



June 4, 2019

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Dear Secretary Fielder:

Associate Director of Collegiate Affairs Karen King-Sheridan requested that UMBC revise and resubmit two new program proposals. The two revised proposals--for a UDC in Social Dimensions of Health and an LDC in Allied Health Preparatory Studies--are attached for review.

Each certificate was designed to serve students already enrolled at UMBC, and neither is expected to generate new undergraduate enrollments. The LDC gives students an affiliation and awards them a credential for work they are already pursuing at UMBC, in most cases prior to subsequent transfer to an allied health program at another institution. The UDC gives students from a variety of majors the opportunity to gain knowledge and develop marketable skills in a specialized dimension of the health field, in preparation for their career or graduate studies. For each proposed new program, faculty are already teaching the courses in the curriculum, and there is capacity for additional students. Also, for each program UMBC is reallocating the small amount of additional funding needed to launch and operate the new program successfully.

Ms. King-Sheridan emphasized the need for UMBC to provide additional information on resources--in the table and the narrative--for each proposal, including, per COMAR13B.02.03.14 **Finances**, "sufficient detail to permit the Secretary to make a judgment on the adequacy of resources." To that end, each proposal now includes a conservative estimate on enrollment projections. In addition, we made another good faith effort to identify any possible increase in tuition and fee revenue for UMBC that might accrue from implementation of each certificate. However, even using the very conservative enrollment projections we developed, the resulting table of resources painted a false picture of UMBC generating additional tuition revenue by offering these two new certificates, when we have no reason to believe that will happen in reality, because the students who will pursue these certificates are already enrolled and paying tuition at UMBC. Therefore the budget tables in the attached proposal show no added tuition and fee revenue being generated by these two certificates. UMBC has done a thorough assessment of the resources needed to offer these programs. We affirm that the resources needed by the programs are reflected in the reallocated funds included in the revised budget tables and the revised narratives for each attached proposal, and that these budgets and their accompanying narratives provide you with "sufficient detail to permit the Secretary to make a judgment on the adequacy of resources."

Thank you very much for your careful review of these proposals.

Sincerely,

Freeman A. Hrabowski, III

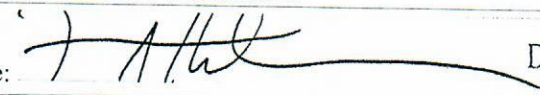
President

cc: Dr. Antonio Moreira



## Cover Sheet for In-State Institutions

### New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	UMBC		
Each <u>action</u> below requires a separate proposal and cover sheet.			
<input type="radio"/> New Academic Program <input type="radio"/> New Area of Concentration <input type="radio"/> New Degree Level Approval <input checked="" type="radio"/> New Stand-Alone Certificate <input type="radio"/> Off Campus Program	<input type="radio"/> Substantial Change to a Degree Program <input type="radio"/> Substantial Change to an Area of Concentration <input type="radio"/> Substantial Change to a Certificate Program <input type="radio"/> Cooperative Degree Program <input type="radio"/> Offer Program at Regional Higher Education Center		
Payment <input type="radio"/> Yes	Payment <input checked="" type="radio"/> R*STARS		
Submitted: <input checked="" type="radio"/> No	Type: <input type="radio"/> Check	Date Submitted:	
Department Proposing Program	College of Natural and Mathematical Sciences		
Degree Level and Degree Type	Lower Division Certificate		
Title of Proposed Program	Allied Health Preparatory Studies		
Total Number of Credits	37		
Suggested Codes	HEGIS:	CIP: 51.1199	
Program Modality	<input checked="" type="radio"/> On-campus <input type="radio"/> Distance Education (fully online) <input type="radio"/> Both		
Program Resources	<input checked="" type="radio"/> Using Existing Resources <input type="radio"/> Requiring New Resources		
Projected Implementation Date	<input checked="" type="radio"/> Fall <input type="radio"/> Spring <input type="radio"/> Summer      Year: 2019		
Provide Link to Most Recent Academic Catalog	URL: <a href="http://catalog.umbc.edu/">http://catalog.umbc.edu/</a>		
Preferred Contact for this Proposal	Name: Beth Wells		
	Assistant Vice Provost for Academic Affairs		
	Phone: (410) 455-8907		
	Email: <a href="mailto:bwells@umbc.edu">bwells@umbc.edu</a>		
President/Chief Executive	Type Name: Freeman A. Hrabowski III		
	Signature:  Date: 2/4/19		
Date of Approval/Endorsement by Governing Board:			

