Proposal for Public Health B.S./Masters of Public Health Accelerated Dual Degree Options

Faculty Senate Reading:

Full Name(s) of Current Program: Bachelor of Science Public Health; Master of Public Health

Stockton Program Acronym: PUBH

Degree/Level of Current Program(s): B.S., MPH

CIP Codes: 51.2201 (Public Health, General)

Names and signatures of Faculty Proposing New Option:

Shaffred

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Date of Program Faculty Votes to Approved the Proposed New Option:

December 8, 2022 (program approval in Public Health) December 8, 2022 (program approval in MPH)

Text Description of Proposed New Option:

This proposal describes a dual degree curriculum that would enable students to earn a Bachelor of Science (B.S.) in Public Health degree and a Master of Public Health (MPH) in an accelerated timeline. Current undergraduate alumni data indicates that over 70% of our graduates are working in a health-related field, while over 85% indicate using their degree in their current careers. Also, 35% have gone onto obtain graduate degrees. Additional data about local demand, market trends and evaluation and justification of needs is provided in Appendix A.

The proposal provides the rationale and outlines how an undergraduate student, matriculated into this accelerated dual degree, would complete up to six MPH courses (18 credits) as Undergraduate PUBH students. These courses would count towards the students' undergraduate degree as Cognate courses. In addition, the six graduate courses (18 credits) would also fulfill requirements in the MPH program. In other words, these six MPH graduate courses will double count for the B.S. in Public Health and the MPH graduate degree. This is similar to the Stockton <u>Dual</u> <u>BA/MA Degree Program in Criminal Justice</u> which also applies 18 credits from the graduate degree toward the undergraduate degree. Additional details about the curriculum are included at the end of this document.

Given there are already free-standing undergraduate and a graduate degrees in Public Health, implementation of the proposed accelerated dual degree program **requires only the addition of a dual degree coordinator**.

Implementation of the proposed accelerated dual degree program requires no other additional Stockton University resources (i.e., library, ITS, new faculty lines, etc.). Future resource needs for each degree program will continue to be evaluated as part of the self-assessment and accreditation processes.

Date of Dean's Council Review: January 20, 2023

Date of Faculty Senate Committee on Academic Programs and Planning Review: March 23, 2023

Date of Provosts' Council Review: TBD

Date of Faculty Senate Review: First reading, April 21, 2023, and second reading, May 19, 2023

I. Admission and eligibility requirements

Students may apply to the B.S./MPH accelerated dual degree program upon or after admission to the university as firstyear or transfer students. As soon as the student expresses interest in the Dual Degree, they will be transferred to the Dual Degree Coordinator for precepting. Having all students precepted by the coordinator will help ensure successful completion of the courses in the order mapped here, allowing program completion in the accelerated timeframe. The Dual Degree Coordinator or the MPH Program Chair may precept students in year five, once the student has matriculated into the MPH program. Students already in the B.S. program may enter the accelerated program any time; however, no student be eligible to enroll in graduate courses (5000-level) until they meet these requirements:

- Minimum of 96 credits
- Minimum of 20 credit hours in B.S. major courses
- 3.2 GPA in the B.S. major
- Successful completion of Introduction to Public Health (PUBH 1200), and either School Health Education (PUBH 3510) or PUBH 4113 (Patient Education), each with a grade of B or better.

Transfer students are eligible for the accelerated dual degree program, but those with over 96 transfer credits should use the "<u>direct entry</u>" application for the MPH.

Once enrolled, to maintain accepted status in the dual degree program, all students must maintain a 3.2 GPA and earn a grade of B or better in all graduate courses.

II. Accelerated Dual Degree Curriculum

A. B.S. Public Health Common Core: 7 courses, 28 credits total

These courses are required of all B.S. Public Health majors:

- PUBH 1200-Introduction to Public Health
- PUBH 2330 Public Health Research Methods and Statistics

- PUBH 2450 Public Health and Marketing
- PUBH 2530 Basic Environmental Health
- PUBH 3415 Writing for Health Professionals
- PUBH 3420 Epidemiology
- PUBH 4950 Public Health Internship

B. Required Electives:

Undergraduate Public Health majors may choose either the Community Health Education concentration or the Health Administration concentration; required electives vary by concentration. This dual degree proposal focuses on the PUBH Community Health Education students. Students in the PUBH Health Administration track are trained and prepared for the <u>M.B.A. in Healthcare Administration & Leadership</u>; however, they may certainly apply for and complete the MPH dual degree if they meet the eligibility requirements outlined in section I of this document.

