

**MARYLAND HIGHER EDUCATION COMMISSION ACADEMIC
PROGRAM PROPOSAL**

PROPOSAL FOR:

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

(For each proposed program, attach a separate cover page. For example, two cover pages would accompany a proposal for a degree program and a certificate program.)

Prince George's Community College

Institution Submitting Proposal

Fall 2018

Projected Implementation Date

A.A

Award to be Offered

General Studies with a concentration in SEM

Title of Proposed Program

4950011

Suggested HEGIS Code

24.0199

Suggested CIP Code

Division of Sciences, Technology, Engineering, and Math
Department of Proposed Program

Christine Barrow, Dean
Name of Department Head

Christine E. Barrow

Contact Name

Barrowce@pgcc.edu

Contact E-Mail Address

301-546-0736

Contact Phone Number

Signature and Date

President/Chief Executive Approval

Date

Date Endorsed/Approved by Governing Board

Academic Program Proposals From Degree-Granting Institutions Authorized to Operate in the State of Maryland

NEW PROGRAM GUIDELINES

An institution submits a proposal using guidelines in accordance with State regulations. See [COMAR Title 13B.02.03](#) (PDF) for the full set of regulations. Proposals for new programs should be submitted electronically to acadprop@mhec.state.md.us.

New Academic Programs, Degrees and Stand-Alone Certificate Programs

A complete proposal shall include a cover letter from the chief academic officer addressed to the Secretary of Higher Education requesting approval of the new program, a [Proposal Cover Sheet\(pdf\)](#) with all required signatures, and should address all of the following areas:

A. Centrality to institutional mission statement and planning priorities:

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

Prince George's Community College proposes offering a concentration under the General Studies Associate in Arts (A.A) degree in Sciences, Engineering, and Mathematics (SEM) is designed to prepare graduates to transfer to four-year colleges and universities to pursue a bachelor's degree in a STEM discipline in pursuit of careers in biology, chemistry, engineering, physics, environmental science, mathematics, medicine, pharmacy, dentistry, and physical therapy. The program is built on and reinforces fundamental skills in reading, writing, oral communications, and quantitative reasoning that are obtained through general education coursework. Students will be exposed to concepts and experiences that are necessary for success in the workplace and higher education. Experiences acquired in the program will also foster a sense of life-long learning. Throughout the curriculum, students will be exposed to a variety of instructional methods and experiences that provide a solid foundation of the necessary skills required in the STEM disciplines.

This degree program is designed to articulate with four-year postsecondary institutions within the state of Maryland and private institutions. Students will be advised to consult the specific requirements of the bachelor's degree program to which they wish to transfer. Credit for previous relevant coursework and/or relevant experience may be awarded.

Prince George's Community College's mission is to "transform students' lives. The college exists to educate, train, and serve our diverse populations through accessible, affordable, and rigorous learning experiences". The college's vision is to "be the community's first choice for innovative, high-quality learning experiences". Currently, the college offers the Associate of Arts (A.A.) degree with a concentration in Biology, the Associate of Arts (A.A.) degree with a concentration in Chemistry, and an Associate of Science (A.S.) degree in Engineering. The Associate of Arts (A.A.) in General Studies with a concentration in SEM would allow students who have not committed to a particular concentration to take coursework in multiple STEM areas to ensure that they taking course work that is relevant to their intended discipline.

Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

The development of the Associate in Arts (A.A) degree with a concentration in Science, Engineering, and Technology clearly aligns with goals set forth in the college’s strategic plan, *Envision Success*.

- Goal 1 - Enhancing pathways that guide students to achieve their academic, career, and personal goals.
- Goal 2 - Develop and implement new credit programs and offerings.

In the fall of 2015, Prince George’s Community College was selected to participate in the Pathways Project as part of the American Association of Community Colleges (AACC). The Pathways model provides the framework for student success and completion. The goals of the Pathways, along with the *Envision Success*, will support a program structure that will help students to choose, enter, and complete a program of study that is aligned to their academic and career goals. In fall 2018, Prince George’s Community College Collage will launch Pathways as an initiative that promotes intrusive advising and career counseling to ensure that entering students select an appropriate program of study that is mapped to either specific careers and labor market outcomes or transfer opportunities to four-year institutions.

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

1. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.

Below is the suggested course sequence with title and semester credit hours. (General education courses are indicated with a GE). Next, are course descriptions followed by a description of program requirements. There are no new courses associated with this program.

Suggested Course Sequence	Credits
<i>First Semester (Fall)</i>	
PAS 1000 Planning for Academic Success: First-Year Experience	1 credit
EGL 1010 Composition I/Expository Writing (GE)	3 credits
MAT 1360 Pre-Calculus II – Trigonometry and Analytic Geometry (GE) OR MAT 2410 Calculus I	4 credits
BIO 1130 Principles of Biology: Evolution, Ecology, and Behavior (GE)	4 credits
CHM 1010 General Chemistry I (GE)	4 credits
Total Credits	<i>16</i>
<i>2nd Semester (Spring)</i>	
EGL 1100 Composition II: Writing about Issues and Ideas (GE) OR EGL 1340 Composition II: Writing About Technical Topics	3 credits
INT 1010 Introduction to Information Technology	3 credits
MAT 2410 Calculus I OR MAT 2420 Calculus II	4 credits

CHM 1020 General Chemistry II	3 credits
CHM 1030 General Chemistry II Laboratory	2 credits
Total Credits	15
3rd Semester (Fall)	
BIO 1140 Principles of Biology: Cellular and Molecular Biology OR BIO 1110 Environmental Biology OR PSC 1010 Introduction to Astronomy	4 credits 3 credits 3 credits
HIM 1800 Introduction to Medical Terms for Health Professionals	1 credit
PSY 1010 General Psychology (GE) OR ANT 1010 Introduction to Physical Anthropology	3 credits
CHM 2010 Organic Chemistry I OR PHY 1010 Introduction to Physics OR PHY 1030 General Physics I	4 credits 4 credits 3 credits
ART 1010 Introduction to Art (GE) OR SPH 1010 Introduction to Speech Communication (GE) OR Foreign Language (GE)	3 credits
Total Credits	13 - 15
4th Semester (Spring)	
CHM 2020 Organic Chemistry II OR BIO 2070 Survey of Microbiology OR PHY 1020 Introduction to Physics II OR PHY 2030 General Physics II	3 credits 3 credits 4 credits 4 credits
ECN 1030 Principles of Macroeconomics (GE) OR HST 1410 History of the United States (GE) OR POS 1010 American National Government (GE)	3 credits 3 credits 3 credits
MAT 2450 Linear Algebra OR MAT 1140 Introduction to Statistics OR BIO 2010 Microbiology	4 credits 3 credits 4 credits
PHL 1010 Introduction to Philosophy: The Art of Questioning (GE) OR PHL 1330 Ethics (GE) OR	3 credits 3 credits

PHL 1090 Introduction to Logic (GE)	3 credits
BMT 1500 Developing a Professional Image	1 credit
<i>Total Credits</i>	<i>13-15</i>
Total Credits for Program	60

Below is a list of course descriptions required for the program.

