



March 4, 2024

Sanjay Rai, Ph.D.
Acting Secretary of Higher Education
Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Dear Dr. Rai:

Attached, please find Chesapeake College's **revised** Academic Program Proposal to offer a **Stand-alone Certificate in Health Sciences**.

On March 4, 2024, we were notified by Education Policy Analyst, Allie Edelstein, that the originally submitted cover sheet did not reflect the highest possible credit count for this certificate. We have revised the cover sheet with the correct credit count and also revised Section G of the proposal to clarify the total number of credits.

A check (#377360) in the amount of \$950 was mailed to cover the fees associated with this transaction and additional changes as noted in the letter accompanying the check.

If you have any questions or require additional information, please contact Lyndy Galan, Director of Program Development, at lgalan@chesapeake.edu or at 410-827-5824.

Sincerely,

A handwritten signature in black ink that reads "David Harper, Jr." with a stylized flourish at the end.

David Harper, Jr., Ph.D.
Vice President for Workforce and Academic Programs



**Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program**

Institution Submitting Proposal	
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Each action below requires a separate proposal and cover sheet.

- | | |
|-----------------------------|---|
| New Academic Program | Substantial Change to a Degree Program |
| New Area of Concentration | Substantial Change to an Area of Concentration |
| New Degree Level Approval | Substantial Change to a Certificate Program |
| New Stand-Alone Certificate | Cooperative Degree Program |
| Off Campus Program | Offer Program at Regional Higher Education Center |

Payment Submitted:	Yes	Payment Type:	R*STARS # Check #	Payment Amount:	Date Submitted:
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Department Proposing Program			
Degree Level and Degree Type			
Title of Proposed Program			
Total Number of Credits			
Suggested Codes	HEGIS:	CIP:	
Program Modality	On-campus	Distance Education (fully online)	Both
Program Resources	Using Existing Resources	Requiring New Resources	
Projected Implementation Date <small>(must be 60 days from proposal submission as per COMAR 13B.02.03.03)</small>	Fall	Spring	Summer Year:
Provide Link to Most Recent Academic Catalog	URL:		

Preferred Contact for this Proposal	Name:
	Title:
	Phone:
	Email:

President/Chief Executive	Type Name:
	Signature: Date:

	Date of Approval/Endorsement by Governing Board:
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MARYLAND HIGHER EDUCATION COMMISSION

New Stand-Alone Certificate Program

Health Sciences Certificate

A. Centrality to institutional mission statement and planning priorities:

Chesapeake College's core commitment is to prepare students from diverse communities to excel in further education and employment in our region and beyond. Our programs and services are designed with our regional economic development and sustainability in mind.

One goal of the Chesapeake College 2019-2024 Strategic Plan is to “calibrate programming to maximize appropriateness and relevancy”¹. The Health Sciences Certificate supports this initiative by providing a course of study designed to meet the needs of students who plan to study and transfer to a college or university to obtain an associate or baccalaureate degree in various areas of Health Sciences.

This program has been designed in collaboration with other Maryland community colleges through the Maryland Education Alliance (MEA) to provide a structure for academic progression and credential stacking. It allows students to complete the first year of an associate degree program in a health science field at their home institution, followed by a second year in a specialized program, such as Massage Therapy, at another institution.

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

The 2022 Maryland State Plan for Higher Education has identified several key priorities. The proposed Health Sciences Certificate directly supports the following priorities under the Student Success goal:

1. Priority 5: *“Maintain the commitment to high-quality postsecondary education in Maryland”*.
2. Priority 6: *“Improve systems that prevent timely completion of an academic program”*

Chesapeake’s partnership with other Maryland community colleges through the MEA enhances access and affordability for students in our five-county service region that are pursuing education in the field of Health Sciences. The Health Sciences Certificate program is designed for students to start an associate degree program close to home and then complete the last part of a specialized program at another Maryland community college. This pathway creates a more seamless transition and makes it easier for students to complete a degree they would otherwise be unable to complete.