"Focus" Concentrations:

- 1. <u>Community Health Education (42 credits)</u>: For cognates, students, in consultation with a PUBH preceptor, are advised to select a cluster of courses from GERO, WGSS, HHM, Childhood Studies, Cannabis studies, or any other health/population health related course of study.
- 2. <u>Health Administration (40 credits)</u>: For cognates, students, in consultation with a PUBH preceptor, are advised to select a cluster of courses from GERO, WGSS, HHM, Childhood Studies, Cannabis Studies, Business, or other health-related courses as electives.

At least 2 of these courses are offered each semester.

MPH courses offered by Public Health faculty that are eligible for graduate and/or dual credit in the proposed accelerated dual degree program include:

- PUBH 5XXX Community Health Education & Promotion
- PUBH 5100 Environmental and Occupational Health
- PUBH 5XXX Epidemiology
- PUBH 5XXX Biostatistics
- PUBH 5XXX Global Health
- PUBH 5XXX Research & Public Health Practice
- PUBH 5XXX Public Health Systems & Policy
- PUBH 5XXX Economics of Healthcare Delivery
- PUBH 5XXX Methodology in Practice and Current Topics

C. B.S. Public Health Program Competency and Cognates/ASD: 96 credits total

The B.S. Public Health Program Competency Requirement may be met by completing the PUBH courses in the core and concentration of each track. The B.S. Public Health program competencies are:

- A. Students will demonstrate effective oral and written communication skills
- B. Students will have an understanding of the principles of Public Health practice.

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C. Students will be able to demonstrate appropriate, ethical and professional behavior when in a role as a Public Health Professional.

The following are competencies for Community Health Education:

- 1. Assess individual and community needs for health education.
- 2. Plan health education strategies, interventions, and programs.
- 3. Implement health education strategies, interventions, and programs.
- 4. Conduct evaluation and research related to health education.
- 5. Administer health education strategies, interventions, and programs.
- 6. Serve as a health education resource person.
- 7. Communicate and advocate for health and health education.

B.S. Public Health Program Cognates, 80 credits total

Cognates in the Community Health Education concentration are BIOL, CHEM, PSYC, HLTH, GERO, WGSS, IHM, and others approved by the preceptor and include the following core courses and electives:

PUBH Core Courses
PUBH 1200 Introduction to Public Health (4)
PUBH 2330 Research Methods and Statistics (4)
PUBH 2530 Basic Environmental Health (4)
PUBH 2432 Contemporary Health Issues (4)
PUBH 2450 Public Health Marketing (4)
PUBH 3102 Community Health Education Theory and Practice (4)
PUBH 3420 Epidemiology (4)
PUBH 3510 School Health Education (4)
PUBH 4113 Patient Education (4)
PUBH 3415 Writing for Health Professionals (4)
PUBH 4950 Public Health Internship (4)

PUBH Electives
BIOL 1200 Cells and Molecules (4)
BIOL 1205 Cells and Molecules Lab (1)
CHEM 2110 Chemistry 1 (4)
CHEM 2115 Chemistry 1 LAB (1)
HLTH 2221 Functional Human Anatomy (4)
PSYC 1100 Introduction to Psychology (4)
PSYC 2212 Health Psychology (4)

Masters in Public Health: 46 credits total

The MPH curriculum is 46 total credits of required courses. Accelerated Dual Degree students may begin taking MPH courses in year four of their undergraduate education, once they meet the 96-credit threshold requirement and meet the eligibility requirements outlined previously.