ANT 1010 Introductory Physical Anthropology (3 Credits)

Humans' place in nature, including genetics, evolutionary theory, primate behavior, human physical variations and culture. Social sciences general education class.

Prerequisite(s): Reading proficiency.

ART 1010 Introduction to Art (3 credits)

Introduces students to the visual arts. Through lecture, demonstration, and hands-on activities, students develop an appreciation for art and an understanding of the elements of art and principles of design, artistic styles, specific art techniques, and major historical movements in art. Artistic ability or experience is not required. Humanities general education class. Prerequisite(s): Reading proficiency.

BIO 1110 Environmental Biology (3 Credits)

Survey of basic scientific principles needed to understand current environmental problems and evaluate alternatives for solving those problems. Science general education class. Prerequisite(s): Reading proficiency.

BIO 1130 Principles of Biology: Evolution, Ecology, and Behavior (4 credits)

Evolution, ecology, and behavior, including Mendelian genetics, population genetics, natural selection, co-evolutionary relationships, ethology, and contemporary issues. Students may receive credit for only one of the following BIO-1130 or BIO-1010 science general education class.

Prerequisite(s): MAT 1350 with grade of C or higher; EGL 1010 completed or concurrent. 3 class/3 lab hours.

BIO 1140 Principles of Biology: Cellular and Molecular Biology (4 credits)

University-parallel biology sequence for science/health majors. Cellular and biochemical emphasis, including cell anatomy and physiology, energy processes, and the molecular biology of gene expression. Students may not receive credit for both BIO-1010 and BIO-1140 toward the same degree.) Science general education class. Prerequisite(s): CHM-1010. 3 lecture/3 lab hours.

BIO 2010 Microbiology (4 Credits)

Structure and function of microorganisms and their role in pathology. Laboratory includes culture methods, staining, and identification of bacteria. Prerequisite(s): BIO-1010 or BIO-1140 or BIO-2050. DVM-0071 completed or appropriate score on math placement test. 2 class/4 lab hours.

BMT 1500 Developing a Professional Image (1 credit)

Techniques for developing a professional image. Attire, nuances of nonverbal communication and office etiquette. Formerly offered as MGT-1500. Students may not receive credit for both MGT-1500 and BMT-1500.

CHM 1010 General Chemistry I (4 credits)

University-parallel introductory chemistry sequence. Structure of matter, bonding, reactions and changes of state. Science general education class. Prerequisite(s): MAT-1350 with grade of C or higher; EGL-1010 completed or concurrent. 3 lecture/3 lab/1 recitation hours.

CHM 1020 General Chemistry II (3 credits)

3 Credits

Continuation of university-parallel sequence. Systems in equilibrium, thermodynamics, electrochemistry, kinetics, and nuclear chemistry. Prerequisite(s): CHM-1010 with grade of C or higher. 3 lecture hours.

CHM 1030 General Chemistry II Laboratory (2 credits)

Introduction to quantitative, qualitative and instrumental analysis with applications to a broad range of chemical systems. Prerequisite(s): CHM-1010; CHM-1020 completed or concurrent.

1 class/3 lab hours.

CHM 2010 Organic Chemistry I (4 credits)

University-parallel organic chemistry sequence. Classes of organic compounds and their reactions, stereochemistry and reaction mechanisms, and basic laboratory techniques for synthesis and analysis.

Prerequisite(s): CHM-1020 . 3 lecture/4 lab hours.

CHM 2020 Organic Chemistry II (3 credits)

Continuation of CHM-2010 with emphasis on reaction mechanisms, synthesis, and spectroscopy of organic compounds. Prerequisite(s): CHM-2010.

CHM 2070 Survey of Biochemistry (3 Credits)

An interdisciplinary examination of living systems at the chemical level. Topics include structure and function of macromolecules, with an emphasis on protein structure and enzyme function, cellular energetics, and cellular respiration.

Prerequisite(s): BIO-1140 and CHM-2010.

ECN 1030 Principles of Macroeconomics (3 credits)

First semester of university-parallel sequence. Introduction to economic macroanalysis, emphasizing gross national product, national income, consumption, investment, taxation, government spending, and monetary and fiscal policies. Social sciences general education class.

Prerequisite(s): Reading and mathematics proficiencies or DVM-0071 completed or concurrent.

EGL 1010 Composition I: Expository Writing (3 credits)

This course is a university-parallel freshman English. The course provides fundamentals of effective prose writing, including required essays and a research paper. Prerequisite: Reading proficiency and writing proficiency or C grade or higher in EGL-1000 or ESL-2020 or a grade of D in EGL-1000 with acceptable writing sample. 3 lecture hours

EGL 1100 Composition II: Writing about Issues and Ideas (3 credits)

Second semester composition. Reading, analyzing, and writing about contemporary issues, demonstrating clear reasoning, and persuasive writing skills. EGL-1020, EGL-1320, or EGL-1340 also will fulfill the Composition II requirement. English general education class. Honors: (Honors version available.)

Prerequisite(s): EGL-1010 with a grade of C or higher.

EGL 1340 Composition II: Writing About Technical Topics (3 credits)

Preparation of various types of technical business, government, and scientific communications, including presentations. Creation of commonly used documents such as letters, memoranda, and resumes, as well as various types of reports such as progress reports, recommendation reports, proposals. Development of clear, concise, and accurate style for communicating complex information, with emphasis on audience, purpose, and presentation choices. A continuation and extension of the rhetorical principles and composition skills addressed. English general education class.