## **Lower Division Certificate in Allied Health Preparatory Studies**

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

UMBC seeks approval to offer a new Lower Division Certificate in Allied Health Preparatory Studies. The Lower Division Certificate in Allied Health Preparatory Studies aims to provide current UMBC students with the opportunity to receive formal recognition for their completion of key courses required for entrance into a variety of allied health programs.

Allied health practitioners as defined by the American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA) are "a large cluster of health care related professions and personnel whose functions include assisting, facilitating, or complementing the work of physicians and other specialists in the health care system". Specifically, the proposed program aims to prepare students for careers in allied health including Nursing, Medical Technology, Pharmacy, Dental Hygiene, Physical/Occupational Therapy, and Physician Assistant. The LDC in Allied Health Preparatory Studies will provide a local response to the growing need for allied health professional projected by the Bureau of Labor Statistics, due to increasing rates of chronic health conditions and the demand for healthcare services from the baby-boom population who are living longer lives.

UMBC's mission statement describes the institution as one that integrates teaching and research to benefit Maryland citizens, and explicitly mentions "economic development of the State and the region through entrepreneurial initiatives, workforce training, (and) K- 1 6 partnerships" (<http://about.umbc.edu/>). The LDC in Allied Health Preparatory Studies advances UMBC's commitment to STEM education, and workforce development. The program supports UMBC's strategic goals by helping the institution to "provide a distinctive undergraduate education" and continuing its dedication "to social responsibility and lifelong learning." Indeed even during their prospective interactions with JIVIBC at admissions events, students often question what kind of official program they will be pursuing as allied health students at UMBC. This "lack of identity" dilemma is a source of confusion for students (and parents) as they navigate learning about UMBC and will be alleviated by the Lower Division Certificate in Allied Health Preparatory Studies which offers a tangible academic affiliation.

### **B. Critical and compelling regional or Statewide need as identified in the State plan**

The proposed LDC in Allied Health Preparatory Studies helps to attain the three primary goals of "access," "success" and "innovation" outlined in the Maryland State Plan for Postsecondary Education (2017-2021). Specifically, the LDC will target strategy 6 under the success goals - "Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements" (p. 4). A significant percentage of UMBC's allied health population is not pursuing a UMBC baccalaureate degree and thus is not accounted for by an academic department. These students typically transfer to professional school at the end of their final year of prerequisite completion. Indeed, despite their successful completion of significant coursework, allied health students do not currently receive any official acknowledgment by the University for their specialized academic attainment. Thus, a portion of UMBC's more accomplished students transfer out from campus every year to complete allied health programs without any formal recognition (for them or for UMBC) of their academic

accomplishments. The proposed program packages existing courses allied health students are already taking into a certificate. UMBC has no historical data on which to project how many of the students who are eligible to enroll in the new certificate will do so. As a result, the enrollment estimates in Table 1 are conservative.

The LDC program will also help to accomplish the mission set by USM in The USM Strategic Plan (2010-2020) to "meet the diverse education, healthcare, service and workforce training needs of our citizens" as well as "promote the quality of life and the advancement of knowledge in, and the economic development of our state" (p. 9). The Strategic Plan outlines initiatives that have already been developed by USM, including "increasing access to high-demand degree programs through expansion or enhancement of ...targeted, high-need programs at our traditional USM institutions, like pharmacy and Nursing", but notes that these initiatives will need to be continually expanded for the coming decade to meet the goal of having at least 55 percent of Maryland's adult population earn a college degree (associate's or four-year baccalaureate) (p. 10-11). The Allied Health Preparatory Studies LDC provides a rigorous preparatory program that will prepare students and encourage them in their pursuit of additional academic work that will lead to degrees qualifying them for high demand allied health employment.

