UNIVERSITY SYSTEM of MARYLAND

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Board of Regents
Committee on Education Policy and Student Life

Tuesday, January 12, 2021
9:30 a.m.

Virtual ~ Zoom

Action Items

1. Academic Program Actions ~ New Academic Program Proposal
    a. University of Maryland, Baltimore: MS in Health Professions Education
    b. University of Maryland, College Park: BS in Mechatronics
    c. University of Maryland Eastern Shore: BS in Sport Management

Information Items

2. Results of Periodic (7-Year) Review of Academic Programs
3. Report: Workload of the USM Faculty ☐Academic Year 2019-2020
4. Report on Extramural Funding ☐FY 2020

Action Item

5. Motion to Adjourn and Reconvene in Closed Session

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland, Baltimore: Master of Science in Health Professions Education

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: The University of Maryland, Baltimore (UMB) Graduate School is proposing to offer a Master of Science in Health Professions Education (MS-HPE). The program will be housed within the School's existing PhD in Health Professions Education program. The MS-HPE will consist of 11 courses with a total of 32 credits. The instruction will occur predominantly online utilizing distance learning technologies in addition to an in-person impact week occurring at the start of the second year. The in-person week will require students to attend four consecutive days of face-to-face lectures, training, discussions, and presentations at UMB's campus in Baltimore, MD. The in-person week will consist of activities that aim to build a community of learners around the topic of education in the health professions and to provide interaction opportunities with doctoral HPE students, including the development and presentation of project work. Upon successful completion of the program, students will be prepared to become leaders and educators in their respective healthcare fields.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fees revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life Committee recommend that the Board of Regents approve the proposal from the University of Maryland, Baltimore to offer the Master of Science in Health Professions Education.

COMMITTEE RECOMMENDATION:		DATE: January 12, 2021
BOARD ACTION:		DATE:
SUBMITTED BY: Joann A. Boughman	301-445-1992	jboughman@usmd.edu

DR. ROGER J. WARD, JD, MSL, MPA
Interim Provost and Executive Vice President

Academic Affairs/Graduate School
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December 7, 2020
Jay A. Perman, MD
Chancellor
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:
The University of Maryland Graduate School is seeking authorization to offer a Master of Science in Health Professions Education (MS-HPE). This 32-credit, predominantly online program will be housed within the School's existing PhD in Health Professions Education program. The Master's degree program will prepare health care professionals to become leaders and educators in their respective fields, who will help meet the State's challenge to grow the number of health care practitioners.

Thank you for your time and consideration of the Graduate School's request. Please contact me if you need additional information.

Regards,

Dr. Roger J. Ward, JD, MSL, MPA
Interim Provost and Executive Vice President
Dean, Graduate School

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
X	Within Existing Resources, or
	Requiring New Resources

University of Maryland, Baltimore
Institution Submitting Proposal

Master of Science (M.S.) in Health Professions Education
Title of Proposed Program

Master of Science Degree	**Fall 2021**
Award to be Offered	Projected Implementation Date
1299.03	**13.1327**
Proposed HEGIS Code	Proposed CIP Code
University of Maryland Graduate School	**Dr. Flavius Lilly, Senior Associate Dean**
Department in which program will be located	Department Contact
(410) 706-7767	**flilly@umaryland.edu**
Contact Phone Number	Contact E-Mail Address

Dr. Roger J. Ward, JD, MSL, MPA
Interim Provost and Executive Vice President
Dean, Graduate School

December 7, 2020
Date

A PROPOSAL FOR A NEW ACADEMIC PROGRAM at THE UNIVERSITY OF MARYLAND, BALTIMORE FOR A MASTER OF SCIENCE IN HEALTH PROFESSIONS EDUCATION

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A. Centrality to Institutional Mission 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.

The Master of Science in Health Professions Education (MS-HPE) relates to UMB's mission: "To improve the human condition and serve the public good of Maryland and society-at-large through education, research, clinical care, and service" by providing learners interested in advanced or dual degree credentials with knowledge in the scientific discipline of education. Through a program including learning and curriuclum theory, practical skills in instructional strategies and assessment, programmatic evaluation, and analytical skills, the degree program directly supports UMB's professional educational mission.

Health Professions Education is critical to the task of meeting the healthcare needs of communities. The University of Maryland Baltimore as the state of Maryland founding campus for graduate professional education is uniquely prepared to meet the growing need for health profession educators by offering this degree to advance the scholarship of graduate health profession teaching and learning.

The MS-HPE will consist of 11 courses with a total of 32 credits. The instruction will occur predominantly online utilizing distance learning technologies in addition to an in-person impact week occurring at the start of the second year. The in-person week will require students to attend four consecutive days of face-to-face lectures, training, discussions, and presentations at UMB's campus in Baltimore, MD. The in-person week will consist of activities that aim to build a community of learners around the topic of education in the health professions and to provide interaction opportunities with doctoral HPE students, including the development and presentation of project work.

UMB students will study the historical and current foundations of learning and curriculum theory, and engage in the practical application of the learning sciences. Students will examine current pedagogical theories and challenges faced by health professions programs, curricula, and institutions under the expert guidance of accomplished faculty from UMB.

Intercultural and inclusive learning competencies will be addressed as a thread through the first two years of the curriculum in several courses. The foundations of learning and curriculum theory course will address how individual differences impact health professions learning and teaching outcomes, as well as the design of an inclusive curriculum; the instructional strategies course will cover cross-cultural learning and assessment; the research methods courses will address sampling and selection bias, and the leadership in higher education course will discuss and apply leadership practices necessary to foster diverse and inclusive workplaces. During the intensive, in-person, impact week, learners will engage with instructors on LGBTQIA diversity, equity, and inclusion training and an intercultural communication workshop, including practical applications to continue developing critical knowledge and skills.

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

   Similar to the Ph.D. in Health Professions Education (HPE), the proposed degree supports UMB's strategic goals through the fulfillment of the following strategic themes:

   - **Student Success** challenges academic units to "design contemporary teaching and learning environments that are accessible and affordable to prepare students to be exemplary professionals and leaders in society" (University of Maryland, Baltimore, n.d.). The degree is designed for completion by practicing health professionals in two years or less, and its online format increases its accessibility to students. The university has recognized the vital role the Graduate School plays in creating accessible education for individuals already engaged in their professions.
   - **Inclusive Excellence** encourages the campus to "foster an environment that recognizes and values each member of the UMB community, enabling members to function at their highest potential to achieve their personal and professional goals" (University of Maryland, Baltimore, n.d.). This degree not only provides scholar-practitioners with the strategies to effectively engage with other health professions members, but it also equips students with teaching and learning skills that can be utilized within any health professional education environment and for leadership roles.
   - **Efficiency, Effectiveness, and Assessment** aims to incentivize efficiency, effectiveness, and evaluation to make more responsible and impactful use of UMB's resources. MS-HPE students will enroll in electives already developed within the graduate school and also leverage the expertise of the faculty members from the Ph.D. program.

3. **Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation.**

   The proposed program is well-resourced; there is an already existing faculty and coursework to support the proposed MS-HPE. Due to shared coursework with the existing PhD in HPE, the UMB Graduate School has the capacity to offer the proposed degree program within existing resources, and to ensure continued funding to support the program into the foreseeable future, even if enrollment should not meet our anticipated projections. Demand and enrollment for the first cohort of HPE students was stronger than projected, with a first class of 12 students starting fall of 2020.

4. **Provide a description of the institution's commitment to ongoing administrative, financial, and technical support of the proposed program and continuation of the program for a period sufficient to allow enrolled students to complete the program.**

   The UMB Graduate School has an ongoing commitment to sustaining new degree programs it has developed. The Graduate School has committed significant resources in the realm of administrative support including a senior associate dean, assistant dean, and program director who will provide leadership for the quality and sustainability of the MS-

HPE. Additionally, the Graduate School plans sufficiently to ensure the financial viability of all new degree programs including the provision of faculty instruction and advisement at a level to ensure a high touch learning experience for students. The Graduate School has also invested in technical assistance through our centralized Center for Information Technology Services and the Faculty Center for Teaching and Learning, which both assist our faculty and students in their success as teachers and learners, respectively. If for some unforeseeable reason the Graduate School discontinues the MS-HPE, then we are committed to a teach-out plan for all enrolled students, so they may complete the program and earn their degree.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Alignment with the Maryland State Plan

There is compelling regional and statewide need for nursing and health profession faculty that directly contributes to the creation of a competent health workforce. The Maryland State Plan for Postsecondary Education 2017-2022 outlines several goals for institutions of higher education. This degree addresses each area.

Goal 1: Success: the Health Professions Education MS-HPE is designed to prepare scholar-practitioners who will promote and implement practices and policies that will ensure student success. This degree aims to explore, inform and advance best practices in teaching, learning and assessment of graduate health professionals.

Goal 2: Access, Affordability, and Completion: By offering an affordable degree designed to be completed within two years with part-time options. This design and academic commitment will encourage program completion resulting in a qualified faculty and a competent workforce. The degree will appeal to students, graduates, and faculty enrolled in other academic programs at UMB, as well as working clinical professionals.

Goal 3: Innovation- is in direct alignment with this degree which aims to provide health professionals with the skills to interact with students and interdisciplinary faculty in a culturally responsive manner applying the science of teaching and learning to curricular design and assessment. By training health professional faculty together, we intend to address and explore interprofessional issues through this program. We will foster the advancement of inter-professional education and clinical practice at the state and national level.

Alignment with National Trends

The leadership of the University of Maryland Baltimore approached the Educational Advisory Board seeking information on workforce demand for doctoral programs in healthcare professions education in 2017. The forum reviewed job titles, skills, employers and locations nationwide and provided a report in early 2017. National Employer Demand for Health Professions Education rose eight percent since 2013 according to a study done by the Education Advisory Board’s partner Burning Glass labor/Insight.

Employers posted over 1000 jobs nationally for health Professions educators “nurse educator’, clinical nurse educator and clinical educator were the top three. The top titles indicate significant employer demand for nurses and other clinical health professionals with a recent demand for master’s degree attainment (Haynie & Anderson, 2017). Indeed, evidence from the 2019-2020 application process to the PhD in HPE supports this data. 30% of the students enrolled in the PhD in HPE are from the nursing field.

Changes within the healthcare delivery system have led to a demand for different types of education in all health professions, resulting in a recognition that educators who teach in health professions programs need to be prepared to meet the challenge of diverse learners. According to Daley and Cervero (2018), faculty training should include dual preparation as both a clinician and educator along with preparation in research and leadership in health professions education. We have requested for a current market study on workforce demand for masters programs in HPE from the Educational Advisory Board and we are waiting for the results. We will share the information as we get it and update this section.

Job Outlook

Professional associations for each of the Health Professions on campus were contacted, and recurring themes regarding faculty shortage concerns were evident. The National League of Nursing has studied faculty workforce issues extensively and notes that each year since 2009 an increasing number of qualified students are turned away due to faculty shortages. The job outlook is not limited to nursing. Table 1 summarizes projected faculty positions in demand by profession.

Furthermore, the Bureau of Labor Statistics Employment Projections states that for 2012-2022, 35 percent more faculty members will be needed to meet expected demand for nursing alone. Also, 10,200 current nursing faculty members are expected to retire, mostly by 2022, creating a need for 34,200 new nursing instructors. Graduates of the proposed degree will be ready to apply the skills that they have acquired through the degree to employment in the private sector, as well as local, state and government positions in healthcare, and education.

Information from indeed.com was gathered to understand better the positions sought by employers. A keyword search was utilized rendering thousands of positions that required skills related to health professions faculty. The search revealed the following results,

Table 1 Job Vacancies by Profession

Health Professions Education	7,420
Nursing Faculty	8,785
Social Work Faculty	12,649
Physician Assistant Faculty	2,517
Pharmacy Faculty	214
Dental Faculty	550

Healthcare Education Specialist	70,786
Healthcare Dean positions	1,604

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

Demand in the Region and State

Health professionals are increasingly encouraged to work in interprofessional teams to improve health outcomes. This in turn has led to schools integrating interprofessional education (IPE). There are many positive learning outcomes of IPE such as, promoting interprofessional collaboration; enhancing practice within the professions; increasing professional satisfaction; and encouraging students to learn with, about, and from each other (Parsell & Bligh, 1998; World Health Organization, 2010). Interprofessional education is an effective tool for improving attitudes toward interdisciplinary teamwork, communication, shared problem solving, and knowledge and skills (Dyess et al., 2019). Learning together with colleagues from different health professions has a positive impact on the effectiveness of the learning experience as each student brings a unique background and experiences to the learning environment (Hammick et al., 2007; Steinert, 2005). We expect the MS-HPE to attract learners from the various health professions including, medicine, pharmacy, nursing, physician assistant, physical therapy, and dentistry, among others.

The demand for health professionals as well as programs continues to grow as evidenced by the following list of examples:

- The Association of American Medical Colleges (AAMC) recommended a 30% increase in the first-year medical school matriculation to address projected physician needs. This goal was reached in 2018-2019. First-year enrollment, however, continues to grow at MD-granting and DO-granting schools (AAMC, 2019).
- The demand for physical therapists is on the rise, so is the number of physical therapy programs. There are 258 physical therapy programs, and 56 more are in development (Commission on Accreditation in Physical Therapy Education, 2020). The increasing number of students and programs implies a need for more faculty.
- The significant growth of physician assistant (PA) programs continues to create challenges for programs and educational institutions in identifying, recruiting, and retaining qualified faculty. Based on national data collected annually by the Physician Assistant Education Association (PAEA), physician assistant program directors continue to rank the lack of available applicants as a significant barrier to filling open positions (PAEA, 2018). The importance of having sufficient and stable numbers of qualified PA faculty is critical to the successful education of future physician assistants as well as to the quality and reputation of the PA profession. Physician assistant faculty are in high demand, yet few are

academically prepared for the teaching, scholarship or service expected of the professoriate.

- The demand for registered nurses is expected to grow by 7% through 2029 (Bureau of Labor Statistics, 2020). The most recent data submitted to the Maryland Higher Education Commission (MHEC) shows an imminent nursing faculty shortage and a decline in PhD-prepared nurses (MHEC, 2017). According to the MHEC 2017 report, the nursing shortage projected in Maryland directly correlates to the faculty shortage.

The Bureau of Labor Statistics (2020) anticipates the need for physical therapists to grow by 22%, respiratory therapists by 21%, physician assistants by 31%, and the need for nurse practitioners is expected to grow by 28% through 2028. Each year qualified applicants are turned away due to lack of faculty to teach students in these disciplines. Master's programs have been the credential of choice for health professions education leaders and have the potential to facilitate the development of a critical mass of educators and thus, meet the need for faculty supply (Tekian & Harris, 2012; Tekian et al., 2014). The proposed MS-HPE can be an entry point toward preparation for academic roles and to continue on to the doctoral degree, such as our PhD in HPE.

Curricular Components and Employer Demand

In preparation for the creation of this degree, UMB contacted the Education Advisory Board (EAB), a provider of research, enterprise technology, and data-enabled services for education institutions, to conduct a market viability examination. Though the use of qualitative interviews with peer institutions, EAB provided UMB with a report in 2017. The qualitative analysis revealed the majority of students would like to be part-time and working professionals and that online programming allow flexibility and convenience for students, especially, working professionals, who will be the intended audience of this degree.

Ten institutions were profiled, collectively they offer online or in-person programs, depending on the target audience for the program. Online programs offer interdisciplinary courses in health care and leadership to attract large numbers of students. Seton Hall University's program currently enrolls more than 80 students in its online health professions education program. Of those students, 80 percent hold leadership positions in health care, mostly from nursing backgrounds.

EAB also provided additional evidence to support the inclusion of an in-person component in the degree. EAB provided the following, "administrators report the success of courses which cause students to self-reflect and challenge long-held beliefs and opinions. These 'a-ha' moments may occur in online courses, but more often happen in face-to-face group settings." The EAB is in the process of conducting a market study for a viability of a MS-HPE degree and we will share these results as they become available.

Likelihood to apply among current UMB faculty and students

Based on a prior poll of UMB Deans to gauge need and interest in a doctoral degree in Health Professions Education and enrollment of the first cohort of that program which exceeded initial projections of a class of 10, enrolling 12 applicants of which 75% are from UMB schools, we project that there will be significant interest in this degree from existing faculty, graduates, clinical faculty, and students.

D. Reasonableness of Program Duplication

Master's Degrees in HPE Offered in the Region

There are 34 Health Professions Education master's degree programs in the country, no other MS-HPE in health professions education is offered in the University of Maryland System.

Johns Hopkins offers a Master of Education in the Health Professions (MEHP). However, there are several differences between our proposed program and the MEHP program. The proposed program will confer a Master of Science degree while the MEHP program confers a Master of Education degree. Second, the Johns Hopkins program is entirely online while our program will offer an in-person impact institute consisting of face-to-face lectures, training, discussions, and presentations for learners. Students taking online classes often report not feeling connected to the instructor and their classmates. The impact institute will foster a learning community and social connectedness. Last but not least, our program will be an on-ramp or off ramp for the PhD in HPE program should students choose to continue to the doctoral degree or decide they will not continue the PhD if already enrolled.

Uniform Services University of the Health Sciences (USUHS) in Bethesda, MD, also offers a MHPE, but this degree is targeted toward the military. Given the global presence of learners involved in this HPE degree it is also online. The demand for this program is increasing, so is the entering class size (Artino & Durning, 2019, Personal Communication).

McDaniel College's PBC is targeted towards current K-12 teachers and directly addresses inequities in educational access, curriculum, and pedagogy. Enrollment is currently only available through school district partnership. Similarly, Notre Dame of Maryland University offers a Master of Arts in Leadership in Teaching: Culturally Proficient Leadership which is designed to prepare K-12 educators for meeting the needs of linguistically and culturally diverse students. However, unlike the programs designed specifically for K-12 educators, UMB's proposed MS-HPE degree in health professions education is designed for current and future faculty of health professionals; including nursing, medicine, pharmacy, physician assistant, social work, and dentistry. This MS-HPE will focus on the scholarship of teaching and learning of health professionals, a unique area of study in Health Professions education which is not currently available on

campus. To our knowledge, there are no additional Maryland institutions offering programs similar to the MS-HPE in Health Professions education.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

The proposed MS-HPE in does not have relevance to the uniqueness and/or institutional identities and missions of HBIs. Currently, there are no academic programs offered through Bowie State University, Coppin State University, Morgan State University, and the University of Maryland Eastern Shore that resemble the proposed MS-HPE in Health Professions Education. Based on the current offerings of the Maryland HBIs, we do not expect any impact on the implementation or maintenance of high-demand programs at HBIs.

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

HBIs do have a unique history and identity of educating racial minorities. HBIs are dedicated to educating graduates who can interact with other racial and ethnic groups upon graduation. Predominately White institutions also must educate students to interact with diverse individuals upon graduation. With this in mind, we do not believe that offering this program impacts the mission and identity of HBIs.

Any student who has attended a regionally accredited institution and completed a baccalaureate degree, including those from HBIs, and meets the admissions requirements is eligible to apply to the program. Graduates of HBIs could improve their competitiveness in the marketplace and reach their professional goals by enrolling in and completing this degree program.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

1. **Describe how the proposed program was established, and also describe the faculty who will oversee the program.**

   The MS-HPE was proposed by the UMB faculty and approved by the faculty shared-governance body, the Graduate Council, in recognition of the compelling need for health professions educators. The faculty realized that the bulk of the coursework required to offer a MS-HPE already exists in the PhD in HPE at UMB and that there was considerable expertise to create a world-class educational experience for students. Consequently, 11 courses in the PhD in HPE were selected to be part of the proposed MS-HPE.

   The faculty overseeing the program are listed with their credentials in Section I, subsection 1: Adequacy of Faculty Resources.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

By the end of the MS-HPE, students will be able to:

1. Articulate how people learn and the strategies that achieve effective learning processes and outcomes.
2. Demonstrate proficiency in curriculum design, delivery, and assessment at the course and program level.
3. Demonstrate effective, high quality teaching methods.
4. Demonstrate proficiency in assessment, evaluation, survey development, and measurement practices in HPE.
5. Work effectively in interprofessional teams.
6. Demonstrate academic and executive administration and leadership qualities needed for academic and health professions roles.

UMB is committed to providing the best teaching and learning possible and excellence in all of its courses. Every effort is made to ensure that coherence, cohesiveness, and academic rigor between programs offered in traditional instructional formats and those offered online are equivalent. Courses are designed to result in learning outcomes appropriate to the rigor and breadth of the course and all courses assess student achievement of defined learning outcomes through regular and formal assessment planning.

The learning outcomes for each course are the foundation of the course; the learning activities, assessments, and content of the course are in alignment with the outcomes and provide a clear pathway for mastery of the outcomes. A multidisciplinary health professions faculty council recommended the proposed curriculum and faculty to teach in the program. To design the new degree a curricular crosswalk analysis of the current MS-HPE programs was performed followed by a backward design exercise to create the MS-HPE curriculum, after identifying the most likely candidates and their clinical professional pre-requisite knowledge and experience.

This program aims to create an inter-professional learning opportunity for current and future faculty to explore learning theories, effective practices in curricular design and assessment and examine attitudes and perceptions of self and other health professions. Historical foundations of pedagogy, andragogy, and strategies to effectively engage with various learning groups; strategies for interdisciplinary communication; and the practical application of skills will be explored. Students will demonstrate their mastery of knowledge and skills in each course, culminating in a capstone project.

3. Explain how the institution will provide for assessment of student achievement of learning outcomes in the program and document student achievement of learning outcomes in the program.

Faculty will assess student achievement and mastery of learning outcomes in their courses using a variety of assessments including meaningful and substantive

contributions to online course discussions, satisfactory completion of assignments and reflections, scores on quizzes and examinations, scores on team collaboration, scores on written essays and term papers, and evaluation of research and capstone project contribution to the field of Health Professions.

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

   Students must complete all the core courses listed in the table below (24 credits, online; 2 credits on site) and two courses from one of the two areas of concentration in educational research or educational leadership (6 credits).

Course Name	Educational Research	Educational Leadership
Core Courses (26 credits)		
HPE 610: Theoretical Foundations of Learning in the Health Professions	X	X
HPE 605: Curriculum Theory and Analysis	X	X
HPE 615: Introduction to Statistics	X	X
HPE 625: Instructional Strategies in the Health Professions	X	X
HPE 660: Measurement, Assessment, and Program Evaluation	X	X
HPE 725: Qualitative Research Methods	X	X
HPE 805: Impact Institute	X	X
HPE 851: Research Seminar	X	X
HPE 860: Capstone in HPE	X	X
Electives (6 credits)		
HPE 620: Critical Appraisal of Literature	X	
HPE 640: Educational Research	X	
HPE 670: Leadership Theory		X
HPE 710: Leadership in Higher Education		X

- **HPE 610: Theoretical Foundations of Teaching and Learning in the Health Professions (3 credits)**
  This course will provide essential foundation in learning theory in a variety of fields and disciplines. The course focuses on answering the following questions: what is learning; what happens in order for learning to occur, and the effect on instruction.

- **HPE 605: Curriculum Theory and Analysis (3 credits)**
  This course will provide a macro view of health professions learning, from the curriculum theory perspective. Modules will focus on major concepts, trends,

issues, and conditions for curriculum design and development.

- **HPE 615: Introduction to Statistics (3 credits)**
  This course will present basic statistical concepts. The course will emphasize the use of these methods and the interpretation of results using education and health sciences applications.