Prerequisite(s): EGL-1010 with a grade of C or higher.

HIM 1800 Introduction to Medical Terms for Health Professionals (1 credit)

Introduces basic medical terminology to students preparing to enter a health care profession. Students will learn word elements, build on and properly use medical language, thus enhancing their communication skills in the didactic and clinical settings. (HIM majors may not take this course. This course cannot substitute for HIM-1530.) Formerly MHE-2000. Students cannot receive credit for both MHE-2000 and HIM-1800.

HST 1410 History of the United States I (3 Credits)

American history from the colonial period through the Civil War. Social sciences general education class.

Prerequisite(s): Reading proficiency.

INT 1010 Introduction to Information Technology (3 credits)

A survey course in evolving computer technology and its relevance to individuals and society. The societal issues stressed include: privacy, security, ergonomics, accessibility, intellectual property, pervasive computing, as well as other timely topics such as new laws impacting computer use. Becoming fluent in necessary technology applications is integrated into the course and may include such topics as word processing, use of e-mail and Web browsers, spreadsheets, course management systems, and others. Students possessing skills and knowledge in this area may receive credit for INT-1010 by passing the department's challenge exam (currently the three Internet and Computing Core Certification tests, known as IC3). Students who are already IC3 certified may receive credit for INT-1010 by presenting their certificate to the transfer evaluator in the Office of Admissions and Records. Computer Literacy general education class.

MAT 1360 Pre-Calculus II - Trigonometry and Analytic Geometry (4 credits)

Trigonometric functions; analytic trigonometry; applications of trigonometry using the unit circle approach, and vectors; complex numbers and polar coordinates; conic sections and parametric equations; sequences and summation; induction and binomial theorem systems of equations and algebra of matrices. Preparation for calculus. Math general education class. Prerequisite(s): Math placement score or MAT-1350 with grade of C or higher. 4 class/1 recitation hours.

Note: All mathematics courses require extensive use of a computer and/or a graphing calculator. In addition, all math courses have a prerequisite of reading proficiency.

MAT 2210 Statistics (3 Credits)

Introduction to statistical concepts and applications, including probability, random variables, sampling, hypothesis testing, and regression. Business applications are stressed. A statistical computer software package will be used. Math general education class.

Prerequisite(s): Appropriate math placement score or MAT-1350 or MAT-1250 with a grade of C or higher. 3 class/1 recitation hours.

Note: All mathematics courses require extensive use of a computer and/or a graphing calculator. In addition, all math courses have a prerequisite of reading proficiency.

MAT 2410 Calculus I (4 credits)

First course in a three-semester sequence of university-level calculus for a variety of majors including, but not limited to, science, engineering, and mathematics. It provides an introduction to single variable calculus; study of limits, continuity differentiation and its applications, definite and indefinite integrals and the Fundamental Theorem of Calculus. Math general education class. Prerequisite(s): Mathematics placement score of MAT-1360 with a grade of C or higher or MAT-1370 with a grade of C or higher. 4 lecture hours

MAT 2420 Calculus II (4 Credits)

Second course in a three-semester sequence of university-level calculus for a variety of majors including, but not exclusive to, science, engineering, and mathematics. Includes the study of integration techniques for single variable functions, applications of integration, improper integrals, and infinite series including Taylor series and their applications. Math general education class.

Prerequisite(s): MAT-2410 with grade of C or higher.

Note: All mathematics courses require extensive use of a computer and/or a graphing calculator. In addition, all math courses have a prerequisite of reading proficiency.

MAT 2450 Linear Algebra (4 credits)

Concepts and applications of linear algebra, including vector spaces, theory of linear equations, matrices, determinants, linear transformations, basis and dimension, and eigenvalues and eigenvectors.

Computer/calculator use will be extensive. Prerequisite(s): MAT-2410 with grade of C or higher.

Note: All mathematics courses require extensive use of a computer and/or a graphing calculator. In addition, all math courses have a prerequisite of reading proficiency.

(Offered spring only.)

PAS 1000 Planning for Academic Success (1 credit)

Assists incoming students in making a successful transition to college. Students will focus on those behaviors and attitudes that are needed to achieve academic success. Students will examine different dimensions of diversity, with careful consideration for others from culturally diverse backgrounds. Students will design goals for learning that lead to a career/professional plan.

PHL 1010 Introduction to Philosophy: The Art of Questioning (3 credits)

Asking and answering the basic and meaningful questions of life and clarifying one's thinking in relation to self, others, laws, nature, and God. Humanities general education class.

Honors: (Honors version available.) Prerequisite(s): Reading proficiency

PHL courses require a satisfactory reading score on the placement test or satisfactory completion of appropriate DVR coursework

PHL 1090 Introduction to Logic (3 Credits)

The elements of logic; how to translate ordinary language into logical form and craft valid arguments.

Humanities general education class. Prerequisite(s): Reading proficiency.

PHL courses require a satisfactory reading score on the placement test or satisfactory completion of appropriate DVR coursework.

PHL 1330 Ethics (3 Credits)

Involves personal decisions each individual makes daily. The course will identify the various ethical/moral theories that affect those decisions. It will involve current issues and concerns to strengthen a student's own ethical deliberations and clarify how such deliberations may be applied to the student's designated career interests. Humanities general education class. Prerequisite(s): Reading proficiency.

PHL courses require a satisfactory reading score on the placement test or satisfactory completion of appropriate DVR coursework.

PHY 1010 Introductory Physics I (4 Credits)

Fundamental concepts and basic laws of mechanics, heat, and thermodynamics using a noncalculus approach. Not recommended for science/engineering majors. Science general education class.

Prerequisite(s): MAT-1350 with grade of C or higher; EGL-1010 completed or concurrent.

3 class/1 rec/2 lab hours.

PHY 1020 Introductory Physics II (4 Credits)

Fundamental concepts of vibration and sound, electricity and magnetism, optics, and modern physics. Prerequisite(s): PHY-1010. 3 class/1 rec/2 lab hours. (Offered spring only.)