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

The Bureau of Labor Statistics notes that employment of healthcare workers is projected to grow 18% from 2016-2026, a much faster rate than the average for all other occupations. The healthcare industry is expected to add about 2.4 million new jobs due to a number of reasons. Including the increase in elderly population, stronger emphasis on preventative health care, and increase in chronic health conditions such as diabetes and obesity (<https://www.bls.gov/ooh/healthcare/home.htm>). Many of these healthcare occupations would be grouped into the allied health field such as Dental Hygiene, Medical and Clinical Laboratory Technology, Pharmacy, Physical and Occupational Therapy, Registered Nursing, and Physician Assistant.

At the local, state, and national level all of these occupations are projected to show growth in the next several years. Washington, DC and Baltimore, MD demonstrated an increase in employment in the areas of education and health services from July 2017 to July 2018 by 2.9 % and 1.1% respectively. Maryland estimates an increase in job growth of at least 7.92% for the aforementioned allied health professions, and national projections list an increase in growth of at least 5.6% in these professions.

([https://www.bls.gov/regions/midatlantic/summary/blssummary\\_washington.pdf](https://www.bls.gov/regions/midatlantic/summary/blssummary_washington.pdf)

[https://www.bls.gov/regions/midatlantic/summary/blssummary\\_baltimore.pdf](https://www.bls.gov/regions/midatlantic/summary/blssummary_baltimore.pdf)). The Maryland Department of Labor, Licensing, and Regulation projects an increase in job opportunities from 2016 to 2026 by 11.45% for Registered Nurses, 25.27% for Physical Therapists, 22.2% for Physician Assistants, 30.52% for Dental Hygienists, 7.92% for Pharmacists, and 12.41 % and 13.66% for Medical and Clinical Laboratory Technologists/Technicians, respectively

(<https://www.dlhr.state.md.us/lmi/iandoproj/maryland.shtml>).

The proposed LDC will help to support the demonstrated growing demand for workers in the allied health field by preparing students to transition into baccalaureate degree programs or specialized allied health programs that will lead to job opportunities in the healthcare field.

#### **D. Reasonableness of program duplication**

Alleghany College of Maryland offers a Lower Division Certificate in Medical Lab Technology (Biotechnology). and Anne Arundel Community College and Community College of Baltimore County offer a Physician Assistant Lower Division Certificate. However, all of these programs are offered at two year colleges and with the demonstrated significant need for allied health professionals in the next five to ten years, a multitude of programs will be needed to successfully meet the workforce demand.

#### **E. Relevance to implementation or maintenance of high-demand programs at historically Black Institutions (HBIs)**

None of Maryland's Historically Black Institutions (HBIs) offer Lower Division Certificate Programs in any allied health related disciplines. Several the HBIs offer baccalaureate degree programs in allied health fields that UMBC students who complete the LDC could potentially transfer into, as described in Section F. Because UMBC does not plan to recruit additional students to this program, it anticipates that the proposed LDC in Allied Health Preparatory Studies will have no adverse impact on enrollment at any HBI. The proposed program packages existing courses that current students are already taking into a certificate that formally recognizes their accomplishments at UMBC.

#### **F. Relevance to the support of uniqueness and institutional identities of HBI's**

The Lower Division Certificate in Allied Health Preparatory Studies aims to provide current UMBC students with the opportunity to receive formal recognition for their completion of existing key courses required for entrance into a variety of allied health programs. Approximately 40 percent of UMBCs allied health population is not pursuing a UMBC baccalaureate degree and is only completing the first two years of foundational coursework necessary to gain entry into professional school or transfer to another four year institution to obtain a baccalaureate degree. Students who complete the Allied Health Preparatory Studies LDC could potentially have the oppmiunity to transfer to one of the four HBI' s that offer baccalaureate degree programs in allied health fields. Examples of these degree programs at HBI's are listed below.

