

MARYLAND HIGHER EDUCATION COMMISSION  
ACADEMIC PROGRAM PROPOSAL

PROPOSAL FOR:

**received**  
8/26/2016

- NEW INSTRUCTIONAL PROGRAM  
 SUBSTANTIAL EXPANSION/MAJOR MODIFICATION  
 COOPERATIVE DEGREE PROGRAM  
 WITHIN EXISTING RESOURCES or  REQUIRING NEW RESOURCES

Cecil College  
Institution Submitting Proposal

Spring 2017  
Projected Implementation Date

Associate of Science  
Award to be Offered

Public Health  
Title of Proposed Program

1214.00  
Suggested HEGIS Code

51.2201  
Suggested CIP Code

Nursing and Health Professions  
Department of Proposed Program

Christy Dryer, DNP, RN, CNE  
Name of Department Head

Rebecca Walker  
Contact Name

rwalker@cecil.edu  
Contact E-Mail Address

443-674-1948  
Contact Phone Number

Mary Way Bolt      8/25/16      President/Chief Executive Approval  
Signature and Date

June 25, 2015      Date Endorsed/Approved by Governing Board

**A. Centrality to institutional mission statement and planning priorities:**

Founded in 1968, Cecil College is an open-admission, learner-centered institution located in a rural community in Maryland's most northeastern county. The College's mission includes career, transfer, and continuing education coursework and programs that anticipate and meet the dynamic intellectual, cultural, and economic development challenges of Cecil County and the surrounding region. Through its programs and support services, the College strives to provide comprehensive programs of study to prepare individuals for enriched and productive participation in society. The College enrolls approximately 8,500 students in credit and non-credit programs.

The Associate of Science degree in Public Health with Areas of Concentration in Environmental Public Health, Health Navigator, and Public Health Generalist is designed for students to earn the first two years of a Public Health degree and transfer to a four-year program or obtain an entry level position in this field. This program supports the College's mission which includes "transfer programs to meet the economic development of the country and surrounding region." The program provides general education and foundation courses in Biology and Human Anatomy and Physiology as well as basic Epidemiology, Genetics, and Environmental Health courses. The areas of concentration in Environmental Public Health, Health Navigator, and Public Health Generalist (consisting of 17 credits each) permit students to further refine their studies.

**B. Adequacy of curriculum design and delivery to related learning outcomes consistent with Regulation .10 of this chapter:**

The Associate of Science Public Health curriculum is designed to meet the needs of students who plan to transfer to a college or a university that grants a baccalaureate degree in Public Health or to obtain entry level employment in the field.

**Student Learning Outcomes:**

Upon successful completion of the AS Public Health program, students will:

- Demonstrate the entry level knowledge, and written and verbal communication skills and abilities associated with public health
- Apply the acquired the skills and knowledge to practice in an entry-level public health position
- Transfer to a baccalaureate program of study with public health generalist or specialized bachelor's degree programs including health education, health administration, and/or environmental health

**Program Requirements:**

**Public Health  
Associate of Science**

General Program Information 410-287-1000 or [information@cecil.edu](mailto:information@cecil.edu)

The Associate of Science in Public Health offers students a flexible degree program designed to provide a sound base of foundational credit coursework and additional career specific studies and/or competencies in the discipline of public health. Through a combination of general education requirements, core electives, specific public health studies, and a final capstone assignment, graduates are prepared to enter the workforce and/or pursue further education in the field of public health.

The computer literacy requirement will be met throughout the coursework in the degree program.

<i>General Education Requirements</i>		<i>General Education Code</i>	<i>Credits</i>
ARTS/ HUM	Arts/Humanities Elective	H	3
BIO 101	General Biology	S	3
BIO 111	General Biology Lab		1
BIO 208	Human Anatomy and Physiology I	S	3
BIO 218	Human Anatomy and Physiology I Lab		1
EGL 101	Freshman Composition	E	3
EGL 211	Technical Writing		3
MAT 127	Introduction to Statistics	M	4
PSY 101	Introduction to Psychology	SS	3
SOC 101	Introduction to Sociology	SS	3
SPH 121 <i>or</i> SPH 141	Interpersonal Communications <i>or</i> Public Speaking	H	3
<b><i>Program Requirements</i></b>			
BIO 209	Human Anatomy and Physiology II	S	3
BIO 219	Human Anatomy and Physiology II Lab		1
PBH 104	Introduction to Public Health		3
PBH 110	Introduction to Epidemiology		3