C. Quantifiable & reliable evidence and documentation of market supply and demand in the region and state:

The Health Sciences Certificate will give students foundational knowledge in many fields of health sciences, such as respiratory therapists, surgical technologists, massage therapists, and

¹ “The Peake Plan” (2019 – 2024) Chesapeake College Strategic Plan.

nuclear medicine technologists. Maryland Department of Labor projects an increase from 2020 – 2030 in the number of openings for these types of positions.²

Field	2020 – 2030 Percent Change in job openings
Respiratory Therapist	+20.76%
Surgical Technologist	+16.10%
Massage Therapist	+27.46%
Nuclear Medicine Technologist	+14.08%

D. Reasonableness of program duplication:

A search of the Maryland Higher Education Commission’s Academic Program Inventory database reveals the following similar Lower Division Certificates in Health Sciences:

Institution	Program	Degree
<u>Anne Arundel Community College</u>	<u>HEALTH SCIENCES</u>	Lower Division Certificate
<u>Carroll Community College</u>	<u>HEALTH SCIENCES</u>	Lower Division Certificate
<u>Cecil College</u>	<u>HEALTH SCIENCES</u>	Lower Division Certificate
<u>College of Southern Maryland</u>	<u>HEALTH SCIENCES</u>	Lower Division Certificate
<u>Prince George's Community College</u>	<u>HEALTH SCIENCES</u>	Lower Division Certificate

These institutions are a part of the MEA. As described above in Section A, The MEA sponsors joint programs among member colleges for which there is a defined need and demand in the region, but which are too costly for an individual college to support on its own. Chesapeake’s own Health Sciences Certificate will allow a student to obtain a credential while also allowing a more seamless transfer into other MEA programs, since many of the articulated courses are general education course and entry-level health-related course required of MEA programs.

E. Relevance to high-demand programs at Historically Black Institutions (HBIs)

The Health Sciences Certificate has no impact, negatively or positively, on programs at HBIs.

F. Relevance to the identity of Historically Black Institutions (HBIs)

² <https://labor.maryland.gov/lmi/iandoproj/maryland.shtml>

The Health Sciences Certificate has no impact, negatively or positively, on programs at HBIs.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning outcomes (as outlined in COMAR 13B.02.03.10):

The Health Sciences Certificate is designed to provide a basis for further study in a healthcare related discipline. This certificate will prepare students for transfer to an Associate or Baccalaureate program in a health sciences field at a two or four year institution.

The proposed certificate in Health Sciences requires the following courses:

Prefix	Number	Course Title	Credits	Semester
BIO	103	Preparatory Biology for Healthcare Students	1*	Fall
MED	106	Medical Terminology	1	Fall
BIO	211	Anatomy and Physiology I	4	Fall
ENG	101	Composition	3	Fall
MAT		Math Elective	3 – 5	Fall
PROG		Program Elective	3	Fall
ART/HUM		Arts & Humanities Elective	3	Spring
BIO	212	Anatomy and Physiology II	4	Spring
PSC	150	General Psychology	3	Spring
Gen Ed		General Education Elective	3	Spring
DIV		Diversity Elective	3	Spring
Total Credits (highest possible credit count)			32	

*Institutional credit only; does not count toward graduation.

Program Electives: (Prefix Number Title Credits)

PED 103 Wellness for Life 3 Credits
 IDC 201 Nature of Knowledge 3 Credits
 COM 101 Fundamentals of Oral and Organizational Communication 3 Credits

General Education Electives: (Prefix Number Title Credits)

ARTS and HUMANITIES

ART 101 Introduction to Art 3 Credits
 ENG 102 Introduction to Literature 3 Credits
 HUM 110 Integrated Arts 3 Credits
 MUS 101 Introduction to Music 3 Credits
 MUS 152 Music Fundamentals 3 Credits
 THE 172 Introduction to Theatre 3 Credits

MATHEMATICS

MAT 204 Introduction to Statistics 3 Credits OR
 MAT 113 College Algebra 3 Credits OR
 MAT 115 Precalculus 5 Credits OR
 MAT 140 Calculus and Analytic Geometry 4 Credits

SOCIAL and BEHAVIORAL SCIENCES

ANT 142 - Cultural Anthropology 3 credits
CMJ 101 – Introduction to Law Enforcement and Criminal Justice 3 credits
ECN 171 - Principles of Macroeconomics 3 credits
ECN 172+ - Principles of Microeconomics 3 credits
HIS 131 - World Civilization I 3 credits
HIS 132 - World Civilization II 3 credits
PSC 150 - General Psychology 3 credits
POL 180 - U.S. Federal Government 3 credits
SOC 161 - Sociology 3 credits
SOC 162 - Social Problems 3 credits