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MPH courses taken during year four ("senior year") including summer session: 8 courses, 22 credits

- PUBH 5000 Introduction to Public Health (3) (Fall)
- PUBH 5006 Biostatistics (3) (Fall)
- PUBH 5007 Community Health Education and Promotion (3) (Fall)
- PUBH 5100 Environmental and Occupational Health (3) (Fall)
- PUBH 5XXX Epidemiology (3) (Spring)
- PUBH 5XXX Community Assessment, Planning and Evaluation (3) (Spring)
- PUBH 5XXX Applied Practice Experience ("Internship") (3) (Summer)
- PUBH 5XXXa Summer Intensive Leadership in Public Health Practice (1) (Summer)

MPH courses taken during year five: 9 courses, 24 credits total

- PUBH 5XXXb Leadership in Public Health Practice (part b, course conclusion) (2) (Fall)
- PUBH 5XXX Public Health Systems & Policy (3) (Fall)
- PUBH 5XXX Methodology in Practice/Current Issues (3) (Fall)
- PUBH 5XXX Research in Public Health Practice (3) (Fall)
- PUBH 5XXX Economics of Healthcare Delivery (3) (Spring)
- PUBH 5XXX Public Health Emergency Preparedness (3) (Spring)
- PUBH 5005 Global Health (3) (Spring)
- PUBH 5004 Health Disparities & Health Equity (3) (Spring)
- PUBH 5XXX Integrative Learning Experience (1) (Spring)

In year four, there are several course substitutions in the proposed curriculum map. These substitutions are made for undergraduate and graduate courses where there is significant overlap in content or learning objectives. The substitutions eliminate redundancy in the course content and learning objectives between the undergraduate and graduate degrees and ensure that students can complete the dual degree on the proposed accelerated schedule. The course substitutions in year four also allow students to meet their undergraduate graduation requirements; if a student chooses not to continue in the dual degree program, they will have completed their undergraduate degree requirements by the end of the fourth year and will be eligible to graduate with the B.S. degree. Specifically,

- The MPH course, 5XXX Community Health Education and Promotion (3 graduate credits) is substituted for PUBH 3102, Community Health Education Theory and Practice (4 undergraduate credits)
- The MPH course, 5100 Environmental & Occupational Health (3 graduate credits) is substituted for PUBH 2530, Basic Environmental Health (4 undergraduate credits).

Also, the MPH course, PUBH 5XXX Community Assessment, Planning & Evaluation (3 graduate credits) is substituted in place of one of the PUBH Cognate electives (4 undergraduate credits) in year four.

Fall: Year 1	(16)	Spring: Year 1	
PUBH 1200 Introduction to Public Health (I)	(4)	PUBH 2432 Contemporary Health Issues (V)	(4)
PSYC 1100 Introduction to Psychology	(4)	PUBH 2450 Public Health and Marketing (W2)	
ASD	(4)	ASD	
"G"	(4)	"G"	
Fall: Year 2	(17)	Spring: Year 2	
PSYC 2212 Health Psychology	(4)	PUBH 2330 Research Methods and Statistics (Q2)	(4)
BIOL 1200/1205 Cells & Molecules & Lab	(5)	HLTH 2221 Functional Human Anatomy	(4)
"G"	(4)	CHEM 2110/2115 Chem 1 & Lab (Q2) *	(5)
"G"	(4)	"G"	(4)
Fall: Year 3	(16)	Spring: Year 3	(16)
PUBH 3415 Writing for Health Prof. (W1)	(4)	PUBH 3510 School Health Education	(4)
PUBH 4113 Patient Education (V)	(4)	ASD	(4)
ASD	(4)	"G"	(4)
"G"	(4)	"G"	(4)
		*Cumulative credits = 98; Eligible to enroll in accelerated program / graduate courses	
Fall: Year 4	(16)	Spring: Year 4	(15)
PUBH Cognate elective (4 u.g. credits)	(4)	PUBH 4950 PUBH Internship	(5)
PUBH Cognate elective (4 u.g. credits) sub with PUBH 5000 Intro to Public Health (3 grad credits)	(3)	PUBH cognate elective (4 u.g. credits)	
PUBH Elective 3000-4000 (4 u.g. credits) sub with PUBH 5XXX Biostatistics (3 grad credits)	(3)	PUBH Cognate elective (4 u.g. credits) sub with PUBH 5XXX Community Assessment, Planning & Evaluation (3 grad credits)	
PUBH 5xxx Community Health Education and Promotion (3 grad credits, sub for PUBH 3102)	(3)	PUBH 5xxx Epidemiology	
PUBH 5xxx Environmental & Occupational Health (3 grad credits, sub for PUBH 2530)	(3)	*At the end of year 4, students are eligible to graduate B.S. with 128 credits, including 18 credits toward MPH	
Summer: Year 4			
PUBH 5XXX Applied Practice Experience ("internship")	(3)	PUBH 5XXXa Leadership in PH Practice ("Summer Intensive")	(1)