SOC 105	Perspectives in Human Diversity	SS	3
<b>Subtotal General Education &amp; Program Requirements: 43</b>			
<b>Environmental Public Health Concentration (17 Credits)</b>			
BIO 222	Genetics		3
BIO 232	Genetics Lab		1
CHM 103	General Chemistry I	S	3
CHM 113	General Chemistry I Lab		1
ELECT	Healthcare, Public Health, or Science Electives *		3
PBH 220	Environmental Health		3
PBH 270	Public Health Capstone		3
<b>Health Navigator Concentration (17 Credits)</b>			
ELECT	Healthcare, Public Health, or Science Electives		5
HCD 120	Medical Terminology		3
HCD 270	Ethical Issues in Healthcare		3
PBH 120	The U.S. Healthcare System		3
PBH 208	Health Education		3
<b>Public Health Generalist Concentration (17 Credits)</b>			
ELECT	Healthcare, Public Health, or Science Electives		5
PBH 218	Health Administration		3
PBH 220	Environmental Health		3
PBH 270	Public Health Capstone		3
PSY 201	Human Growth and Development	SS	3

**Total Credits Required in Program: 60**

\*Suggested electives are BIO 200/BIO 210, HCD 270, PBH 120, PBH 208, PBH 218, PBH 220

## Course Descriptions:

**BIO 101 General Biology (S)** introduces the student to the basic biological principles common to all living things, with emphasis on evolution, molecular biology, diversity, ecology, physiology and genetics. 3 credits

Prerequisites: MAT 092 or MAT 097

Co-requisites: BIO 111 and EGL 101

**BIO 111 General Biology Lab** is a laboratory course designed to actively involve the student in the process of science. The student will perform experimental activities in the field or lab that study ecology, molecular biology, and genetics using team work and scientific instrumentation.

1 credit

Pre-requisite: MAT 092

Co-requisite: BIO101

**BIO 200 Microbiology (S)** surveys the roles of microorganisms in today's environment. We examine the history and development of microbiology, survey the diversity of microbes, and compare the structures of prokaryotic and eukaryotic organisms. Metabolic processes such as fermentation, photosynthesis, aerobic and anaerobic respiration are studied. Beneficial microbes and epidemiology are discussed. We will examine the growing role of microbes, through bioengineering and immunology, in maintaining our environmental and personal health. 3 credits

Pre-requisites: MAT 093 or MAT 095 or MAT 097

Co-requisites: BIO 210, EGL 101

**BIO 208 Human Anatomy and Physiology I (S)** studies the structural and functional organization of the human organism with initial emphasis on the concepts of homeostasis and levels of organization. This is followed by a brief survey of histology and then the study of four organ systems: integumentary, skeletal, muscular and nervous. *It is strongly recommended that students take an introductory Biology course before enrolling in an Anatomy and Physiology course.* 3 credits

Pre-requisites: MAT 093 or MAT 097

Co-requisites: BIO 218, EGL 101

**BIO 209 Human Anatomy and Physiology II (S)** completes the sequence of study of the human body by studying the following organ systems: endocrine, cardiovascular, respiratory, digestive, urinary and reproductive. Relevant topics of metabolism, electrolyte balance and human genetics and development are included. 3 credits

Pre-requisites: BIO 208, BIO 218, and MAT 093 or MAT 097

Co-requisite: BIO 219

**BIO 210 Microbiology Lab** introduces the student to methods for studying microbes including various types of microscopy, staining techniques, transformation and culture methods. Students will participate in lab experiments that stress the importance of microbe diversity, their unique physical and chemical growth requirements, and appropriate identification processes. Students are required to spend additional time in the lab to monitor lab results on non-lab days. 1 credit

Co-requisite: BIO 200

**BIO 218 Human Anatomy and Physiology I Lab** reinforces the topics covered in the lecture course BIO 208 with hands-on activities. Students will use models, wall charts, microscopes, dissections and experimental observations. Students will study basic histology as well as the structure and function of the skin, skeletal, muscular, and nervous systems. *It is strongly recommended that students take an introductory Biology course before enrolling in an Anatomy and Physiology course.* 1 credit

Co-requisite: BIO 208

**BIO 219 Human Anatomy and Physiology II Lab** uses models, microscopes, dissections and experimental observations to reinforce topics in the endocrine, cardiovascular, digestive, respiratory, urinary and reproductive systems. 1 credit

Pre-requisite: BIO 218

Co-requisite: BIO 209

**BIO 222 Genetics** encompasses transmission genetics, molecular genetics, population genetics, genomics, and proteomics with a focus on understanding concepts and their application. This course should be of interest to students pursuing a career in advanced studies in biology, molecular biology, or biochemistry, science teaching, and health sciences. 3 credits

Pre-requisites: BIO 130 and BIO 131 or BIO 101 and BIO 111

Co-requisite: BIO 232

**BIO 232 Genetics Lab** uses an experimental approach to illustrate and explain the basic concepts of genetics, including recombinant DNA techniques and classical, molecular and population genetics. Student hands on experience may include DNA analysis, PCR, Western blots, protein analysis and simulations to reinforce the topics covered in the lecture. This course will prepare students to employ the techniques used in genomics, proteomics and bioinformatics. 1 credit