INSTITUTIONAL REQUIREMENTS (Diversity)

BUS 240 International Business 3 Credits
ENG 206 World Literature II 3 Credits
GCIS 101 Introduction to Global and Intercultural Studies 3 Credits
GEO 142 Cultural Geography 3 Credits
HIS 115 African American History 3 Credits
HIS 131 World Civilization I 3 Credits
HIS 132 World Civilization II 3 Credits
HIS 141 US History I 3 credits
HIS 142 US History II 3 credits
MUS 201 World Music 3 Credits
THE 297 World Culture and Performance 3 Credits

COURSE DESCRIPTIONS:

BIO 103+ - Preparatory Biology for Healthcare Students

1 credit

A review of the fundamental principles of chemistry including atomic structure, chemical reactions and basic concepts of living organisms including cell structure and function, metabolism, growth and reproduction, and genetics for healthcare students who intend to take BIO 211+. Topics provide an understanding of biological systems as a whole.

[FALL/SPRING/SUMMER] One hour online lecture per week. **prerequisite(s):** complete MAT 023 and ENG 094 as prerequisites, or appropriate placement score.

MED 106 Medical Terminology

1 credit

A study of the language of medicine. Medical terminology will be presented through a study of the progress of word building using medical root words, combining forms, prefixes and suffixes. The presentation of medical language in this course will later serve as a foundation for students interested in a career in many different health-related fields, such as nursing, radiology, physical therapy, dentistry, etc. This course will provide a framework by introducing the key elements in the formation, as well as the modification of medical terms

which can then be applied to specific body systems. [FALL/SUMMER] One hour lecture per week.

BIO 211+ - Anatomy & Physiology I

4 credits

An introduction to the structure and function of the human body. This course is the first of two courses involving a systematic study of homeostatic mechanisms of the integumentary, skeletal, muscular, and nervous systems, including special senses. Laboratory study includes cellular biology, histology, and gross anatomy of these systems, with dissection and selected experiments in physiology. [FALL/SPRING] Three hours lecture, two hours laboratory per week. **Prerequisite(s):** complete MAT 023 or appropriate placement score.

Prereq/Corequisite: complete BIO 111+ as a prerequisite or BIO 103+ as a pre/co-requisite, or passage of readiness exam.

ENG 101+ - Composition

3 credits

Instruction in the writing process and fundamentals of academic writing. Students will learn to write clearly organized, well supported, thesis-driven essays. Analysis of written works and other texts, research methods and information literacy, and ethical use of resource materials are studied. A formal research paper is a required component of the class.

[FALL/SPRING] Three hours per week. **Prerequisite(s):** Complete ENG 095 or ENG 100 as a prerequisite, or appropriate placement score. **Corequisite:** ENG 095+ if determined by appropriate placement score.

BIO 212+ - Anatomy and Physiology II

4 credits

An introduction to the structure and function of the human body. This course is the second of two courses involving a systematic study of the cardiovascular, respiratory, digestive, urinary, and reproductive systems. Homeostasis and endocrine relationships are stressed. Laboratory study includes microscopic and gross anatomy of these systems, with selected experiments in physiology. [FALL/SPRING] Three hours lecture, two hours laboratory per week. **Prerequisite(s):** complete MAT 023 or appropriate placement score. BIO 211+

Prereq/Corequisite: ENG 094 or appropriate placement score.

PSC 150 General Psychology

3 credits

An introduction to the scientific study of psychology with emphasis on learning, cognition, motivation and emotion, individual differences, and adjustment patterns. [FALL/SPRING] Three hours per week.

Upon successful completion of the program, students will be able to:

- Write effectively using medical terminology and reflecting the appropriate application of human anatomic and physiologic principles
- Demonstrate proficiency in the anatomy and function of the human body
- Use mathematical concepts and methods with an emphasis on real world applications

The Health Sciences Certificate will be assessed in accordance with Chesapeake College's program review process as outlined in the College Curriculum Guide³. Core programmatic goals include:

- A. Prepare students to transfer to a health care discipline associate degree program
- B. Demonstrate the entry level knowledge and abilities associated within healthcare disciplines
- C. Demonstrate written and verbal communication skills needed within healthcare disciplines.

