

August 4, 2020

Dr. James D. Fielder Secretary of Higher Education Maryland Higher Education Commission 6 N. Liberty Street Baltimore, MD 21201

Dear Dr. Fielder:

Enclosed for the Commission's review is a proposal for a new lower division certificate offered by Cecil College:

# LDC Health Sciences HEGIS Code 1201.00; CIP Code 51.0000

We have enclosed a check for \$850 to cover the Commission's fee for this review.

Should you have any questions or require additional information, please contact Dr. Colleen Flewelling, Associate Dean for Academic Assessment and Development, at 443-674-1948 or cflewelling@cecil.edu.

Sincerely,

General Origer

Christy Dryer, DNP Vice President of Academic Programs

# Academic Programs

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

Institution Submitting Proposal

# Each <u>action</u> 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<br>Submitted:        | Yes<br>No      | Payment<br>Type: | R*STARS<br>Check                            | Payment<br>Amount:    | Date<br>Submitte | ed:                   |  |
|------------------------------|----------------|------------------|---|-----------------------|------------------|-----------------------|--|
| Department P                 | roposing       | Program          |   |                       |                  |                       |  |
| Degree Level                 | and Deg        | ree Type         |   |                       |                  |                       |  |
| Title of Propo               | sed Prog       | ram              |   |                       |                  |                       |  |
| Total Number                 | r of Cred      | its              |   |                       |                  |                       |  |
| Suggested Co                 | des            |                  | HEGIS:                                      |                       | CIP:             |                       |  |
| Program Mod                  | ality          |                  | On  | -campus               | Distance Edu     | cation (fully online) |  |
| Program Reso                 | ources         |                  | Using Existing Resources Requiring New Reso |                       | w Resources      |                       |  |
| Projected Imp                | lementat       | ion Date         | Fall  | Spring                | Summer           | Year:                 |  |
| Provide Link<br>Recent Acade |                | ılog             | URL:  |                       |                  |                       |  |
|                              |                |                  | Name:                                       |                       |                  |                       |  |
| Due ferme 1 Com              | 4 4 <b>6</b> 4 | h'a Duana 1      | Title:                                      |                       |                  |                       |  |
| Preferred Con                | tact for t     | nis Proposal     | Phone:                                      |                       |                  |                       |  |
|                              |                |                  | Email:                                      |                       |                  |                       |  |
|                              |                |                  | Type Name:                                  |                       |                  |                       |  |
| President/Chief Executive    |                | Signature: 7     | Nary Way Bol                                | lt                    | Date:            |                       |  |
|                              |                |                  |   | val/Endorsement by Go |                  |                       |  |

Revised 3/2019

# CECIL COLLEGE NEW PROGRAM PROPOSAL LCD HEALTH SCIENCES HEGIS 1201.00 CIP 51.0000

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

Cecil College's lower division certificate in Health Sciences is designed to provide the basis for further study in the health sciences field. The certificate provides a course of study designed to meet the needs of students who plan to study and transfer to a college or a university that grants an associate or baccalaureate degree in various areas of Health Sciences.

This program has been designed in collaboration with other Maryland community colleges 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 one institution, followed by a second year in a specialized program, such as respiratory therapy, at another institution.

Thus, this program directly supports Cecil College's mission to provide a supportive learning environment to students as they build the skills and knowledge to achieve academic success, prepare to transfer, and enter the workforce.

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

As shown in Section C below, Maryland expects to see a large increase in the number of healthcare related positions over the next ten years. The Health Sciences certificate program is designed to allow students from Cecil County 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, supporting goal 2 (Success) of the Maryland State Plan for Education.