Pre-requisites: BIO 101 and BIO 111 or BIO 130 and BIO 131

Co-requisite: BIO 222

**CHM 103 General Chemistry I** studies the fundamental principles of chemistry including measurement, atomic structure, stoichiometry, energy relationships, chemical bonding, molecular structure, and gases. 3 credits

Pre-requisites: EGL 101, MAT 093

Co-requisite: CHM 113

**CHM 113 General Chemistry I Lab** will expose students to basic chemistry laboratory techniques and procedures such as sample preparation, data collection, gravimetric analysis and titration. Because this course is designed to complement the General Chemistry I lecture course, conceptual topics include physical properties, determination of molecular weights, stoichiometry, energy, and gas laws. 1 credit

Co-requisite: CHM 103

**EGL 101 Freshman Composition (E)** teaches students the skills necessary to read college-level texts critically and to write effective, persuasive, thesis-driven essays for various audiences. The majority of writing assignments require students to respond to and synthesize texts (written and

visual) through analysis and/or evaluation. Students also learn how to conduct academic research, navigate the library's resources, and cite sources properly. The course emphasizes the revision process by integrating self-evaluation, peer response, small-group collaboration, and individual conferences. Additionally, students are offered guided practice in appropriate style, diction, grammar, and mechanics. Beyond completing multiple readings, students produce approximately 5,000 words of finished formal writing in four-five assignments, including a 2,000-word persuasive research essay. 3 credits

Pre-requisites: C or better in COL081 and EGL093 or equivalent skills assessment

**EGL 211 Technical Writing** entails the study and practice of written communications in professional settings. In an ongoing workshop, students will be asked to think critically about rhetorical situations; analyze and address case studies; collaborate with team members; research, design, and write effective, ethical texts; develop multiple literacies for multiple audiences; respond constructively to peer writers; present texts through a variety of electronic media; and improve oral presentation and discussion skills. 3 credits

Pre-requisite: EGL 101

**HCD 120 Medical Terminology** is designed to improve the students' professional medical vocabulary. Students will build medical vocabulary, while recognizing the prefixes, suffixes, root words, combining forms and abbreviations. Topics include how to spell, define and pronounce medical terms associated with the major body systems as well as label basic anatomy and recognize common pathology terms. 3 credits

Co-requisite: EGL 090

**HCD 270 Ethical Issues in Healthcare** will introduce students to ethical issues in today's healthcare environment. Students will be exposed to a comprehensive view of ethical issues including how to identify ethical issues and how to address a wide variety of ethical situations. 3 credits

Pre-requisite: EGL 101

**MAT 127 Introduction to Statistics (M)** introduces students to the study of measures of central tendency, measures of variation, graphical representation of data, least squares regression, correlation, probability, probability distributions, sampling techniques, parameter estimation, and hypothesis testing. The emphasis is on applications from a variety of sources including newspapers, periodicals, journals, and many of the disciplines that students may encounter in their college education. Students shall be expected to gather and analyze data, and formally report the results of their research. The use of technology and statistical software is integrated throughout the course. 4 credits

Pre-requisites: EGL 093 and Grade of C or better in MAT 093 or MAT 095

**PBH 104 Introduction to Public Health** provides a general introduction to the study of health in populations, including the fundamentals of epidemiology, biostatistics, environmental health, health administration, and health education. Students will receive an overview of the profession of public health, including the history of public health, ethical issues in public health, and the public health workforce. Students will explore emerging issues in public health, such as the impact of infectious diseases on global populations, bioterrorism, and public health preparedness.

Students will explore the role of government in public health and public health policy issues, such as access to healthcare. 3 credits

Pre-requisite: EGL 093

**PBH 110 Introduction to Epidemiology** provides an introduction to principles and methods of epidemiological investigation and introduces the application of different types of research design for investigating the etiology of disease. The course will focus on describing the patterns of illness in populations for both infectious and noninfectious diseases. 3 credits

Pre-requisites: BIO 101, BIO 111, MAT 093 or MAT 097

Co-requisite: PBH 104

**PBH 120 The US Healthcare System** focuses on the organization, financing, and delivery of healthcare in the US through exploration of the private and public sectors of healthcare. Students will learn about the interaction of payers, providers, and patients within the US healthcare system in order to understand the issues related to the allocation of healthcare resources among the population. Students will learn about the factors that influence healthcare spending, quality of care, and access to care. Students will also explore the function of health advocacy. 3 credits

Pre-requisites: EGL 093, MAT 127, PBH 104

**PBH 208 Health Education** will explore health education and promotion as a profession.

Students will explore relevant theories and models that provide the framework for the practice of health education and promotion. Emphasis is placed on the responsibilities and competencies of health education specialists as well as the historical, ethical and philosophical foundations of the profession. 3 credits