Table 1. Curriculum Map - B.S. in Public Health: Community Health Education / MPH

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Fall: Year 5	(11)	Spring: Year 5	
PUBH 5XXX Public Health Systems & Policy	(3)) PUBH 5XXX Economics of Healthcare Delivery	
PUBH 5XXX Methodology in Practice & Current Issues	(3)) PUBH 5XXX Public Health Emergency Preparedness	
PUBH 5XXX Research in Public Health Practice	(3)	PUBH 5XXX Global Health	
PUBH 5XXXb Leadership in Public Health Practice	(2)	PUBH 5XXX Health Disparities & Health Equity (3)	(3)
		PUBH 5XXX Integrative Learning Experience	(1)

III. Program Mission, Goals, and Learning Outcomes

B.S. in Public Health Mission, Program Goals, Learning Outcomes and Competencies

The importance of Public Health today is indisputable. As a public institution we have a clear responsibility to educate competent public health professionals. The Public Health undergraduate degree is designed to make available to students the skills and knowledge necessary to attain employment in health-related fields within the public and private sector. It is also a pre-professional degree that may be used to pursue graduate study in a variety of allied health fields.

Mission

Stockton's Public Health undergraduate program is committed to its original mission as stated in the 1974 Program Approval Document. Table 3 illustrates how the program mission aligns with the <u>University's Mission Statement</u>.

Stockton University Mission	Mission of the Public Health Program
We insist on excellence in teaching and dedication to learning.	To provide the educational environment and opportunity necessary to educate competent, professional public health administrators and environmental health specialists. (Since the goal was originally articulated, concentrations have fluctuated due to internal and external demands).

Table 2. Alignment of Public Health Program Mission with Stockton University Mission

Exposure to many disciplines and intensive investigation of one discipline should prepare graduates to move into appropriate fields of employment, or to continue with graduate academic or professional study. At Stockton we seek to help our students develop the capacity for continuous learning and the ability to adapt to changing circumstances in a multicultural and interdependent world by insisting on breadth, as well as depth, in our curriculum.	To provide program graduates both eligible for and motivated to continue in graduate level of study.	
Stockton is committed to the positive development of southern New Jersey. Through research and community service, we actively seek to take advantage of and to improve the unique physical and human environment in which the University is located.	To provide high quality and appropriate continuing education opportunities to those professionals presently employed in the field.	
We value diversity and the differing perspectives it brings.	To develop a well- educated citizen with an expanded social consciousness and sensitivity to social needs.	

The B.S. Public Health program is committed to creating an educational experience that will enable students to become enlightened, contributing members of the global community. The faculty are all dedicated to excellence in teaching and learning and remain current in their respective areas of specialty. The curriculum is revised based on the needs of the field as well as data gathered from students, faculty, internship supervisors, and professional advisory board members. The curriculum offers breadth and depth and utilizes an interdisciplinary approach by offering practicum, internships, service learning, and special events. Public health students are encouraged to actively engage in co-curricular activities and to pursue minors in areas of interest to augment their personal and professional growth. All of these program strengths are closely aligned with the Mission and Vision of Stockton University.

B.S. Program Goals and Student Learning Outcomes (SLOs)

B.S. Program Goals:

- 1. Offer Public Health courses, internships and precepting to facilitate students' learning and to ensure current majors will be able to graduate in a timely manner.
- 2. Promote the program in order to increase both visibility and admissions.
- 3. Utilize the data gleaned from the Public Health program assessment process to maintain a strong curriculum, relevant to current public health issues.

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- 4. Afford students and faculty opportunities for professional and community engagement.
- 5. Continue active faculty involvement in professional development and service to the community and university.
- 6. Develop a curriculum that addresses diversity, inclusion and antiracism.