- **HPE 625: Instructional Strategies in the Health Professions (3 credits)**
  This course prepares the student to select and implement instructional strategies and media that are appropriate to the learning style of the learner, the content to be taught, the behavioral objectives of the learning material, and the processes of learning. The course includes both didactic and experiential experiences and provides a strong linkage to techniques for evaluating the impact of various instructional strategies on learning. Attention is given to basic measurement principles of reliability and validity, test construction, assessing skill acquisition and competence, and interpreting results from measures.

- **HPE 660: Measurement, Assessment and Program Evaluation (3 credits)**
  This course provides advanced concepts regarding the assessment, design, and implementation of evaluations of educational programs. Topics focus on all aspects of assessment design and implementation of educational evaluations, including considering the clinical context, audience, and purposes for evaluations, developing an evaluation plan, preparing the evaluation design, designing evaluation instruments and measures, collecting, analyzing, and reporting evaluation data, and adhering to professional ethical principles. Students will be expected to apply research methods, conduct data analysis using Microsoft Excel, SPSS, or other statistical software to complete some assignments. There will be written assignments and a final project that requires each student to design an evaluation proposal on an educational topic of personal and professional interest.

- **HPE 725: Qualitative Research Methods (3 credits)**
  This course is designed to introduce students to the history, principles, and practice of qualitative research. The course will cover the theoretical and multidisciplinary origins of the methods as well as the application of qualitative methods germane to health professional practice, programs, and policy. This course is an experiential course embedded with the core qualitative methods of observation, interviews and document analysis (including ethnography, narrative analysis text or discourse analysis, visual analysis, case study, grounded theory, oral/life history, focus groups, phenomenology, and action research.

- **HPE 805: Impact Institute (2 credits)**
  The Impact Institute is an opportunity for students to engage in face-to-face teaching and learning and develop a deeper understanding of the concepts and skills learned over the four online courses. Additionally, this institute will provide the reflection and intergroup dialogue that is integral to leadership development. Students will present their proposed research project and the potential for impact

on their profession. 4-day residency requirement.

- **HPE 851: Research Seminar (3 credits)**
  The seminar in HPE is a project-oriented course in which students will begin working on projects in their focal content area.

- **HPE 860: Capstone Project in HPE (3 credits)**
  This course is designed for students to complete their projects and present them to faculty and peers, either virtually of in-person.

- **HPE 620: Critical Appraisal of Literature (3 credits)**
  Clinical appraisal skills are now as much a part of the clinician's toolbox as the ability to diagnose conditions and prescribe treatments. Critical appraisal skills allow clinicians to prioritize evidence that can improve outcomes. It is critical that inter-professional team members all demonstrate this skill and that faculty are adept at teaching these skills as it is now routinely tested in medical, dental, pharmacy and nursing examination.

- **HPE 640: Educational Research (3 credits)**
  Students will search, critique, compare and contrast the highest quality educational research using an approach consistent with best practices in educational research design and implementation. At the conclusion of this course, the student will be assigned a committee chair, will be allowed to select two qualified committee members. They will submit their proposed research and methods for consideration to progress to the third year. Students must complete an oral presentation and formal examination to progress.

- **HPE 670: Leadership Theory (3 credits)**
  This course will provide a macro view of leadership in the health professions, from the leadership theory perspective. Modules will focus on major theories, concepts, trends, and issues, in leadership.

- **HPE 710: Leadership in Higher Education (3 credits)**
  This course is designed to create a community of scholar-practitioners working together to explore a variety of constructs, principles, and models of leadership and to apply that learning to current, and future leadership experiences and opportunities. The course encourages a scholar-practitioner analysis of these experiences/opportunities with focused application to academic and professional goals of MS-HPE students. Students are expected to draw on learning from prior life experiences, and new learning acquired in this course to complete the course activities and produce products that focus on context-based problems in urban educational organizations (or others) and demonstrate evidenced-based leadership strategies for leveraging change.

Implementation and Management

The proposed MS-HPE will be coordinated and administered through the Graduate School at UMB. The MS-HPE will be led by a faculty member in the Ph.D. in Health Professions Education, Associate Professor, Dr. Violet Kulo, Ed.D. The MS-HPE will adopt UMB's Graduate School academic, administrative, and financial structure recently added for the growing number of online degree and certificate programs.

Master's Program Standards

Students must meet all Master's Program requirements for satisfactory academic performance and progress as well as UMBGS requirements. Students are advised to be familiar with all handbooks, requirements, and standards of their Master's Program.

UMB will be responsible for the administrative needs of all students enrolled in the MS in Health Professions Education in accordance with UMB policies and procedures: ensuring that all course offerings, are entered in the UMB student registration system; ensuring that all MS-HPE course offerings appear correctly on student transcripts and student records; and ensuring payment of tuition at the applicable per-credit tuition rate. Accordingly, students enrolled in the MS-HPE shall pay tuition and fees; receive grades and academic credit; and shall be subject to the rules, policies, practices, and regulations (pertinent to students) of UMB when enrolled in any of UMB's courses. The appropriate faculty have been identified, and additional guest lectures will be identified at a later time.

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

   Not Applicable.

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

   There are no specialized accreditation or graduate certification requirements for the proposed MS-HPE.

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

   Not applicable.

8. **Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of**

academic support services and financial aid resources, and costs and payment policies.

The Graduate School maintains up-to-date information of its degree programs on the program explorer web site (https://www.graduate.umaryland.edu/Program-Explorer/). The web site has information on the curriculum, course descriptions, degree requirements, and cost of education. The website has links to information about the learning management system, support services, and financial aid. We affirm that the same information will be available for prospective and existing students in the proposed MS-HPE.

9. **Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.**

   The Graduate School at UMB affirms that all advertising, recruiting and admissions materials will accurately represent the MS-HPE, as do all materials produced by UMB's Graduate School for programs it offers.

H. Adequacy of Articulation

Not applicable.

I. Adequacy of Faculty Resources

1. **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 faulty member will teach in the proposed program.**

   The following table summarizes information about the faculty who will be responsible for designing and instructing coursework. The MS-HPE will use faculty resources committed to teach and mentor in the PhD in Health Professions Education.

Name	Terminal Degree and Discipline	Rank and FT/PT Status	Course
Christina Cestone	PhD Educational Psychology	Associate Professor, Full-time	HPE 610: Theoretical Foundations of Learning in the Health Professions HPE 851: Research Seminar HPE 805: Impact Institute

Violet Kulo	EdD Instructional Design & Technology	Associate Professor, Full-time	HPE 660: Measurement, Assessment, and Program Evaluation HPE 640: Educational Research HPE 860: Capstone in HPE
Karen Gordes	PhD Public Policy DSc Physical Therapy	Associate Professor, Full-time	HPE 620: Critical Appraisal of Literature
Hyun-Jin Jun	PhD Social Work	Assistant Professor, Full-time	HPE 615: Introduction to Statistics HPE 725: Qualitative Research Methods
Jane Neapolitan	EdD Curriculum and Teaching	Adjunct Professor, Part-time	HPE 605: Curriculum Theory and Analysis HPE 670: Leadership Theory HPE 710: Leadership in Higher Education
Michael Sweet	PhD Educational Psychology	Adjunct Professor, Part-time	HPE 625: Instructional Strategies and Assessment in the Health Professions

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices:

UMB, through its Faculty Center for Teaching and Learning (FCTL), has a robust process for training faculty and ensuring effective instruction. Based on Quality Matters standards, at UMB we have developed a rubric that outlines best practices for distance education - this rubric helps faculty and instructional designers develop the courses, assess the readiness of the course and ensure that the online courses are instructionally and pedagogically sound. The best practices are grounded in research, a proven synthesis of strategies, activities, design techniques, and organizational items that have proven successful in higher education. The specific domains of this checklist are as follows:

- Course overview and introduction to the students
- Course organization and design
- Learning Objectives (competencies)
- Instructional Materials
- Learner Communication, Interaction and Collaboration

- Assessment and Evaluation (measurement)
- Course Technology
- Learner Support

The Learning Management Platform UMB utilizes and provides IT support for is the Blackboard Learning Management System for online course delivery. Within Blackboard, is the Collaborate conferencing software that we will use for our synchronous live activities, i.e., orientation, face-to-face class sessions, and recurring webinars. Additionally, the FCTL team has available to them the use of a video recorder to record lectures, webcams, and an interactive smart board. We will also use video and Camtasia software for screen lecture capture.

J. Adequacy of Library Resources

The University of Maryland, Baltimore's Health Sciences and Humans Services Library (HS/HSL) collection contain more than 30,000 electronic journals, 162 current print journals, approximately 170,000 books, and 6,000 electronic books. Students can access the electronic resources offered on the library website by logging in with their University ID number. The library serves as the regional medical library for ten southeastern states as part of the National Library of Medicines National Network of Libraries of Medicine. In addition to the library services and collections, the building also houses computing services. Faculty librarians are dedicated to providing direct service to students. They use subject expertise to develop online resources and provide in-person consultations.
The HS/HSL is one of the largest health sciences libraries in the United States with a track-record of user-centered innovative services and programs. The library consists of 57 employees including 27 faculty librarians. The attractive and vibrant facility, which opened in 1998, serves as a hub for collaboration and learning with resources, programs, and tools that promote discovery, creativity, and innovation. With wireless connectivity throughout the building, the HS/HSL has 45 group study rooms, three computer classrooms, an Innovation Space which includes 3D printers; a presentation and practice studio, art gallery, and multiple technology-enhanced meeting spaces. Through the HS/HSL's website (www.hshsl.umaryland.edu,) the UMB community has access to a full range of resources and services.
The HS/HSL supports the University's students, faculty, and staff members in the schools of dentistry, law, medicine, nursing, pharmacy, and social work; the Graduate School; the University of Maryland Medical Center; and other affiliated institutions. Research Connection, the library's suite of research services, is available for all programs on campus and includes individual research consultations, a systematic review service, research impact assessment, reference assistance, and more. For over 30 years, the HS/HSL has provided liaison services, in which faculty librarians are assigned to work with specific user communities. Faculty librarians have many years of instructional experience in the classroom, in the community, and the online environment. In FY16, faculty librarians reached 4,131 faculty, staff and students through online and in-person instructional sessions offered through the curriculum and in library-sponsored workshops. In FY16, the HS/HSL licensed 116 databases, 4,524 journals, 18,018 e-books, and maintained a print collection of 360,104 volumes. One hundred percent of the current journal subscriptions are available electronically. Through its interlibrary loan and

document delivery service, library staff can acquire articles and other resources not available through the library's collections. These are secured through local, regional, and national networks including the University System of Maryland and Affiliated Institutions, the National Library of Medicine's DOCLINE service, and OCLC, among others.

The HS/HSL is also home to the National Network of Libraries of Medicine/Southeastern Atlantic Region (NNLM/SEA), whose mission is to advance the progress of medicine and improve the public health by providing all U.S. health professionals with equal access to biomedical information and improve the public's access to information to enable them to make informed decisions about their health. With only eight regions in the U.S. designated as regional medical libraries under contract to the National Library of Medicine at the National Institutes of Health, the Southeastern/Atlantic Region serves ten southeastern states, Puerto Rico, the U.S. Virgin Islands, and the District of Columbia. The HS/HSL has held this competitive and prestigious designation for over 30 years.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment

UMB's 71-acre research and technology complex encompasses 67 buildings in West Baltimore near the Inner Harbor. The faculty has offices provided within their respective departments, and the Graduate School has identified office space to house the program director and instructional technology personnel. UMB has adequate facilities, infrastructure, and equipment to support any distance learning needs of the MS-HPE Program. Students will have full access to the computing facilities at UMB. Students will be provided with UMB e-mail and library accounts and will have complete journal searching ability via PubMed. UMB possesses computing facilities that include a networked computing environment for support of a broad range of information technology functions, including basic research, clinical research, patient information, and general office management.

L. Adequacy of Financial Resources with Documentation

No new general funds will be required for implementation of the proposed MS-HPE. The degree will be coordinated and administered fully through the Graduate School including identifying a program director who is directly affiliated with the Graduate School. Tuition will be administered through the Graduate School, and student tuition payment is in addition to that required of any individual professional school at UMB. As shown in the Budget Table provided in Appendix B this program is expected to be self-supported.

M. Adequacy of Provisions for Evaluation of Program

Students will have the opportunity to evaluate courses and faculty through a standard evaluation of every course. Formal assessment planning is already in place throughout UMB Schools, including the Graduate School. Our approach includes ensuring that student learning is in alignment with course learning outcomes, alignment of mission at institutional and program levels, alignment of the mission with learning outcomes, then program outcomes with the curriculum, flowing down to course outcomes and the

assignments. Assessment activities emphasize analysis of results and feedback loops for continuous improvement. The additional evaluation includes tracking of student retention, grade distributions, and cost-effectiveness, with regular academic program reviews considering these factors.

The program will participate in the Graduate School Program Review process detailed below:

The Council of Graduate Schools[1] notes that graduate program review has five general purposes: quality assurance, quality improvement, accountability, identification of strategies for improvement, and provide the institution with information for prioritization of resources. Reviews share specific key characteristics:

1. Program review is evaluative, not just descriptive. It requires academic judgments about the quality of the program and the adequacy of its resources. It goes beyond the assessment of minimum standards to subjective evaluations of quality by peers and recognized experts in the discipline or field.
2. Review of graduate programs is forward-looking; it is directed toward improvement of the program, not merely assessment of its current status. It makes specific recommendations for future changes, as part of the long-range plans of the institution, the department, and other coordinating units.
3. Programs being reviewed are scrutinized on the bases of academic strengths and weaknesses, not on their ability to produce funds for the institution or generate development for the state. Finances and organizational issues are relevant, but only as they affect the quality of the academic program.
4. Program review is an objective process. It asks graduate programs to engage in self-studies that assess, as objectively as possible, their programs. It brings in faculty from other institutions to review the self-studies and to make their evaluations.
5. Graduate program review is an independent process, distinct from any other review. Data collection and parts of the self-study may often serve some review purposes. However, to be effective, graduate program review must be a unique, identifiable process that stands on its own, draws its own set of conclusions, and directs its recommendations to the only individuals with the power to improve graduate programs: the faculty and administrators of the institution.
6. Program review results in action. Based on the reviewers' comments and recommendations, as well as the program faculty's response to the review report, the institution develops and agrees on a plan to implement the desired changes according to a specific timetable.

Incorporating these characteristics, successful graduate program review answers the following questions:

Is the program advancing the state of the discipline?

[1]Assessment and Review of Graduate Programs: A policy Statement. 2005. Washington, DC: Council of Graduate Schools.

Is its teaching and training of students effective?
Does the program meet the institution's goals?
How do experts in the field assess it?

At UMB Graduate Program Review includes an internal self-study and an on-site review by an external site team.

N. Consistency with the State's Minority Student Achievement Goals

A key feature of UMB's mission and strategic planning involves respecting, valuing and achieving diversity. The Strategic Plan states: diversity represents a core value, which is defined as being "committed to a culture that is enriched by diversity, in the broadest sense, in its thoughts, actions, and leadership" (University of Maryland, Baltimore, n.d.). The State also has a goal of expanding educational opportunities for minority and educationally disadvantaged students.

The proposed MS-HPE aims to address both UMB's and the State's cultural diversity goals. First, the delivery of the majority of the courses in the program through the use of distance learning technology will enhance student access, as it expands access and success for learners from diverse communities. Essentially, distance learning is quickly becoming the educational opportunity for students who may not or would not be able to participate in a traditional in-person college education. For rural and isolated communities, distance learning can be the vehicle that conquers geography and space between teachers and students. The emergence of so-called "virtual universities" has had more success in attracting diverse populations compared to traditional colleges. Ibarra (1999) asserts that historically underrepresented groups are highly attracted to internet-based degrees that embrace the core values of social change and community engagement.

The second manner in which the new MS-HPE addresses diversity goals is that distance learning not only achieves "access," but can also help ensure "success," as the technology of distance learning meets the needs of various learners and allows for differentiated instruction. Essentially, with the proper use of its varied technology, distance learning can address the needs of all populations, creating an environment where students can thrive. In contrast with many universities that have a predominance of a particular and preferred learning environment grounded in outmoded ideas about one-size fits all educational pipelines, the varied types of interactions common in distance education embrace a shift from passive to active learning and from competition to collaboration. Furthermore, different learning styles and cultures can be accommodated more easily because useful collaborative learning values diversity (Palloff & Pratt, 2005).

Additionally, UMB realizes that it must not only embrace and celebrate diversity but also provide opportunities for students to develop faculty who can design curricula to promote cultural competence and intercultural leadership. The MS-HPE uses an interdisciplinary approach to positively influence the climate for diversity, which includes consideration of external (i.e., governmental/political forces and sociohistorical forces) and internal (i.e., historical legacy of inclusion or exclusion, compositional diversity, psychological climate, behavioral dimension, organizational/structural diversity) factors deemed

necessary to understand and shape campus environments (Hurtado, Milem, Clayton-Pedersen, & Allen, 1999; Milem, Chang, & Antonio, 2005).

O. Relationship to Low Productivity Programs Identified by the Commission

The proposed new MS-HPE program is not directly related to an identified low productivity program identified by the Maryland Higher Education Commission.

P. Adequacy of Distance Education Programs

The Context of Online Education at UMB

As the State's public health, law, and human services university, the mission of UMB is to excel at professional and graduate education, research, patient care, and public service, and to educate leaders in health care delivery, biomedical science, global health, social work, and the law. Also, UMB emphasizes interdisciplinary education in an atmosphere that explicitly values civility, diversity, collaboration, and accountability. UMB expects to achieve its mission in educational excellence and to be competitive; the Graduate School has designed and offered online degree programs that respond to the following changes occurring in higher education (Picciano, Seaman, & Allen, 2010):

- Education Pipeline. The education pipeline is now seeing inputs at every level with a highly diverse prospective student pool. Prospective students are typically working adults who demand part-time and non-residential educational opportunities. Results of the educational experience are becoming ever more outcomes-based.
- Changing Demographics. Data indicate a shift from the traditional-aged student (i.e., 18-22-year old, full-time resident) to older students studying part-time.
- Technology Shift. Online delivery is far outpacing traditional forms of delivery. From 2002 to 2008, online enrollments grew at an annual compound rate of 19% vs. 1.5% for all of higher education. By the fall of 2008, 25% (4.6 million) of all students took at least one online course. There is a growing acceptance that online education is as good as or better than traditional face-to-face delivery models. It is estimated that online learning will grow by 31% from 2020 to 2025.
- The growth of Mobile Technologies. Mobile technologies and miniaturization are changing the computing environment and the educational delivery paradigm. Technologies like netbooks, e-Readers, iPhones, and iPads have the potential to revolutionize the delivery space and to provide anywhere, anytime learning.
- Web 2.0 Revolution. Other technologies that are already figuring widely into the future of education are part of the Web 2.0 revolution. The use of a variety of technologies is disaggregating the educational experience into 'the cloud.' Many of the technologies for the future, like blogs, wikis, podcasts, video, social networking, and social media, virtual worlds, mobile learning, and Personal Learning environments, will have profound effects on the future learning landscape.

Essentially, online education represents a strategy that can address the restrictions of college courses that are delivered onsite. Online learning seeks to expand knowledge beyond the walls of the campus and can reach millions of new learners who could never put their lives on hold to complete a certificate or degree mainly delivered or solely on a college campus. Online programs also can respond to individual student learning needs and styles in ways that cannot be duplicated in the face-to-face classroom. Significant determinants of successful online programs include 1) course design that incorporates best practices, 2) quality faculty who can engage students in the material, and 3) responsible academic oversight. All three of these determinants are present in this proposal.

Instructional Design Team

The following individuals from the Faculty Center of Teaching and Learning will direct the distance education strategy for the MS-HPE program:

Christina Cestone, PhD | Executive Director, Faculty Center for Teaching and Learning
Dr. Cestone earned a Ph.D. in Educational Psychology from the University of Texas at Austin and a Master's degree in Human and Organizational Learning from The George Washington University. Dr. Cestone research includes faculty learning communities, instructional methods, motivation, and interprofessional education. Most recently, as Associate Dean of Assessment and Evaluation for Drexel University, College of Medicine, Dr. Cestone directed medical student assessment, and course and curriculum evaluation in an integrated medical curriculum for 1,100 medical students. Her interests are in program evaluation, and curriculum and instructional development involving active learning methods. She presents her work nationally and is active in the American Education Research Association (AERA) and the Professional and Organizational Development Network (POD), a national association of directors of Centers for Teaching and Learning.

Kevin Engler, MA | Instructional and Curriculum Designer
Mr. Engler holds a Masters of Arts degree in Instructional Design. Mr. Engler provides instructional design, audio-visual support, and faculty training in the use of instructional technologies. He is responsible for the overall pedagogy, planning and designing of course content and assessments for distance education courses in the program. Mr. Engler is knowledgeable in adult learning theory, distance education pedagogical techniques, course development planning and process management. Mr. Engler is trained and certified in the Quality Matters methodology and the ADDIE approach to course design. He has experience and background in writing instructional objectives that utilize Bloom's Taxonomy.

Erin Hagar, MA/MFA | Instructional and Curriculum Designer
Ms. Hagar taught Spanish at the college level and has worked in instructional and curriculum design for colleges and universities since 2000. She previously worked at Montgomery Community College and Johns Hopkins University, helping faculty

incorporate new pedagogical practices and technologies into their face-to-face and online courses. Her areas of expertise include faculty development and training, online course design using the Quality Matters standards, and authentic activities and assessments. She is responsible for the overall pedagogy, planning and designing of course content and assessments for distance education courses in the program.

Sharon Gillooly | Senior Media Production Specialist
Ms. Gillooly leads media production for the AIDE team. Her main focus is to produce videos that support academic instruction. After a long career in documentary television, she completed a Master's Certificate in Online Instructional Development from Florida State University where her work focused on instructional design and emerging technologies. Ms. Gillooly is especially interested in the use of media to enhance learning.

Eric Belt, MS | Senior Academic Innovation Specialist
Mr. Belt holds a Master of Arts degree in distance education and e-Learning. He is an educational technology doctoral student at Boise State University pursuing research in communication, interaction, and engagement in online courses. He was previously the director of learning technology at the College of Southern Maryland and, formerly, the assistant director of e-Learning at Howard Community College. Mr. Belt has served as an instructional designer both virtually and on-campus for various community colleges across the United States. He has a passion for advancing the scholarship of teaching and learning through course design, instructional communication, and faculty professional development.

Becky Menendez, MA/MEd | Academic Innovation Specialist
Ms. Menendez holds master's degrees in elementary education, teaching English as a Second Language, and educational technology. She has a deep understanding of educational practice and design in higher and postsecondary education, particularly with English language learners, and has supported online course design for the International Baccalaureate, the Community College of Baltimore County, and Penn State University. Ms. Menendez is a trained Quality Matters peer reviewer, providing feedback and guidance to institutions on improving the quality of their online courses.

Collectively, the FCTL team will provide the following services to ensure that best pedagogical practices are used to train and support the most of effective presentation of their course content.

- Guided tutorials on the online course development process, with open questions and answer session.
- Written instructions accompanied by training videos to guide faculty on how to use the learning management system.
- A manual for the faculty regarding principles of good practice and the pedagogy of distance education.
- Provide timely support to the faculty in the use of the technology and trouble shoot any problems that might arise during the course of instruction.

- Work with faculty to design and develop courses, monitor the delivery of the course, and assess and revise the course for future offerings.