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

A health science certificate begins a student's preparation for several fields in health sciences. Examples of these fields include respiratory therapists, surgical technologists, nuclear medical technologists, and speech-language pathologists. Maryland's Department of Labor projects an increase from 2016-2026 in the number of openings for these types of positions.<sup>1</sup>

| Field                 | 2016-2026 Percent Change in openings in<br>Maryland |
|-----------------------|---|
| Respiratory Therapist | +10.0%  |

<sup>&</sup>lt;sup>1</sup> http://dllr.maryland.gov/lmi/iandoproj/maryland.shtml

| Surgical Technologist        | +15.8% |
|------------------------------|--------|
| Nuclear medical technologist | +15.1% |
| Speech language pathologist  | +14.9% |

# D. Reasonableness of program duplication:

A search of the Maryland Higher Education Commission's Academic Program Inventory database reveals no other certificate programs in Health sciences, and only one Associate degree program in health sciences in Maryland.

| Institution                           | Program Name  | Degree<br>Offered |
|---------------------------------------|---------------|-------------------|
| Community College of Baltimore County | Allied Health | Associate         |

Because this program is located more than 50 miles from Cecil College's campus, offering this program at Cecil College will allow students in Cecil County a more accessible and affordable option to study nearby their residence.

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

We anticipate there will be no impact on the implementation or maintenance of high-demand programs at HBI's.

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

Both Coppin State University and the University of Maryland Eastern Shore offer bachelor's degree programs in health sciences fields. Because Cecil's certificate program in Health Sciences is designed as a transfer program, graduates could choose to attend any of these institutions.

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

The following information on degree requirements, learning outcomes, and course descriptions will be made available to students in the college catalog, which is available on the Cecil College website. Students may also consult with advisors and faculty members to learn about these programs.

Information about new programs is clearly and accurately represented in advertising, recruiting, and admissions materials. The College's Academic Programs unit widely shares information about the requirements for new or changed degrees in MHEC-approved programs. The Admissions and Marketing departments use this information to update application and inquiry forms, internal recruitment products, and other marketing materials.

Faculty at Cecil College design all courses and programs, which are then presented to the Academic Affairs Committee, a committee comprised primarily of faculty, for approval.

| Course   | Courses  | Credits |
|----------|--|---------|
| Code     | (30 Credits)   |         |
| ARTS/HUM | Arts and Humanities Elective   | 3       |
| BIO 208  | Anatomy and Physiology I   | 3       |
| BIO 218  | Anatomy and Physiology I Lab   | 1       |
| BIO 209  | Anatomy and Physiology II  | 3       |
| BIO 219  | Anatomy and Physiology II Lab  | 1       |
| EGL 101  | College Composition  | 3       |
| MAT      | Math Elective (Select from MAT 121, 127 or higher-level math course) | 4       |
| SOC SCI  | Behavioral and Social Science Elective*                              | 3       |
| HCD 120  | Medical Terminology  | 3       |
| ELECT    | Electives  | 6       |

The proposed certificate in Health Sciences requires the following courses:

\*Sociology or Psychology

Total Credits: 30

#### **COURSE DESCRIPTIONS**

**BIO208 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. Credits: 3 Prerequisite: MAT093 or MAT097 Corequisites: BIO218, EGL101

**BIO209 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. Credits: 3 Prerequisites: BIO208, BIO218, MAT093 or MAT097 Corequisite: BIO219

**BIO218 Human Anatomy and Physiology I Lab** reinforces the topics covered in the lecture course BIO208 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. Credits: 1 Corequisite: BIO208

**BIO219 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. Credits: 1 Prerequisite: BIO218 Corequisite: BIO209

**EGL101 College 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 selfevaluation, 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 a minimum of 7,500 words, approximately 5,000 words of which are finished formal writing in four-five assignments, including a 2,000-word persuasive research essay. 3 credits. Pre-requisites: C or better in COL 081 and EGL 093 or equivalent skills assessment.

**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. Credits: 3 Corequisite(s): EGL 090 or EGL 091

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

- Demonstrate the entry level knowledge, and written and verbal communication skills and abilities associated with many disciplines within the field of health care
- Be prepared to transfer to an entry-level health care discipline associate degree program

Cecil College does not contract with another institution or non-collegiate organization in providing this program.

