Programming (3cr.)

HLPR - 807 - Topics and Issues in Health Promotion (3cr.)

HLPR - 823 - Human Response to Stress (3cr.)

KAAP - 609 - Concussion Pathology & Management (3cr.)

SOCI - 605 - Data Collection and Analysis (3cr.)

SOCI - 633 - Sociology of Health & Illness (3cr.)

SOCI - 647 - Disparities in Heath & Healthcare (3cr.)

SPPA - 808 - Qualitative Research Methods (3cr.)

STAT - 608 - Statistical Research Methods (3cr.)

STAT - 609 - Regression and Experimental Design (3cr.)

STAT - 611 - Regression Analysis (3cr.)

STAT - 617 - Multivariate Methods (3cr.)

STAT - 656 - Biostatistics (3cr.)

STAT - 674 - Applied Data Base Management (3cr.)

STAT - 675 - Logistic Regression (3cr.)

UAPP - 619 - Contemporary Issues in a Global Society (3 to 6cr.)

UAPP - 653 - Politics and Healthcare (3cr.)

UAPP - 657 - Health Policy (3cr.)

UAPP - 672 - Nonprofit Organizations: Scope, Frameworks and Dynamics (3cr.)

UAPP - 684 - Performance Management and Program Evaluation (3cr.)

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UAPP - 823 - Proseminar: Social and Urban Policy (3cr.)