PHY 1030 General Physics I (3 Credits)

First semester of three-semester sequence (PHY-1030/PHY-2030/ PHY-2040) for science/engineering transfer students. Calculus-based study of classical mechanics, including laws of motion, force, energy, momentum, and gravitation. Science general education class.

Prerequisite(s): MAT-2410; MAT-2420 completed or concurrent.

PHY 2030 General Physics II (4 Credits)

Calculus-based survey of kinetic theory, thermodynamics, electricity, and magnetism and electromagnetic phenomena. For science/engineering transfers. Prerequisite(s): PHY-1030 and MAT-2420.

3 class/1 rec/3 lab hours.

POS 1010 American National Government (3 Credits)

A study of the Constitution and the American political system, including how power and authority are acquired and applied. Emphasis will be placed on the Congress, the Presidency, and the Supreme Court, as well as on voting dynamics, political parties, interest groups, public opinion, and the media. Social sciences general education class. Prerequisite(s): Reading proficiency

PSC 1010 Introduction to Astronomy (3 Credits)

For nonscience majors. Introduction to the extraterrestrial environment, including astronomical concepts and theories. Science general education class. Prerequisite(s): Reading proficiency.

PSY 1010 General Psychology (3 credits)

University-parallel introductory course which surveys the field of psychology, including the study of behavior, cognitive processes, the concepts of memory, consciousness, intelligence, personality development, psychological disorders, psychotherapy, and social behavior. Prerequisite(s): Reading proficiency level.

SPH 1010 Introduction to Speech Communication (3 Credits)

Oral communication theory and practice focusing on interpersonal, small group, and public speaking skills. Humanities general education class. Prerequisite(s): Reading and oral proficiencies or ESL-0106 (formerly ESL- 1060) with a grade of C or higher.

Below is a catalog description for the Associate of Arts in General Studies with a concentration in SEM.

The General Studies Associate in Arts degree with a concentration in Science, Engineering, and Mathematics is designed for students who desire to enter a science, engineering, or mathematics discipline without the specificity of declaring a single track; the option allows students to take multiple STEM courses while assessing their particular interest in science, engineering, and mathematics. The Associate in Arts (A.A.) degree with the SEM concentration is designed to prepare graduates for transfer into baccalaureate programs in biology, chemistry, physics, mathematics, and engineering programs. The program is built on and reinforces fundamental skills in writing, oral communications, and quantitative skills obtained through general education coursework. Students will be exposed to concepts and experiences necessary for success in the workplace, further education, and life-long learning. Throughout the curriculum, students will be presented with a wide range of instructional methods and experiences that provide exposure to a solid foundation in STEM careers.

2. **Describe the educational objectives and intended student learning outcomes.**

Outcomes for the General Studies Associate of Arts (A.A.) degree with a concentration in SEM are listed. After each program outcome, the courses that address those program outcomes are listed.

Upon program completion, the graduate will be able to:

- Perform mathematical calculations using trigonometry, differentiation, and integration (MAT 1360, MAT 2410, MAT 2420)
- Solve stoichiometric problems and balance chemical equations (CHM 1010, CHM 1020, CHM 1030)
- Predict chemical reactivity of atoms and molecules (CHM 1010, CHM 1020, CHM 1030)
- Explain the key principles of modern evolutionary theory and its importance throughout the field of biology (BIO 1130)
- Investigate natural phenomena through experimentation, using the scientific method (BIO 1130, CHM 1010, CHM 1020, CHM 1030)
- Model and solve real-world problems using fundamentals of calculus, chemistry, and biology (MAT 2410, MAT 2420, BIO 1120, BIO 1130, CHM 1010, CHM 1020)

In addition to program specific outcomes, there are also a set of “core competencies” which PGCC has established as a necessary foundation of skills for every graduate. PGCC has identified six core competencies (communication, scientific and quantitative reasoning, critical reasoning, information literacy, culture, and ethics) which every graduate of all two-year programs will possess. These student core competencies are specifically addressed in the General Education courses in the program and are measured by 17 measurable outcomes (MOs), which are PGCC’s Institutional Learning Outcomes.

3. **Discuss how general education requirements will be met, if applicable.**

The Associate in Arts (A.A.) degree parallels the first two years of a bachelor’s degree and transfers to four-year colleges and universities. All degree recipients will complete the requirements for their program of study that includes transferable general education courses that are specified for the Associate in Arts (A.A.) degree with a concentration in sciences, engineering, and mathematics. The required general education requirements will be met by the following courses in the program curriculum, as prescribed in COMAR, Title 13B:

English (6 credits)	
English Comp I	3
EGL 1010 English Composition I	
English Comp II.....	3
EGL 1100 Writing About Issues and Ideas	
Humanities (6 credits)	
Humanities	6
ART 1010 Introduction to Art	
PHL 1010 Introduction to Philosophy: The Art of Questioning	
Mathematics (3 credits)	
Mathematics.....	4
MAT 1360 Pre-Calculus II: Trigonometry and Analytic Geometry	
Science (8 credits)	
Science.....	8
BIO 1130 Principles of Biology: Evolution, Ecology, and Behavior	
CHM 1010 General Chemistry I	
Social Science (6 credits)	
Social Sciences	6
ECN 1030 Principles of Macroeconomics	
PSY 1010 General Psychology	
Computer Literacy (3 credits)	
Computer Literacy.....	3
INT 1010 Introduction to Information Technology	

4. **Identify any specialized accreditation or graduate certification requirements for this program and its students.**

Not Applicable

5. **If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

Not Applicable

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

1. **Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:**
- **The need for the advancement and evolution of knowledge;**
 - **Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education;**
 - **The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs.**

Prince George’s County is the second most populous jurisdiction in the State of Maryland. The U.S. Census Bureau (2017) data states there are 912,756 citizens reflecting an increase of 5.7% since 2010¹. Additionally, the strategic location and proximity to the District of Columbia and the nation’s capital fosters a steady employer base for county residents. According to the U. S. Census Bureau (2017) the population of Prince George’s County is 65.0% African American; 17.8% Hispanic/Latino; 13.1% Caucasian; 4.6% Asian American; 1.1% Native American or

¹ <http://www.census.gov/quickfacts/table/PST045215/24033>

Alaskan native; 0.2% Native Hawaiian or other Pacific Islander; and 2.7% Multiracial². This highly diverse population translates to a highly diverse workforce. The student population at Prince George's Community College closely mirrors that of the County: 70.9% African American; 11.3% Hispanic/Latino; 4.4% Caucasian; 4.2% Asian American; 0.4% Native American or Alaskan native; 0.0% Native Hawaiian or other Pacific Islander; 3.1% Multiracial; 2.7 % Foreign/Non Resident Alien; and 2.7% Unknown. The College fully expects the demographics of Associate in Arts (A.A) degree with concentration in science, engineering, and technology to mirror that of Prince George's county.