Course development and curricular oversight will be accomplished in partnership with a program director, teaching faculty, and the instructional design team, who will ensure course materials follow best practices in online education and adult learning theory. Collectively, they will produce the following materials:

- Course-level outcomes and module level objectives
- Course storyboards that will serve as planning documents for new courses that outline objectives, discussion prompt and learning activities, and resources (e.g., articles, websites, online videos)
- Assignments and assessments that measure student performance and clear instructions for completing them
- Grading Rubrics
- Course syllabus

Supporting Students in Distance Education

All of the courses for the MS-HPE in Health Professions Education will have an online component, and two will be in person. We realize that the key to the success of the online courses is dependent on a) students knowing upfront the assumptions, requirements, and responsibilities of taking an online course, 2) the ability of students to have the background, knowledge, and technical skills to undertake an online program; and 3) their having access to academic and technical support services to support their online activities. Accordingly, we will provide the following services to support the students in accessing distance learning technology:

- Communicate to students the nature of online learning, including their requirements, roles and responsibilities, and access to support services. We have also prepared a short questionnaire for students that will help them decide whether online learning is right for them. All of our advertising, recruiting, and admissions materials shall clearly and accurately represent the program and the services available.
- Ensure that enrolled students shall have reasonable and adequate access to the range of student services to support their learning.
- Ensure that accepted students will have the background, knowledge, and technical skills needed to undertake the program.
- Make available the library’s services to students so that they can have access to research databases, the online catalog of books and media, chat with or e-mail a Librarian, electronic interlibrary loan, and more.

Evaluation and Assessment of Online Courses

We will adhere to a quality improvement model for assuring the continuous quality of the online courses. The process will involve the following steps:

1. Assessment of course readiness as measured by our quality indicators of best practices (including assessment of faculty readiness)
2. Monitoring of course delivery as assessed by the instructional designers with the use of our "course evaluation' rubric."
3. Obtain feedback from the faculty and students and instructional designers.
4. Analysis of feedback as performed by the Distance Learning Committee.
5. Institute course revisions based on comments by the Distance Learning Committee.

Finally, to ensure the sustainability of the distance learning program, the Academic Affairs Office at UMB affirms the following:

- UMB Policies for faculty evaluation includes appropriate consideration of teaching and scholarly activities related to programs offered through distance learning.
- Commitment to ongoing support, both financial and technical, and to a continuation of the program for a period sufficient to enable students to complete a certificate.

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Appendix A. Sample Plan of Study

	Educational Research		Educational leadership	
Year 1	Course	Credits	Course	Credits
Fall A	HPE 610: Theoretical Foundations of Learning in the Health Professions	3	HPE 610: Theoretical Foundations of Learning in the Health Professions	3
Fall B	HPE 605: Curriculum Theory and Analysis	3	HPE 605: Curriculum Theory and Analysis	3
Spring A	HPE 625: Instructional Strategies in the Health Professions	3	HPE 625: Instructional Strategies in the Health Professions	3
Spring B	HPE 615: Introduction to Statistics	3	HPE 615: Introduction to Statistics	3
Summer	HPE 660: Measurement, Assessment, and Program Evaluation	3	HPE 660: Measurement, Assessment, and Program Evaluation	3
Summer	HPE 620: Critical Appraisal of Literature	3	MHS 670: Leadership Theory	3
	Subtotal	18	Subtotal	18

Year 2	Course	Credits	Course	Credits
Summer	HPE 805: Impact Institute	2	HPE 805: Impact Institute	2
Fall A	HPE 725: Qualitative Research Methods	3	HPE 725: Qualitative Research Methods	3
Fall B	HPE 640: Educational Research	3	HPE 710: Leadership in Higher Education	3
Spring A	HPE 851: Research Seminar	3	HPE 851: Research Seminar	3
Spring B	HPE 860: Capstone in HPE	3	HPE 860: Capstone in HPE	3
	Subtotal	14	Subtotal	14
	Total Credits	32	Total Credits	32

Appendix B: Budget

Expenditure Categories	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Faculty					
Faculty Program Director	$ 10,000.00	$ 10,300.00	$ 10,609.00	$ 10,927.00	$ 11,255.00
Instructional Faculty (Teaching)	$ 12,500.00	$ 22,500.00	$ 23,175.00	$ 23,870.00	$ 24,586.00
Instructional Faculty (Course Design)	$ 0	$ 12,500.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
Total Benefits	$ 5,850.00	$ 11,778.00	$ 10,084.00	$ 10,347.00	$ 10,619.00
Total Faculty	$ 28,350.00	$ 57,078.00	$ 48,868.00	$ 50,144.00	$ 51,460.00
Administrative	$ 13,250.00	$ 13,648.00	$ 14,057.00	$ 14,479.00	$ 14,913.00
FTE	0.25	0.25	0.25	0.25	0.25
Total Benefits	$ 3,843.00	$ 15,831.00	$ 16,306.00	$ 16,795.00	$ 17,299.00
Total Administrative	$ 17,093.00	$ 29,479.00	$ 30,363.00	$ 31,274.00	$ 32,212.00
Equipment	$ 0	$ 0	$ 20,000.00	$ 5,000.00	$ 5,000.00
Library	$ 0	$ 0	$ 20,000.00	$ 20,000.00	$ 20,000.00
New or Renovated Space	$ 0	$ 0	$ 25,000.00	$ 100,000.00	$ 100,000.00
Curriculum Development and Maintenance	$ 22,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00
Other Expenses Professional Development	$ 10,000.00	$ 12,000.00	$ 22,000.00	$ 22,000.00	$ 22,000.00
Contingency Funding	$ 0	$ 0	$ 0	$ 0	$ 0
TOTAL	**$**	**$**	**$**	**$**	**$**

	77,443.00	**123,557.00**	**191,231.00**	**253,418.00**	**255,672.00**
Resource Categories					
Reallocated Funds	$ 21,499.00	$ 0	$ 0	$ 0	$ 0
Total Tuition/Fees Revenue	$ 55,944.00	$ 128,000.00	$ 197,760.00	$ 271.680.00	$ 363,584.00
Number of F/T Students					
Annual Tuition/Fee Rate	$ 0	$ 0	$ 0	$ 0	$ 0
Number of P/T Students	6	10	15	20	26
Credit Hour Rate	$ 777.00	$ 800.00	$ 824.00	$ 849.00	$ 874.00
Annual Credit Hour per P/T Student	12	16	16	16	16
Grants, Contracts & Other External Sources	$ 0	$ 0	$ 0	$ 0	$ 0

Appendix C: Graduate School Policies

Purpose: Satisfactory academic performance and progress within the University of Maryland Baltimore's master's degree (MS-HPE) programs is a shared responsibility...

of the University of Maryland Baltimore Graduate School (UMBGS), the Masters Programs, and graduate students. This policy specifies the elements of satisfactory academic performance and progress for students in UMBGS MS-HPE programs (University of Maryland Baltimore, n.d.).

UMBGS Standards

- After admission to a master's program, each student must continue a course of study and must register fall and spring semesters unless on an approved leave of Absence. Failure to comply with the requirement to register every semester will be taken as evidence that the student has terminated his or her program and admission status in the Graduate School.

- Students accepted provisionally will have provisional admission status removed only after all provisions have been satisfied and the student has fulfilled all other UMBGS and Master's Program requirements for non-provisional admission. This determination will be made by the Graduate Program Director and the UMBGS Academic Coordinator.

- Graduate students must maintain a minimum, cumulative grade point average (GPA) of 3.0 on a 4.0 scale.

- UMBGS does not impose a uniform protocol for preliminary, qualifying, or comprehensive examinations. Admission to candidacy occurs after fulfilling Master's Program requirements.

- Students must establish and maintain a professional relationship with a faculty research advisor. The advisor must hold Regular membership in the Graduate Faculty with the appropriate knowledge and expertise to serve as research advisor.

- Students must demonstrate the ability to conduct independent research by developing, presenting, and defending an original dissertation on a topic approved by the Master's Program. Evidence of completion of this requirement is a submission of the committee approved dissertation to the Graduate School.

- UMBGS requires that students take and pass a masters examination of the dissertation comprised of an open presentation and a formal examination. The formal examination can only be attempted twice. A failure on the second attempt means the MS-HPE degree is forfeited.

- Students must be admitted to candidacy within five academic years of the first term of enrollment in the Master's Program and at least two full sequential semesters or sessions (spring, summer, or fall) before graduation. All degree requirements, including the final

examination of the dissertation, must be completed within four years of admission to candidacy and no more than nine years after admission into the Master's Program.

- Students are expected to meet the highest standards of academic integrity. Plagiarism, fabrication, falsification, cheating, and other acts of academic dishonesty, or abetting the academic dishonesty of another will result in sanctions and may lead to academic dismissal.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland, College Park: Bachelor of Science in Mechatronics

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: The University of Maryland, College Park (UMD) proposes to establish a Bachelor of Science in Mechatronics. Mechatronics is the combination of mechanical, electrical, and information systems engineering. The program addresses the growing need for cross-disciplinary engineers skilled in the areas of robotics, automation, and advanced manufacturing technologies, collectively known as Industry 4.0. The Bachelor of Science in Mechatronics will provide students with a fundamental understanding of mechatronic systems analysis, the knowledge of how these systems are developed and deployed, and the practical experience required to implement mechatronic systems in real-world applications. Graduates of the program are expected to be highly sought after in fields such as aerospace & defense, energy, infrastructure, manufacturing & automation, robotics, and biomedical engineering.

This program will be offered at the Universities at Shady Grove and is mainly intended for students who have completed an associate's degree from a Maryland public community college. The program will allow them to complete their baccalaureate degree in two years. The program will offer courses at the 300- and 400-level, which constitute the junior and senior years of the program. The curriculum will require 43 credits of core courses and 18 credits of program-specific electives.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fees revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life Committee recommend that the Board of Regents approve the proposal from the University of Maryland, College Park to offer the Bachelor of Science in Mechatronics.

COMMITTEE RECOMMENDATION:		DATE: January 12, 2021
BOARD ACTION:		DATE:
SUBMITTED BY: Joann A. Boughman	301-445-1992	jboughman@usmd.edu

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

Main Administration Building
College Park, Maryland 20742
301.405.5803 TEL 301.314.9560 FAX

December 2, 2020

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Bachelor of Science program in Mechatronics. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

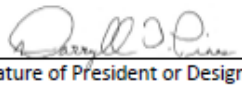
cc: Antoinette Coleman, Associate Vice Chancellor for Academic Affairs
Mary Ann Rankin, Senior Vice President and Provost
Robert Briber, Dean, A. James Clark School of Engineering

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FORM

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Mechatronics
Title of Proposed Program

Bachelor of Science	**Fall 2022**
Award to be Offered	Projected Implementation Date
092100	**14.4201**
Proposed HEGIS Code	Proposed CIP Code
Department of Aerospace Engineering	Andrew Becnel
Department in which program will be located	Department Contact
301-405-1931	abecnel@umd.edu
Contact Phone Number	Contact E-Mail Address
	12-02-2020
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. Mechatronics can be concisely described as the combination of mechanical, electrical, and information systems engineering. Mechatronics engineers design, develop, and test automated production systems, transportation and vehicle systems, robotics, computer-machine controls, and many other integrated systems. Mechatronics engineers also develop new technologies for use in the automotive and aviation industry, advanced manufacturing operations, and often specialize in areas such as robotics, autonomous vehicles, and manufacturing systems. The Bachelor of Science in Mechatronics will provide students with a fundamental understanding of mechatronic systems analysis, the knowledge of how these systems are developed and deployed, and the practical experience required to implement mechatronic systems in real-world applications. Graduates of the program are expected to be highly sought after in fields such as aerospace & defense, energy, infrastructure, manufacturing & automation, robotics, and biomedical engineering.

The proposed Bachelor of Science in Mechatronics, to be offered at the Universities at Shady Grove, seeks to address the growing need for cross-disciplinary engineers skilled in the areas of robotics, automation, and advanced manufacturing technologies, collectively known as Industry 4.0. As society moves into the 4th industrial revolution, the regional economy is redoubling its focus on high-tech industries like biotechnology and aerospace/defense, fields which rely heavily on the broad expertise offered by engineers trained in Mechatronics.

Relation to Strategic Goals. The proposed major in Mechatronics relates to UMD's strategic goals by adding to its STEM program offerings, most specifically at the Universities at Shady Grove (USG). The Mechatronics major aligns with the University Mission Statement, to "advance knowledge in areas of importance to the State", as well as the undergraduate learning objectives 4.1.3 and 4.1.9, to "increase the number of graduates in fields that support the workforce needs of the state and the nation by creating new programs and pathways", and to "continue to improve pathways for transfer students in our undergraduate programs on the College Park campus and at regional centers such as the Universities at Shady Grove," respectively.

The Mechatronics program is the third of three UMD engineering programs planned for delivery specifically at the Universities at Shady Grove to contribute to workforce development in the state and most specifically in the Montgomery County region, taking advantage of the robust partnership with Montgomery College. USG's mission is *"to support and expand pathways to affordable, high-quality public higher education that meet the distinctive needs of the region and are designed to support workforce and economic development in the state; to achieve these goals through partnerships and collaborations with academic, business, public sector and community organizations that promote student success, high academic achievement and professional advancement.*" This program contributes directly to the goals of access and affordability, to high quality programming, and to regional and state capacity building, as articulated in USG mission statement.

Funding. Resources for the new program will be drawn from the University System of Maryland's Workforce Development Initiative that was approved by the State Legislature beginning in FY19. Funds were specifically directed to increasing the number of undergraduate degree offerings in STEM areas at the Universities at Shady Grove.

Institutional Commitment. The program will be administered by the Department of Aerospace Engineering within the A. James Clark School of Engineering. Each of UMD's USG programs has an on-site program director. In addition, two staff members are currently in residence at USG to support the program directors in admissions decisions and to provide academic operational support such as recruiting, outreach to community colleges, access to training, and to act as a liaison to academic services on the College Park campus. The University of Maryland (UMD) is also the managing institution for USG, and in that role supports many administrative services for the operation of USG.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. The Maryland State Plan for Postsecondary Education highlights the need to ensure equitable access to higher education for the diverse population of the state, and offering a Mechatronics baccalaureate program at USG expands opportunities for students along the I-270 tech corridor region who may otherwise be geographically prohibited from participation at other USM institutions. The program will offer students who have completed their first two years of STEM-focused postsecondary education at a Maryland public community college (MPCC) or institutions a pathway to continue their studies in a growing field and earn a terminal four year degree. Providing for these students' success through this lower cost option - 2 years at an MPCC followed by 2 years in a UMD program delivered at USG - helps to reduce the financial burden potential students may face otherwise. The innovative curriculum will combine a solid theoretical foundation with practical implementation skills that prepare graduates for a productive and impactful career in regional industries like defense, aerospace, and advanced manufacturing.

State Plan. The proposed program aligns with the *Maryland State Plan for Postsecondary Education* in several ways. First, the program aligns with the state's emphasis on career training and research. Strategy 7 of the *Maryland State Plan* is "Enhance career advising and planning services and integrate them explicitly into academic advising and planning."[1] Career advising will not only be integrated with student advising, it will also be incorporated in the program coursework. All of the core courses for the program will help students achieve this outcome

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

The US Department of Labor, Education and Training Agency (DOL ETA) recently added a classification for Mechatronics Engineer (17-2199.05) distinct from other occupations.[2] Combined with the related occupations of Robotics Engineers (17-2199.08) and others, the U.S. Department of Labor's Bureau of Labor Statistics, Occupational Employment Statistics Program (BOL OESP) projects 4%-6% average growth in this occupation from 2018-2028 nationwide, accounting for nearly 12,000 new jobs.[3]The State of Maryland in particular is projected to see higher than average opportunities for Mechatronics Engineers[4], both in terms of job placement and median wages, which according to the BOL OESP are 45% higher than the national average ($140,840 in Maryland vs. $96,980 nationwide). This corresponds to over 7,000 jobs in

[1] Maryland Higher Education Commission. (2017). *Maryland State Plan for Postsecondary Education.* (p. 60). Retrieved October 29, 2018 from: http://www.mhec.state.md.us/About/Documents/2017.2021%20Maryland%20State%20Plan%20for%20Higher%20Education.pdf.

[2] 2018 ASEE Southeastern Section Conference American Society for Engineering Education, 2018 Growth of 2-Year programs for Mechatronics Marilyn Barger, Richard Gilbert

[3] National Center for O*NET Development. 17-2199.05 - Mechatronics Engineers. O*NET Online. Retrieved January 28, 2020, from https:// www.onetonline.org/link/summary/17-2199.05

[4]National Center for O*NET Development. State Map for Mechatronics Engineers. My Next Move. Retrieved January 28, 2020, from https:// www.mynextmove.org/profile/state/17-2199.05?from=profile

Mechatronics and related industries specifically, and an even greater number considering the broad based skill set that Mechatronics engineering students offer to employers.[5]

D. Reasonableness of Program Duplication

During the time that this program has been under development, there were no Bachelor's degree programs for Mechatronics in the State of Maryland. Anne Arundel Community College offers an Associate of Applied Science (AAS) degree in Mechatronics Technology. Additionally, Johns Hopkins University offers a Master's degree program in Mechatronics, Robotics, and Automation Engineering. The proposed Mechatronics program at USG will help fill an important gap, particularly in the central and northwest geographic areas of the state in which there is significant market demand. The program is expected to draw students who have already acquired the fundamentals in Maryland's community college system and who are not interested in pursuing one of the more standard 4-year engineering degrees available within the University of System of Maryland or other campuses in the state.

In November 2020, Morgan State University announced plans to launch a Mechatronics program on approximately the same time scale as the program proposed here[6]. It is our belief that the market demand is sufficiently high, the geographic draw of students is sufficiently distinct, that both programs will provide valuable contributions to the Maryland workforce.

One might also anticipate some overlap between a Mechatronics degree program and a Mechanical Engineering program, such as that to be offered by the University of Maryland Baltimore County at the Universities at Shady Grove. Experts from the two universities have met to discuss the similarities and differences between the two programs and have determined that the curricula are distinct and complementary, although discussion is already underway about the possibility of sharing both equipment and program electives.

E . Relevance to Historically Black Institutions (HBIs)

As noted above, development of the UMD Mechatronics program began in 2018, responding to a call for engineering pathway programs at the Universities at Shady Grove and with the support of Governor Hogan's Workforce Development Initiative. At that time, we had determined that no historically black institutions in Maryland offered a bachelor's program in Mechatronics. With the proposed new program at Morgan State University now in view, our position remains that the two programs, while leading to the same credential, differ substantially in the target student audience. It is important to note that there are no residential facilities at the Universities at Shady Grove so all students in the program proposed here would have to be within commuting distance from the Rockville campus. A significant majority of students will be drawn from Montgomery College.

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

See above.

[5] https://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml
[6] https://news.morgan.edu/stem-program-offerings/

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. The curriculum was developed by faculty of the Aerospace Engineering department in collaboration with faculty in Electrical and Computer Engineering and in Mechanical Engineering. All of the undergraduate programs within the A. James Clark School of Engineering are "limited enrollment programs", due to high demand and finite capacity.

The program will be offered exclusively at the Universities at Shady Grove. All undergraduate programs at USG are years 3 and 4 only. Expectations for lower-level coursework will be established through articulation agreements with the Maryland community colleges or taken at College Park prior to admission to the School of Engineering and the major. The proposed curriculum will offer courses at the 300- and 400-level, which constitute the junior and senior year of the program. The program is primarily intended for students transferring from a Maryland public community college. While students at the College Park campus can pursue the program, they will not be able to seek admission into the School of Engineering and Mechatronics major until they have completed the Engineering Limited Enrollment Program (LEP) gateway courses, required prior study major courses, lower-level General Education requirements (or an Associate's Degree), and have earned at least 60 credits.

Faculty Oversight. The faculty within the department of Aerospace Engineering will provide academic direction and oversight for the program. Appendix A contains a list of the relevant faculty.

Educational Objectives and Learning Outcomes. The educational objectives of this program are established to produce top-notch graduates to fill the growing need for workers experienced with integrated mechanical and electrical systems. The Bachelor of Science in Mechatronics will produce engineering graduates who:

1. Apply their training in combining mechanical, electrical, and aerospace problem solving skills to contribute professionally in industrial or research settings;
2. Demonstrate leadership, teamwork, and professional ethical responsibility;
3. Demonstrate an appreciation for their professional activities on society as a whole.

The program will additionally use the following ABET learning outcomes:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics;
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economics factors;
3. An ability to communicate effectively with a range of audiences;

4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts;
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goads, plan tasks, and meet objectives;
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions;
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Institutional assessment and documentation of learning outcomes. Assessment of the program will follow the same plan that the Department of Aerospace Engineering (ENAE) uses for assessing its major for ABET accreditation purposes. Aerospace Engineering and Mechanical Engineering faculty members establish and assess the Mechatronics Program Educational Objectives (PEOs). The faculty members evaluate achievement of the PEOs based on indicators informed by reviewing relevant data from program constituencies (students, faculty, and corporate partners). The departments' Undergraduate Affairs Committees will evaluate recommendations from these constituencies before modification of PEOs. A proposal of these modifications will be presented to the Chairs, the Department Councils, and Department Advisory Boards for feedback prior to a vote for adoption by faculty.

Student Learning Outcomes are evaluated through course-specific performance indicators. The Department will establish rubrics for each performance indicator and develop a course-related assessment as part of this evaluation. Faculty members will then be asked to evaluate the students through these course assessments. Assessment of learning outcomes will take place each year.

Course requirements.

FIRST & SECOND YEAR

Prior to being admitted to the Mechatronics major, students should have completed the Engineering LEP gateway courses, basic math/science courses, and lower-level General Education requirements. Below is the representative set of requirements; specific articulation agreements will be established with each of the local community colleges.

Course	Title	Cr
ENGL 101	Academic Writing	3
MATH 140	Calculus I	4
MATH 141	Calculus II	4
MATH 241	Calculus III	4
MATH 240	Introduction to Linear Algebra	4
MATH 246	Differential Equations for Scientists and Engineers	3

CHEM 135	General Chemistry for Engineers	3
PHYS 161	General Physics: Mechanics and Particle Dynamics	3
PHYS 260/261	General Physics: Vibration, Waves, Heat, Electricity and Magnetism (plus Laboratory)	4
PHYS 270/271	General Physics: Electrodynamics, Light Relativity and Modern Physics (plus Laboratory)	4
ENES 100	Introduction to Engineering Design	3
ENES 102	Mechanics I	3
ENES 220	Mechanics II	3
ENES 232	Thermodynamics	3
GenEd Courses	General Education Requirements (for A.A.S.)	12
	Total Credits	**60**

JUNIOR & SENIOR YEARS AT SHADY GROVE

Junior Year 1st Semester

Course	**Title**	**Cr**
ENMT 301	Dynamics	3
ENMT 305	Electro-mechanical Circuits and Systems	3
ENMT 364	Aerospace Sciences Laboratory	4
ENMT 380	Flight Software Systems	3
ENMT 387	Manufacturing Processes	3
	Total Semester Credits	**16**

Junior Year 2nd Semester

Course	**Title**	**Cr**
ENMT 313	Real Time Software Systems and Microprocessors	3
ENMT 432	Classical Control Theory	3
ENMT 324	Structures	3
ENMT 3XX	Technical Elective (based on track within program)	3
ENGL 393	Professional Writing	3
	Total Semester Credits	**15**

Senior Year 1st Semester

Course	**Title**	**Cr**
ENMT 483	Mechatronics Systems I	3
ENMT 461	Mechatronics and Controls Lab I	3
ENMT XXX	Three program electives (see below)	9
	Total Semester Credits	**15**

Senior Year 2nd Semester

Course	**Title**	**Cr**
ENMT 484	Mechatronics Systems II	3
ENMT 462	Mechatronics and Controls Lab II	3

ENMT XXX	Three program electives (see below)	9
	Total Semester Credits	**15**

TOTAL DEGREE CREDITS	**121**

The program will offer electives; at the same time, opportunities for electives outside the program may become available as the program matures, including USG programs offered by other universities.