- Bowie State University Nursing B.S.N.
- Coppin State University B.S.N.
- University of Èv Maryland Eastern Shore Physician Assistant B.S.
- University of Maryland Eastern Shore Physical Therapv B.S.
- University of Maryland Eastern Shore Medical Technology B.S.
- Morgan State University Nursing B.S.N.
- Morgan State University Medical Technology B.S

## **G. Adequacy of curriculum design and delivery to related learning outcomes**

Please see Appendix A for a list of the existing courses that comprise the LDC in Allied Health Preparatory Studies, as well as an outline of the full proposed curriculum.

The goal of UMBC's proposed LDC in Allied Health Preparatory Studies is to provide current UMBC students pursuing these required courses with the opportunity to receive formal recognition for their completion of key courses required for entrance into a variety of allied health programs.

The curriculum of the LDC includes a total of between 35 and 37 credits (depending on which pathway is taken for the required chemistry and biology coursework) consisting of courses currently offered or approved at UMBC. A total of between 26 and 28 credit hours are dedicated to instruction in biology, chemistry, and statistics courses relevant to the allied health field, as well as an additional six credits of laboratory course instruction. The curriculum also incorporates nine credits of general education requirements: one course in the social sciences, one course in the arts and humanities, and an English composition course. The proposed program:

- Provides students with a broad knowledge of theories and concepts in the natural and mathematical sciences.
- Provides students with the preparation and skills needed to acquire a working knowledge of the human body including structure, function and basic pathologies.
- Provides students with the methods that underlie the search for knowledge in the arts, humanities and social sciences.
- Enables students to use writing processes to explore, think and learn and to write effectively for various tasks and audiences.
- Prepares students to enter various allied health programs - specifically in Nursing, Medical Technology, Pharmacy, Dental Hygiene, Physician Assistant, and Occupational/Physical Therapy.

Two changes are being made in the courses included in the curriculum for the LDC. A curriculum redesign is being planned for BIOL 275 (microbiology), which will be dedicated solely to servicing allied health students, with the content more relevant to their future occupations. BIOL 100L (Concepts in Experimental Biology) has not been offered for several years and will be offered as part of the LDC curriculum. The reimplementation of BIOL 100L will help Dental Hygiene and Medical Laboratory Technology students, who currently complete their introductory biology laboratory course at another institution.

## **H. Adequacy of any articulation**

No articulation agreement related to the proposal.

### **I. Adequacy of faculty resources**

The College of Natural and Mathematical Sciences (CNMS) at UMBC will administer the Lower Division Certificate in Allied Health Preparatory Studies. The proposed program will be coordinated by the CNMS Research Coordinator with support from the Assistant Director of Allied Health Programs positioned in the UMBC Office for Academic and Pre-Professional Advising.

See Appendix B for a table of the LDC in Allied Health Preparatory Studies program faculty. All of the courses in the proposed LDC are currently being taught by UMBC full-time faculty, with the exception of BIOL 100L, for which a part-time faculty member will be hired. BIOL 275 will transition to being taught by a part-time faculty member.

### **J. Adequacy of library resources**

According to Patrick Dawson, Director of the Albin O. Kuhn Library "The President assures that institutional facilities meet new program needs." Since the program is a packaging of existing courses for students already attending UMBC, no additional funds for the library are needed in this certificate.

### **K. Adequacy of physical facilities, infrastructure and instructional equipment**

The LDC in Allied Health Preparatory Studies will be based on the main UMBC campus in Baltimore, MD. The majority of the classes that will be offered under the LDC are already currently offered at UMBC and have adequate allocated classroom space in the academic buildings. A new Integrated Life Sciences Building is also under construction at UMBC and could provide classroom/laboratory space for courses offered in the LDC. UMBC's new 130,000 GSF Interdisciplinary Life Sciences Building (ILSB) will provide 70,000 net assignable square feet of flexible and adaptable research and education spaces to support on-going and future life sciences programs.

### **L. Adequacy of financial resources with documentation**

The comprehensive project budget is provided in Appendix C. With regard to revenue, the project budget for the LDC program is based on the program's being designed for students who are already enrolled, already paying tuition, and already pursuing these courses at UMBC. Estimates of the number of students who will choose to earn this new certificate credential are conservative, because no historical data are available for making projections. Regardless of how many students choose to earn the certificate credential, there will be no added tuition or fee revenue for UMBC that can be attributed to this new certificate, so none is reflected in the budget.