Without focusing on a specific cognate, the Associate of Arts (A.A.) degree with a concentration in sciences, engineering, and mathematics affords perspective students the opportunity to explore numerous career and educational opportunities within the disciplines of science, technology, engineering, and mathematics. The general studies concentration will also increase the pool of STEM-qualified applicants in the region. The program constructs foster the well-being and health of the community, while placing a strong emphasis on cultural diversity and effective citizenry. Throughout the program, there is a sustained emphasis on general education courses that foster and enhance professional writing skills, verbal skills, and communication techniques for socio-economic and ethnically diverse populations. The program's conceptual framework embodies three major areas of learning with a sound pedagogical approach of applying cognitive knowledge to skill performance, thus deepening critical-thinking and the fostering metacognition.

2. **Provide evidence that the perceived need is consistent with the [Maryland State Plan for Postsecondary Education \(pdf\)](#).**

<http://mhec.maryland.gov/About/Pages/2017StatePlanforPostsecondaryEducation.aspx>

In accordance with the 2017- 2021 Maryland State Plan for Postsecondary Education, the proposed Associate in Arts (A.A) degree with a concentration in Sciences, Engineering, and Mathematics aligns Goal #2, SUCCESS: "Promote and implement practices and policies that will ensure student success", Strategy #6: "Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements" Point #2 "Consider utilizing focused pathways to improve college completion and student success". Prince George's Community College has implemented Academic and Career Pathways, based on the national Pathways model, for all credit and continuing education students. This concentration aligns with one of the nine established Academic and Career Pathways and will afford students the opportunity to identify a path to an interesting, exciting career field in Sciences, Engineering, and Mathematics to discover how classes will lead to high-demand, high paying jobs and careers, often in less than two years. Given the demographic growth and diverse population of the county, the addition of the General Studies Associate in Arts (A.A.) program with a concentration in Sciences, Engineering, and Mathematics program at Prince George's Community College (PGCC) will ensure the intellectual enhancement of students and the health and economic well-being of the county and surrounding areas. The Associate in Arts degree concentration in SEM will also meet the student need for a transfer option in the STEM disciplines.

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

² <http://www.census.gov/quickfacts/table/PST045215/24033>

1. **Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.**

Not applicable – this is intended to serve as a general studies concentration for transfer.

Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

Not applicable – this is intended to serve as a general studies concentration for transfer.

Data showing the current and projected supply of prospective graduates.

During the spring of 2018, there were 1760 students classified in the STEM division. The interest and demand from students and the community is tremendous. As a result, there are a significant number of students already in the queue, and the College would expect to easily achieve an enrollment of more than 20 students during the first year.

Projected Enrollment – General Studies (A.A) concentration in SEM

	2018	2019	2020	2021	2022
Full-time	61*	89*	111*	128*	142*
Part-time	40	72*	98*	118*	134*

*Assumes 80% from previous year enroll and complete that year, with 40 new enrollees beginning that year.

Students in the General Studies Area of Concentration in Science, Engineering, and Mathematics A.A. may be full-time or part-time students. Prince George’s Community College offers a number of scholarships to support students in maintaining full-time status and complete academic program on target.

Projected Graduates – General Studies Associate in Arts (A. A) with a concentration in SEM

	Year 1	Year 2	Year 3	Year 4	Year 5
Full-time*	0*	49*	71*	89*	102*
Part-time*	0	0	10	15	20

*The College expects a minimum of 80% of the full-time students to graduate from the A.A. program.

E. Reasonableness of program duplication:

1. **Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.**

According to the Maryland Higher Education Commission's (MHEC) Academic Program Inventory, fourteen community colleges in the state of Maryland offer the General Studies Transfer degree option. Of the institutions offering the general studies transfer option, Frederick Community College offer the general studies with a concentration in STEM as a 60-hour associate in science degree option. The program allow students to enroll in 25 semester hours of STEM-related courses in biology, chemistry, physics, engineering, and computer and information technology. Although the program at Prince George's Community College and Frederick Community College are similar in terms of the general education courses, the major difference entails the omission of the technology concentration component as part of the degree at Prince George's Community College. The technology component was omitted from the general studies concentration (PGCC) due to the limited technology options offered in the program.

2. Provide justification for the proposed program.

The Associate in Arts (A. A.) degree with a concentration in SEM is being developed to provide an additional pathway for students who wish to transfer to a 4-year institution to pursue a baccalaureate or graduate degree in one the SEM disciplines.

F. Relevance to Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.

This program would not impact current high-demand programs at HBIs, given that no such program is offered at HBIs in the state.

2. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

N/A

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

N/A – this is not proposed as a distance education program.

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

Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach.

No additional faculty are needed. Currently, there are A graduate degree with 18 graduate hours in the respective discipline is the minimum requirement for teaching courses in associate degree programs that transfer to other institutions. There are a number of qualified full-time and adjunct faculty currently employed by the College to teach General Education and required program courses in the specific disciplines.

The College adheres to the following COMAR requirements:

- The minimum educational attainment of the faculty shall be the appropriate degree commensurate with the degree level of the proposed program.
- The doctorate is the appropriate terminal degree for bachelor's and graduate programs, however, the Master of Fine Arts (M.F.A.) or another professional degree may be adequate and appropriate for the proposed program.
- If specialized accreditation or State licensure is an expectation, the number of terminal degree holders shall meet the minimum requirements of the appropriate accrediting association or licensing agency.
- Programs shall involve credentialed full-time faculty in teaching, program development, and student academic support.
- Adjunct and part-time faculty are an important and necessary component of some programs. Except in circumstances to be determined by the Secretary, at least 50 percent of the total semester credit hours within the proposed program shall be taught by full-time faculty.
- Adjunct and part-time faculty shall:
 - Possess the same or equivalent qualifications as the full-time faculty of the institution;
 - Be approved by the academic unit through which the credit is offered.