B.S. Program Core Competencies:

A. Communication

- Students will demonstrate effective oral and written communication skills
- Students will demonstrate effective oral communication skills and effectively utilize electronic methods for communication.
- Students will demonstrate effective written communication skills.
- B. Competency
 - Students will have an understanding of the principles of Public Health practice
 - Students will have an understanding of fundamental techniques relevant to research in Public Health

C. Credibility

- Students will perform basic Computational Analysis: portfolio includes examples of student generated analysis of data for internship site projects
- Students will have an understanding of Epidemiological methodology and will be able to accurately describe the epidemiological principles that are utilized in their internship experiences.
- Students will demonstrate an understanding of basic marketing principles and will demonstrate the ability to apply marketing principles when planning, implementing, and evaluating public health initiatives
- Students will have knowledge of Public Health in relation to social historical, political, and/or economic contexts: demonstrate personal knowledge of the social (i.e. the influence of cultural beliefs on health care practices), historical (i.e. evolution of existing health care structure), political (i.e. influence of governmental policies on access to health care), and economic (i.e. influence of socioeconomic status on the quality and quantity of available health care) dynamics that influence Public Health practice.

D. Civic Mindedness

- Students will be able to demonstrate appropriate, ethical and professional behavior when in a role as a Public Health Professional.
- Students will demonstrate appropriate behavior: shows up for work consistently and on-time, follows instructions by carrying out duties, and displays professional behavior and attitude while working as a Public Health Professional.
- Students will use critical thinking in professional decision making: A proficient critical thinker employs not only logic but broad intellectual criteria such as clarity, credibility, accuracy, precision, relevance, depth, breadth, significance and fairness, when making decisions or during problem solving.
- Students will demonstrate cultural competence when working in the public health sector.
- Students will develop the ability to demonstrate leadership when applicable.

Community Health Education Track Competencies:

The following eight areas of responsibility are outlined by the <u>National Commission for Health Education</u> <u>Credentialing</u> for entry level Health Educators. These are also the criteria utilized to certify health education specialists (CHES).

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- 1. Assessment of Needs and Capacity
 - Plan assessment
 - Obtain primary data, secondary data, and other evidence informed sources.
 - Synthesize assessment findings to inform the planning process.
- 2. Planning
 - Engage priority populations, partners, and stakeholders for participation in the planning process.
 - Define desired outcomes
 - Determine health education and promotion interventions
 - Develop plans and materials for implementation and evaluations
- 3. Implementation
 - Coordinate the delivery of intervention(s) consistent with the implementation plan.
 - Deliver health education and promotion interventions.
 - Monitor implementation
- 4. Evaluation and Research
 - Design process, impact, and outcome evaluation of the intervention
 - Design research studies
 - Manage the collection and analysis of evaluation and/or research data using appropriate technology
 - Interpret data
 - Use findings
- 5. Advocacy
 - Identify a current or emerging health issue requiring policy, systems, or environmental change
 - Engage coalitions and stakeholders in addressing the health issue and planning advocacy efforts
 - Engage in advocacy
 - Evaluate advocacy
- 6. Communication
 - Determine factors that affect communication with the identified audience(s)
 - Determine communication objective(s) for audience(s)
 - Develop message(s) using communication theories and/or models
 - Select methods and technologies used to deliver message(s)
 - Deliver the message(s) effectively using the identified media and strategies
 - Evaluate communication
- 7. Leadership and Management
 - Coordinate relationships with partners and stakeholders (e.g., individuals, teams, coalitions, and committees)
 - Prepare others to provide health education and promotion
 - Manage human resources
 - Manage fiduciary and material resources
 - Conduct strategic planning with appropriate stakeholders
- 8. Ethics and Professionalism
 - Practice in accordance with established ethical principles.
 - Serve as an authoritative resource on health education and promotion
 - Engage in professional development to maintain and/or enhance proficiency.
 - Promote the health education profession to stakeholders, the public, and others

Goal Alignment with University ELO's

The University's Essential Learning Outcomes are provided in Table 3, which demonstrates alignment to the mission and vision statements for the <u>Stockton ELO initiative</u>. It is understood that not all courses will meet all ELOs, nor will all ELOs be found in the curriculum of all majors. It is believed, however, that with a robust curriculum which includes major, at-some-distance, and general studies courses, students will be exposed to all the ELOs through their academic careers and become either "aware", "competent", or "skilled" at each of the ELOs. In response to the ELO initiative, the B.S. in Public Health program reviewed the syllabi for all 27 courses.