Pre-requisite: PBH 120

**PBH 218 Health Administration** provides an introduction to the principles of health administration, including concepts of management and leadership theory as applied to health care and the organizational structure of the health care delivery system. Students will gain an understanding of the core competencies of a health service administrator, including planning, problem solving, decision making, the importance of continuous quality improvement, and managing organizational change. Students will also explore challenges facing health service administrators. 3 credits

Pre-requisites: BIO 101, BIO 111

Co-requisite: PBH 104

**PBH 220 Environmental Health** examines the relationship of people to their environment and how it affects their physical and mental well-being. Students will explore health issues, with an emphasis on the specific components of the environment which influence health. Students will explore the environmental factors involved in transmission of communicable diseases and hazards due to exposure to chemical, physical, and biological agents in our environment.

Emerging global environmental health issues will be explored, including global warming and food insecurity. 3 credits

Pre-requisite: PBH 110

**PBH 270 Public Health Capstone** requires the application of knowledge, skills, and competencies students have acquired throughout the public health curriculum in an experiential learning opportunity. An analysis of the area of public health, as well as a summary of experiential learning and a written component are required. 3 credits  
Co-requisites: PBH 218, PBH 220

**PSY 101 Introduction to Psychology (SS)** is both the scientific and philosophical study of behavior and thought. Topics covered include: research methodology, perspectives on personality, biological basis of behavior, states of consciousness, human development, learning, memory, motivation, emotion, social psychology, and mental health and adjustment. 3 credits  
Prerequisite: EGL 093

**PSY 201 Human Growth and Development (SS)** studies the developing person through the lifespan from conception to death. Current research and applications are used to describe and explain physical, cognitive, social, emotional and personality development. The importance of specific environmental contexts in development is emphasized. Some of the major topics explored in the course include: prenatal development, birth, attachment, language development, abuse and neglect, parenting, moral development, gender role development, and problems and challenges of adolescence. 3 credits  
Pre-requisites: PSY 101, Satisfactory Completion of EGL 093

**SOC 101 Introduction to Sociology (SS)** is the study of human society and social interaction. The course objectives are to understand the basic concepts, origins and theories of sociology; to evaluate the impact of gender and sexual orientation in family life, the workplace and education; to analyze the cultural and social forces which govern human behavior in a diverse society; to describe the positive and negative functions of group conformity; and to apply sociological concepts to everyday life. 3 credits  
Co-requisite: EGL093

**SOC 105 Perspectives in Human Diversity (SS)** introduces the concepts of diversity consciousness, recognizing and overcoming diversity barriers, and identifying and appreciating cultural differences. Ethical and practical considerations are integrated through the use of case studies, projects, and reaction papers. 3 credits  
Pre-requisite: EGL 093

**SPH 121 Interpersonal Communications (H)** is a survey course covering all facets of human communication. The course emphasizes basic communication skills and awareness of what contributes to effective communicating and what contributes to messages miscommunicated. It also provides students with practice in verbal and listening skills. Students relate communication learning to all areas of life and career skills. Classroom discussions, activities and experiments on a variety of topics are used as a basis for students' growing awareness of perception and skills in communication. 3 credits  
Co-requisite: EGL 093

**SPH 141 Public Speaking (H)** is the study of the principles and models of communication in conjunction with hands-on experience in the planning, structuring, and delivery of speeches.

Students study and deliver several kinds of public address. The course also provides students with a model for constructive criticism to teach the students what contributes to effective public speaking. 3 credits

Pre-requisite: EGL 093

**C. Critical and compelling regional or statewide need as identified in the State Plan:**

The proposed program meets the critical and compelling regional and statewide need outlined in Goal 5 of *Maryland Ready: 2013 Maryland State Plan for Postsecondary Education* – “Maryland will stimulate economic growth, innovation, and vitality by supporting a knowledge-based economy, especially through increasing education and training and promoting the advancement and commercialization of research.”

Public health professionals focus on preventing disease and injury by promoting healthy lifestyles. They implement educational programs, develop policies, administer services, conduct research, and regulate health systems to achieve these goals.

The Affordable Care Act created the National Prevention, Health Promotion and Public Health Council (National Prevention Council). The council’s task is to coordinate and lead federal efforts related to prevention, wellness, and health promotion and advance a national prevention agenda.