# H. Adequacy of articulation

Several community colleges have collaborated on the requirements for the certificate to facilitate easy transfer to associate degree health care programs in other community colleges.

| Faculty Member   | Credentials  | Status    | Courses Taught   |
|--|--|-----------|--|
| Melissa Burke,<br>Assistant Professor<br>of Biology          | M.A.T. University of<br>Maryland (Secondary<br>Education of Biology)                   | Full-time | BIO 208 Anatomy & Physiology I<br>BIO 218 Anatomy & Physiology I Lab   |
| Christopher<br>Gaspare, Assistant<br>Professor of<br>English | M.A. Washington<br>College (English)   | Full-time | EGL 101 College Composition  |
| Rebecca<br>McPherson   | Ph.D. University of<br>the Sciences in<br>Philadelphia (Cell and<br>Molecular Biology) | Part-Time | BIO 209 Anatomy & Physiology II<br>BIO 219 Anatomy & Physiology II Lab |
| Kim Robell   | M.S. West Chester<br>University (Education<br>– Health Focus)                          | Part-time | HCD 120 Medical Terminology  |

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

Faculty have several opportunities for ongoing professional development in pedagogy. Cecil College's instructional technologist offers regular workshops on using technologies to improve both face-to-face

and online teaching. In addition, each semester she offers the Quality Matters-based Professional Development for Online Teaching (PDOT) course on best practices in online teaching. The College also funds faculty participation in academic conferences, including conferences focused on pedagogical topics. In 2018-19, Cecil College also piloted the Faculty Guild professional development program with selected full-time and part-time faculty; six additional faculty members participated in this program in 2019-20.

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

Cecil College's Cecil County Veterans Memorial Library is a member of Maryland Digital Library (MDL) and the Maryland Community College Library Consortium (MCCLC). CCVM Library has reciprocal borrowing privileges with other community college libraries within the state of Maryland. CCVM Library also subscribes to Inter-Library Loan, where students and faculty can request physical books, eBooks, and scholarly articles from institutions nationwide.

Students can make an appointment to meet one-on-one or in groups with the Instructional Librarian for assistance with the following: narrowing down a research topic, finding articles in the library databases, finding books and eBooks, evaluating resources, and crafting citations. The Instructional Librarian also visits classes upon request to teach library information sessions tailored to class projects and curricula.

The library subscribes to approximately 84 online databases that cover the majority of disciplines offered at Cecil College. The following databases in particular may help most with varying aspects of the Health Sciences Certificate: Academic Search Complete, ProQuest Arts and Humanities, Humanities International Complete, ProQuest Biology, ProQuest Science, ProQuest Health & Medical, ProQuest Health Management, ProQuest Health Source Consumer and Nursing/Academic Editions, ProQuest Public Health, ProQuest Research Library, ProQuest Career and Technical Communication, ProQuest Nursing and Allied Health, Nursing Reference Center, ProQuest Psychology, ProQuest Sociology, PubMed, GreenFILE, CINAHL, MEDLINE, Joanna Briggs Institute, and Ovid.

CCVM Library offers both a 20,000 volume physical book collection, and 190,000 volume online eBook collection for student use with texts directly related to Health Sciences Certificate courses, as well as a list of open resources on its Open Educational Resources (OER) LibGuide that both students and faculty can utilize. The library also has a number of program required textbooks on reserve for students to use in the library. CCVM Library staff welcomes and encourages faculty to submit requests for books, multi-media resources, and databases to support student projects and teacher instruction throughout the academic year.

# K. 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 College's Anatomy and Physiology laboratories include several quality models, real bone sets, and torso mannequins. Students work in small groups to discuss their models as they take them apart and put

them together. Microscopes allow students to learn to use the devices and to see material on a scale that reinforces materials presented through lecture. A computer-camera setup is available so the instructor can use the same set of slides and point out details students may not have noticed. Students in these classes are also asked to dissect heart and brains in pairs to reinforce sense of different types of fabrics (tissues) that the body uses.

The 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 smart 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 and technology resource staff, during regular lab hours, to assist students. The 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.