There are 243 full-time faculty and 605 adjunct faculty teaching credit courses at the college, according to the College's 2015 Workforce Profile:

https://my.pgcc.edu/committees/humanresources/New%20Employee%20Onboarding%20Documents/PGCC%20Workforce%20Profile%20%20FY15_Final.pdf

In compliance with COMAR, all instructors have either the terminal degree or a Master's degree in their respective fields. A list of full-time faculty is as follows:

Name	Terminal Degree	Rank	Program Courses
Baldwin, Beth E.	Master of Arts/English	Professor	EGL 1010, 1100, 1340
Bardi, Abigail R.	Ph.D./English	Professor	EGL 1010
Bishop, Nicole	Master of Arts/English	Associate Professor	EGL 1010
Bres, Mimi G.	Ph.D./Biology	Professor	BIO 1130,1140
Cizek, Ann	Master of Arts/English	Associate Professor	EGL 1010
Dantley, Bernadette J.	Master of Science/Mathematics	Associate Professor	MAT 1360,2410,2450
Das, Salil Kumar	Ph.D./Mathematics	Associate Professor	MAT 1140, 1360,2410,2420,2450
Debartolomeo, Anthony	Master of Arts/English	Associate Professor	EGL 1010
Dee, Abednego G.	Master of Science/Mathematics	Associate Professor	MAT 1140, 1360,2410,2450
Dirks, Tracy	Master of Science/Biology	Professor	BIO 1110,1130,1140
Freels, Jeffrey	Ph.D./History	Associate Professor	HIS 1410, PHL 1330 PHL 1090, ANT 1010, POS 1010
Fridy, Tonya L.	Ph.D./Psychology	Professor	PSY 1010, ANT 1010

Fry, Gary R.	Master of Arts/Speech	Assistant Professor	SPH 1010
Gaines, James	Master of Science/Mathematics	Assistant Professor	MAT 1140, 1360, 2410, 2450,
Gebler, Glenn	Ph.D./Biology	Associate Professor	BIO 1110, 1130, 1140
Georgescu, Radu	Master of Science/Mathematics	Associate Professor	MAT 1140, 1360, 2410, 2450
Gordon, Julie E.	Master of Science/Mathematics	Associate Professor	MAT 1140, 1360, 2410, 2450
Gross-Butler, Lynn A.	Bachelor of Science/IT	Associate Professor	INT 1010
Gray, Holly	Master of Arts/Languages	Associate Professor	Foreign Language
Guidry, Francois	Master of Arts/English	Associate Professor	EGL 1010
Hailstorks, Robin J.	Ph.D./Psychology	Professor	PSY 1010
Haptemariam, Zewdu	Master of Science/IT	Associate Professor	INT 1010
Hardy, Michele	Master of Arts/English	Associate Professor	EGL 1010
Hossain, Manzoor	Bachelor of Science/IT	Assistant Professor	INT 1010
Houser-Archield, Nadene R.	Ph.D./Chemistry	Professor	CHM 1010, 1020, 1030, 2020
Huxel, Scott B.	Master of Science/Mathematics	Associate Professor	MAT 1140, 1360, 2410, 2450
Hyatt, Sarah	Master of Science/Biology	Assistant Professor	BIO 1110, 1130, 1140
Johnson, Barbara L	Master of Fine Arts/ Arts	Professor	ART 1010
Jones, Andy D.	Master of Science in Education/Mathematics	Professor	MAT 1140, 1360, 2410, 2450
Klein, Michelle R.	Master of Science/Biology	Associate Professor	BIO 1110, 1130, 1140
Lawrence, M. Zach	Bachelor of Arts/IT	Assistant Professor	INT 1010
Mulusa, Judy	Ph.D./Economics	Professor	ECN 1030
Plants, Nick	Ph.D/Philosophy	Professor	PHL 1010, PHL 1330, PHL 1090
Street, LaLinda	Master of Arts/English	Associate Professor	EGL 1010
Panyon, Peter	Master of Science/Biology	Professor	BIO 1110,1130,1140
Richards, Reyniak	Master of Science/Chemistry	Assistant Professor	CHM 1010, 1020, 1030, 2020
Snodgrass, Jeffrey L.	Master of Science/English	Associate Professor	EGL 1010
Starkey, Cliff	Master of Arts/English	Associate Professor	EGL 1010

Sumner, Jacqueline	Master of Science/Languages	Associate Professor	Foreign Language
Yarington, Earl	Ph.D./English	Associate Professor	EGL 1010

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

Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program. If the program is to be implemented within existing institutional resources, include a supportive statement by the President for library resources to meet the program's needs.

The PGCC library has been consulted regarding provisions and resources for college transfer (A.A. degree) students. The PGCC library is highly committed to procuring literature and technical information specific to the learning and employment expectations for students and graduates. The library maintains online accessible and extensive databases, journals, and E-texts. Students may request holdings and inter-library loans either by E-mail or in person. Additionally, the library will provide journals and publications specifically related to the various Public Health professions.

The PGCC library has extensive online resources available to students:

General Databases

ProQuest
Academic OneFile
Credo Reference

E-books

Ebrary
EBSCOHost Academic E-book Collection
Gale Virtual Reference Library
Streaming Video:
Films on Demand
VAST Academic Video Collection

Moreover, the library has ready access to:

- a. Interlibrary loan services compliant to and in support of the Library of Congress and its Bibliographic Utilities.
- b. The holdings of the Prince George's County Memorial Library System.
- c. The holdings of the University of Maryland System.
- d. If faculty requests the librarians to review Books-In-Print for materials to enhance students' academic understanding of the discipline, the College library will use its budget to acquire those books them. The librarians will provide a subject strength analysis of the proposed titles to assure compatibility with course content.

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

Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences. If the program is to be implemented within

existing institutional resources, include a supportive statement by the President for adequate equipment and facilities to meet the program's needs.

The campus has sufficient classroom and office space to accommodate the program. No additional space is needed.