“The public health system focuses on prevention through population-based health promotion—those public services and interventions which protect entire populations from illness, disease, and injury—and protection. The primary providers of these public health services are government public health agencies. Public health agencies in communities throughout the United States are responsible for protecting, assessing, and assuring individual, community, and environmental health. These agencies build partnerships and often provide or coordinate direct services to ensure that there is access to adequate health services in a community. The major health problems we face today—workplace and environmental hazards, tobacco-induced illnesses, drug abuse, HIV (human immunodeficiency virus), poor nutrition, low birthweight infants, sedentary lifestyles, injuries, especially from violence—call for policy-guided population-based public health interventions. Coronary heart disease, stroke, diabetes, and certain cancers are the result of environmental, occupational, or social conditions that have been responsive to public health interventions. Morbidity associated with some of these chronic diseases can be controlled or eliminated by public health activities.”<sup>1</sup>

**D. Quantifiable & reliable evidence and documentation of market supply & demand in the region and State:**

In 2011, the University of Michigan Center of Excellence in Public Health Workforce Studies (UM CEPHS) was contracted by the Centers for Disease Control and the U.S. Department of Health and Human Services, Health Resources and Services Administration to identify data sources that could be used to produce an updated estimate of the number of public health

---

<sup>1</sup> American Public Health Association, 2016, *The Role of Public Health in Ensuring Healthy Communities*.

workers in federal, state, and local health departments (LHDs) and to assess their usability for ongoing monitoring of the size and composition of the public health workforce.

According to the Center of Excellence in Public Health Workforce Studies at the University of Michigan, “Regularly assessing the size and composition of the U.S. public health workforce has been a challenge for public health officials and public health systems and services researchers for decades. Enumeration of the public health workforce poses special challenges because of the breadth of the field, its multidisciplinary nature, the diverse settings for employment, and the lack of any standardized system for regularly and systematically collecting data on this segment of the health workforce. ”<sup>2</sup>

Some job titles that are included in the classification of Public Health Worker include:<sup>3</sup>

- Administrative or Clerical Personnel
- Behavioral Health Professional
- Emergency Preparedness Staff
- Environmental Health Worker
- Epidemiologist
- Health Educator
- Laboratory Worker
- Nutritionist
- Public Health Dentist
- Public Health Manager
- Public Health Nurse
- Public Health Physician
- Public Health Informatics Specialist
- Public Information Specialist
- Other Public Health Professional/Uncategorized Workers

“The best estimate for the lowest range enumeration estimate is 303,773 workers nationally, including 161,615 local, 66,846 state, and 75,312 federal public health workers.....This estimate demonstrates that the majority of the 303,773 workers provide services at the local level, with 53% (161,615) of enumerated workers in that setting. An additional 22% (66,846) of the governmental public health workforce work in a state health agency. Approximately 25% (75,312) of workers are civilian federal public health workers employed in a DHHS agency. Administrative or Clerical Personnel compose the largest proportion of workers in this enumeration estimate at 19%, followed by Public Health Nurses (14%), Environmental Health Workers (6%), and Public Health Managers (4%). All other occupational categories represent 3% or fewer of the governmental public health workforce. Approximately 43% of all workers in this estimate were categorized as Other/Unclassified.”<sup>4</sup>

---

<sup>2</sup> University of Michigan School of Public Health, Center of Excellence in Public Health Workforce Studies July 2013, *Public Health Workforce Enumeration, 2012*.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

Maryland's state health agency has 8,246 FTEs, including 2,466 state workers assigned to local/regional offices.<sup>5</sup> This is just **one** organization in our state providing public health services.

A recent survey by the Association of State and Territorial Health Officials of state health agency professionals in the public health sector found that, "Despite a high level of job satisfaction, 13 percent of workers plan to leave their jobs in the next year for jobs that are not in public health and an additional 25 percent plan to retire before 2020."<sup>6</sup> Total turnover = 38%.

A June, 2015 report to the Maryland General Assembly notes the crucial role of public health, and in particular, the services provided by Community Health Workers (only one of many public health professions). Community Health Workers are frontline public health workers. "Maryland has many Community Health Worker (CHW) programs in place with an estimated 1,430 CHWs working in the state in 2013 in a wide variety of programs from community-based to hospital-based to primary care team-based (Dept. of Labor). CHW programs in Maryland make an important contribution to the healthcare of underserved populations. They provide an invaluable platform of experience and expertise from which to move forward. It is critical to build on Maryland's valuable experience of CHW programming so that organizations already engaged in CHW training and delivery will continue to develop and implement their programs. These organizations include the Health Enterprise Zones (HEZ) grantees, **universities/community colleges**, Area Health Education Centers (AHECs), Minority Outreach and Technical Assistance (MOTA) grantees, and some Local Health Departments."<sup>7</sup>

The report also notes: "The use of CHWs in Maryland is likely to increase in the coming years as the state's health system continues to transform. As part of the new All-Payer Hospital Model, Maryland hospitals are being financed via global budgets that establish a strong financial incentive to reduce utilization and improve population health. ...For the first time, the basic financial incentives in health care delivery are aligned with population health improvement and, in turn, the roles and capacities of CHWs."<sup>8</sup> This is an example of how public health workers are assisting in the transformation of our fragmented health care system towards a more holistic type of care, centered on the total needs of the individual and embedded in the community in which the patient lives.