The source of the funds to be expended for the program is discretionary funds from the dean's office in the College of Natural and Mathematical Sciences at UMBC. These funds have been specially allocated to this program because there will be no added revenue earned from the certificate to cover the minimal added costs entailed in offering it. The program budget establishes faculty support for two part-time instructors to teach a microbiology lecture course

(BIOL 275) and an introductory biology course (BIOL 100L), two core courses in the certificate curriculum. BIOL 275 will be undergoing a curriculum redesign and therefore expenses for a part-time instructor dedicated specifically to this course have been included. A part-time instructor will be hired to teach BIOL 100L. Operating expenditures focus on academic support, administrative support (e.g., marketing), and initial start-up equipment funding for the reimplementation of BIOL 100L.

#### **M. Adequacy of provisions for evaluation of program consistent with Regulation .15 in COMAR**

Program and Institutional Level Evaluation: The 2009 UMBC Assessment Plan, which delineates roles and responsibilities for learning assessment, requires that academic programs collect data and provide assessment reports to their respective College Deans every two years. The Deans summarize findings in a report that is shared with the Council of Deans. Representatives of the General Education Committee (GEC) join this meeting with the purpose of determining how well the University is assessing and achieving its institutional-level student learning outcomes. The GEC develops a report that captures highlights and proposes recommendations for improvement. The University Assessment Committee, which includes stakeholders across the University, reviews these reports, notes achievements, and makes recommendations for moving forward.

Program-specific evaluation: The LDC program, which will be under the purview of the CNMS, will undergo a biennial assessment that includes review of program learning goals, assessment measures, and student learning outcomes. The results of the program assessment and review will be used to develop strategies for improving the education of LDC in Allied Health Preparatory Studies majors. An Advisory Committee, comprised of faculty associated with core courses in the LDC program and members of the advising community, will lead the assessment efforts under the procedures mandated by the CNMS. Additionally, a representative from the LDC program will serve with other CNMS department representatives on the CNMS Student Learning Assessment Advisory Committee (SLAAC). SLAAC members create templates for general education course and program assessment in the CNMS that are used by each department to create individualized but uniform assessment plans to promote continuous improvement.

SLAAC members also serve as assessment liaisons to their departments/programs and help facilitate best practices and the use of the CNMS SLA templates to complete plans. Committee members also facilitate the timely completion of the assessment reports to fulfill the approved plans for the assessment of departmental general education courses and overall program assessment and serve as the primary contacts between the Dean's Office and the department/program to address questions and/or issues involving the submitted assessment plans. It is the intent of the College to conduct exit interviews with students who complete the certificate program as part of evaluating the LDC program.

UMBC will continue to employ assessment tools and methods in evaluating student outcomes, courses, and faculty consistent with COMAR 13B.02.03.15 expectations and with curriculum review procedures established by UMBC.

#### **N. Consistency with the Commission's minority student achievement goals**

UMBC has established a commitment to diversity as one of its core principles for the recruitment and retention of faculty, staff and students. Founded in 1966, UMBC is a selective. Historically diverse, public research university. At UMBC, diversity is defined in its fullest scope, embracing not only racial and ethnic groups and individuals who are or have been underrepresented in higher education, but also including religious affiliation, non-traditional, sexual orientation and gender identity, disability, foreign nationality, non-traditional student status, and other important characteristics. According to UMBC's 2017-2018 Diversity Report, student enrollment reflected a 47.3% minority undergraduate enrollment, including 18.1 % African American. 7.4% Hispanic and 21.5% Asian enrollment (<https://provost.umbc.edu/files/2018/06/UMBC-Diversity-Report2017-2018-06142018-Final.pdf>). The UMBC student population was reported as 45% female and 55% male.

Implementing a Lower Division Certificate in Allied Health Preparatory Studies will provide an opportunity to market allied health majors/disciplines to the diverse student population at UMBC.

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

No relationship to low productivity programs identified by the Commission.

#### **P. If proposing a distance education program, please provide evidence of the Principles of Good Practice**

No distance learning is being proposed for this program.