Autonomous Air Vehicles Track – Program Elective Courses

Course	Title	Cr
ENMT 471	Advanced Manufacturing and Automation	3
ENMT 472	UAV Flight Testing	3
ENMT 473	Motion Planning for Autonomous Systems	3
ENMT 474	Hands-on Autonomous Aerial Vehicles	3
ENMT 477	Machine Learning in Mechatronics Engineering	3
	Additional electives by permission of advisor	

Robotics Systems Track – Program Elective Courses

Course	Title	Cr
ENMT 471	Advanced Manufacturing and Automation	3
ENMT 473	Motion Planning for Autonomous Systems	3
ENMT 475	Introduction to Robotics	3
ENMT 476	Bio-inspired Robotics	3
ENMT 477	Machine Learning in Mechatronics Engineering	3
	Additional electives by permission of advisor	

See Appendix B for course descriptions.

General Education. Students will complete their science and mathematics general education requirements by way of fulfilling major requirements. Students who transfer to UMD with an Associate's degree from a Maryland community college are deemed to have completed their General Education requirements with the exception of Professional Writing, which is typically taken in their third year of study.

Accreditation or Certification Requirements. As with other undergraduate Engineering degree programs at UMD, the Clark School of Engineering will seek to have this program accredited by the Accreditation Board of Engineering and Technology (ABET).

121 Credit Total. Because of ABET accreditation requirements for engineering undergraduate programs, this program, as with other engineering programs, requires more than 120 credits. At 121 credits, the total is still lower than many engineering programs and is, by design, lower in credits than either the Mechanical Engineering or Aerospace Engineering majors offered on the College Park campus, which have minimum requirements of 124 credits.

Other Institutions or Organizations. The department does not currently intend to contract with another institution or non-collegiate organization for this program.

Student Support. Shady Grove students will receive academic advising and support from a full-time academic advisor at Shady Grove who will report to the Director, Office of Undergraduate Studies in Aerospace Engineering at UMD. This advising includes the usual scheduling of classes, evaluation of progress towards the degrees, and identification of resources. The Mechatronics major will have a mandatory advising process, where students will be required to meet with their advisor, once each semester prior to registration, to check up on the academic progress.

In addition, the AE department will maintain offices at Shady Grove. We will designate an AE faculty member as the Faculty Program Director. The Faculty Program Director will spend one to two days per week at the Shady Grove facility to address the concerns of students, faculty, and instructors. In addition, we will hire an on-site lab technician to maintain the instructional and fabrication laboratory facilities at Shady Grove and a part-time IT specialist serving dual roles at USG and UMD. These personnel will report to the corresponding group leaders in the AE department at UMD. Students evaluate courses and faculty through the courses evaluation system for UMD.

Additional services are provided for all programs at the Universities at Shady Grove through USG's Center for Academic Success.

Marketing and Admissions Information. The AE office of external relations in collaboration with the undergraduate office will produce marketing materials and will conduct recruitment events throughout the year. Following procedures previously established at the Universities at Shady Grove, the Clark School's Assistant Director of Transfer Student Advising and Admissions will review the accepted Mechatronics cohort to ensure all students meet the Clark School's LEP admission criteria.

H. Adequacy of Articulation

Montgomery College is expected to be the largest feeder, although students who have completed two years in any engineering program in a Maryland Community College will be eligible for admission provided they meet the program's eligibility requirements. The Clark School's requirements for transfer students are articulated with the Montgomery College Associate of Science in Engineering. Montgomery College students can enter the program upon completing the Mechanical Engineering focus at Montgomery College with ENES240 – Scientific and Engineering Computation (or equivalent).

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a full list of Aerospace Engineering department faculty. Instruction will also be supported by UMD's Mechanical Engineering department. Four tenured or tenure-track (TTK) faculty and five professional track (PTK) faculty will be engaged in delivery of the program on-site. Two to three graduate students will be employed as teaching assistants on-site, and stipends/fringe benefits as well as support for commuting to/from USG is included in the proposed budget. The curriculum will also be supported by various existing centers and

laboratories in the Clark School of Engineering including Space Systems Laboratory (ENAE), Smart Structures Laboratory (ENAE), the Maryland Robotics Center (ENGR) and the UMD Unmanned Air Systems (UAS) Test Site.

Faculty training. All faculty will receive guidance from the Aerospace Engineering and Mechanical Engineering departments, both of which considers teaching to be critical to the success of its program. For the learning management system, faculty teaching in this program will have access to instructional development opportunities available across the College Park campus, including those offered as part of the Teaching and Learning Transformation Center. For online elements of the coursework, instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment.

J. Adequacy of Library Resources

The University of Maryland Libraries has conducted an assessment of library resources required for this program. The assessment concluded that the University Libraries are able to meet, with its current resources, the curricular and research needs of the program. Resources are available locally at USG's Priddy Library as well as on the College Park campus.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

The program will be delivered in the new Biomedical Sciences and Engineering Education (BSE) building (also called Building IV) at the Universities at Shady Grove. This state-of-the-art educational facility has a suite of shared active-learning classrooms, computing resources, wet labs, a dental clinic, product design laboratory and maker space, as well as offices for faculty and staff delivering the curricula and student support services. Dedicated and shared laboratory and classroom facilities, as well as office space, have been identified for the program.

L. Adequacy of Financial Resources

Resources for the program will come from tuition revenue and from the Governor's Workforce Development Initiative funds that were specifically directed towards implementation of STEM degree programs at the Universities at Shady Grove. Students in this program will represent new enrollment at UMD the tuition revenue associated with this enrollment will be directed towards program needs. Tuition revenue alone is not adequate to support the program; UMD, USG and USM have articulated a memorandum of understanding to maintain funding for the program, beyond revenue expected from tuition. See Tables 1 and 2 for anticipated resources and expenditures.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered

by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment (https://www.irpa.umd.edu/Assessment/LOA.html). Faculty within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online course evaluation instrument that standardizes course evaluations across campus. The course evaluation has standard, university-wide questions and also allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

An important aspect of this program is to draw upon students in the community colleges, which have traditionally larger numbers of African and Latin Americans than does UMD, and thereby improving the numbers of underrepresented minorities in STEM education. This will be a factor in student recruitment.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

N/A

Tables 1 and 2: Resources and Expenditures

TABLE 1: RESOURCES

Resources 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)	$116,800	$360,912	$495,652	$638,153	$788,757
a. #FT Students	10	30	40	50	60
b. Annual Tuition/Fee Rate	$11,680	$12,030	$12,391	$12,763	$13,146
c. Annual FT Revenue (a x b)	$116,800	$360,912	$495,652	$638,153	$788,757
d. # PT Students	0	0	0	0	0
e. Credit Hour Rate	$485.00	$499.55	$514.54	$529.97	$545.87
f. Annual Credit Hours	16	16	16	16	16
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
4. Other Sources	$900,000	$900,000	$900,000	$900,000	$900,000
TOTAL (Add 1 - 4)	**$1,016,800**	**$1,260,912**	**$1,395,652**	**$1,538,153**	**$1,688,757**

Tuition revenue is based on AY2020-21 rates for the A. James Clark School of Engineering. It does not include mandatory fees or laboratory fees. Reallocated funds assume support from the States Workforce Development Initiative targeted towards programs to be delivered at the Universities at Shady Grove.

TABLE 2: EXPENDITURES

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Full time Faculty (b+c below)	$478,800	$657,552	$677,279	$871,996	$898,156
a. #FTE	3.0	4.0	4.0	5.0	5.0
b. Total Salary	$360,000	$494,400	$509,232	$655,636	$675,305
c. Total Benefits	$118,800	$163,152	$168,047	$216,360	$222,851
2. Part time Faculty (b+c below)	$14,000	$28,000	$70,000	$70,000	$70,000
a. #FTE	0.2	0.4	1.0	1.0	1.0
b. Total Salary	$14,000	$28,000	$70,000	$70,000	$70,000
c. Total Benefits	$0	$0	$0	$0	$0
3. Admin. Staff (b+c below)	$186,200	$191,786	$246,924	$254,332	$261,962
a. #FTE	2.0	2.0	2.5	2.5	2.5
b. Total Salary	$140,000	$144,200	$185,658	$191,227	$196,964
c. Total Benefits	$46,200	$47,586	$61,267	$63,105	$64,998
4. Technical Support staff (b+c below)	$53,200	$54,796	$56,440	$58,133	$59,877
a. #FTE	0.5	0.5	0.5	0.5	0.5
b. Total Salary	$40,000	$41,200	$42,436	$43,709	$45,020
c. Total Benefits	$13,200	$13,596	$14,004	$14,424	$14,857
5. Graduate Assistants (b+c below)	$44,144	$89,341	$90,425	$91,542	$92,692
a. #FTE	1.0	2.0	2.0	2.0	2.0
b. Stipend	$20,000	$40,000	$40,000	$40,000	$40,000
c. Tuition Remission	$17,544	$36,141	$37,225	$38,342	$39,492
d. benefits	$6,600	$13,200	$13,200	$13,200	$13,200
6. Equipment	$50,000	$25,000	$25,000	$25,000	$25,000
7. Library	$5,000	$5,000	$5,000	$5,000	$5,000
8. New or Renovated Space	$0	$0	$0	$0	$0
9. Marketing/Advertising	$10,000	$10,000	$10,000	$10,000	$10,000
10. Other Expenses: Operational Expenses	$50,000	$50,000	$50,000	$50,000	$50,000
11. Office Space Rental	$10,500	$10,815	$11,139	$11,474	$11,818
12. Classroom Rental	$0	$9,000	$9,270	$9,548	$9,835
13. university administrative fee	$11,680	$36,091	$49,565	$63,815	$78,876
TOTAL (Add 1 - 13)	**$913,524**	**$1,167,381**	**$1,301,042**	**$1,520,840**	**$1,573,215**

Notes: Graduate assistants are included in the budget to support instruction. Other expenses include lab equipment and software maintenance, materials and supplies, program outreach, and travel related to the program.

Appendix A: Faculty in the Fischell Department of Bioengineering

All faculty hold doctoral degrees in a field relevant to the discipline. Faculty biographies and research interests can be found in the department's web site (https://bioe.umd.edu/clark/facultydir?drfilter=1). All faculty listed are full-time. Specific course assignments have not yet been made, but will be made in time to schedule the courses for the target start term of Fall 2021. Some additional hires are anticipated to support the program at Shady Grove.

Faculty Name	Highest Degree Earned - Field and Institution	Rank
Akin, David	Ph.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Associate Professor
Baeder, James	Ph.D., Aeronautics & Astronautics, Stanford University	Professor
Bauchau, Olivier	Ph.D., Structural Dynamics, Massachusetts Institute of Technology	Professor
Cadou, Christopher	Ph.D., Mechanical Engineering, UCLA	Professor
Chopra, Inderjit	Sc.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Distinguished Univ Professor
Datta, Anubhav	Ph.D., Aerospace Engineering, University of Maryland	Associate Professor
Flatau, Alison	Ph.D., Mechanical Engineering, University of Utah	Prof & Assoc Chair
Jones, Anya	Ph.D., Aerodynamics, University of Cambridge	Associate Professor
Laurence, Stuart	Ph.D., Aeronautics, California Institute of Technology	Associate Professor
Lee, Sung	Ph.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Professor
Martin Aguirre, Maria		Associate Professor
Paley, Derek	Ph.D., Mechanical & Aerospace Engineering, Princeton University	Professor
Sanner, Robert	Ph.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Assoc Prof & Assoc Chair
Sedwick, Raymond	Ph.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Professor
Wereley, Norman	Ph.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Prof & Chair
Winkelmann, Allen	Ph.D., Aerospace Engineering, University of Maryland	Associate Professor
Yu, Kenneth	Ph.D., Aerospace Engineering, UC Berkeley	Professor
Akin, David	Ph.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Associate Professor

Baeder, James	Ph.D., Aeronautics & Astronautics, Stanford University	Professor
Bauchau, Olivier	Ph.D., Structural Dynamics, Massachusetts Institute of Technology	Professor
Cadou, Christopher	Ph.D., Mechanical Engineering, UCLA	Professor
Hartzell, Christine	Ph.D. Aerospace Engineering Sciences, University of Colorado at Boulder	Assistant Professor
Otte, Michael	Ph.D., Computer Science, University of Colorado at Boulder	Assistant Professor
Xu, Huan	Ph.D., Mechanical Engineering, California Institute of Technology	Assistant Professor
Hartzell, Christine	Ph.D. Aerospace Engineering Sciences, University of Colorado at Boulder	Assistant Professor
Becnel, Andrew	Ph.D., Aerospace Engineering, University of Maryland	Senior Lecturer
Bowden, Mary	Sc.D., Aeronautics & Astronautics, Massachusetts Institute of Technology	Visiting Asst Professor
Carignan, Craig	Sc.D. Aeronautics & Astronautics, Massachusetts Institute of Technology	Lecturer

Appendix B: Course Descriptions

ENMT301 - Dynamics
Kinematics and dynamics of three dimensional motion of point masses and rigid bodies with introduction to more general systems. Primary emphasis on Newtonian methods. Practice in numerical solutions and computer animation of equations of motion using MATLAB.

ENMT305 - Electro-mechanical Circuits and Systems
Analysis techniques for simulating resonances and impedances in systems that couple physical interactions electrical, mechanical, magnetic and piezoelectric domains. Analysis applied to modeling the electro-magneto-mechano-acoustic domain interactions in traditional loudspeaker designs, and can be extended to the design of sensors, energy harvesters and actuators.

ENMT313 - Real Time Software Systems and Microprocessors
Timing, synchronization and data flow; parallel, serial, and analog interfaces with sensors and actuators; microprocessor system architecture; buses; direct memory access (DMA); interfacing considerations.

ENMT324 - Structures
Analysis of torsion, beam bending, plate bending, buckling and their application to aerospace and robotic systems.

ENMT364 - Aerospace Sciences Laboratory
Application of fundamental measuring techniques to measurements in aerospace engineering. Includes experiments in aerodynamics, structures, propulsion, flight dynamics and astrodynamics. Correlation of theory with experimental results.

ENMT380 - Flight Software Systems
Avionics using advanced sensor and computing technologies are at the heart of every modern Aerospace vehicle. Advanced software systems to improve safety and enable unmanned and deep-space missions. Object-oriented programming and software engineering concepts required to design and build complex flight software systems. Software validation, verification and real-time performance analysis to assess flight software system reliability and robustness. Human-machine interface design for piloted systems. Automatic onboard data acquisition and decision-making for unmanned air and space vehicles.

ENMT387 - Manufacturing Processes
An introduction to common manufacturing processes and the mindset of “design-for-manufacture” in a mechatronics context. Establishing datums, geometric dimensioning and tolerancing (GD&T), and planning for the manufacturing methods that will successfully produce the desired parts. Overview of common small- and large-volume production methods, such as milling, turning, stamping and bending of sheet metal, and injection molding.

ENMT432 - Classical Control Theory
An introduction to the feedback control of dynamic systems. Laplace transforms and transfer function techniques; frequency response and Bode diagrams. Stability analysis via root locus and Nyquist techniques. Performance specifications in time and frequency domains, and design of compensation strategies to meet performance goals.

ENMT461 - Mechatronics and Controls Lab I
Basic instrumentation electronics including DC electronics, AC electronics, semiconductors, electro-optics and digital electronics. Sensing devices used to carry out experiments including metrology, machine tool measurements, bridge circuits, optical devices, and introduction to computer based data acquisition.

ENMT462 - Mechatronics and Controls Lab II
Design of mechanical motion transmission systems: gearing, couplings, belts and lead-screws; Sensing and measurement of mechanical motion, sensor selection; Electromechanical actuator selection and specification; PLCs and sequential controller design, digital I/O; Case studies.

ENMT471 - Advanced Manufacturing and Automation
Develop a comprehensive understanding of additive and subtractive manufacturing, including extrusion-based deposition, stereolithography, powder bed-based melting, inkjet-based deposition, and computer numerical controlled (CNC) machining operations, including milling and laser cutting. Cultivate a "design-for-advanced manufacturing" skill set for combining computer-aided design (CAD) and computer-aided manufacturing (CAM) methodologies to produce desired parts. Fabricate 3D mechanical objects using a variety of manufacturing technologies on campus. Execute a design project that demonstrates how advanced manufacturing technologies can overcome limitations of traditional manufacturing processes and the challenges of applying these processes at scale.

ENMT472 - UAV Flight Testing
Provides basic instruction to unmanned aircraft flight testing and demonstrates need for systematic, well-proven technique to allow for accurate performance measurements. Concepts of aerodynamics, airplane performance, and stability and control. Emphasis on small, general use quadrotor type aircraft.

ENMT473 - Motion Planning for Autonomous Systems
Autonomous systems (e.g., aircraft, vehicles, manipulators, and robots) must plan long-term movement that respects environmental constraints such as obstacles, other actors, and wind; system constraints such as kinematics, dynamics, and fuel; as well as factors such as time and safety. Robust autonomy also requires dealing with environmental changes, new information, and uncertainty. This course provides an overview of such problems and the methods used to solve them.

ENMT474 - Hands on Autonomous Aerial Vehicles
Exposes the students to mathematical foundations of computer vision, planning and control for

aerial robots. The goal is to train the students to develop real-time algorithms for the realization of autonomous aerial systems. The course is designed to balance theory with an application on hardware. The assignments will require a significant investment of time and energy. All projects will be carried using quadrotors in a group of students.

ENMT475 - Introduction to Robotics
Introduction to the kinematics, dynamics, and control of robot manipulators. DH parameters, serial and parallel manipulators, kinematic redundancy, sensors, actuators, and mechanism design. Control concepts introduced ranging from independent joint control to impedance control. Examples drawn from space robotics, wearable robotics, and other areas.

ENMT476 - Bio-Inspired Robotics
Successful realization of a flapping wing micro air vehicle (MAV) requires development of a light weight drive mechanism converting the rotary motion of the motor into flapping motion of the wings. Students will have an opportunity to develop and understand the physics and associated control algorithms enabling wings to change their position and speed instantaneously in order to perform maneuvers autonomously, such as controlled dives and loitering. Kinematics and dynamics principles essential to modeling the forces that control the flight maneuvers.

ENMT477 - Machine Learning in Mechatronics Engineering
Learn how to apply techniques from Artificial Intelligence and Machine Learning to solve engineering problems and design new products or systems. Design and build a personal or research project that demonstrates how computational learning algorithms can solve difficult tasks in areas you are interested in. Master how to interpret and transfer state-of-the-art techniques from computer science to practical engineering situations and make smart implementation decisions.

ENMT483 - Mechatronic Systems I
Principles of mechatronic systems analysis and design. Performance analysis and optimization. Design of systems including avionics, power, propulsion, human factors, structures, actuators and mechanisms, and thermal control. Design processes and design synthesis. Individual student projects in mechatronic systems design.

ENMT484 - Mechatronic Systems II
Senior capstone design course in Mechatronics. Group preliminary design of a mechatronic system, including system and subsystem design, configuration control, costing, risk analysis, and programmatic development. Course also emphasizes written and oral engineering communications. Groups of students will complete, brief and report on a major design study to specific requirements.

ENGL393: Technical Writing
The writing of technical papers and reports. Technical track of Professional Writing that is required of all UMD undergraduates.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland Eastern Shore: Bachelor of Science in Sport Management

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: The University of Maryland, Eastern Shore proposes to establish a Bachelor of Science in Sport Management. The program will produce graduates who will be employed as sport managers. They will work in many aspects of sport organizations and events including marketing, finance, law, facility management, event management, fundraising, sponsorships, and promotions. In addition, sport managers can work with all levels of sport, including recreational sports, interscholastic sports, intercollegiate sports, or professional sports.

The curriculum includes 42 required credits in general education and 33 credits of major core courses including facility management, sport governance, sport marketing, sport business, sport finance and economics, a unique focus and practicum in interscholastic and intercollegiate athletic administration, and an internship. The basic coursework is complemented by 15 credits selected from other Exercise Science courses to broaden their knowledge including courses that involve sport medicine and first aid, exercise physiology, exercise testing, and sport nutrition. Because sport management also involves other aspects of business and the media, students will be required to complete courses in accounting and business ethics, as well as digital media and broadcasting performance.

The curriculum of 120 credit hours will be divided among the following categories: 1) 42 credit hours in general education, 2) 33 credit hours of major core courses, 3) 15 credit hours of Exercise Science electives, 4) 24 credit hours of supportive courses, and 5) 6 credit hours in free electives.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fees revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life Committee recommend that the Board of Regents approve the proposal from the University of Maryland Eastern Shore to offer the Bachelor of Science in Sport Management.

COMMITTEE RECOMMENDATION:		DATE: January 12, 2021
BOARD ACTION:		DATE:
SUBMITTED BY: Joann A. Boughman	301-445-1992	jboughman@usmd.edu

UNIVERSITY OF MARYLAND EASTERN SHORE
Office of the President

December 4, 2020

Jay A. Perman, M.D.
Chancellor
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783-1690

Dear Dr. Perman:

The University of Maryland Eastern Shore (UMES) seeks your approval to offer a new Bachelor of Science (B.S.) program in Sport Management.

As noted in the proposal, the Bureau of Labor Statistics projects faster than average job growth for the field of sports management through 2028, with the Washington Metropolitan area listed as the third highest of the top 10 metropolitan areas. The proposed B.S. in Sport Management is consistent with our institution mission to meet local, state, and national workforce needs. In addition, the proposed degree program supports UMES Strategic Plan Goals III and IV, and more specifically sub-goals 3.2 and 4.1 which address the alignment of academic programs with workforce development needs and educational needs of the state ofMaryland, respectively.

Students who pursue the proposed undergraduate program in Sport Management will complete a total of 120 credit hours, including 33 credit hours of core courses, 15 credit hours of sport management electives, 24 credit hours of support courses, and 6 credit hours of free electives.

The proposal was approved by each individual and shared governance body in our internal curriculum review process. I, too, endorse this proposal and am pleased to submit it to you for approval.

Thank you for your consideration of this request.

Sincerely,

Heidi M. Anderson, Ph.D., FAPhA
President

John T. Williams Hall, Suite 2107 Princess Anne, Maryland 21853-1299 Office : (410) 651-6101 Fax (410)651-6300
www.umes.edu

cc: Dr. Antoinette Coleman, Associate Vice Chancellor for Academic Affairs
cc: Dr. Nancy S. Niemi, Provost and Vice President for Academic Affairs
cc: Dr. Latasha Wade, Vice Provost and MSCHE Accreditation Liaison Officer
cc: Dr. Rondall E. Allen, Dean, School of Pharmacy and Health Professions

John T. Williams Hall, Suite 2107 Princess Anne, Maryland 21853-1299 Office: (410) 651-6101 Fax (410) 651-6300
www.umes.edu

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
	Within Existing Resources, or
X	Requiring New Resources

University of Maryland Eastern Shore
Institution Submitting Proposal

Sport Management
Title of Proposed Program

Bachelor of Science	Fall 2021
Award to be Offered	Projected Implementation Date
	31.0504
Proposed HEGIS Code	Proposed CIP Code
Department of Kinesiology	Dr. Margarita Treuth
Department in which program will be located	Department Contact
(410) 651-6494	mstreuth@umes.edu
Contact Phone Number	Contact E-Mail Address
Signature of President or Designee	12-3-2020
	Date

Bachelor of Science (B.S.) in Sport Management

A. Centrality to Institutional Mission 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.

This Sport Management program will fall under the School of Pharmacy and Health Professions (SPHP) and will tie together both health and business areas. The Department of Kinesiology is seeking approval of this new program to enhance the undergraduate degree offerings, as it currently has one major, Exercise Science with the Health Fitness or Clinical Tracks. This proposal is consistent with UMES Strategic Goal 4 'to meet the educational needs of the State of Maryland with high quality and innovative academic programming.' This proposal specifically relates to adding a new undergraduate major within Kinesiology and the SPHP.