Essential Learning Outcome	Number of B.S. Public Health Courses that Address the ELO
Adapting to Change	8
Communication Skills	6
Creativity and Innovation	4
Critical Thinking	7
Ethical Reasoning	8
Global Awareness	10
Information Literacy and Research Skills	9
Program Competence	17
Quantitative Reasoning	6
Teamwork and Collaboration	3

Table 3:	Number of	Courses	that Address	Individual ELO
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A review of the curriculum map reveals that the ELOs that are emphasized the most within the B.S. Public Health program courses are Global Awareness and Program Competence. The two strongest ELOs reflect the values that dominate the field of Public Health. Public Health is the study of population health; therefore, having global awareness is critical among all entry-level public health professionals. Practitioners require skill-based competence; therefore, the emphasis based on program competence aligns with the needs of the profession. Strong quantitative reasoning skills are necessary for all public health practitioners, yet quantitative skills are not incorporated into all of the PUBH program courses. However, students are encouraged to take courses outside the PUBH program that strengthen their quantitative skills while simultaneously satisfying the university-wide quantitative reasoning requirement. Teamwork and collaboration are soft skills that all competent public health professionals should possess. A review of the curriculum map reveals that it is adequately covered in three PUBH courses.

MPH Mission, Program Goals, Learning Outcomes and Competencies

Public health can be defined as the art and science of preventing disease and promoting quality of life by working with communities, private and public organizations, and society at large. Unlike a clinical model of health care, public health focuses on protecting the health of populations, identifying root causes and societal influences on health, and engaging stakeholders to promote greater wellbeing and vitality of all who are potentially impacted.

The MPH program prepares students to serve as evidence-based practitioners and leaders in the dynamic and collaborative field of public health. The curriculum is based on the core competencies of public health: Biostatistics and Epidemiology; Environmental Health Sciences; Health Policy & Management; Social & Behavioral Sciences; Communication & Leadership; Program Planning; Diversity, Equity and Inclusion.

Mission

The mission of the MPH at Stockton University is to promote the health of individuals and communities at the local, regional, national and global level with an emphasis on health equity and social justice. We develop public health practitioners and leaders who collaborate with, advocate for, and empower the communities they serve. Our vision is healthy people, thriving where they live, work, learn, play and worship. Graduates of our comprehensive, evidence-based program will serve people and communities and improve lives at the local, regional, national and global levels.

MPH Program Goals and Student Learning Outcomes (SLOs)

The Stockton Master of Public Health (MPH) program will provide students with the foundational skills, education, research experience and service in public health settings including state and county health departments, non-profit agencies, hospital population health departments/offices, wellness centers, and academic institutions. The MPH program will seek accreditation from the Council on Education for Public Health (CEPH), the nationally recognized body that establishes the rigorous standards and oversight for public health programs and schools at the undergraduate and graduate levels.

MPH Program Goals:

- 1. Offer graduate public health courses, internships, and research experiences to facilitate students' learning and ensure students graduate in a timely manner.
- 2. Promote the program in order to increase both visibility and admissions.
- 3. Achieve accreditation through CEPH and utilize the data gleaned from the accreditation process to maintain a strong curriculum, relevant to current public health issues.
- 4. Afford students and faculty opportunities for professional and community engagement.
- 5. Continue active faculty involvement in professional development and service to the community and university.

The MPH program prepares students to serve as evidence-based practitioners and leaders in the dynamic and collaborative field of public health. Graduates are competitive for leadership positions in a wide variety of professional settings. The curriculum is based on the core competencies of public health: Biostatistics and Epidemiology; Environmental Health Sciences; Health Policy & Management; Social & Behavioral Sciences; Communication & Leadership; Program Planning; Diversity, Equity and Inclusion.

MPH Program Core Competencies:

The MPH Core Competencies align with the <u>CEPH accreditation standards</u>, and include the following:

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MPH Foundational Public Health 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 U.S. 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)

MPH Foundational Competencies

Evidence-based Approaches to Public Health

- 1. Apply epidemiological methods to 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 systemic 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, implementation, or critique 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

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11. Select methods to evaluate public health programs

Policy in Health

- 12. Discuss 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 leadership and/or management principles to address a relevant issue
- 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 (i.e., non-academic, non-peer audience) public health content, both in writing and through oral presentation
- 20. Describe the importance of cultural competence in communicating public health content