#### **Appendix A: Adequacy of Curriculum Design and Delivery to Related Learning Outcomes**

<b>Curriculum Requirements</b>	<b>Description</b>	<b>Total Credits</b>
BIOLOGY:  BIOL 101: Concepts of Biology <sup>1</sup>	A broad overview of contemporary biological science designed for non-majors.	3 credits
OR		
BIOL 141: Foundations of Biology: Cells, Energy and Organisms <sup>1</sup>	This course for majors provides a broad overview of contemporary biological concepts.	4 credits
BIOL 100L: Concepts of Experimental Biology	The laboratory exercises are designed to provide the student experience with essential laboratory equipment and techniques.	2 credits

BIOL 251: Human Anatomy and Physiology	The first semester of a two-semester lecture course covering the structure and function of the organs of the human body.	3 credits
BIOL 275: Microbiology	Introductory course describing the fundamental properties of micro-organisms and viruses and their relationships to other life forms.	3 credits
BIOL 275L: Microbiology Laboratory	This laboratory course consists of a series of exercises designed to familiarize the student with microbiological techniques.	2 credits
CHEMISTRY:		
CHEM 101: Principles of Chemistry 1 <sup>2</sup>	An introduction to chemistry for science majors and other students who require a thorough grounding in the principles of chemistry.	4 credits
CHEM 102: Principles of Chemistry 11 <sup>2</sup>	Continuation of CHEM 101.	4 credits
CHEM 102L: Introductory Chemistry Lab 1 <sup>2</sup>	Companion course to CHEM 102. Intended for all students who require two or more years of chemistry.	2 credits
OR		
CHEM 123: Introduction to General Organic and Biochemistry I <sup>2</sup>	A two-semester chemistry course intended for students preparing for health sciences.	4 credits
CHEM 124: Introduction to General Organic and Biochemistry II <sup>2</sup>	Continuation of CHEM 123.	3 credits
CHEM 124L: General Organic and Biochemistry Lab <sup>2</sup>	A companion laboratory course to CHEM 124.	2 credits

STATISTICS:		4 credits
STAT 121: Introduction to Statistics for the Social Sciences <sup>3</sup>	Introduction to statistical methods common to social science applications.	
OR		
STAT 350: Statistics with Applications in the Biological Sciences	An overview of statistical procedures that will be illustrated using data from biology and the health sciences.	4 credits
GENERAL EDUCATION:		
ENGL 100: Composition <sup>4</sup>	A course in critical thinking, reading, and composing, with an emphasis on integrating academic research and documentation.	3 credits
Social Science	Chosen from General Education Program Options.	3 credits
Arts and Humanities	Chosen from General Education Program Options.	3 credits
TOTAL CREDIT HOURS		35 - 37 credits
<sup>1</sup> Students will choose to complete BIOL 101 <b>OR</b> BIOL 141		
<sup>2</sup> Students will choose to complete the CHEM 101, I 02, I 02L sequence <b>OR</b> CHEM 123,124, 124 L sequence		
<sup>3</sup> Students will choose to complete STAT 121 <b>OR</b> STAT 350		
<sup>4</sup> Students will choose to complete ENGL 100 <b>OR</b> equivalent course (ENGL 100A, ENGL 110, ENGL 100H, or ENGL 100P		

#### Appendix B: Adequacy of faculty resources

Faculty Member	Appointment	Terminal Degree	Academic Title/Rank	Status	Courses Taught
Jennifer Hughes	Non-Tenure Track	Ph.D. Phvsiology	Lecturer	Full-time	BIOL 101 BIOL 251
Esther Fleischmann	Non-Tenure Track	Ph.D.. Zoology	Senior Lecturer	Full-time	BIOL 101. BIOL 251