This new program supports the UMES mission. As noted in the mission statement, UMES is "grounded in distinctive learning, discovery and engagement opportunities in the arts and sciences, education, technology, engineering, agriculture, business and health professions." UMES is known for "nationally accredited undergraduate and graduate programs, applied research, and highly valued graduates." UMES also "provides individuals, including first generation college students, access to a holistic learning environment". Another element is the "commitment to meeting the workforce needs of the Eastern Shore, the state, and nation". In summary, this program will allow the department to seek accreditation when appropriate, provide new opportunities to first generation college students at UMES, and lastly, as the need for healthcare and business professionals continues, provide the workforce with qualified individuals.

In the 2018-2019 academic year, the university engaged in a program prioritization process that involved a written response from each program addressing key issues such as those addressed here and it was followed by the committee's recommendations to the schools and departments. These recommendations were based on the current professional needs of our students and of our prospective students. Based on this, it was determined that our students would benefit from enhancement in the Department of Kinesiology, and in particular, the proposed Sport Management Program was included in the Department's report.

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

The Sport Management program supports UMES' Strategic Goal 4: "To meet the educational needs of the State of Maryland with high quality and innovative academic programming."

In the 2020 Strategic Plan, Goal III is supported in that the goal is to "become a leading USM partner, in research, innovation and economic competitiveness" with sub-goal 3.2 "align academic programs with workforce development needs". This new academic program will provide the workforce with qualified sport management professionals for the state of Maryland.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of the program implementation.

UMES will provide the proposed program with adequate resources, facilities, and faculty in the same manner that it currently has in place for its academic programs in the Department of Kinesiology. This program will require an increase in the annual operational budget from state funds for the department to accommodate the needs of the new program. The first year of the program will not require any additional resources, since existing faculty will be teaching the first introductory

course. The next four years will require additional resources and the university has agreed to provide these additional resources to support the success of the program.

4. Provide description of the institution's commitment to:

a) Ongoing administrative, financial, and technical support of the proposed program

The internal approval procedure for new programs at UMES is indicative of the University's commitment to the ongoing administrative, financial, and technical support of the Department of Kinesiology and its only current undergraduate major, Exercise Science. At present, the department has the third largest undergraduate enrollment. The proposed program was vetted and approved by the Department Curriculum Committee, the chair of the Department of Kinesiology, the School of Pharmacy and Health Professions Curriculum committee, the dean of the School of Pharmacy and Health Professions, the Faculty Assembly Academic Standing Committee, the Faculty Assembly (faculty shared governance body), the provost and vice president for academic affairs, as well as the UMES president, indicating their support of the new program offering.

b) Continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

UMES has a commitment to support this program with sufficient time for enrolled students to complete the Sport Management program. Our goal to pursue this major is driven by the strategic goals listed previously and to increase offerings to our students. In order to accomplish these strategic goals and maintain the quality in the department, support of this program and its students through graduation is essential to the mission and goals of the University.

B. 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:

a) The need for the advancement and evolution of knowledge

The 2017-2021 Maryland State Plan for Postsecondary Education: Student Success with Less Debt includes Strategy 7 in which the proposed curriculum addresses the sub-goal 'increase internship opportunities to improve career planning' in that the students in the Sport Management program will complete a 3 credit Practicum experience in Interscholastic and Intercollegiate Athletics in their junior year in collaboration with the UMES Department of Athletics, and then a 6 credit Internship experience in Interscholastic and Intercollegiate Athletics in the senior year. The sport industry in Maryland includes athletics at both of these levels, as well as professional sports. Providing the students with these practical internship experiences will train the students to be prepared for this billion dollar industry in Maryland.

b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education

Offering an undergraduate degree in Sport Management at UMES will expand the educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education. One component of the mission of UMES is specifically to offer programs to first generation college students. The student majors in the Department of Kinesiology align with these descriptions.

c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

Currently, there are two historically black institutions in Maryland with programs in Sports Management. Bowie State University offers a B.S. in Sports Management, while Coppin State University offers a B.S. in Sport and Entertainment Management. The Sport Management program proposed by UMES supports the institution's mission to offer unique educational programs to the rural, underrepresented, and educationally disadvantaged residents of the Maryland Eastern Shore.

2. Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education

The 2017-2021 Maryland State Plan for Postsecondary Education: Student Success with Less Debt emphasizes three areas, including *Access*, *Success*, and *Innovation*.

The goal for *Access* is to ensure equitable access to affordable and quality postsecondary education for all Maryland residents.

The goal for *Success* is to promote and implement practices and policies that will ensure student success. Under Strategy 4: Continue to ensure equal educational opportunities for all Marylanders by supporting all postsecondary institutions, the action item that pertains to this program is to 'support the unique missions of Historically Black Colleges and Universities'. Under Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning, the action item that pertains to this program is to 'increase internship opportunities to improve career planning'.

The goal for *Innovation* is to foster innovation in all aspects of Maryland higher education to improve access and student success.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (ex: mid-level management) for graduates of the proposed program.

Graduates of the UMES Sport Management program can be employed as sport managers. They will work in many aspects of sport organizations and events including marketing, finance, law, facility management, event management, fundraising, sponsorships, and promotions. In addition, sport managers can work with all levels of sport, including recreational sports, interscholastic sports, intercollegiate sports, or professional sports. Graduates will enter at the lower end of management opportunities.

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

The Bureau of Labor Statistics (BLS) projects the job growth for sports management will increase faster than average from 2018 through 2028. This does depend on the path the graduate pursues. For example, a career as a sport coach and scout will grow faster than average by 11%, and a sports marketing manager will grow faster than average by 8%. The DC/MD/VA area is listed as the third highest of the top 10 metropolitan areas for this occupation.

3. **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.**

The BLS includes sport management under the category 'agents and business managers of artists, performers, and athletes'. The bureau expects the job outlook to be strong as it is predicted to grow. Specifically, the employment change from 2018-2028 is projected to be a total of 21,800 jobs for marketing managers, which as noted, includes sport marketing managers.

The Maryland Department of Labor provides data for the Maryland Occupational Projections – 2016-2026 (https://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml). For coaches and scouts, a projected increase of 7.26% or 180 jobs for 2016-2026 was reported. The CIP (Classification of Program) taxonomy of 31.0504 designation was used to gather this data.

4. **Provide data showing the current and projected supply of prospective graduates.**

	Total Undergraduate Applicants to UMES	Total Undergraduates Admitted to UMES	Enrolled in Kinesiology	Graduated in Kinesiology
2014-2015	4,807	3,045	260	40
2015-2016	7,735	3,944	242	39
2016-2017	11,218	4,370	225	44
2017-2018	8,419	3,305	206	46
2018-2019	5,347	2,953	188	30
2019-2020	4,284	2,784	164	N/A(projected 30)

Of the 4 Sport Management programs offered in the state of Maryland, graduation rates in 2018 ranged from 14 students (Coppin University) to 125 students (Towson University). It is anticipated that the Sport Management program proposed by UMES would enroll 10-15 students initially. Enrollment in the program is expected to increase quickly to approximately 25-30 students, to eventually reach a target of ~40-50 total graduates per year from the Department of Kinesiology.

D. 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.**

There are a few Sport Management programs in the State of Maryland; however, none are in the same geographical area. The following table illustrates the similarities and differences between the proposed program and others.

	Similarities	Differences
Bowie State University	46 credits Gen Ed 6 similar program core courses	Not located on the Eastern Shore 47 credits program core In the College of Education
Coppin State University	40 credits Gen Ed 6 similar program core courses	Not located on the Eastern Shore 33 credits program core In the College of Business
Mount St. Mary's University	46-49 credits Gen Ed 6 similar program core courses	Not located on the Eastern Shore Private Institution 46 credits program core In the College of Business

Towson University	40 credits Gen Ed 6 similar program core courses	Not located on the Eastern Shore 42 credits program core Requires a Business Administration minor of 24 credits

2. Provide justification for the proposed program.

This proposed program has a unique focus on interscholastic and intercollegiate athletics. It also contains some similarities to the other programs in the state. The General Education requirements are consistent with COMAR. The other programs across the state also include courses in the major program core that are required for program accreditation by the Commission on Sport Management Accreditation (COSMA). These include six courses, namely an introductory course, management, governance, marketing, finance and economics courses, and the practicum/internship courses. The proposed program at UMES differs from these programs in that the major core courses are different from those taught in the Business Administration program at UMES. In addition, there is a specific focus on interscholastic and intercollegiate athletic administration. In fact, the proposed program will include a course titled “Interscholastic and Intercollegiate Athletic Administration” and a course practicum “Interscholastic and Intercollegiate Athletic Administration Practicum”. The Department of Athletics will participate in this practicum experience to provide integrated, hands-on learning opportunities for the students. Each of these 3-credit courses will be at the 300-level and offered to students in their junior year. This allows the student to have practicum experience prior to the Internship in the senior year, which is a 6-credit, 180-hour internship in the sport management field. Importantly, the career opportunities for the graduates will be strengthened if the courses in the curriculum follow those needed for accreditation by COSMA, and the goal would be to seek accreditation once the program has been well established.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs):

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

UMES is a Historically Black Institution and would benefit from offering a new undergraduate major in Sport Management. There are two HBI’s in Maryland with somewhat similar programs and degrees in Sport Management. However, they are located on the western shore of Maryland, 120 miles away.

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

1. Discuss the program’s potential impact on the uniqueness and institutional identities and missions of HBIs.

There are two other HBIs with a Sport Management program. This program will be offered on the Maryland Eastern Shore and will contribute to both the uniqueness and mission of HBIs.

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

1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.

The proposed new program in Sport Management was internally approved by all requisite approvers at UMES, which is necessary before the proposal for a new degree or certificate program can be submitted to the University System of Maryland and MHEC for consideration. The proposed program was developed by faculty in the Department of Kinesiology, including Dr. LaShawn

Nastvogel and Dr. Margarita Treuth. Dr. Nastvogel was instrumental and developed the program curriculum.

Dr. Nastvogel earned a doctorate in Sport Management and teaches in the undergraduate Exercise Science program at UMES. If the Sport Management program is approved, she will transition to the Sport Management program full-time and teach courses in the proposed curriculum. Currently, Dr. Margarita Treuth (chair of the Department of Kinesiology) and Dr. Nastvogel co-teach the Internship experience course and both will continue to do so for students in the Department of Kinesiology. Input from the staff in the Department of Athletics and the Professional Golf Management Program also contributed their ideas for involvement through potential teaching opportunities.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

The goal of the Sport Management program is to prepare students to enter into the sport management industry as athletic administrators, coaches and scouts, and managers at the interscholastic and intercollegiate level for the state of Maryland.

Upon graduation from the program, students will:

1. Demonstrate knowledge of the leadership and managerial qualities both within and outside the sport environment and the knowledge and skill requirements for leading a sport organization
2. Demonstrate knowledge of sport marketing techniques and be able to create a sport marketing plan
3. Gain an understanding of how to locate, budget, and allocate funds within multiple sport sectors
4. Demonstrate knowledge of the social and psychological aspects of sport
5. Gain an understanding of the US legal system and how it relates to intramural, recreational, interscholastic, and intercollegiate athletics
6. Demonstrate oral and written skills to effectively communicate
7. Gain hands-on experience in developing, implementing, and monitoring fundraising campaigns, and assisting with sporting events
8. Gain an internship experience in the field of sport management

3. Explain how the institution will: a) provide assessment of student achievement of learning outcomes in the program; b) document student achievement of learning outcomes in the program

UMES attempts to build and maintain a solid assessment process of student learning at the course, program, and institutional levels. Multiple assessment approaches ensures that students master critical knowledge and skills in General Education level and program level areas. These assessments follow the Student Learning Outcomes Assessment Process or SLOAP. Courses in the program are evaluated using SLOAP. Assessment tools are both direct and indirect in order to understand what students know, think, and can do at the end of each program. Each year, the department chair completes an assessment summary report of the program in order to guide program success and make modifications when needed. Achievement of learning outcomes is demonstrated by 90% proficiency in the prerequisite courses for the practicum (freshman and sophomore years), as well as the practicum (junior year) and internship (senior year) experiences. Core competencies will include assessments of written and oral communication, critical analysis and reasoning, and diversity and professional behavior.

Students will be evaluated on the ability to apply what has been learned in theory to practice regarding their academic preparation for assessments in sport management. Evaluations will occur midway and

at the completion of the practicum or internship, and these will be completed by the site supervisor and practicum or internship coordinator utilizing a survey instrument. T hese two experiences in the sport management program will provide students with professional, trained supervision and guidance. In addition, it will enhance the student's knowledge, skills, and abilities of the sport management industry so that they have the skills to pursue a career in sport and it will allow them to develop networking opportunities.

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

This program will be offered as an undergraduate degree consisting of 120 credits, with 42 credits of general education, 33 credits of major core, 15 credits of major electives, 24 credits of support courses, and 6 credits of free electives (any UMES course). The majority of these program core courses in the 200-400 level are 3 credit courses.

The support courses include:

Course Number	Course Name	Credits
TELC 214	Introduction to Digital Media	3
TELC 239	Introduction to Broadcast Performance	3
TELC 241	Basic News Writing and Performance	3
SOCI 201	Social Problems	3
ACCT 200	College Accounting	3
BUAD 200	Business Ethics	3
BUAD 302	Management and Organizational Behavior	3
MATH 210	Elementary Statistics	3
	Total	24

The courses and course descriptions are listed below for the major core credits to be offered in the new program.

Major Core Course Descriptions

EXSC 205 Introduction to Sport Management (3 credits)

The purpose of this course is to provide students with a broad, yet specific overview of the sport management curriculum as well as the professional opportunities that are available within the field. The course will identify the fundamental principles of management as it relates to the sport environment.

EXSC 207 Facility Management (3 credits)

This course is designed to provide students with an understanding of the planning, design, and managing of sport related facilities. The course will place an emphasis on facility services, the daily operations, maintenance, and planning of these facilities, and the budget management of these facilities.

EXSC 285 Leadership in Sport (3 credits)

This course is designed to prepare students for the practical application of sport management principles. Students will become acquainted with the theoretical underpinnings on leadership, organizational change, and professional development. This course will also focus on the knowledge

and skill requirements for leading a sport organization with an emphasis on relationships, responsibilities, and results.
Prerequisite(s): EXSC 205

EXSC 350 Sport Governance (3 credits)

This course is designed to provide students with an in depth analysis of the structure and function of the United States legal system and how it relates to intramural, recreational, interscholastic, and intercollegiate athletics. Sport law application is examined from a social, legislative, and judicial standpoint. Special emphasis is on interscholastic and intercollegiate athletics and the legal aspects concerning the laws and equity that have taken place. Students will also explore how current trends in campus demographics have impacted sports programs throughout the nation.

EXSC 375 Sport Marketing (3 credits)

This course is designed to provide students with specific and relevant marketing techniques and platforms that are and will be used in the sport industry. Students will explore its foundation, consumer interactions, and learn how to monitor consumer behaviors. Emphasis will be placed on branding, sales, community relation, and social media. The course will include the strategic creation of a marketing plan utilizing each component that is covered.
Prerequisite(s): EXSC 205

EXSC 390 Interscholastic and Intercollegiate Athletic Administration (3 credits)

This course is designed to provide an in-depth, integrated, and strategic approach to helping students understand all aspects of interscholastic and intercollegiate athletic administration. Special emphasis will be placed on budgeting, marketing, sponsorships, ticketing, public and alumni relations, event management, sport organization-specific student-athlete compliance, and student-athlete support services.
Prerequisite(s): EXSC 205, EXSC 285

EXSC 391 Interscholastic and Intercollegiate Athletic Administration Practicum (3 credits)

This course is designed to provide students with a hands-on learning component in conjunction with EXSC 390. The student will actively engage in conversation with athletic administration, participate in the planning and implementation of fundraising and/or competitive events, and assist with the generation of new ideas. Students will understand the practical application of concepts learned throughout the sport management curriculum. Upon departmental and/or university approval, students will be required to complete 90 hours within a sport organization.
Prerequisite(s): EXSC 205, EXSC 285
Co-requisite: EXSC 390

EXSC 393 Sport Business (3 credits)
This course is designed to provide students with skills to effectively communicate in the context of interscholastic, intercollegiate, and professional sports. Students will be introduced to methods of writing standard business documents.

EXSC 456 Sport Finance and Economics (3 credits)

This course is designed to provide students with basic financial principles and economic concepts in interscholastic, intercollegiate, and professional athletic programs. An introduction to budget management and allocation, private versus public sources of revenue, and economic impact

statements will provide students with a foundation of financial and economic aspects of multiple sport sectors.

EXSC 490 Internship (6 credits)

A structured off campus learning experience is designed to provide students with a terminal professional experience that permits first-hand, direct practical and professional experiences in Exercise Science. Prerequisites: Senior status with approval of the Department Chair. Student may not exceed 12 semester hours during the semester in which they complete their professional internship experience.

Major Electives (15 credits)

Students can choose from a variety of courses offered in the Department of Kinesiology to satisfy these 15 credits. These can be chosen from the following:

Course Number	Course Name	Credits
EXSC 202	Personal and Community Health	3
EXSC 252	Sport Psychology	3
EXSC 302	Sport Medicine and First Aid	3
EXSC 311	Applied Kinesiology	4
EXSC 332	Exercise Physiology	4
EXSC 355	Exercise Testing and Prescription	3
EXSC 360online	Exercise and Sport Nutrition	3
EXSC 445	Health Aspects of Aging	3
EXSC 455	Health Fitness Management	3
EXSC 464online	Adult Health Fitness Programming	3
EXSC 475	Advanced Strength and Conditioning	3

This table below indicates the course sequence the student's will follow to fulfill the academic requirements for the Sport Management Program.

Freshman Year		Credits
FALL	EXSC 100 Freshman Experience	1
	EXSC 111 Personal Health and Fitness	3
	BIOL 111 Principles of Biology I	3
	BIOL 113 Principles of Biology I Lab	1
	ENGL 101 Basic Composition I	3
	GEN ED Curriculum Area I	3
	GEN ED Curriculum Area II	3
	Total	17

SPRING	EXSC 205 Introduction to Sport Management	3
	BIOL 112 Principles of Biology II	3
	BIOL 114 Principles of Biology II Lab	1
	ENGL 102 Basic Composition II, ENGL 001 EPE	3
	MATH 109 College Algebra	3
	GEN ED Curriculum Area I	3
	Total	16
Sophomore Year		
FALL	EXSC 207 Facility Management	3
	EXSC 265 Contemporary Issues in Kinesiology	3
	ENGL 203 Fundamentals of Contemporary Speech	3
	TELC 214 Introduction to Digital Media	3
	GEN ED Curriculum Area II	3
	Total	15
SPRING	EXSC 285 Leadership in Sport	3
	EXSC 350 Sport Governance	3
	ACCT 200 College Accounting	3
	BUAD 200 Business Ethics	3
	TELC 239 Introduction to Broadcast Performance	3
	Total	15
Junior Year		
FALL	EXSC 375 Sport Marketing	3
	EXSC 393 Sport Business	3
	EXSC Elective	3
	SOCI 201 Social Problems	3
	TELC 241 Basic News Writing and Performance	3
	Total	15
SPRING	EXSC 390 Interschol & Intercolleg Athletic Admin	3
	EXSC 391 Interschol & Intercolleg Athletic Admin Pract	3
	EXSC Elective	3
	Free Elective	3
	MATH 210 Elementary Statistics	3
	Total	15
Senior Year		
FALL	EXSC 450 Sport Finance and Economics	3
	EXSC Elective	3
	EXSC Elective	3
	Free Elective	3
	BUAD 302 Management and Organizational Behavior	3
	Total	15
SPRING	EXSC Elective	3
	EXSC 490 Internship in Exercise Science	6
	ENGL 305 Technical Writing	3
	Total	12
	Total	**120**

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

General Education requirements will be met in conjunction with the program requirements and will meet COMAR and UMES policies. Students are required to take 42 credits in the UMES General Education curriculum including courses in the Arts and Humanities, Social and Behavioral Sciences, Biological and Physical Sciences, Mathematics, English Composition, and Emerging Issues. A semester-by-semester sequence will be provided in the course catalog.

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

In the future, the program will seek accreditation from COSMA. The core curriculum required by COSMA includes four areas, 1) Foundations of Sport Management including management concepts and governance and policy; 2) Functions of Sport including sport marketing, sport finance and economics; 3) Sport Management Environment including legal aspects, diversity aspects, and technical advances; and 4) Integrative Experiences and Career Planning including internship/practical/experiential learning.

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

There will be no contracting with other entities.

8. **Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management systems, availability of academic support services and financial aid resources, and costs and payment policies.**

Upon approval, the program curriculum, courses, degree requirements, department home page, and UMES undergraduate academic catalog will be published clearly, completely and in a timely manner. Approval of the Sport Management program will be communicated in a timely manner to the appropriate offices on campus, such as those in the Division of Enrollment Management and Student Experience and the Division of Institutional Advancement.

9. **Provide assurance and any appropriate evidence that advertising, recruiting, and administration materials will clearly and accurately represent the proposed program and the services available.**

The program will be clearly and accurately represented in as-yet-to-be-developed advertising, recruiting, and admissions materials.

H. Adequacy of Articulation:

1. **If applicable, discuss how the program supports articulation with programs institutions. Provide all relevant articulation agreements.**

There is a potential for students at local community colleges on the Eastern Shore, including Wor-Wic Community College and Chesapeake Community College, to transfer to UMES and complete the Sport Management Program. There also lies the potential for articulation agreements to be developed with community colleges on the western shore of Maryland. In particular, the Community College of Baltimore (CCBC) has submitted a proposal to MHEC in January of 2020 for a new concentration (A.O.C.) in Sports Management for the Associate of Arts (A.A.) in the Humanities and Social Sciences degree program. The ability to provide a continued path in Sport Management for those students completing their A.A. degree at CCBC is ideal.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11)**:**

1. **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 will teach in the proposed program.**

For the first two years of the proposed program, General Education requirements will be satisfied and four courses in the major. Those will be taught by existing faculty and with adjuncts. The program will need to hire two full-time, tenure-track faculty at the Assistant Professor level with advanced doctorate degrees in Sport Management to teach and advise students in the major at year 3 and one additional faculty member at year 4. The adjunct, part-time faculty will be needed in the first two years to teach the first set of core courses for freshman and sophomore years. Several staff from the Department of Athletics at UMES, including the Athletic Director, will be involved as either adjuncts or guest lecturers in some of the major core courses. In addition, faculty in the UMES Professional Golf Management program will also participate as either guest lecturers or adjunct faculty. If possible, colleagues from Salisbury University could also be interested in working with our faculty at UMES. The Department of Athletics at UMES will participate in the practicum experiences and provide guest lectures when appropriate. Currently, the Department of Kinesiology has one faculty member with specific expertise in sport management who can teach courses in the proposed program, and another faculty member that can support the internship experiences. All other courses in the major will be taught by the adjunct faculty initially as the first two years contains many General Education courses. The junior and senior year courses will be taught by both current faculty and new faculty. Advising will be done with the current faculty and new faculty.