Interprofessional and/or Intersectoral Practice

21. Integrate perspectives from other sectors and/or professions to promote and advance population health

Systems Thinking

22. Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative

IV. Program Assessment

B.S. Public Health Assessment

The PUBH program has been actively involved in assessing program effectiveness using a systematic evaluation of the internship experience. The development of an initial assessment protocol for the PUBH program was completed during the 2008-2009 academic year. To begin, each faculty member submitted outcome expectations for specific PUBH competencies for each of their classes. Using these outcome expectations, Dr. Calamidas and Dr. Crowell developed a Likert scale to assess internship portfolios. The internship portfolios, reaction papers, and final internship presentations were chosen as the most appropriate factors to assess student outcome since they are all final products and are based on student classroom and fieldwork experiences; hence, they are the best representation of the level of PUBH competence our students attain by graduation. Based on the assessment data, a "feedback" loop was created, and improvements were made to the development, implementation, and evaluation in our program components.

In 2015, Dr. Crowell and Dr. Calamidas published a manuscript entitled "A Comprehensive Five-Year Program Assessment Study" to the Journal of Assessment and Institutional Effectiveness. The manuscript illustrates the entire assessment cycle and assessment results. The following is an excerpt from the article:

This comprehensive five-year program assessment study illustrates the full circle of the assessment cycle; development, implementation, feedback and reshaping of curriculum. First, this study provides specific information on the development and implementation of multiple measures of program assessment for both core and track goals and objectives. Second, it provides five years of quantitative and qualitative data illustrating the use of internship e-portfolios and presentations in assessing students' proficiencies on 13 specific core competencies and numerous track competencies. Students' self-rating along with faculty's rating on these variables provides descriptive statistics on students' level of proficiencies for program core and track goals and objectives. Site supervisors also provide evaluations of students' performance and levels of preparedness to enter the public health field. Results from all three sources indicate high levels of proficiencies for students and support that program and track goals and objectives are being met. Qualitative data support these statistics and provide insight into program needs that are not being met. Based on both sets of data, program solutions are identified and implemented creating an assessment feedback loop. Finally, audience feedback from internship presentations provides a final measure of program assessment. Both quantitative and qualitative data support the benefit of students attending these events and posit that students gain a better understanding of the internship process, the public health field and careers, and the link between public health classrooms and careers. Results of all these measures provide valuable insight into future program and course curriculum, along with teaching strategies and techniques in order to increase student learning. (Crowell, T. & Calamidas, E., 2015).

As of Spring 2021, assessment data has been collected on over 400 public health students.

MPH Program Assessment

The assessment of student learning in the MPH program is closely tied to program accreditation. We evaluate the effectiveness of our courses in meeting the Student Learning Outcomes outlined by the <u>CEPH</u>, including the students' individual Applied Practice Experience ("internship"). CEPH specifies the MPH program implement an evaluation plan with the following elements/functions:

- Includes measures such as enrollment, graduation rate, student perceptions of faculty availability and class size, and learning as outlined in <u>Appendix 1 of the CEPH Accreditation Criteria</u>.
- Allows the school or program to determine its effectiveness in advancing its mission and goals.

We engage in regular, substantive review of evaluation findings, and act strategically on their implications for our students, our academic program, mission and goals. This allows the MPH program to make data-driven quality improvements in key areas including our curriculum, student services, advising, faculty (personnel and function), research and extramural service, and operations.

Annually, we will present an evaluation in the CEPH-recommended format that provides the following for each required element:

- 1. The specific data source(s) for each listed element (e.g., alumni survey, student database)
- 2. A brief summary of the method of compiling or extracting information from the data source
- 3. The entity (i.e., committee or group) responsible for reviewing and discussing each element and recommending needed improvements, when applicable

4. The timeline for review.

We will gather and maintain evidence of implementation of the plan, including reports or data summaries prepared for review, notes from meetings at which results were discussed, etc. We will also gather and maintain examples of improvements undertaken in the previous three years based on the evaluation plan. We will assess program strengths and weaknesses related to this criterion and plans for improvement in this area. The program will collect and analyze graduation rate data with the goal of achieving a rate of at least 70% for MPH students. We will gather and analyze post-graduation outcomes including employment or enrollment in further education post-graduation, with the goal of achieving a rate of 80% or greater employment or enrollment in further education within two years post-graduation. We will gather and analyze data on alumni perceptions of curricular effectiveness including perceptions of their preparation for the workforce (or for further education, if applicable). Specifically, we will determine what skills are most useful and applicable in post-graduation destinations, areas in which graduates feel well prepared, and areas in which they would have benefitted from more training or preparation.