This certificate program is fully supported through the college's marketing initiatives; all correlating materials accurately and concisely represent the program.⁴

H. Adequacy of Articulation (as outlined in COMAR 13B.02.03.19):

Through the MEA, several Maryland community colleges have collaborated on the requirements for the certificate to facilitate easy transfer to associate degree health care programs in other community colleges.

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

Program Director: David Timms is a full-time Associate Professor and the Director of Health Professions. He earned his M.Ed. in Distance Education. He serves on the MEA Healthcare sub committee and is abreast of new programs and MEA articulations with our partner colleges.

Faculty Member	Credentials	Status	Courses Taught
Kimberly Smoloski, Professor of Anatomy & Physiology	Ph.D. Medicine	Full-time	BIO 211 Anatomy and Physiology I BIO 212 Anatomy and Physiology II
Mary Beth Bailey, Associate Professor of Radiologic Science	B.S. Organizational Management	Full-time	MED 106 Medical Terminology
Allison Barba, Assistant Professor of Biological Sciences	M.S. Estuarine & Environmental Science	Full-time	BIO 103 Preparatory Biology for Healthcare Students
Lori Riley, Associate Professor of English	Ph.D. Education	Full-time	ENG 101 Composition
Jennifer Hawley, Assistant Professor of Psychology	M.A. Psychology	Full-time	PSC 150 General Psychology

Faculty have many opportunities for professional development. Chesapeake College's Teaching and Learning Center (TLC) provides training to faculty in the use of our learning

³ Chesapeake College. *Chesapeake College Curriculum Development Guide*. 2016.

⁴ Chesapeake College. *Chesapeake College Curriculum Development Guide*. 2016.

management system, Canvas, and in the use of other technologies that enhance student engagement and success. The Director and staff of the TLC have expertise in instructional design and technology and are always ready to discuss pedagogical solutions and technical tools.

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

The library of Chesapeake College provides students, faculty and community members with various resources to meet their informational and research needs and supports the programs that make up the current curriculum offerings. The library has a collection of 30,000 print titles, more than 300,000 e-books, 1,500 audiovisual materials, 50 print serial subscriptions, and over 100,000 electronic print serials. The library subscribes to over 50 databases providing full-text material, bibliographic citations, images, audio, and films.

The library is a member of the Upper Eastern Shore Library Consortium which provides for resource sharing among the college and local public libraries. This program allows our patrons to borrow from public and academic libraries throughout the State of Maryland. Information about the college's library resources is found at <http://info.chesapeake.edu/lrc/library>. The President has affirmed that the program can be implemented within existing library resources.

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

Existing classrooms and labs within the Science and Humanities Buildings will be used to hold all General Education classes and there is sufficient space to hold any needed new equipment, supplies, or materials. In addition to the classroom and lab spaces, students have the opportunity to utilize all of the College's resources, including the library, Academic Support Center, computer labs, small group conference areas, and student dining/lounge areas.

The Health Sciences Certificate proposal was carefully reviewed and approved through the college governance structure. Thus it has met the approval of the college faculty, administration and Board of Trustees for implementation and inclusion in the college budgeting process. The President has affirmed that the program can be implemented with existing institutional resources.

L. Adequacy of financial resources with documentation (as outlined in COMAR 13B.0203.14):

TABLE 1: PROGRAM RESOURCES AND NARRATIVE RATIONALE

1. **Reallocated funds:** This program will utilize existing faculty resources and administrative staff.

2. **Tuition and Fee Revenue:** We are projecting no more than a 2% tuition increase each year.
3. **Grants & Contracts:** While the tuition and course fees are designed to cover the immediate costs of the program, additional grants and private donations are anticipated to assist with site overhead and infrastructure needs.
4. **Other sources:** Other sources of revenue include Consolidated Fees⁵ of \$37 per credit hour; Capitol Improvement Fees⁶ of \$15 per registration transaction; and Registration Fees⁷ of \$10 per registration transaction. There is a \$33 Internet Delivery Fee for MED 106 and BIO 103, which are offered online. There is a \$33 Lab Fee for BIO 211 and BIO 212.
5. **Total Year:** *See below.*