Faculty Name	**Title/Expertise**	**Credentials**	**Potential Courses taught in program**
LaShawn Nastvogel, tenure-track, full-time	Assistant Professor /Sport Management	PhD, North Central University	EXSC 205, EXSC 350 EXSC 390, EXSC 391 EXSC 456
Margarita Treuth, tenured, full-time	Professor and Chair/ Exercise Physiology	PhD, University of Maryland College Park	EXSC 490
Adjunct Faculty Name	**Title/Expertise**	**Credentials**	**Potential Courses taught or guest lecture in program**
William Dillon, tenured	Associate Professor/ PGA Golf Management	MS, Southern Wesleyan University	EXSC 285, EXSC 375
Christopher Prosser, non-tenure track	Lecturer/ PGA Golf Management	PhD, University of Maryland Eastern Shore	EXSC 285, EXSC 375
Keith Davidson, staff	Athletic Director/ Athletics	MA, University of Central Oklahoma	EXSC 390
Kristen Drummond, staff	Associate Athletic Director for Compliance/ Athletics	PhD, North Central University	EXSC 350
G. Stan Bradley, staff	Associate Director of Athletics for External Affairs/ Athletics	MBA, University of Maryland University College	EXSC 207

2. Demonstrate how the institution will provide the ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

a) pedagogy that meets the needs of students

UMES provides training in pedagogy for faculty in several ways. These include:
1) Annual Innovations in Teaching and Learning Conference in June sponsored by the Center for Teaching Excellence (CTE), which is free to UMES faculty and involves faculty from across the region. Topics covered in these conferences include Teaching with Technology, Innovative Pedagogy, Assessment, Online Learning, and Diversity and the Inclusive Classroom;

2) The Center for Instructional Technology and Online Learning (CITOL) offers regular seminars and trainings throughout the year related to the use of a variety of technology tools and platforms to enhance teaching and learning;
3) Faculty Reading Circles: CTE offers faculty reading circles focused on enhancing teaching skills. The Provost's office purchases the book for faculty, and faculty meet weekly to discuss the books during a specific time frame;
4) The SPHP has an annual Faculty and Staff Development Seminar in the spring semester;
5) Faculty are encouraged to apply for a stipend to attend professional development activities.

b) the learning management system

UMES provides uses the Blackboard Learning Management System (LMS) and other instructional software. The CITOL offers seminars on the different features of Blackboard, as well as tutorials, professional development workshops, and provides the UMES online teaching certification. CITOL staff are available for consultation and troubleshooting, and are very responsive to requests for assistance.

c) evidenced-based best practices for distance education, if distance education is offered

The UMES Sport Management program will not be offered via distance education at this time since the practicum experiences are designed to be in person. However, as appropriate, some courses can be developed as online or hybrid courses.

J. Adequacy of Library Resources: (as outlined in COMAR 13B.02.03.12)

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

The Frederick Douglass Library functions as a viable component of the University's academic program through an organized structure which embraces Public and Technical Services. As a member of USMAI (University System of Maryland and Affiliated Institutions) consortium, the library is affiliated with the University's thirteen campuses and seventeen libraries for the purpose of sharing library resources. The integrated, comprehensive library system, ALEPH makes it possible for our patrons to have 24/7 access to USMAI library collections and electronic resources. These collections and resources include the library catalog and over 120 research databases often including full text journals, books and newspapers.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment:

1. 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.

At UMES, the Department of Kinesiology is physically located in the William P Hytche Athletic Building. There, the department has three classrooms which are used by the courses only in the major and on rare occasions, other departments. This will provide adequate space for classroom instruction, Additional faculty offices for the program will be needed however. The department has its own computer lab. On campus, the Academic Computer Center is an academic work area which provides computing resources for instructional purposes and research. Students are given uniq ue account ID's and passwords to use the facility. The center is open each day of the week, for approximately 100 hours per week during the academic year. Students are able to complete all online activities at the center including emails, checking academic progress, and coursework

assignments. The center also has specialized software that students may need for a particular course.

2. **Provide assurance and any appropriate evidence that the institution will ensure students are enrolled in and faculty teaching in distance education will have adequate access to: a) An institutional electronic mailing system, and b) A learning management system that provides the necessary technological support for distance education**

While fully online instruction is not envisioned for this program, UMES has both an institutional electronic mailing system and a learning management system.

Gmail is the campus-wide email provider. UMES faculty and staff were gradually converted from Microsoft Outlook to Gmail to avoid interruption to instruction; all students, faculty and staff were moved to Gmail by July 2019.

CITOL assists faculty and student in all aspects of e-learning including hosting, training, development, and support of Blackboard.

L. Adequacy of Financial Resources with Documentation:

1. **Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of these funds.**

TABLE 1: PROGRAM RESOURCES					
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)	$118,814	$221,510	$299,530	$385,110	$385,110
a. Number of F/T Students	13	25	35	45	45
b. Annual Tuition/Fee Rate	$8,558	$8,558	$8,558	$8,558	$8,558
c. F/T Revenue (a x b)	$111,254	$213,950	$299,530	$385,110	$385,110
d. Number of P/T Students	2	2	3	3	3
e. Credit Hour Rate	$315	$315	$315	$315	$315
f. Annual Credit Hours	12	12	12	12	12
g. Total P/T Revenue (d x e x f)	$7560	$7560	$11,340	$11,340	$11,340
3.Grants, Contracts & Other External Sources	0	0	0	0	0
4.Other Sources	0	0	0	0	0
TOTAL (Add 1-4)	$118,254	$221,510	$310,870	$396,450	$396,450

Assumptions:

1. No reallocation of funds
2. Projected number of total students in Sport Management
3. In-state tuition rate, 2020-2021
4. Number of full-time students: modest, but steady increase, accounting for retention
5. Number of part-time students: modest, slow increase
6. Full-time is considered 12 credits each semester, 24 credits/yr
7. Part-time is considered 6 credits each semester, 12 credits/yr

2. **Complete Table 2: Program Expenditures and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.**

TABLE 2: PROGRAM EXPENDITURES					
Expenditure Categories	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
1.Faculty (b + c below)	$0	$0	$211,200	$316,800	$316,800
a. Number of FTE	0	0	2	3	3
b. Total Salary	$0	$0	$160,000	$240,000	$240,000
c. Total Benefits	$0	$0	$51,200	$76,800	$76,800
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)	$8800	$17,600	$17,600	$17,600	$17,600
a. Number of FTE	2	4	4	4	4
b. Total Salary	$8800	$17,600	$17,600	$17,600	$17,600
c. Total Benefits	0	0	0	0	0
4.Technical Support and 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	$8,000	$10,000	$10,000	$10,000
TOTAL (Add 1-7)	$8800	$25,600	$238,800	$344,400	$344,400

Assumptions:

1. A total of 4 adjunct faculty for Y1 and Y2, 2 new faculty for Y3, and a total of 3 faculty for Y4-Y5
2. Stable salary and benefits
3. No new administrative staff
4. Support staff includes adjuncts
5. Other expenses include accreditation and professional development

M. Adequacy of Provisions of Evaluation of Program: (as outlined by COMAR 13B.02.03.15)

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

At UMES, the Office of Institutional Research, Planning, and Assessment (OIRPA) provides official student data, including enrollment, retention, and graduation rates. The OIRPA provides this data annually to each specific department. To track the measures for all academic programs and offerings, the Office of the Registrar, assigns a unique code to all specified student population groups.

Course evaluations occur each semester through the student evaluation of instruction, which is an online, anonymous survey. This assessment evaluates faculty on teaching skills and dispositions. Faculty evaluations occur through faculty evaluations by the Chair, evaluations as part of the Promotion and Tenure Review Process, and the Post Tenure Review Process (every five years after tenure). Twice each year, faculty complete the faculty evaluation report which includes goals for the year, as well as achievements in the areas of teaching, research, and service. At the end of the year, the Chair evaluates faculty with respect to these three areas. In the Tenure and Promotion, and Post-Tenure Review processes, faculty accomplishments are assessed for teaching, research/scholarship, and service.

Student learning outcomes are based on selected key assessments in major core courses, which could include comprehensive exams or reflective writings, practical exams (demonstration of proficiency in certain skills), or a certification exam in the First Aid and CPR course. The Internship evaluations include assessment by the mentor/site supervisor, as well as the clinical coordinator.

2. **Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

   At UMES, the Chair and the Dean submit annual end of the year reports to the OIRPA. These reports evaluate the effectiveness of the departments' programs in meeting strategic goals, including student retention, results from the annual assessment of student learning outcomes, and cost effectiveness of department and school budgets.

N. Consistency with the State's Minority Achievement Goals: (as outlined by COMAR 13B.02.03.05).

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

   At UMES, the institution has a goal to 'improve structure for attracting, developing and retaining high quality and diverse students'. The faculty, staff, and students are diverse at UMES. UMES has one of the most diverse racial and ethnic student population in the USM.

   Based on Fall 2019 data, UMES faculty statistics reflect a diverse faculty, including 37% African American, 38% Caucasian, 14% Asian, 1% American Indian, 3% international, and 7% other. UMES student race and ethnicity statistics reflect a student population of 52% African American, 13% Caucasian, 2% Asian, 0.2% American Indian, 4% international, and 29% other/unknown.

   The Department of Kinesiology has a high enrollment of minority students, reflecting the university's diverse student population. The low tuition rate at UMES improves minority student access .

O. Relationship to Low Productivity Programs Identified by the Commission:

1. **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 proposed Sport Management program is not related to a low productivity program at UMES.

P. Adequacy of Distance Education Programs: (as outlined by COMAR 13B.02.03.22)

1. **Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.**

   At this point in time, the intention is to offer this program in a traditional, face-to-face format. Some courses may be developed as online or hybrid, as appropriate to the course material.

2. **Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.**

   This is not applicable as the proposed Sport Management program will only be offered in the traditional, face-to-face format at this time.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Results of Periodic Reviews of Academic Programs, 2019-2020

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: At its meeting in June 2003, the Board of Regents delegated to the Chancellor the authority to approve institutional reports on the review of existing academic programs. Existing academic programs are required to submit a report every seven years. Each USM institution follows a review process that was approved previously by the Regents. A format for the reports is standardized and includes information on enrollments and degrees awarded, internal and external reviews, and institutional recommendations and actions.

The periodic program review process includes an internal self-study that is conducted by the program at the departmental level. The self-study is reviewed by external reviewers who then submit a report that becomes a part of the draft full periodic program review report. The respective dean for the program and the provost review the draft full report prior to submission to USM.

Drafts of each report are reviewed by staff in the USM Office of the Senior Vice Chancellor for Academic and Student Affairs, and comments are shared with the institutions for appropriate action prior to final submission to the Chancellor. Comments may include requests for additional information or the need for additional action following program accreditation reviews.

The reports demonstrate the seriousness with which the reviews are taken. Institutional action plans are decided upon primarily by the provost or dean, both of whom are responsible to monitor academic quality and productive use of resources. The following narratives and data tables provide information on enrollment and degrees awarded during the five years prior to the submission of the report.

Copies of the complete program review summaries are available from the USM Office of Academic and Student Affairs.

ALTERNATIVE(S): This is an information item.

FISCAL IMPACT: This is an information item.

CHANCELLOR'S RECOMMENDATION: This is an information item.

COMMITTEE RECOMMENDATION: Information Only	**DATE**: January 12, 2021
BOARD ACTION:	**DATE**:
SUBMITTED BY: Joann A. Boughman 301-445-1992	**EMAIL**: jboughman@usmd.edu

2019 Periodic Review of Academic Programs Summary

Existing academic programs are required to submit a report every seven years. A format for the reports is standardized and includes information on enrollments and degrees awarded, internal and external reviews, and institutional recommendations and actions. Drafts of each report are reviewed by staff in the USM Office of the Senior Vice Chancellor for Academic and Student Affairs and comments are shared with the institutions for appropriate action prior to final submission to the Chancellor. A total of seventy-two (72) academic programs were reviewed during the 2019-2020 period program review period.

Number of Programs Reviewed

Associate's[1]: 0
Bachelor's: 33
Master's: 15
Doctorate: 7
Certificates: 17

[1] The University of Maryland Global Campus is the single USM institution approved by the Maryland Higher Education Commission (MHEC) to offer the Associate's degree.

Results of Program Accreditation Reviews

Bowie State University

The College of Business *Bachelor of Science (B.S.) in Business Administration and Master in Business Administration (M.B.A.) programs* completed reaccreditation reviews by the Accreditation Council for Business Schools and Programs (ACBSP) in 2019. The enrollments and degrees awarded for the aforementioned Bowie State University programs are included in this report.

Frostburg State University

The Department of Psychology *Master of Science (M.S.) in Counseling Psychology program* in the College of Liberal Arts and Science completed a reaccreditation review by the Masters in Psychology and Counseling Accreditation Council in AY 2019-2020. The enrollments and degrees awarded for the aforementioned Frostburg State University program are included in this report.

Salisbury University

The Department of Community Health *Bachelor of Science (B.S.) in Community Health program* in the College of Health and Human Services / School of Health Services completed a reaccreditation review by Council on Education for Public Health (CEPH) in 2019.

The School of Health Services *Bachelor of Science (B.S.) in Medical Laboratory Science program* in the College of Health and Human Services completed a reaccreditation review by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) in 2020.

The enrollments and degrees awarded for the aforementioned Salisbury University programs are included in this report.

Towson University

The Department of Speech-Language Pathology and Audiology *Master of Science (M.S.) in Speech Language Pathology and Doctor of Audiology (Au.D.) programs* in the College of Health Professions completed reaccreditation reviews by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA) in 2019-2020. The enrollments and degrees awarded for the aforementioned Towson University programs are included in this report.

University of Baltimore

The Department of Information Systems and Decision Sciences *Bachelor of Science (B.S.) in Information Systems and Technology Management program* in the Merrick School of Business completed a reaccreditation review by the Association of Advance Collegiate Schools of Business (AACSB International) in 2020.

The Merrick School of Business *Bachelor of Science (B.S.) in Business Administration and Master of Business Administration (M.B.A.) programs*, and the Department of Accounting, Finance and Economics *Master of Science (M.S.) in Accounting and Business Advisory Services, Master of Science (M.S.) in Business-Finance, Upper Division Certificate in Accounting (U.D.C.), and Post-Baccalaureate Certificate (P.B.C) in Business Fundamentals programs* completed reaccreditation reviews by the Association of Advance Collegiate Schools of Business (AACSB International) in 2020.

The enrollments and degrees awarded for the aforementioned University of Baltimore programs are included in this report.

Low Degree Productivity

MHEC Definition
Bachelor's: < 5 in most recent year or a total of 15 in last three years
Master's: < 2 in most recent year or a total of 6 in last three years
Doctorate: < 1 in most recent year or a total of 3 in last three years

By the aforementioned definition**,** thirteen (13) programs are considered to demonstrate "low productivity." The types of programs identified in this report as low productivity include six (6) bachelor's degree (B) programs, five (5) upper-division certificates (U.D.C.), one (1) post-baccalaureate certificate (P.B.C.), and one (1) master's of professional studies (M.P.S.). Low productivity for an U.D.C. program is defined the same as a bachelor's degree program and the P.B.C. and M.P.S. programs follow the same definition as a master's degree program.

The following brief summaries highlight the strategies being undertaken by the identified programs to address low enrollment and the low number of degrees awarded.

Bowie State University

The *Bioinformation (B) program* faculty in the department of Natural Sciences reported action plans to address low-productivity that include 1) expanding high-impact practices and experiential learning opportunities within the program, 2) engaging curriculum mapping to align with program learning outcomes, 3) reviewing syllabi to ensure alignment with revised University guidelines, 4)

instituting a comprehensive assessment plan for program learning outcomes, and 5) establishing a pipeline for advisement and mentoring.

A few of the action plan activities to be undertaken are 1) partnering with local STEM charter schools and public high schools in the Prince George's and surrounding counties to mentor and nurture students towards STEM careers and to recruit them to the Bioinformatics program, 2) Bioinformatics research and joint activities for student learning with the Mathematics and Computer Sciences departments at the institution, 3) a Course-based Undergraduate Research Experiences (CURE) in Bioinformatics that incorporates data-driven experiential learning outcomes, and 4) hiring of additional support to enhance student learning.

Coppin State University

The *History (B) program* faculty in the department of Humanities where the program is housed reported action plans to address low-productivity that include 1) utilizing interdisciplinary skill sets from faculty across the department more effectively; 2) revising the program's requirements and curricula, updating content and learning outcomes with a focus on preparing students for entry into graduate programs and into career pathways in government, law, public history, and new media; 3) incorporating "vertical pathway" to fast-track History majors in the Coppin State University Master of Arts (M.A.T.) program, 4) establishing relationships with regional graduate programs in Master of Arts (M.A.) and Doctor of Philosophy (Ph.D.) programs in History, African American Studies, and other related programs, and 5) presenting program revision proposals to the department by the end of Fall 2020.

Towson University

The *Cultural Studies (B) program* faculty in the department of Interdisciplinary Studies (IDIS) reported action plans to address low-productivity that include 1) engaging in a critical, sustained, strategic review of staffing issues comprising of exploring ways in which a greater number and range (tenure line and part time) can become involved in the program with a timeline of fall 2021 through fall 2023 lead by the Director of Cultural Studies Major/Assistant Director of IDIS and IDIS and IDIS Director or Designee; 2) beginning a review of mechanisms of presentation (web-based, social media) for the program with a timeline of fall 2021 through fall 2023 lead by the Director of Cultural Studies Major/Assistant Director of IDIS and IDIS Director or Designee; and 3) seeking ways to expand the program both in terms of majors and minors with a timeline of spring 2022 through fall 2024 lead by the Director of Cultural Studies Major/Assistant Director of IDIS and IDIS Director or Designee.

The *Metropolitan Studies (B) program* faculty in the department of Interdisciplinary Studies (IDIS) reported action plans to address low-productivity that include 1) continuing the work currently underway in supporting assessment and program improvement consistent with best practices in assessment, teaching, and program design with a timeline of fall 2021 through fall 2023 lead by the Director of Metropolitan Studies Major/Assistant Director of IDIS and IDIS Director or Designee; 2) beginning a review and revision of the program curriculum to make it more coherent, current, and coincide with emerging practices, concerns, and employment opportunities in metropolitan areas that focus on: a) most notably race and ethnicity in urban systems and technologies relevant to city planning, i.e. GIS, that comprise aspects of urban environments, and b) advancing more off-campus opportunities for students, with a timeline of fall 2021 through fall 2023 lead by the Director of Metropolitan Studies Major/Assistant Director of IDIS and IDIS Director or Designee; and 3) working in conjunction with the IDIS Director, Dean of the College, and allied departments/offices to coordinate and expand the program student internship opportunities,

community engagement initiatives, internationalization of the curriculum, and study abroad opportunities with a timeline of spring 2022 through fall 2024 lead by Director of Metropolitan Studies Major and IDIS Director.

University of Maryland, Baltimore County

The *Asian Studies (U.D.C.) program* faculty in the department of Asian Studies reported action plans to address low-productivity that include 1) hiring a lecturer with specialization in political science, economics, or another social science field, 2) creating a capstone course, 3) creating academic pathways, 4) collaborating with other programs to introduce students to Asian Studies and raise the profile of the program on campus, 5) revamping program website and increase usage of social media, 6) revising and creating new articulation agreements with area community colleges to increase the number of transfer students in the Asian Studies Program, 7) improving connections between affiliate faculty and the program, 8) adding a study abroad requirement, and 9) enhancing the connections between Asian Studies and STEM programs at UMBC.

The *Chinese (U.D.C.), Intercultural Communication (U.D.C.), Russian (U.D.C.), and Korean (U.D.C.) programs* faculty in the department of Modern Languages, Linguistics & Intercultural Communication (MLLI) reported action plans to address low-productivity that include 1) examining the curriculum to identify points that pose difficulties to the students, 2) studying the viability of developing courses in conjunction with faculty members from other programs, 3) promoting better the 200-level language courses to increase enrollments in certificates, minors, and majors, 4) re-envisioning the program, to develop and offer online courses, to attract working professionals in a variety of fields, and 5) demonstrating to the university the value of learning other languages and cultures using the website and promotional materials,

University of Maryland, College Park

The *Survey and Data Science (M.P.S.) and Survey Statistics (P.B.C.) programs* faculty in the Joint Program in Survey Methodology department reported action plans to address low-productivity that include 1) continuing to increase enrollments from non-profits and the private sector, 2) initiating partnerships with undergraduate academic programs to create dual bachelor's/master's tracks, 3) working to create a mix of opportunities in certificates, 4) promoting training opportunities, 5) pursuing joint appointment for faculty with a tenure home in an academic unit, and 6) positioning the programs for more engagements with existing faculty across the campus

University of Maryland Eastern Shore

The *Agribusiness Management (B) program* faculty in the department of Agriculture, Food and Resource Sciences reported action plans to address low-productivity that include 1) hiring of faculty, 2) increasing the collaboration between academic programs and the Extension Program, 3) promoting the program at the state and national levels to potential students, 4) continuing to offers service courses used by other majors on campus, 5) enhancing recruitment pipeline through bringing high school students to the UMES campus to participate in the Maryland World Food Prize Youth events, and 6) increasing the number of Jr. Minorities in Agricultue, National Resources and Related Sciences (MANRRS) chapters in high schools and the organization of Jr. MANRRS Leadership Institutes at UMES.

The *Mathematics (B) program* faculty in the department of Mathematics and Computer Science reported action plans to address low-productivity that include 1) recommending program suspension to reorganize it to ensure sustainability, 2) developing strategies for improving

enrollment in the program, 3) developing interventions for addressing high attrition and low retention and graduation rates, 4) developing areas of research expertise in trending areas, 5) determining the best strategies from national mathematics for course redesign, 6) seeking scholarship funding for students, and 7) developing partnerships with K-12 schools, community colleges, other universities, and private entities as well as establishing a partnership with the University's Center for Access and Academic Success to develop a retention plan for mathematics majors.