Accelerated Dual Degree Program Assessment

The assessment of student learning in the PUBH/MPH Accelerated Dual Degree program will be conducted through the periodic assessment measures detailed above for the B.S. and MPH degrees. The Dual Degree program will use data provided by the Office of Institutional Research, the School of Health Sciences, the Career Center, and survey instruments to assess how well the Accelerated program meets students' needs by tracking time to degree completion, course grades and student grade point averages, post-graduation outcomes, and student feedback.

V. Conclusion

Public Health education at Stockton has a long history of student success and contribution to our communities - locally, regionally, nationally, and globally. We seek to build on our successes in the <u>undergraduate</u> program by helping our students advance to graduate training seamlessly and efficiently, saving time and resources. Our dual degree students will achieve all the benefits of a solid undergraduate liberal arts education, where they develop critical thinking skills and gain an appreciation for and understanding of the core public health topics including biostatistics, epidemiology, environmental health, health policy and management, community health, community health education, and social and behavioral sciences. Then, through the training provided in the graduate courses, our students will deepen their understanding of public health issues and gain real-world experiences at the undergraduate and graduate levels, through their internship experience in the B.S. program and the Applied Practice Experience at the graduate level. The proposed accelerated dual degree program offers a clear benefit to students and offers an opportunity for Stockton University to grow, while contributing to and improving public health.

Appendix A

Justification of Need & Regional Competition

A recent Market Analysis provided by Hanover provides compelling information and data that indicates not only the need for public health professionals within our community, but the growth and demand of the public health job market. Recent trends show a projected growth rate of 17.6% for public health occupations. Between 2013 and 2017, regional master's completions in public health increased at an annualized rate of 4.1%, which is faster than the 1.4% average growth rate across all master's programs in the Mideast.

From 2016-2026, employment opportunities for MPH graduates are projected to increase by 17.6% in the Mideast, higher than 9.0% average growth expected for all occupations. This would equate to about 14,980 public health-related job openings each year during and 10-year projected period. Within the state of New Jersey, this area of employment growth is projected to be high as well.

National trends also show a projected growth rate of 17.6% for public health occupations. Between 2013 and 2017, regional master's completions in public health increased at an annualized rate of 4.1%, which is faster than the 1.4% average growth rate across all master's programs in the Mideast. Demand trends suggest favorable conditions for a new master's in public health degree in New Jersey and the Mideast Region.

In addition to the report prepared by Hanover, the US Department of Labor Bureau of Labor Statistics estimates a 16% increase in job prospects between the years of 2016 and 2026 for Health Educators and Community and Public Health Workers, further confirming the growth expected for public health professionals.

A number of employers and employment settings are looking to specifically hire Certified Health Education Specialists as opposed to clinically trained nutrition and health professionals. According to the Health Education Specialist Practice Analysis (2015), the skillsets of CHES are valuable assets in a variety of career settings including: Community/Non-Profit Organizations, Government Offices and Programs, School Health, Academia/University, Business, and Outpatient Hospital/Health Care Environments. NCHEC will only evaluate academic preparation for eligibility to sit for the CHES examination, so offering an MPH program whose curriculum is aligned with the NCHEC educational requirements will be a highly valuable attribute.

To evaluate whether current Stockton University students, as well as community sites and professionals, would support an MPH program at Stockton University, a survey was distributed to current students enrolled at Stockton University, alumni of Stockton University, as well as professionals within the community. The purpose of this survey was to better determine the potential level of interest and support in a Master of Public Health program. The results of these surveys, show that students, alumni, and community professionals see value in this program, with many current students and alumni showing interest in matriculating into the MPH program once it is operational. The survey revealed:

- Approximately 82.35% of surveyed current students have plans on attending graduate school after graduation.
- Approximately 48.8% of alumni indicated interest in graduate school in fields related to MPH
- Alumni results show 50.77% of surveyed alumni "Somewhat Agree" to "Strongly Agree" in an interest in learning more about the MPH program

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- 14% of current students, alumni, and community professionals see value in the MPH program, with many current students and alumni showing interest in matriculating into the MPH program once it is operational.
- Approximately 60% of students surveyed show between a general interest to a strong interest in learning more about the MPH program.