The following table lists Maryland Department of Labor, Licensing, and Regulation occupational projections for a **sample** of public health worker job titles.<sup>9</sup>

---

<sup>5</sup> Association of State and Territorial Health Officials, 2014. *ASTHO Profile of State Public Health, Volume Three*. Washington, DC: Association of State and Territorial Health Officials.

<sup>6</sup> Association of State and Territorial Health Officials, September 2015. *Information to Action: The Workforce Data of Public Health WINS*.

<sup>7</sup> Maryland Department of Health and Mental Hygiene and Maryland Insurance Administration, June 2015. *Workgroup on Workforce Development for Community Health Workers: Final Report to the Maryland General Assembly*.

<sup>8</sup> Ibid.

<sup>9</sup> Maryland Department of Labor, Licensing, and Regulation, Division of Workforce Development and Adult Learning, Office of Workforce Information and Performance, *Maryland Long Term Occupational Projections (2014 - 2024)*.

<b>Job Title</b>	<b>2014</b>	<b>2024</b>	<b>Change</b>	<b>Percent Change</b>
Community Health Worker	1,617	2,188	571	35.31%
Environmental Science and Protection Technicians, including Health	475	596	121	25.47%
Epidemiologists	489	579	90	18.40%
Health Educators	2,089	2,451	362	17.33%
Healthcare Support Occupations	83,397	108,647	25,250	30.28%
Home Health Aides	11,392	17,027	5,635	49.46%
Substance Abuse and Behavioral Disorder Counselors	2,534	3,296	762	30.07%
<b>Sample Total</b>	<b>101,993</b>	<b>134,784</b>	<b>32,791</b>	<b>32.15%</b>

**E. Reasonableness of program duplication:**

A search of the Maryland Higher Education Commission’s Academic Program Inventory database reveals the following similar programs in the state:

<b>Institution</b>	<b>Program Name</b>	<b>Degree Offered</b>
Anne Arundel Community College	Public Health Professions	Associate Degree
Howard Community College	Public Health	Associate Degree
Montgomery College-All Campuses	Public Health Sciences	Associate Degree

The closest location to Cecil’s campus is Anne Arundel Community College. However, since Anne Arundel is located more than 40 miles from our campus, our program will not compete with Anne Arundel’s.

**F. Relevance to Historically Black Institutions (HBIs)**

No impact is anticipated on the state’s historically black institutions.

**G. If proposing a distance education program, please provide evidence of the Principles of Good Practice (as outlined in COMAR 13B.02.03.22C).**

Not applicable.

**H. Adequacy of faculty resources (as outlined in COMAR 13B.02.03.11).**

The following faculty members will teach in the program.

<b>Faculty Member</b>	<b>Credentials</b>	<b>Status</b>	<b>Courses Taught</b>
Lorraine Bell, Adjunct Instructor	Ph.D., MSN, RN	Part-time	PBH 104 Introduction to Public Health PBH 110 Introduction to Epidemiology
Kristin Bennett, Adjunct Instructor	MPH, BSN, RN	Part-time	PBH 120 The U.S. Healthcare System PBH 218 Health Administration PBH 220 Environmental Health PBH 270 Public Health Capstone
John Climent, Professor of Mathematics	Ph.D., University of Delaware	Full-time	MAT 127 Introduction to Statistics
Jack Cohen, Assistant Professor of Sociology and Psychology	M.Div. Eastern/Palmer Theological Seminary	Full-time	SOC 101 Introduction to Sociology
Veronica Dougherty, Professor of Biology	Ph.D., University of Connecticut	Full-time	BIO 209 Human Anatomy and Physiology II BIO 219 Human Anatomy and Physiology II Lab
Craig Frischkorn, Professor of English	Ph.D., English State University of New York at Buffalo	Full-time	EGL 101 Freshman Composition
Christopher Scott Gaspare, Assistant Professor of English	M.A., Washington College	Full-time	EGL 211 Technical Writing
Charalane M. (Laney) Hoxter, Director of Multicultural Student Services	M.S., West Chester State University	Part-time	SOC 105 Perspectives in Human Diversity
Amrutha Kuraguntla, Professor of Biology	Ph.D., University of Minnesota	Full-time	BIO 111 General Biology Lab BIO 222 Genetics BIO 232 Genetics Lab
Melissa Lewis, Adjunct Instructor	MSN, RN	Part-time	HCD 120 Medical Terminology