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	\$0	\$0	\$0	\$0	\$0
2. Tuition/Fee Revenue (c + g below)	\$25,344.00	\$29,868.00	\$38,437.00	\$47,600.00	\$55,044.00
a. Number of F/T Students	3	3	4	5	6
b. Annual Tuition/Fee Rate	\$3,968.00	\$4,061.00	\$4,123.00	\$4,216.00	\$4,309.00
c. Total F/T Revenue (a x b)	\$11,904.00	\$12,183.00	\$16,492.00	\$21,080.00	\$25,854.00
d. Number of P/T Students	7	9	11	13	14
e. Credit Hour Rate	\$128.00	\$131.00	\$133.00	\$136.00	\$139.00
f. Annualized Credit Hour Rate	\$1,920.00	\$1,965.00	\$1,995.00	\$2,040.00	\$2,085.00
g. Total P/T Revenue (d x e x f)	\$13,440.00	\$17,685.00	\$21,945.00	\$26,520.00	\$29,190.00
3. Grants, Contracts & Other external sources	\$0	\$0	\$0	\$0	\$0
4. Other Sources	\$7,708.00	\$7,862.16	\$8,019.40	\$8,179.79	\$8,343.39

⁵ Other sources: Consolidated Fee: Helps cover the cost of the Academic Support Center, student activities, technology, and general expenses of the college. This fee also covers use of the physical education facilities and equipment which all students have access to.

⁶ Other sources: Capital Improvement Fee: Supplements county funds for facility improvements and equipment upgrades that do not meet the threshold for State funding

⁷Other sources: Registration Fee: Defrays cost of clerical support and supplies for registration processing.

TOTAL (Add 1 – 4)	\$33,052.00	\$37,730.16	\$46,456.40	\$55,779.79	\$63,387.39
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Chesapeake College expects that this program will enroll approximately 10 students in its first year, with enrollment growing steadily after that.

TABLE 2: PROGRAM EXPENDITURES AND NARRATIVE RATIONALE

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	\$8,028	\$8,163	\$8,301	\$8,442	\$8,585
a. Number of FTE	0.10	0.10	0.10	0.10	0.10
b. Total Salary	\$6,500	\$6,598	\$6,696	\$6,797	\$6,899
c. Total Benefits	\$1,528	\$1,566	\$1,605	\$1,645	\$1,686
2. Admin. Staff (b + c below)	\$0	\$0	\$0	\$0	\$0
a. Number of 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. Number of FTE	\$0	\$0	\$0	\$0	\$0
b. Total Salary	\$0	\$0	\$0	\$0	\$0
c. Total Benefits	\$0	\$0	\$0	\$0	\$0
4. Technical Support & 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
TOTAL (Add 1 – 7)	\$8,028	\$8,163	\$8,301	\$8,442	\$8,585

The program will be implemented with existing administrative staff and campus resources, requiring no new expenses for personnel. Campus resources are funded through the College’s general operating budget each year. Because the courses required for this program are all currently also required for other programs, we estimate that .1 FTE of a faculty member’s time will be required to administer this program.

Salaries are forecasted to increase 1.5% each year, while health benefits are forecasted to increase 2.5% each year. Library resources and equipment are budgeted within the general operating budget on an ongoing basis.

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

The college uses a five-year internal program review process for all of its courses and programs. Additionally, all courses are reviewed annually with student opinion surveys.

Faculty developed and approved assessment plans are implemented to monitor student mastery of all identified course and program goals and student learning outcomes.

N. Consistency with the state’s minority student achievement goals (as outlined in COMAR 13B.02.04.05):

Chesapeake College will use its ongoing outreach strategies to feeder high schools and to communities with high concentrations of minority populations. The College has a strong dual enrollment program which will be used to encourage early decisions about career goals and career exploration. Also the college, working in cooperation with the local county schools, has initiatives such as grow your own programs, community mentors, and new financial incentives, to recruit and retain more minority students. The college has an aggressive “early alert” system as part of its student retention initiatives.

O. Relationship to low productivity programs identified by the commission:

This program is not related to low productivity programs identified by the Commission.

P. Adequacy of distance education programs (as outlined in COMAR 13B.02.03.22):

Chesapeake College follows C-RAC guidelines for distance education.