## L. 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.

|    | 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)        | \$29,875 | \$35,921 | \$46,680 | \$58,051 | \$67,249 |
| a. | Number of F/T students                   | 3        | 3        | 4        | 5        | 6        |
| b. | Annualized Tuition/Fee Rate <sup>2</sup> | \$4.125  | \$4,249  | \$4,376  | \$4,507  | \$4,643  |
| с. | Total F/T Revenue (a x b)                | \$12,375 | \$12,746 | \$17,505 | \$22,537 | \$27,856 |
| d. | Number of P/T students                   | 7        | 9        | 11       | 13       | 14       |
| e. | Credit Hour Rate                         | \$125    | \$129    | \$133    | \$137    | \$141    |

## **TABLE 1: RESOURCES**

<sup>&</sup>lt;sup>2</sup> Assumes Cecil County resident taking 35 credits per year.

| f. | Annualized Credit Hour Rate <sup>3</sup>      | \$2,500  | \$2,575  | \$2,652  | \$2,732  | \$2,814  |
|----|---|----------|----------|----------|----------|----------|
| g. | Total P/T Revenue (d x e x f)                 | \$17,500 | \$23,175 | \$29,175 | \$35,514 | \$39,393 |
| 3. | Grants, Contracts & other External<br>Sources | \$0      | \$0      | \$0      | \$0      | \$0      |
| 4. | Other Sources                                 | \$14,370 | \$15,125 | \$16,312 | \$17,094 | \$19,530 |
|    | Total (add 1-4)                               | \$33,287 | \$39,953 | \$51,746 | \$64,151 | \$74,073 |

Cecil College expects that this program will enroll approximately 10 students in its first year, with enrollment growing steadily after that. The projections above reflect the fact that approximately 30% of Cecil students attend full-time.

We are projecting tuition increases of 2% each year. Other sources of revenue include Student Development fees (\$8/credit) and Registration fees (\$75/semester). On average, full-time Cecil students take 33 credits per year; part-time students take 20 credits per year on average.

|    | Expenditure Categories         | Year 1  | Year 2  | Year 3  | Year 4  | Year 5  |
|----|--------------------------------|---------|---------|---------|---------|---------|
| 1. | Faculty (b + c below)          | \$5,937 | \$6,034 | \$6,124 | \$6,215 | \$6,308 |
|    |                                |         |         |         |         |         |
| a. | # FTE                          | 0.1     | 0.1     | 0.1     | 0.1     | 0.1     |
|    |                                |         |         |         |         |         |
| b. | Total Salary                   | \$5,150 | \$5,227 | \$5,306 | \$5,385 | \$5,466 |
| с. | Total Benefits                 | \$787   | \$807   | \$818   | \$830   | \$842   |
| 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     |
| с. | 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     |
| с. | 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     |
|    | Total (Add 1-7)                | \$5,937 | \$6,034 | \$6,124 | \$6,216 | \$6,308 |

# TABLE 2: EXPENDITURES

This program will be implemented with existing faculty resources and administrative staff, so there are no new expenses for personnel. Because the courses required for this program are all currently also required

<sup>&</sup>lt;sup>3</sup> Assumes Cecil County resident taking 20 credits per year.

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).

Faculty members are evaluated 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. In addition, faculty members are assessed in the classroom by the appropriate dean or designee each semester for their first year at Cecil College, annually for the next two years, and every three years thereafter. Student course evaluations are an important component in the College's process of monitoring student satisfaction.

All faculty members are contractually obligated to complete an annual report that includes assessment results. Faculty satisfaction is monitored through the Great Colleges to Work For Survey, which is administered every two years.

The College's Assessment Plan requires that each learning goal for an academic program be reviewed at least once every four years. These assessments are used to make improvements to the program. In addition, the College has an established Comprehensive Program Review process through which programs evaluate their strengths, opportunities, and cost effectiveness every eight years.

Student retention rates are regularly monitored by the division dean.

**N.** 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 embraces the value of diversity, and strives to continuously foster inclusiveness, and has identified "Graduates will illustrate knowledge of …the Diversity of Human Cultures" as one of the institution's six General Education learning goals.

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

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

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

Cecil College is a member of NC-SARA and follows C-RAC guidelines for distance education.