Elizabeth Feeser	Non-Tenure Track	Ph.D., Biochemistry, Cellular and Molecular Biology	Lecturer	Full-time	BIOL 141
Tara Carpenter	Non-Tenure Track	Ph.D., Analytical Chemistry	Senior Lecturer	Full-time	CHEM 101 CHEM 102
Sarah Bass	Non-Tenure Track	Ph.D., Chemistry	Lecturer	time	CHEM 101 CHEM 102
Marie Van Staveren	Non-Tenure Track	Ph.D. Chemical and Materials Physics	Lecturer	Full-time	CHEM 102L
Allison Tracy	Non-Tenure Track	Ph.D., Biochemistry and Molecular Biology	Senior Lecturer	time	CHEM 123, CHEM 124
Frank Tvminski	Non-Tenure Track	B.S., Chemistry/Life Sciences	Laboratory Supervisor	Full-time	CHEM 102b, CHEM 124L
Bonnie Kegan	Non-Tenure Track	M.S., Statistics	Adjunct Faculty	Part-time	STAT 121
William Slowikowski	Non-Tenure Track	M.S. Mathematical Statistics	Adjunct Faculty	Part-time	STAT 121
Thomas Mathew	Tenure-Track	Ph.D. Statistics	Professor	Full-time	STAT 121, STAT 350
Yi Huang	Tenure-Track	Ph.D. Biostatistics	Associate Professor	Full-time	STAT 350
Carol Fitzpatrick	Non-Tenure Track	M.A., English	Senior Lecturer Director. Writing and Rhetoric Division	Full-time	ENGL 100

\*Please note that the instructors listed are the main instructors who have taught the listed courses for the past several semesters. Instructors may differ according to semester. Instructors for the Social Science and Arts and Humanities courses will vary according to the course taken.\*

## Appendix C:

**TABLE 1: RESOURCES**

Resources Category	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated*	56,110	31,610	31,610	31,610	31,610
2. Tuition/Fee Revenue (c + g below)+	0	0	0	0	0
a. # F.T. Students	10	20	30	40	50
b. Annual Tuition/Fee Rate	0	0	0	0	0
c. Annual Full Time Revenue (a x b)	0	0	0	0	0
d. # Part Time Students	0	0	0	0	0
e. Credit Hour Rate	0	0	0	0	0
f. Annual Credit Hours	120	240	360	480	600
g. Total Part Time Revenue (d x e x f)	0	0	0	0	0
3. Grants, Contracts, & Other External Sources	0	0	0	0	0
<b>TOTAL (Add 1 -4)</b>	<b>56,110</b>	<b>31,610</b>	<b>31,610</b>	<b>31,610</b>	<b>31,610</b>
<p>*Funds to cover the expenditures of the LDC programs are being reallocated from the dean's office discretionary funds under the College of Natural and Mathematical Sciences at UMBC. This reallocation is expected to have no impact on existing programs. The reallocation is consistent with UMBC's strategic plan in that the LDC is expected to improve the students' experience and the retention of allied health students at UMBC.</p> <p>+There is no anticipated tuition and fee revenue attributable to this certificate, because the students expected to pursue this credential are existing UMBC students who are already paying tuition and are already enrolled in the courses in this certificate. This certificate is designed specifically for students already attending UMBC, to award them a credential for their work. If students choose to pursue this credential, no added tuition or fee revenue to UMBC will result. This is why we have specially allocated funds from other sources to pay the minimal added costs of offering the certificate.</p>					

**TABLE 2: EXPENDITURES**

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty: (b + c below)*	24,110	24,110	24,110	24,110	24,110
a. #FTE	1.67	1.67	1.67	1.67	1.67

b. Total Salary	24,110	24,110	24,110	24,110	24,110
c. Total Benefits	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	20,000	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	12,500	7,500	7,500	7,500	7,500
8. TOTAL (Add 1-7)	56,610	31,610	31,610	31,610	31,610

\*Faculty expenses account for part-time salary for two instructors. One instructor will be hired to teach BIOL 275 (#FTE 1) and one instructor will be hired to teach BIOL 100L (#FTE = 0.67).

+ Equipment expenses are a one-time cost that will be used to purchase new equipment and instrumentation for the reimplementation of BIOL 100L. This lab has not been offered for several years, so funding will be needed to update equipment and instrumentation.

++ Other Expenses include the cost of consumable products for each section of BIOL 100L and a one-time cost of \$5,000 for marketing supplies for the new program. The cost of consumables will be paid for by the \$50 lab fee that is in effect for this course.