Number of buildings on main campus: 18 permanent & 3 temporary

- Total square footage of the buildings: on the main campus: 858,855
- Classroom space: 77,455 square feet
- Number of classrooms and seating capacity: 182 classrooms with an average seating capacity of 25
- Number of offices for faculty and staff: 621
- Number of computer labs, and any specialized equipment (projectors, smartboards, or white boards, etc.): 122

K. Adequacy of financial resources with documentation (as outlined in COMAR 13B.02.03.14)

1. Complete [Table 1: Resources \(pdf\)](#) and [Table 2: Expenditure\(pdf\)](#). [Finance data\(pdf\)](#) for the first five years of program implementation are to be entered. Figures should be presented for five years and then totaled by category for each year.
2. Provide a narrative rationale for each of the resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

The proposed program is expected to generate revenue in excess of expenses from the second year. Contracted services and supplies have been included in the proposed fiscal year 2018 budget.

Table 1

TABLE 1: RESOURCES for General Studies concentration in Science, Engineering and Mathematics Program					
<u>Resource Categories</u>	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds #	\$0	\$0	\$0	\$0	\$0
2. Tuition/Fee Revenue(c + g)	\$167,400	\$374,320	\$577,530	\$721,680	\$835,140
a. Number of F/T Students	20	56	85	108	126

b. Annual Tuition/Fee Rate	\$4,650	\$4,650	\$4,650	\$4,650	\$4,650
c. Total F/T Revenue (a x b)	\$93,000	\$240,000	\$395,250	\$502,200	\$585,900
d. Number of P/T Students	40	72	98	118	134
e. Credit Hr. Rate	\$155	\$155	\$155	\$155	\$155
f. Annual Credit Hours	12	12	12	12	12
g. Total P/T Revenue (d x e x f)	\$74,400	\$133,920	\$182,280	\$219,480	\$249,240
3. Grants, Contracts & Other External Sources	\$0	\$0	\$0	\$0	\$0
4. Other Sources	\$0	\$0	\$0	\$0	\$0
TOTAL (1 – 4)	\$167,400	\$374,320	\$577,530	\$721,680	\$835,140

1. Reallocated Funds

Since the College already offers the General Studies A. A. degree, no funds need to be reallocated to this General Studies Concentration in Science, Engineering, and Mathematics. The courses in the program already exist, and current faculty will teach these courses.

2. Tuition and Fee Revenue

Tuition and fees are assumed to be constant over the next five years. The in-county tuition rate of \$107 per credit and a fee of \$48 per credit for a total of \$155 per credit have been used to calculate revenue; with 30 credits per year for full-time students.

3. Grants and Contracts

Program development and implementation is not dependent on grants, contracts or external funding.

4. Other Sources

No additional sources of funding are expected.

5. Total Year:

The proposed program is expected to generate revenue in excess of expenses from the second year as indicated in **Table 1**.

Table 2

TABLE 2: EXPENDITURES for A.A.S. and Certificate					
<u>Expenditure Categories</u>	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (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 3%	\$0	\$0	\$0	\$0	\$0
2. Admin. 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
8. TOTAL (Add 1 – 7)	\$0	\$0	\$0	\$0	\$0

Narrative for Expenditures

1. Faculty (# FTE, Salary, and Benefits)

No new full-time or adjunct faculty are needed for the program at this time based on enrollment projections. Information below is based on current faculty.

There are 243 full-time faculty and 605 adjunct faculty teaching credit courses at the college, according to the College’s 2015 Workforce Profile.

Full-time faculty are contractually obligated to teach the equivalent of 15 ECH each semester or 30 annually. Part-time faculty may not exceed 28 ECH annually.

For salary and benefits, see the following Appendices:

- A. 10-Month Full-time Faculty Benefits
- B. 12-Month Full-time Faculty Benefits
- C. Full-time Faculty Salary Scale
- D. Adjunct Faculty 2017 -2018 Pay Scale

2. Administrative Staff (# FTE, Salary, and Benefits)

No new full-time administrative staff is required for the program.

No new full-time administrative staff is required for the program. The program will become part of the Sciences, Technology, Engineering, and Mathematics division. The Dean of Sciences, Technology, Engineering, and Mathematics will assume administrative responsibility for the program. FTE does not apply to administrative staff. Administrative staff salaries vary and are based on annual contracts.

There are 58 administrators according to the College’s 2015 Workforce Profile.

For salary and benefits, see the following Appendices:
E. Administrative Staff Benefits
F. Professional Staff Benefits

3. Support Staff (# FTE, Salary, and Benefits)

No new support staff are required for the program. The program will become part of the Health, Business and Public Service Division. FTE does not apply to support staff.

There are 493 full-time staff according to the College's 2015 Workforce Profile.

For salary and benefits, see the following Appendices:
G. Technical and Support Staff Benefits
H. Staff Salary Schedule

4. Equipment

Specialized equipment and supplies are not required for this program.

5. Library

The library currently has adequate holdings and access to current databases to support the program. The library's acquisition budgets will cover requests for additional materials as needed.

6. New and/or Renovated Space

No new or renovated space will be required. Existing classroom space is sufficient to support the program.

7. Other Expenses:

Funding has been allotted for faculty development, as well as registration fees for faculty and students attending large locally-held conferences and events.

8. Total Year:

Years 1-5: \$0/year

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

1. Discuss procedures for evaluating courses, faculty and student learning outcomes.

The College has a rigorous course and program assessment process. Course assessment takes place by using embedded tests and assignments that address specific course outcomes. Data from

these course embedded assessments are collected and analyzed to improve courses and to ensure program learning outcomes are met.

Complete program assessment takes place every five years, with progress toward achievement of improvement plans being evaluated every two years. Data regarding enrollment, retention, and graduation is collected and analyzed against program outcomes, courses offered, and other variables. Each program must have an advisory board consisting of professionals in the field assist in the construction and analysis of program review data.

Non-tenured faculty members are evaluated yearly by students and administrators. Each year, non-tenured faculty members have their course material and student evaluations assessed by their department chairs and deans, with final verification of the assessment conducted by the Executive Vice President and Provost for Teaching, Learning and Student Success. In order to receive high evaluations, faculty members must demonstrate effective teaching above all, but professional development in the discipline and participation in departmental, divisional, and college-wide activities is also assessed. The same criteria for evaluation are carried out for tenured members of the faculty, but once every three years. The above assessment process also provides administrators the opportunity to set out action plans for faculty improvement in teaching, professional development, and/or college service in order for each or any of those facets of the faculty member's career to be enhanced.