2019-2020 Periodic Review of Academic Programs

Bowie State University										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Business Administration (B)	705	134	816	126	914	106	986	113	989	151
Business Administration (M)	34	14	33	11	26	19	34	11	46	12
Bioinformatics (B)	7	1	8	3	4	1	7	0	12	0
Biology (B)	306	57	347	37	410	47	378	61	377	55
Management Information Systems (M)	133	32	106	64	117	38	83	37	64	26
Psychology (B)	321	70	308	77	342	73	356	74	359	81
Sports Management (B)	115	15	138	13	149	15	168	19	195	30

Notes:

1. The Bioinformatics (B) program indicates low degree productivity with less than 5 in 2019 and less than a total of 15 in the last three years (2017, 2018, and 2019) in this report period.
2. The Bioinformatics (B) program equips students to rise to the challenges of the changing global economy to address the future STEM workforce and to fulfill the unmet need for trained scientists, educators, and other degree-holders in STEM and related fields. The 2019 strategies undertaken for the Bioinformatics program to increase enrollment include the adding of highly-qualified subject matter experts in Bioinformatics, enhancing the visibility of the program through strategic marketing, and to improve course progress for student to complete the program.
3. The Business Administration (B) and (M) programs are the hallmarks of the College of Business. From the periodic reviews of the programs the action plan for the undergraduate program is to a) obtain from students and stakeholders information for planning educational programs, services, marketing, process improvements, and the development of other services; b) to create a process to provide evidence that ongoing educational programs and offerings are systematically tracked and regularly evaluated; and c) specifically for the master's program the provision of resources to assist faculty in developing more online courses and conduct other course redesigns.
4. The Biology (B) program is consistent with the University's Strategic Initiatives and equips students with a broad yet strong conceptual foundation. The action plan defined for the program is to expand high-impact practices, experiential learning, curriculum revision, program outcomes and assessment, aligning curriculum mapping with program learning outcomes, and advisement and mentoring to improve student outcomes.
5. The Management Information Systems (M) program has strong foundational and core courses recommend by ACM (Association for Computing Machinery) and AIS (Association for Information Systems). The action plan outlined from the periodic review is to expand it course offerings in information technology to meet the latest demands of the profession and employers and increase students' competitiveness in the marketplace while maintaining the requisite credits for the major.
6. The Psychology (B) program is to prepare undergraduate psychology majors for graduate training in psychology and/or employment in social science professions. The action plan for the program is to strengthen student advisement, improve the opportunities for internships and undergraduate research, and hire full-time faculty to fill vacant positions.
7. The Sports Management (B) program has increased enrollment over the last five years. The action plan is to continuously improve the program by enhancing the curriculum to meet the rapidly changing sport industry, expanding internship and experiential opportunities for students, and to hire full-time faculty to fill vacant positions.

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

2019-2020 Periodic Review of Academic Programs

Coppin State University										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
History (B)[1]	19	5	17	3	10	1	10	0	10	1
Social Sciences (B)	17	4	27	6	26	6	32	11	34	8

Notes:

1. The History (B) program is inextricably linked to the university's mission and lays the foundations for social responsibility, civic and community engagement, and diversity and inclusion. At the time of this reporting period, the program indicates low degree productivity with less than 5 in 2019 and less than a total of 15 in the last three years (2017, 2018, and 2019). The action plan to improve the productivity of the program is a) the hiring of one new faculty member in 2019, b) increase interdisciplinary programming, c) incorporate "vertical pathways" that allow majors to fast-track their progress into the Master of Arts (MAT) degree, and d) pursue relationships with regional graduate programs seeking enrollments for M.A .and Ph.D. programs in History, African-American Studies, and other related programs.
2. The Social Science (B) program is the foundation of the programs offered in Applied Social and Political Sciences (ASPS). The action plan for the program is to a) expand course methodology inclusive of capstone courses, b) strengthening the coordination of the internship program to enhance learning outcomes for students, and c) further advance the presence of the department across the campus.

Frostburg State University										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Applied Ecology and Conservation Biology (M)	15	1	15	3	14	4	11	6	10	2
Biology (B)	246	30	196	35	152	33	125	29	105	28
Counseling Psychology (M)	31	7	30	12	29	7	29	9	28	9
English (B)	79	28	82	20	67	20	62	12	56	18
History (B)	40	14	39	10	34	10	26	4	24	6
Psychology (B)	303	92	294	83	260	77	258	66	272	75

Notes:

1. The Applied Ecology and Conservation Biology (M) program is housed in the Department of Biology. The program action plan is to a) explore the feasibility of adding a non-thesis option, b) expand the scope to include all faculty members, and c) increase stipends for graduate support and other support (e.g., conference attendance), to name a few.
2. The Biology (B) program has a diverse student body with an action plan that includes a) developing an exit assessment for graduating senior, b) increasing full-time teaching capacity, c) expanding the use of exceptional undergraduate students as tutors, and d) increasing communication and tracking alumni.
3. The Counseling Psychology (M) program demonstrates curricular integrity and produces quality counselors who are able to pass the National Counselor Exam. The program action plan moving forward is to a) hire full-time faculty for vacant positions, b) identify and act upon data on student discontinuation in the program to address the 20% attrition rate, and c) enhance relationships with internship sites.

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

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4. The English (B) program is the largest provider of General Education Program (GEP) credits and special programs in community outreach and cultural development at the Universities. The program enhancement action plan is to a) pursue technology funds, b) review curriculum to consider course offering changes that will engage students and draw on faculty expertise, c) encourage more internships and field experiences to offer students additional high-impact educational practices, d) update open house materials and website to better market the program and liaison with Admissions, and e) pursue strategies to provide more reading and writing support to basic writing students.
5. The History (B) program adheres to the guidelines of the American Historical Association and the action plan is to a) redesign the assessment plan, b) publicize faculty development activities and student achievements to develop a program reputation, c) develop alumni outreach, d) lobby the General Education Program (GEP) Review Committee to include US History courses in revised GEP, and e) develop and publicize internships to increase student participation.
6. The Psychology (B) program is healthy and well-functioning according to this review. The continuous improvement action plan is to a) redesign designed courses to improve students' professional writing skills in collaboration with the English, b) redesign select psychology courses, and c) hire faculty member with expertise to afford the offering of an Addictions Counseling major.

Salisbury University										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Community Health (B)	59	15	76	22	106	34	117	23	110	56
Contemporary Curriculum Theory and Instruction: Literacy (D)	11	n/a	20	n/a	21	6	31	0	30	6
Medical Laboratory Science (B)	67	15	67	11	73	15	57	13	67	16

Notes:

1. The Community Health (B) program enjoys national recognition. The action plan recommendations for the program are to a) allocate a new faculty position as the enrollment increases, b) implement a formalized recruitment strategy for USM-H, c) establish a well-developed assessment plan, d) identify and equip a dedicated classroom conducive to learning, and e) enhance the quality of online instruction.
2. The Contemporary Curriculum Theory and Instruction: Literacy (D) program is well-aligned to the University's mission and strategic plan. The action plan recommendations for the program are to a) develop innovative recruitment and obtain marketing resources for sustaining and diversifying enrollment, b) explore the viability of an administrative credential credit-count track that can be coupled with the Ed.D., c) develop opportunities for cross-level partnering with the Ed.D. and M.Ed. students seeking an M.Ed. in Reading Specialist, d) institute a scholarly writing course, e) develop formal faculty mentoring program faculty, f) participation in the Carnegie Project on the Education Doctorate (CPED), g) work to obtain resources for sustaining student persistence, and h) consider reducing the cohort size to 8 students.
3. The Medical Laboratory Science (B) program has many areas of strength and the recommendation for the action plan are to a) further improve and update laboratory equipment, b) address tenuous clinical affiliate placements, c) strengthen faculty coverage, d) improve facilities, and e) enhance research opportunities.

2019-2020 Periodic Review of Academic Programs

Towson University										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Audiology (D)	50	12	49	11	45	16	52	10	58	10
Cultural Studies (B)	9	7	12	2	19	4	16	3	9	3
Deaf Studies (B)	211	64	156	61	148	42	130	58	114	29
Foreign Languages (B)	90	32	104	23	103	29	85	34	84	19
Metropolitan Studies (B)	14	5	6	3	13	0	15	4	18	4
Professional Studies (M)	26	14	23	13	29	7	28	7	23	6
Social Science (B)	55	13	58	12	66	12	78	16	69	18
Social Science (M)	20	4	16	4	17	5	19	3	14	5
Speech Language Pathology (M)	92	43	96	44	94	46	82	48	86	45
Speech Language Pathology & Audiology (B)	273	76	280	64	264	63	233	72	245	53

Notes:

1. The Au.D. in Audiology (D) program has a well-designed curriculum that provides students with excellent knowledge base. The review plan for the program is a thorough review of the curriculum and will revise it based on current and anticipated workforce needs, review all clinical procedures and will brainstorm ideas to further enhance clinical opportunities and procedures, provide additional hands-on opportunities with hearing aids through the hiring of a new instructor to teach a Hearing Aids course, provision of continuity across the didactic course and the clinical experiences, expand simulation-based learning, and examine and implement strategies to enhance student and faculty diversity.
2. The Cultural Studies (B) program offers significant opportunities for students at exceptionally low cost to include opportunities to explore aspects of urban life that helps to increase their job prospects upon graduation. In addition, the dedicated courses serve the university's core curriculum. In this report period, the program indicates low degree productivity with less than 5 in 2019 and less than a total of 15 in the last three years (2017, 2018, and 20219). The action plan is to a) leverage dedicated faculty, b) enhance dedicated fixed program cost, and c) use the enrollment of students in the core curriculum courses to build the program enrollment.
3. The Deaf Studies (B) program is stable and has strong enrollments. The program action plan is to a) develop a course scheduling and staffing plan to reduce the number of faculty overload courses, and b) review and revise the program curriculum to make it more coherent within the program and more consistent with off-campus programs at community colleges and other four year institutions.
4. The Foreign Languages (B) program has innovative and visionary teachers who strive to anticipate the needs of a diverse student pool both inside and outside the classroom. The program action plan includes a) assigning mentors to junior faculty, b) establishing professional development activities opportunities, c) advancing learning outcomes, d) providing advisors and mentors to both majors and minors, and e) creating a committee or ad-hoc group focused entirely on diversity, enrollment, and retention.
5. The Metropolitan Studies (B) program, like the Cultural Studies, offers significant opportunities for students at exceptionally low cost, serves the University's core curriculum and is a natural complement to several related majors in the college and majors elsewhere on campus. In this report period, the program indicates low degree productivity with slightly less than 5 in 2019 and 2018, and less than a total of 15 in the last three years (2017, 2018, and 20219. The action plan is to a) affords students opportunities to explore aspects of urban life that help to increase their job prospects upon graduation, b) establish dedicated faculty, and c) provide fixed cost for the program.

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

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6. The Professional Studies (M) program offers flexibility for students at multiple levels ranging from curricular design to rolling admissions and a choice of full- or part-time scheduling, as well as strong mentorship with faculty associated with the program. The action plan for the program is to a) create an advisory body for the program, b) track student coursework more formally to identify pathways and trends in curricular design, c) identify PBC programs that could be completed concurrently with the M.A. degree and consider creating new ones to serve identified needs, d) increase recruiting efforts, greater flexibility for completing courses and programs remotely, e) create a more robust assessment plan, f) establish a long-range curricular development plan, and g) create an advisor position dedicated to serving Professional Studies M.A. students.
7. The Social Sciences (B) programs is strong both in terms of numbers of students enrolled and graduates. The action plan to further build the program includes a) curricular change, i.e., a capstone course, possible changes to the Secondary Education concentration in the major, and b) extensive changes to the program's assessment processes.
8. The Social Science (M) program is currently suspended and the expected result for the program is ultimately termination. The decision to suspend the program was based on the existence of too few students, too few courses available to students, and too narrow a pathway from the program to career goals for many prospective students.
9. Speech Language Pathology (M) program has a wide-range of course and clinic offerings that provide a solid foundation of knowledge and skills across a variety of disorders and populations. The program action plan is to a) complete a thorough review of the curriculum, b) brainstorm activities to further enhance clinical opportunities, c) recruit an expert clinician in the area of voice disorders, and d) examine and implement strategies to enhance student and faculty diversity.
10. Speech Language Pathology & Audiology (B) program possesses a high rate of on-time graduation and acceptance into graduate school or full-time employment. The advancement action plan for the program is to a) complete a thorough review of the curriculum and will revise it based on current and anticipated workforce needs, b) review transfer study policy and barriers to entry and on-time graduation will be evaluated, and c) provision of opportunities on cultural humility (i.e., trainings, webinars) will be provided for faculty, staff, and students.

University of Baltimore										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Accounting and Business Advisory Services (M)	34	11	27	13	24	14	37	5	40	9
Accounting Fundamentals (PBC)	7	4	6	3	6	1	9	2	6	4
Accounting (UDC)	28	4	31	5	27	12	37	5	23	8
Business Administration (B)	1160	228	1100	270	964	256	831	239	678	223
Business Administration (M)	339	137	448	125	384	146	410	132	409	93
Business Administration (PBC)	12	4	15	5	35	8	29	12	31	16
Business Finance (M)	12	5	11	4	18	5	39	5	39	6
Environmental Sustainability (B)	42	12	43	6	39	9	32	10	28	7
Global Affairs and Human Security (M)	57	4	63	11	65	17	56	14	46	16
Information Systems and Technology Mgmt. (B)	42	10	56	6	63	6	56	16	47	14
Legal Studies (M)	60	20	62	17	54	17	46	25	42	18
Public Administration (D)	38	2	40	5	44	1	42	5	54	3

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

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2019-2020 Periodic Review of Academic Programs

Simulation and Game Design (B)	210	45	201	45	189	41	188	37	172	44

Notes:

1. The Merrick School of Business Accounting and Business Advisory Services (M), Accounting Fundamentals (PBC), Accounting (UDC) , Business Administration (B, M, PBC), Business Finance (M), and Information Systems and Technology Management (B) programs are engaging in new strategic planning processes for the creation of new emphasis areas designed to appeal to local, non-traditional students to advance program enrollments. The action plan opportunities for the aforementioned programs in the Merrick School of Business are to a) develop and implement an annual scorecard to measure the success of the school in achieving enrollment and financial goals in alignment with both the University of Baltimore Board of Regents Task Force report and peer review team recommendations, b) conduct holistic curriculum reviews and revisions to reinvigorate in the marketplace the Bachelor of Science (B.S.) in Business Administration, Master in Business Administration (M.B.A.), and Master of Science in Business-Finance with targeted implementation in AY 2022-2023, c) pursue develop of accounting apprenticeship program and summer institute to fast-track offering of Upper Division Certificate in Accounting, d) continue enhancement of specialized offerings for Master of Science (M.S.) in Accounting and Business Advisory Services and Post-Baccalaureate Certificate (P.B.C.) in Accounting Fundamentals in collaboration with Law School graduate taxation program to offer tax specialization courses, and e) replace the B.S. Business Administration specialization in Computer Information Systems with Data Analytics to better leverage Information Systems course offerings across programs.
2. The Environmental Sustainability (B) program's key feature is interdisciplinarity and the provision of a solid background for students to pursue careers in various professional fields in environmental sciences/environmental studies. The program action plan recommendations are to a) institutional investment –consider the addition of a faculty line, b) expand institutional marketing and promotion (web, social media etc.), c) create specific thematic courses, d) network with other area academic institutions, and e) increase use of our alumni community.
3. The Global Affairs and Human Security (M) program has a diverse student body consisting of local students and those from other countries with different perspectives on transactional issues and interaction with international organizations. The program action plan includes opportunities to a) institute support for the study of foreign languages, b) implement innovative and sustainable recruitment activities, c) continuously expand e-learning as a key strategy for growth, and d) pursue online programming options.
4. The Legal Studies (M) program comprises a wealth of course offerings, high-quality faculty, and strong connections to the law school, local organizations and institutions. The program action plan includes opportunities to a) further increase staffing, b) offer more online courses to improve enrollment, c) improve the tracking of graduates to use the information to enhance web pages, d) more intentionally use alumni network, and e) improve student access to available databases,
5. The Public Administration (D) program accommodates working professionals with weekend scheduling and recruits a high quality student body that typically brings years of government or non-profit experience. The program action plan includes opportunities to a) develop fund raising campaign for graduate assistantships, scholarships and research support, b) develop a Doctor of Professional Practice or practitioner track in the D.P.A, c) develop a recruitment plan, and d) explore potential markets.
6. The Simulation and Game Design (B) program consistently offers to student a career-focused curriculum for aspiring and current professionals to build expertise through the acquisition of skills. It is the oldest and largest game design program in Maryland. This continues to be a popular field for students. The program action plan recommendations are to a) build broader institutional support to maintain program visibility, b) increase program-related events, c) evaluate and address curriculum based on the industry, d) incorporate eSports topic in the curriculum, and e) revisit specific track in the program to further support enrollment.

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

2019-2020 Periodic Review of Academic Programs

University of Maryland, Baltimore County										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Asian Studies (B)	67	13	53	17	60	14	66	11	52	14
Asian Studies (UDC)	0	3	0	0	2	0	2	0	1	0
Modern Languages and Linguistics (B)	207	46	198	42	195	34	225	44	198	36
Intercultural Communication (M)	12	12	15	10	8	6	13	5	16	4
Chinese (UDC)	2	0	2	1	2	2	0	0	1	1
French (UDC)	6	10	15	3	15	8	6	6	8	1
German (UDC)	3	4	1	1	5	1	4	3	5	5
Intercultural Communication (UDC)	12	5	9	7	8	5	8	6	17	1
Russian (UDC)	1	2	5	1	5	1	4	1	6	1
Spanish (UDC)	25	11	31	12	33	11	25	18	32	8
Korean (UDC)	0	0	0	0	0	0	3	2	5	0
Political Science (B)	322	105	293	82	304	73	316	85	306	81

Notes:

1. MHEC does not explicitly define the productivity of Upper Division Certificates (UDC). UDCs are included in the 2019-2020 Period Review of Academic Programs Report because the institution monitors the viability of its certificate programs.
2. The Asian Studies (B) program compared to peer programs is of the highest quality as it is unique in offering Hindi and courses on South Asia. The plan for the program is to hire a lecturer to teach core courses, create a capstone course at the 300 or 400 level to help consolidate student knowledge and provide better means of assessing the success of the program, increase the number of majors, minors and certificate students, increase the connections between affiliate faculty and the program, explore adding a study abroad requirement, and increase connections between Asian Studies and STEM programs at UMBC.
3. Within the Bachelor of Asian Studies, the Upper Division Certificate in Asian Studies (UDC) program plans to increase productivity by creating a capstone course that attracts and engages student in research, enhances their critical reading and thinking skills, and to provide more career-oriented students events.
4. The Modern Languages and Linguistics (B) program has become one of the primary academic departments at UMBC dedicated to innovative approaches to linguistic, cultural, and economic diversity and social justice.
5. The Intercultural Communication (M) is unique, especially the inclusion of in lingua courses in a variety of language/culture traditions. The plan for the program is re-envision the program (including the development and teaching of online courses) to attract working professionals in a variety of fields in the Baltimore-Washington area, study the development of a professional degree certificate to meet demand for intercultural training in industry, develop a concentration in Cultural and Diversity Studies to attract more students, increase Graduate Assistantships when possible, and develop exchange programs with international institutions (e.g., Uniclaretiana in Colombia) by working with the International Education Office
6. The Upper Division Certificate in Chinese (UDC), Upper Division Certificate in Intercultural Communication (UDC), Upper Division Certificate in Russian (UDC), and Upper Division Certificate in Korean (UDC) are undergraduate certificate programs. These certificate programs as listed indicate low certificate productivity in alignment with the definition for bachelor's program productivity that denotes less than 5 in the most recent year (2019) and less than a total of 15 in the last three years (2017, 2018, and 2019). The programs are within the Department of Modern Languages, Linguistics and Intercultural Communication (MLLI) and are among the most

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

2019-2020 Periodic Review of Academic Programs

interdisciplinary academic units within the liberal arts curriculum and play an important role in the General Education Program (GEP) at UMBC. Furthermore, the programs support cultural and ethnic diversity and social responsibility.

7. The Upper Division Certificate in French (UDC), Upper Division Certificate in German (UDC) and Upper Division Certificate in Spanish (UDC) programs demonstrate continued enrollment growth.
8. The Political Science (B) program is commitment to improving undergraduate research capacity, Integrate Shady Grove program and students more with main campus, and curriculum and assessment reforms.

University of Maryland, College Park																
Program Title (Degree)	2015			2016			2017			2018			2019			
	Enrolled	Degrees		Enrolled	Degrees		Enrolled	Degrees		Enrolled	Degrees		Enrolled	Degrees		
Survey Methodology – Graduate - (M/D)	39	M	D	32	M	D	29	M	D	30	M	D	32	M	D	
		5	2		13	1		10	0		9	1		2	3	
Survey and Data Science (MPS)	0	0		0	0		2	0		4	0		8	1		
Fundamentals of Survey Methodology (PBC)		2			3			2			4			2		
Survey Statistics (PBC)		1			1			2			0			1		
Women's Studies – Undergraduate -(B)	28	11		22	6		22	7		30	8		21	11		
Women's Studies – Graduate - (M/D)	28	M	D	28	M	D	24	M	D	22	M	D	18	M	D	
		4	0		1	2		3	5		1	5		4	4	
LGBT Studies (UDC)		26			27			18			23			17		
Women's Studies (PBC)		1			8			4			4			3		

Notes:

1. MHEC does not explicitly define the productivity of Post-Baccalaureate Certificates.
2. The PBC in Survey Statistics indicates low degree productivity with less than 2 in 2019 and less than a total of 6 in the last three years (2017, 2018, and 2019) in alignment of with the definition for Master's program degree productivity.
3. The Survey Methodology (M/D) program has an admissions process only for the doctoral track. The master's and doctorate enrollments are not tracked separately.
4. The Survey and Data Science (MPS) program productivity is low in accordance with the MHEC definition for Master's degrees.
5. The Survey and Data Science (M.P.S.) and Survey Statistics (P.B.C.) programs action plans to address low-productivity that include a) continuing to increase enrollments from non-profits and the private sector, b) initiating partnerships with undergraduate academic programs to create dual bachelor's/master's tracks, c) working to create a mix of opportunities in certificates, d) promoting training opportunities, e) pursuing joint appointment for faculty with a tenure home in an academic unit, and f) positioning the programs for more engagements with existing faculty across the campus.
6. The Post-Baccalaureate Certificate (PBC) in Fundamentals of Survey Methodology and Post-Baccalaureate Certificate (PBC) in Survey Statistics are embedded in the Survey Methodology (M/D) program. The enrollments for each of the PBCs are not tracked separately within the Survey Methodology (M/D) program.
7. The PBC in Survey Statistics just began and the enrollments are still relatively low.
8. The PBC in Survey Statistics is disadvantaged because it does not have a departmental status and it is recommended for the PBC more mentoring of the existing faculty.
9. The Women's Studies (M/D) program enrollments are not separately tracked for the master's and doctorate.
10. The enrollment for the Upper Division Certificate (UDC) in LGBT Studies is not tracked separately from the Women's Studies (B).

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

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11. The Post-Baccalaureate Certificate (PBC) in Women's Studies enrollment is not tracked separately from the Women's Studies (M/D).

University of Maryland Eastern Shore										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Agribusiness Management (B)	5	0	6	1	6	0	9	0	8	2
Food and Agricultural Science (D)	12	1	12	3	13	3	14	3	13	1
Mathematics (B)	34	6	31	6	26	4	26	2	28	2
Toxicology (M)	7	0	3	0	4	0	4	0	3	3
Toxicology (D)	10	1	15	0	14	1	14	0	13	1

Notes:

1. The Agribusiness Management (B) plays a critical role in fulfilling the land-grant mission of UMES. The program indicates low degree productivity with less than 5 in 2019 and less than a total of 15 in the last three years (2017, 2018, and 2019) in this report period. The Agribusiness Management (B) program demonstrates that the enrollments are pointing upward and the National data indicates the program is very necessary as there is a shortage of graduates in Agricultural disciplines, including Agribusiness Management. The action plan includes a) increasing promotion through advertisement, open-houses, and campus-wide activities, b) advancing scholarship programs, particularly Land Grant Scholarship program supported by USDA funds, and c) increasing the number of Jr. "Minorities in Agricultue, National Resources and Related Sciences (MANRRS)" chapters in high schools and the organization of Jr. MANRRS Leadership Institutes at UMES.
2. The Food and Agriculture (D) program enrollment and productivity is expected to increase slightly due to the program title change from "Food Science and Technology" to "Food and Agricultural Sciences" in 2019. The action plan is to a) establish an advisory board, b) increase program visibility, and c) increase faculty pursuit of grants and contracts with federal agencies, foundations, and private industry.
3. The Mathematics (B) program is seeking suspension in order to engage in program redesign for its future sustainability. In this report period, the program indicates low degree productivity with less than 5 in 2019 and less than a total of 15 in the last three years (2017, 2018, and 2019). The action plan during the suspension period is to engage in program redesign to a) create new pathway in Statistics that lead to careers in Actuarial Analytics, Data Science, and Statistics, etc. to increase enrollment, retention and completion, b) revise the B.S. in Mathematics and Mathematics Education concentration curricula, c) support faculty to engage aggressively with top high school students, and d) seek scholarship funding to attract and retain students.
4. The Toxicology (M, D) programs demonstrate the essential building blocks and faculty to have the programs recognized as statewide and national leaders in the field, particularly for underrepresented minorities. The program action plan is to a) broaden the scope of inference beyond the current primarily medical applications, b) sustain student recruitment pipelines with USM institutions, regional HBCUs, and other regional colleges and universities, c) develop more meaningful connection across UMES department, d) seek external grant funding, and e) enhance graduate student experience through the provision of career opportunity events, spaces for groups meetings, independent or team opportunities to analyze data, or write, etc.