<b>Faculty Member</b>	<b>Credentials</b>	<b>Status</b>	<b>Courses Taught</b>
Meredith Lutz Stehl, Professor of Sociology and Psychology	Ph.D., Drexel University	Full-time	PSY 101 Introduction to Psychology PSY 201 Human Growth and Development
Metty Mesnick, Adjunct Instructor	MAPC, BCC	Part-time	HCD 270 Ethical Issues in Healthcare
Michelle Ness, Adjunct Instructor	MSN, RN	Part-time	PBH 208 Health Education
Patricia D. Richardson, Instructor of Communication, Speech and Theatre	B.A., Michigan State University Graduate studies, Michigan State University	Full-time	SPH 121 Interpersonal Communications SPH 141 Public Speaking
Ebony Roper, Assistant Professor of Chemistry	Ph.D., Howard University	Full-time	CHM 103 General Chemistry I CHM 113 General Chemistry I Lab
Nancy Vinton, Professor of Biology	M.D., Yale School of Medicine	Full-time	BIO 208 Human Anatomy and Physiology I BIO 218 Human Anatomy and Physiology I Lab
Christine Warwick, Assistant Professor of Biology	M.S., University of Saint Joseph	Full-time	BIO 101 General Biology BIO 210 Microbiology Lab

**I. Adequacy of library resources (as outlined in COMAR 13B.02.03.12).**

Cecil College's Cecil County Veterans Memorial (CCVM) Library is a member of Maryland Digital Library and the Maryland Community College Library Consortium. In addition, CCVM Library has reciprocal borrowing privileges with other community college libraries throughout the State of Maryland.

The Instructional Librarian will develop a LibGuide specifically for the program with links to relevant databases, websites, reference books, citation information, ebooks, and professional associations and post this link on MyCecil's Library portlet.

Students enrolled in the Public Health with Areas of Concentration in Environmental Public Health, Health Navigator, and Public Health Generalist will receive a library orientation upon

faculty request. During the orientation students will learn how to obtain a CCVM library barcode, how to access and navigate the online catalog for print and Ebsco's eBook Academic Collection with nearly 170,000 titles, databases including but not limited to Ebsco's Academic core products, ProQuest Central journals, Science-AAAS, New England Journal of Medicine, Journal of the American Medical Association, LibGuides using MyCecil and how to submit inter-library loan requests.

Instructors have the option to place textbooks and DVDs on reserve for student use. The library staff welcomes and encourages faculty to submit requests for books, multi-media resources and databases to support their instruction.

**J. Adequacy of physical facilities, infrastructure and instructional equipment (as outlined in COMAR 13B.02.03.13)**

All students have the opportunity to utilize all physical facilities on campus including the Library, the Arts and Sciences Building, the Engineering and Math Building, Physical Education Complex, and the Technology/Conference Center, housing the computer lab, a student lounge / dining area and a Conference Center.

The Nursing and Health Professions Department has sufficient dedicated office space for program faculty, staff, and students. Faculty offices include a desk and multiple chairs available for private conferences with students and/or faculty, bookshelves for department resources and a locked file cabinet to secure program materials.

There is also dedicated office space for adjunct faculty. The adjunct offices are equipped with computers, desks, chairs, and telephones.

Multiple conference rooms are available for faculty meetings and or private conferences with students in the Engineering and Math Building, the Arts and Science Building, and the Physical Education Complex.

Available technology includes state-of-the-art electronic classrooms with interactive white boards, projection systems, immediate capture and documentation cameras, wireless internet access, and the College-wide course management system Blackboard, which can provide on-line learning to supplement courses.

The North East campus computer lab, housed in the Technology Center, provides 28 computers in a student lab, and technology resource staff, during regular lab hours, to assist students.

The Reading/Writing Center is a free service to all Cecil College students. Tutors are available during a variety of day and evening hours to assist students with reading and writing assignments in any subject. Free subject matter tutoring is also available to all students upon request.

**K. Adequacy of financial resources with documentation (as outlined in COMAR 13B.02.03.14) — Please see tables that follow on the next two pages.**

**Cecil College – AS Public Health  
Projected Revenues**

<b>TABLE 1: RESOURCES</b>					
<b>Resource Categories</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
1. Reallocated funds	N/A	N/A	N/A	N/A	N/A
2. Tuition/Fee revenue (c+g below)	\$13,482	\$19,902	\$29,853	\$39,804	\$53,286
a. Number of F/T students	2	2	3	4	6
b. Annual Tuition/Fee Rate	\$107/credit	\$107/credit	\$107/credit	\$107/credit	\$107/credit
c. Total F/T Revenue (a * b)	\$7,062	\$7,062	\$10,593	\$14,124	\$21,186
d. Number of P/T students	3	6	9	12	15
e. Credit Hour Rate	\$107/credit	\$107/credit	\$107/credit	\$107/credit	\$107/credit
f. Annual Credit Hour Rate	N/A	N/A	N/A	N/A	N/A
g. Total P/T Revenue (d * e * f)	\$6,420	\$12,840	\$19,260	\$25,680	\$32,100
3. Grants, Contracts, & Other External Sources	0	0	0	0	0
4. Other sources:					
Student Dev. Fees	\$1,008	\$1,488	\$2,232	\$2,976	\$3,984
Registration Fees	\$750	\$1,200	\$1,800	\$2,400	\$3,150
<b>Total (Add 1-4)</b>	<b>\$15,240</b>	<b>\$22,590</b>	<b>\$33,885</b>	<b>\$45,180</b>	<b>\$60,420</b>