Prince George's Community College (PGCC) has developed a comprehensive system to assess student learning that is organized, well documented, and has continued to improve since spring 2012. The system is founded on the existence of clear statements defining the skills, knowledge, and values that students are expected to acquire in their educational experiences at the College. These statements or learning outcomes, which are publicized in the College Catalog and in master course syllabi, establish well-defined, shared expectations for faculty, students, and the community. In doing so, the learning outcomes ensure consistency across the diversity of educational experiences offered at the College. They also provide the basis for measuring the quality of program and course offerings, as well as for developing targeted interventions for continuous improvement. Prince George's Community College has identified three sets of learning outcomes for its students: course, program, and institutional learning outcomes. Course outcomes define the skills, knowledge, and values that students are expected to acquire upon completion of a course. Program outcomes specify the skills, knowledge, and values that students are expected to acquire upon completion of a program of study. The institutional learning outcomes encapsulate the foundational skills, knowledge, and values that every graduate of an associate's degree is expected to achieve. The College has identified six institutional learning outcomes, called the Student Core Competencies: 1. Communication, 2. Scientific and Quantitative Reasoning, 3. Critical Reasoning, 4. Information Literacy, 5. Culture, and 6. Ethics. The Student Core Competencies are specifically addressed in the General Education coursework and also appear throughout the curriculum at PGCC.

Evidence of student learning is collected through embedded assessments that students have to complete as part of their regular coursework. These assessments, which are used in the calculation of student grades, are designed to provide direct demonstrations of students' skills, knowledge, and values. Frequently used assessments include multiple-choice exams, written assignments, artistic artifacts or performances, and clinical demonstrations. With the exception of multiple choice exams, assessments are evaluated and scored with the aid of rubrics. All sections of the same course are required to use either the same assessment or variations of the same assessment. Data collected in the classroom are aggregated across sections and used to simultaneously measure student achievement of course outcomes, program outcomes, and the

Student Core Competencies. These data are stored in an assessment management system, called Tk20, which provides multiple data reports easily accessible to faculty and administrators.

Program Assessment

Prince George's Community College has a five-year cycle for completing the assessment of every program outcome and every Student Core Competency. Prior to the beginning of each cycle, faculty design an assessment plan for every program of study offered by their department. The assessment plan indicates which program outcome(s) will be assessed each semester along with the list of courses where those outcomes are addressed. Whenever a department offers General Education courses such as English 1010, a second assessment plan is developed. This assessment plan lists one or more Student Core Competencies and the General Education courses where those Student Core Competencies are addressed. Thus, for example, the English Department has an assessment plan for addressing the English program outcomes and another one for addressing foundational skills such as communication and information literacy. Departments are expected to assess all courses in their assessment plan(s) during the five-year cycle. For each course included in an assessment plan, faculty adhere to the following sequence: 1. Prior to assessing a course, faculty create assessment materials to measure student achievement of course outcomes and submit these materials for review to the Assessment Coaches and the AAAC; 2. The Assessment Coaches and the AAAC examine the materials to ensure that they are appropriately rigorous and reflect best practices for assessment; 3. Once the assessments are approved, faculty implement the assessment in the following semester. Data are then collected and entered into Tk20, allowing the College to store, track, analyze, and disseminate data to all stakeholders; 4. The semester following data collection, OPAIR analyzes the data and releases a 188 report of its findings; 5. Faculty discuss the findings and use preset performance criteria or benchmarks to determine whether an Action Plan needs to be developed to address any areas of concern; 6. When an Action Plan is needed, changes are implemented in the following semesters and the course is later reassessed (see Assessment Cycle - Appendix E). The assessment data are publicly distributed every semester in the Student Learning Outcomes Assessment Report (SLOAR). An additional report showing student achievement of the Student Core Competencies is published every year. Assessment data are discussed within each department for course and program improvement, leading to changes in individual courses and in the content and structure of the curriculum. Furthermore, the data are also discussed by a General Education Taskforce, with representatives from the AAAC, charged with improving teaching and assessment of the Student Core Competencies. The College relies on a plethora of training guides, regular face-to-face training sessions, and a series of online assessment modules to ensure that all faculty are equipped with the knowledge and skills they need to engage in the discussion and use of assessment findings.

Course Assessment and Evaluation

Each semester, the Office of Planning Assessment and Institutional Research reports the results of every Action Plan implemented to improve student learning the previous semester. Results are published in a document called the Action Plan Success Report, which allows faculty to see if the changes introduced in their courses following the initial assessment produced the desired impact. The report is available to the entire PGCC community on the College's intranet. See Table 1 below, which summarizes other examples of assessed courses, course outcomes needing improvements, corresponding action plans, and reassessment results.

Although these Action Plans are focused on improving performance in the classroom, the clear alignment of course outcomes to program outcomes and to the Student Core Competencies mean that changes implemented at the course level can have a significantly broader impact. Beyond

measuring student achievement every semester, the assessment system is aimed at capturing students' skill development over time and building a better understanding of how small changes in each course can lead to larger aggregate changes in learning at the program and institutional levels.

All information taken from:

<http://mhec.maryland.gov/publications/Documents/Research/AnnualReports/2016StudentLearningOutcomesAssessmentReportVol2.pdf>

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).

Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

The mission of Prince George's Community College is compatible with the State's minority achievement goals. The College provides accessible and affordable education, and it is committed to diversity. With a majority African American student body (70.9%), Prince George's Community College is well-positioned to provide opportunities for students traditionally underrepresented in higher education. Moreover, the graduates of this program will further align the racial makeup of the region's workforce.

Prince George's Community College will continue to recruit a diverse student base. In addition to working with and relying on the college's student recruiting professionals, additional activities to recruit a diverse body of students will include:

- involvement with community-based organizations, high schools, and teen church programs;
- increased visibility of the new programs (e.g. college Web site and catalogue); and
- clear communication about the integrated nature of the academic work with practical experience and professional networking opportunities.

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

If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

The college has no low productivity programs directly related to this program.