**Assumptions:**

- Tuition revenue is conservatively projected based on an in-county rate of \$107/credit
- Full-time students complete 33 credits per year on average; Year one tuition revenue = 2 students \* 33 credits = 66 total credits; credits \* \$107/cr. = \$7,062
- Part-time students complete 20 credits per year on average; Year one tuition revenue = 3 students \* 20 credits = 60 credits \* \$107/cr. = \$6,420
- Student Development Fee is \$8/credit hour; Fees for year one = 126 total credits \* \$8 = \$1,008
- Registration fee = \$75/semester; registration fees are assumed to be two semesters each year or \$150, but students may elect to also take courses in the summer; Year one registration fees = 5 students \* \$150 = \$750

**TABLE 2: EXPENDITURES**

<b>Expenditure Categories</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
1. Faculty (b + c below)	\$25,825	\$26,243	\$26,668	\$27,100	\$27,540
a. #FTE	.20	.20	.20	.20	.20
b. Total Salary	\$19,600	\$19,894	\$20,192	\$20,495	\$20,802
c. Total Benefits	\$6,225	\$6,349	\$6,476	\$6,605	\$6,738
2. Administrative Staff (b + c below)	0	0	0	0	0
a. #FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
3. Support Staff (b + c below)	0	0	0	0	0
a. #FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	0	0	0	0	0
<b>Total (Add 1-7)</b>	<b>\$25,825</b>	<b>\$26,243</b>	<b>\$26,668</b>	<b>\$27,100</b>	<b>\$27,540</b>

**Assumptions:**

- One full-time faculty member's salary is allocated at .20 of time
- Library resources are budgeted in the operating budget on an ongoing basis.
- Salaries are forecasted to increase @ 1.5% each year
- Health benefits are forecasted to increase @ 2.5% each year

**L. Adequacy of provisions for evaluation of program (as outlined in COMAR 13B.02.03.15).**

Individual course assessment reports document student learning outcomes which are taken directly from the course syllabus. The Assessment Committee has established a rubric for course assessment reports which requires documentation of desired learning outcomes (taken from the syllabus), indicators of student learning outcomes, direct and indirect methods of assessment, quantitative and qualitative data on student performance, and how assessment results will be used to further improve student learning outcomes in the future. Each report is reviewed to ensure that it meets the guidelines established by the Assessment Committee. Reports are collected for one-third of all courses offered during the fall and spring semesters each academic year, resulting in a review of all courses within 36 months.

Faculty members are evaluated each and every semester by students enrolled in their courses. The College uses an electronic survey process (Evaluation Kit) and students are required to complete the evaluation within a specified time frame at the end of the semester or they are locked out of the learning management system (Blackboard) until they complete the survey. This has resulted in a very high response rate for all courses.

The College has an established Program Review Policy and a Program Review and Assessment Plan. Both of these documents have been endorsed by the Faculty Senate and approved by the Board of Trustees. One-fifth (20%) of the programs are reviewed each year so that all programs are reviewed on a five-year cycle. A repository, which is accessible to all faculty members, is kept for all Program Review and Assessment documents. Additionally, a database has been established to track the status of recommended changes/revisions to programs.

Faculty members are assessed in the classroom by the Dean of Academic Programs each year for their first five years at Cecil College and every three years thereafter.

All faculty members are contractually obligated to complete an annual report: inclusive of assessment results.

**M. Consistency with the State's minority student achievement goals (as outlined in COMAR 13B.02.03.05 and in the State Plan for Postsecondary Education).**

Cecil College has qualified professional staff in the student advising and student support areas. Advisors seek and support other-race students consistent with the core values of the College, which encompass diversity and inclusiveness. In addition, the College has adopted a Strategic Initiative to "create educational opportunities for a diverse community of learners." The College plans to employ broad recruitment efforts to attract a racially diverse student body. Statements of non-discrimination are included in College publications and will appear in any marketing pieces for the program. In addition, the Director of Minority Student Services will assist in marketing and referring students to the new program.

**N. Relationship to low productivity programs identified by the Commission:**

Not applicable.