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study. 15

2019-2020 Periodic Review of Academic Programs

University of Maryland Global Campus										
Program Title (Degree)	2015		2016		2017		2018		2019	
	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees	Enrolled	Degrees
Digital Media and Web Technology (B)	529	106	496	101	499	93	539	119	540	119
Finance (B)	539	78	648	97	710	15	822	134	799	124
Foreign Language Area Studies (UDC)	80	67	102	52	118	55	136	71	138	48
Homeland Security (B)	383	131	209	92	114	61	204	33	508	38
Psychology (B)	2484	437	2469	417	2620	387	2713	469	2847	437
Spanish for Business and the Professions (UDC)	30	14	30	18	34	8	42	12	35	8

Notes:

1. The Digital Media and Web Technology (B) program has consistently met the highly specialized, rapidly changing needs of the industry.
2. The Finance (B) program has shown progressively increasing enrollments while maintaining a strong learning experience for students.
3. The Foreign Language Area Studies (UDC) program has been running successfully for over two decades and has proven to be particularly valuable for military students and their families stationed overseas.
4. The Homeland Security (B) programs meets the needs for a foundation of knowledge and emergency management skills for entry-level homeland security positions.
5. The Psychology (B) program shows strength in leadership, support, curriculum and enrollments.
6. The Spanish for Business and the Professions (UDC) program will continue to be evaluated in relation to market demands, improve the quality of student learning, and improve faculty involvement.

Degree Codes: (B) Bachelor; (M) Master; (D) Doctorate; (BFA) Bachelor of Fine Arts; (BTS) Bachelor of Technical Studies; (BPS) Bachelor of Professional Studies; (UDC) Upper Division Certificate; (PBC) Post-Baccalaureate Certificate; (MAT) Master of Arts in Teaching; Master of Professional Studies (MPS); (PMC) Post-Master Certificate; (CAS) Certificate in Advanced Study.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Report on the Instructional Workload of the USM Faculty - (AY 2019-2020)

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: At this meeting, the Committee will review the annual report on the workload of the USM faculty. This year's report (AY 2019-2020) is the second of a 3-year transition between reports generated under the earlier policy and reports that will reflect the format of the new policy which was passed by the Board of Regents in June 2019.

As in the past, the report summarizes faculty workload, which includes teaching, research, and service activities at all USM degree-granting institutions with tenured or tenure-track faculty. Key findings include:

- Overall, total credit hours produced by faculty outpaced total student enrollment.
- Full-time tenured/tenure track and full-time, non-tenure track instructional faculty account for 69% of all credit hours produced (up another 3% from last year).
- Further, over the five years since 2014-15, credit hours produced by tenured/tenure track faculty is up 5.65% while credit hours produced by part-time faculty (adjuncts, etc.) is down -3.9%
- Faculty publication and scholarship continue at high levels.
- Faculty secured over $1.5 billion in research funding, representing a 5.33% gain over last year.

ALTERNATIVE(S): This is an information item.

FISCAL IMPACT: This is an information item.

CHANCELLOR'S RECOMMENDATION: This is an information item.

COMMITTEE RECOMMENDATION: Information Only		DATE: January 12, 2021
BOARD ACTION:		DATE:
SUBMITTED BY: Joann A. Boughman	301-445-1992	jboughman@usmd.edu
Ellen Herbst	301-445-1923	eherbst@usmd.edu

UNIVERSITY SYSTEM of MARYLAND

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OFFICE OF THE CHANCELLOR

December 10, 2020

The Honorable Guy Guzzone
Chair, Senate Budget & Taxation Committee
3 West Miller Senate Office Building
Annapolis, MD 21401

The Honorable Maggie McIntosh
Chair, House Appropriations Committee
121 House Office Building
Annapolis, MD 21401

RE: Fiscal 2021 Joint Chair's Report – Report on Faculty Workload (R75T00), Page 197

Dear Chair Guzzone and Chair McIntosh:

The Fiscal 2021 Joint Chair's Report, section R75T00, page 197, requires that the University System of Maryland (USM) Office report on USM instructional faculty workload:

> The committees request that the University System of Maryland (USM), Morgan State University (MSU), and St. Mary's College of Maryland (SMCM) continue to provide annual instructional workload reports for tenured/tenure-track faculty. By focusing on these faculty, the committees gain a sense of the teaching activities for the regular core faculty. However, there are other types of instructional faculty at institutions such as full- and part-time nontenured/nontenure-track faculty including adjunct faculty, instructors, and lecturers. Focusing on only tenured/tenure-track faculty provides an incomplete picture of how students are taught. Therefore, the report should also include the instructional workload when all types of faculty are considered. Additional information may be included at the institution's discretion. Furthermore, the USM report should include the percent of faculty meeting or exceeding teaching standards for tenured/tenure-track faculty for the University of Maryland, Baltimore Campus.

Attached is the AY 2019-2020 Report of the Workload of the USM Faculty. This document is the second report in a three-year transition to the University System of Maryland's new workload reporting format under the Board of Regents' June 2019 policy amendment. The new format, as you may recall, is aimed at improving reporting accuracy and coverage, better aligning with current practice, and incentivizing policy goals around student success.

I am happy to address any questions you may have regarding this response.

Sincerely,

Jay A. Perman
Chancellor

Enclosures

cc: Sarah Albert, DLS; Sara J. Baker, DLS; Joann Boughman, USM; Ellen Herbst, USM; Patrick Hogan, USM

REPORT ON THE INSTRUCTIONAL WORKLOAD OF THE USM FACULTY

ACADEMIC YEAR 2019-2020

As requested on Page 197 of the FY21 Joint Chair's Report

Submitted by:

Office of the Senior Vice Chancellor for Academic and Student Affairs

Office of the Vice Chancellor of Administration and Finance

REPORT ON THE WORKLOAD OF THE USM FACULTY: ACADEMIC YEAR 2019-2020

KEY FINDINGS

- Overall, in 2019-20, total credit hours produced by faculty outpaced total student headcount enrollment. In the five years since 2014-15, USM enrollment decreased by 0.66% and USM total credit hours produced increased by 7.19% (see Table 2a).
- When disaggregated by the program and degree level of the courses taught (such as lower- and upper-division, undergraduate and graduate), total credit hours produced appropriately mirrors the unique mission of the USM institutions.
- Full-time tenured/tenure track and full-time, non-tenure track instructional faculty account for 69% of all credit hours produced (up another 3% from last year) (see Table 4).
- Further, over the five years since 2014-15, credit hours produced by tenured/tenure track faculty is up 5.65% while credit hours produced by part-time faculty (adjuncts, etc.) is down -3.9% (see Table 4).
- Full-time tenured/tenure-track faculty carry the largest load at the upper-division undergraduate and graduate levels as compared to other faculty types (see Table 5).
- The number of bachelor's degrees awarded continues to increase. There was a USM record 20,744 bachelor's degrees awarded in the most recent year, 489 more than last year and 1,269 more than five years earlier (see Table 7).
- Four-year graduation rates have improved this year to the best performance since this measure was first tracked (see Table 8a). Six-year graduation rates have also increased (see Table 8b).
- Faculty publication and scholarship continue at high levels (see Table 9) and at appropriate levels according to faculty type (Table 10).
- Faculty secured over $1.5 billion in research funding, representing a 5.33% gain over last year (Table 11).

INTRODUCTION

Since 1994 the University System of Maryland (USM) Board of Regents has provided an annual report to the General Assembly that synthesizes faculty workload, with a major emphasis on instructional activities. This report provides summary data on faculty activity at USM degree-granting institutions for the academic year 2019-2020.

Background

The USM policies governing faculty workload are designed to ensure maximum accountability, while providing individual campuses high levels of flexibility to deploy faculty in the most effective and efficient way possible. The primary USM Board of Regents policy governing faculty workload is II-1.25 POLICY ON FACULTY WORKLOAD AND RESPONSIBILITIES.[1]

The main purpose of this policy is to promote optimal performance by the USM institutions in meeting the needs and expectations of its students and other stakeholders and to provide mechanisms that will ensure public accountability for that performance, particularly as it relates to faculty work. However, since this policy was initially developed in 1994, the nature of faculty work related to instruction has evolved to include much more than just classroom teaching. As a result, the "course unit" metric reported previously was requiring an increasing number of exemptions and workarounds to establish equivalencies with the various academic innovations our institutions are embracing. This policy, therefore, was amended in June 2019 to improve reporting accuracy and coverage, align with current practice, and incentivize policy goals around student success by eliminating the course unit metric and rely, instead, on credit hours to measure teaching productivity.

This year's report is the second of a 3-year transition between reports generated under the earlier policy and reports that will reflect the format of the new policy. While UMCES, UMGC, and UMB will not be included until next year, for the first time this year's report incorporates teaching data from UB's School of Law, UB's Merrick School of Business, SU's Perdue School of Business, TU's College of Business & Economics, and any other departments and colleges that had been exempted in previous years.

As described, below, we have also made some definitional shifts in this year's report:

- Numbers of faculty provided are based on *headcounts* instead of *full-time equivalents* (FTEs).
- Data for department chairs and non-departmental administrators who are also full-time faculty are included in the full-time faculty categories instead of being included as part of "other faculty."
- Data for full-time research faculty and teaching/graduate assistants are disaggregated into their own categories instead of being included as part of the previous "other faculty" category.

While these definitional shifts will make some longitudinal comparisons a little more difficult over the next 5 years, we believe these changes will provide a clearer picture of how faculty are being deployed across teaching, research, and service in the analyses. The addition of student credit hour data disaggregated by course level this year should also help make clearer how faculty are being deployed across undergraduate and graduate programs. In addition, these changes put the definitions being used for purposes of this report into better alignment with COMAR and MHEC data definitions for various submissions, including the Employee Data System (EDS) report.

Definitions

For analysis purposes, this report combines various faculty activities and different faculty types into relatively broad categories. The metrics for these activities and the types of faculty are defined below:

1 Other policies that clarify specific issues or relate to the faculty workload include: II-1.19 UNIVERSITY OF MARYLAND SYSTEM POLICY ON THE COMPREHENSIVE REVIEW OF TENURED FACULTY and II-1.05 POLICY ON THE EMPLOYMENT OF FULL-TIME, NON-TENURE TRACK INSTRUCTIONAL FACULTY IN THE UNIVERSITY SYSTEM OF MARYLAND.

Student Credit Hours (SCH): Student credit hours are calculated as the number of students in the course at enrollment freeze (EIS) multiplied by the number of course credit hours, as measured in accordance with COMAR 13B.02.02.16(D). For example, a 3-credit course with ten students produces thirty student credit hours. Similarly, for a variable credit course where 10 students are enrolled at 2 credits and 10 other students are enrolled at 3 credits, the student credit hours generated would be 50 credits.

Academic Year: All data reported are for fall and spring terms only.

Faculty Types: Numbers of faculty included here represent headcounts and are disaggregated by their employment classification, as described below:

Full-time Tenured/Tenure-Track Faculty: This includes all persons, including department chairs and non-departmental administrators, holding tenured and tenure-track positions who are classified as faculty and had at least 1 instructional credit hour in the reporting year.

Full-time Non-Tenure Track Instructional Faulty: These are all full-time instructional faculty who are not on the tenure track with at least 1 instructional credit hour in the reporting year. Full-time visiting instructional faculty are also reported here.

Full-time Non-Tenure Track Research Faculty: This includes all full-time research faculty who are not on the tenure track with at least 1 instructional credit hour in the reporting year. Full-time visiting research faculty are also reported here.

Teaching/Graduate Assistant: These are graduate students with at least 1 instructional credit hour in the reporting year as part of their university employment.

Part-Time Instructional Staff: This category includes emeritus, adjunct and affiliated faculty, staff who teach, and all other part-time faculty with at least 1 instructional credit hour in the reporting year. Teaching/ graduate assistants are not reported here.

Course Levels: Per the USM's Policy for the Numbering of Academic Courses III-6.10, course levels are defined here as follows:

Lower Division: Undergraduate credit hours for 000-099 non-degree courses and 100 and 200 level courses.

Upper Division: Undergraduate credit hours for undergraduate courses 300 level courses and higher.

Graduate I: Graduate credit hours for post-baccalaureate certificate, master's and professional practice doctoral level courses

Graduate II: Graduate credit hours for post-master's and research/scholarship doctoral level courses.

Graduate III: Graduate credit hours for master's and doctoral research supervision courses (798, 799, 898, 899).

MEASURES OF FACUTLY CONTRIBUTIONS TO STUDENT SUCCESS

Because student success is the central focus of our degree-granting institutions, the primary measure of instructional productivity in this report is expressed in terms of credit hours produced. Additional student outcomes with respect to enrollments and graduation rates are also presented here as a measure of the faculty's contributions to student success.

Student Credit Hour Measures

Production of student credit hours (SCH) is the prescribed measure in the revised policy on faculty workload for evaluating instructional activity and deployment of faculty. SCH are calculated as the number of students in the course at enrollment freeze (EIS) multiplied by the number of course credit hours, as measured in accordance with COMAR 13B.02.02.16(D) and further defined above.

Total SCH Production by Institution

The total SCH production by institution over the academic years since 2014-15 is reported in Table 1, below. This table includes SCH totals across all faculty types and instructional levels. The number and percent of 1-year change since 2018-19 and the 5-year change since 2014-15 are also reported.

Table 1. One-year (2018-19 vs. 2019-20) and 5-year (2014-15 vs. 2019-20) Change in Total SCH Produced

							1-year change		5-year change	
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	#	%	#	%
BSU	126,225	121,580	130,328	141,908	142,389	149,722	7,333	5.15%	23,497	18.62%
CSU	68,287	71,361	73,302	72,329	72,014	43,904	-28,110	-39.03%	-24,383	-35.71%
FSU	124,447	126,599	121,206	121,392	112,865	117,702	4,837	4.29%	-6,746	-5.42%
SU	208,478	200,511	205,456	209,529	207,673	227,458	19,785	9.53%	18,980	9.10%
TU	477,122	472,248	462,548	464,834	471,472	551,865	80,393	17.05%	74,743	15.67%
UB	66,374	65,189	63,592	58,362	49,534	78,698	29,164	58.88%	12,324	18.57%
UMBC	317,452	322,899	322,225	317,416	321,734	320,027	-1,707	-0.53%	2,575	0.81%
UMCP	854,228	853,867	895,625	887,875	889,605	962,924	73,319	8.24%	108,696	12.72%
UMES	115,829	115,731	103,346	93,939	83,779	75,792	-7,987	-9.53%	-40,037	-34.57%
Total	**2,358,442**	**2,349,985**	**2,377,628**	**2,367,584**	**2,351,065**	**2,528,091**	**177,026**	**7.53%**	**169,649**	**7.19%**

Source: USM Report on Faculty Teaching Workload

Table 2a, below, provides a general sense of whether the number of total SCH produced by the institution is keeping pace with total enrollment. While there was a slight drop in USM fall headcount enrollment between Fall 2018 and Fall 2019 (-1.78%) there was an increase in overall USM SCH production (7.53%) between 2018-19 and 2019-20. This 1-year comparison roughly mirrors the 5-year comparison; between Fall 2018 and Fall 2019 there was a slightly lower enrollment headcount (-0.66%) and an increase in overall SCH production (7.19%). As can be seen in Table 2a, however, fluctuations in enrollment and SCH production varies for specific institutions.

Table 2a. One-year and 5-year Change in Fall Undergraduate and Graduate Headcount and Total SCH Produced

	1-year change (2018-19 vs. 2019-20)		5-year change (2014-15 vs. 2019-20)	
	Enrollment	Total SCH	Enrollment	Total SCH
BSU	-2.36%	5.15%	8.36%	18.62%
CSU	-0.51%	-39.03%	-13.05%	-35.71%
FSU	-2.19%	4.29%	-8.27%	-5.42%
SU	0.58%	9.53%	-1.74%	9.10%
TU	-0.93%	17.05%	1.90%	15.67%
UB	-11.21%	58.88%	-30.30%	18.57%
UMBC	-1.20%	-0.53%	-2.70%	0.81%
UMCP	-1.11%	8.24%	8.33%	12.72%
UMES	-9.61%	-9.53%	-32.55%	-34.57%
Total	**-1.78%**	**7.53%**	**-0.66%**	**7.19%**

Sources: USM Report on Faculty Teaching Workload and USM Institutional Research Information System (IRIS)

Given SCH is calculated as the number of students in a course multiplied by the number of course credit hours, one might expect enrollment changes to closely mirror SCH changes. However, undergraduate and graduate headcount enrollment includes both full time and part-time students, who differentially impact SCH due to the numbers of credits they are taking in a given year. Part-time students count equally in enrollment headcount numbers, but account for fewer SCH within a given year. Drops in part-time enrollment, as experienced 2018-19,

can account for some of this variation. Table 2b illustrates the 1-year and 5-year change in fulltime and part-time headcount enrollments.

Table 2b. Total Undergraduate and Graduate Headcount Enrollment by Attendance Status

	1-year %			5-year %		
	Change in Fulltime	**Change in Part-time**	**Change in Total**	**Change in Fulltime**	**Change in Part-time**	**Change in Total**
BSU	-1.62%	-4.87%	-2.36%	14.73%	-9.36%	8.36%
CSU	1.64%	-5.28%	-0.51%	-12.74%	-13.78%	-13.05%
FSU	-6.28%	10.59%	-2.19%	-15.30%	17.55%	-8.27%
SU	0.30%	2.78%	0.58%	-1.09%	-6.47%	-1.74%
TU	-0.86%	-1.21%	-0.93%	3.03%	-2.44%	1.90%
UB	-12.75%	-9.68%	-11.21%	-35.31%	-24.72%	-30.30%
UMBC	-1.25%	-1.02%	-1.20%	-1.37%	-7.27%	-2.70%
UMCP	-0.92%	-2.63%	-1.11%	10.11%	-4.20%	8.33%
UMES	-10.62%	-3.67%	-9.61%	-32.86%	-30.85%	-32.55%
Total	**-1.70%**	**-2.14%**	**-1.78%**	**1.04%**	**-7.75%**	**-0.66%**

Source: USM Institutional Research Information System (IRIS)

This year the USM institutions also provided a breakdown of SCH disaggregated by the program and degree level of the courses taught. Table 3 provides the 2019-2020 SCH data by course level, illustrating the unique missions of each of the USM institutions.

Table 3. 2019-2020 SCH Production by Course Level

	BSU	**CSU**	**FSU**	**SU**	**TU**	**UB**	**UMBC**	**UMCP**	**UMES**	**USM**
Lower-Division	87,546	16,874	55,198	122,069	271,828	12,334	150,735	417,347	39,739	1,173,669
Upper-Division	48,487	22,861	52,972	91,847	242,816	29,226	136,781	407,749	22,366	1,055,105
Graduate I	6,810	0	8,502	12,688	34,424	36,274	21,606	87,412	11,538	219,254
Graduate II	4,495	0	612	854	2,189	573	4,008	30,733	1,445	44,909
Graduate III	2,384	4169	418	0	608	291	6,897	19,683	705	35,155
Total	**149,722**	**43,904**	**117,702**	**227,458**	**551,865**	**78,698**	**320,027**	**962,924**	**75,792**	**2,528,091**

Source: USM Report on Faculty Teaching Workload

Student Credit Hour Production by Faculty Type

Table 4, below, illustrates the degree to which different types of faculty are responsible for the production of SCH. Core instructional faculty (tenured/tenure-track and full-time, non-tenure track instructional faculty) account for 69% of all SCH produced (up another 3% from last year). Of note, while non-tenure track instructional faculty produced over 24% more SCH than they did five years ago, the number of SCH produced has also increased for full-time tenured/tenure-track faculty overall by 5.65% while dropping for part-time faculty by -3.90%. Specific institutions do differ from this trend.

Table 4. Percentage of SCH Produced by Faculty Type and 5-Year Percent Change (2019-20 vs. 2014-15)

	FT Tenured/Tenure Track		Full-time Non-Tenure Track Instructional		FT non-TT Research		Teaching/Graduate Assistants		Other PT Instructional Staff	
	% of total	% 5yr change	% of total	% 5yr change	% of total	% 5yr change	% of total	% 5yr change	% of total	% 5yr change
BSU	44.67%	23.36%	0.14%	4.10%	0.00%	--	0.00%	--	43.28%	86.31%
CSU	90.32%	2.94%	4.24%	-21.90%	0.00%	--	0.00%	--	5.44%	-89.83%
FSU	65.62%	1.91%	13.92%	16.60%	0.00%	--	0.41%	--	20.05%	4.53%
SU	60.53%	23.83%	19.49%	19.50%	0.00%	--	0.55%	--	19.43%	0.89%
TU	40.20%	23.02%	28.89%	6.50%	0.00%	--	0.42%	--	30.49%	8.10%
UB	55.28%	89.63%	14.27%	-10.40%	0.00%	--	0.00%	--	30.45%	-30.51%
UMBC	29.40%	-7.24%	31.17%	14.00%	0.26%	--	1.72%	--	37.45%	12.02%
UMCP	33.43%	-6.32%	36.31%	56.30%	1.54%	--	6.43%	--	22.29%	-16.46%
UMES	48.62%	-34.25%	23.52%	-31.40%	0.53%	--	0.41%	--	26.92%	-34.28%
Overall	**41.13%**	**5.65%**	**27.71%**	**24.20%**	**0.63%**	**--**	**2.84%**	**--**	**26.98%**	**-3.90%**

Source: USM Report on Faculty Teaching Workload
Note: FT non-TT Research and Teaching/Graduate Assistants have not been reported separately before this year, so percent of 5 year change could not be calculated.

Table 5, below, illustrates how faculty are being deployed across undergraduate and graduate programs by faculty type. As one would expect, full-time tenured/tenure-track faculty carry the largest load at the graduate level as compared to other faculty types. Of note, the institutions appropriately make heavy use of part-time faculty (practitioners in the field) at the Graduate I Level, which are typically master's and professional practice courses.

Table 5. Course Levels of Total SCH Produced by Faculty Type

	FT Tenured/TT	FT non-TT Instructional	FT non-TT Research	Teaching/ Graduate Assistants	Other PT Instructional Staff	Total
Lower-Division	369,871	409,471	6,779	45,529	342,021	1,173,669
Upper-Division	499,836	267,878	7,419	24,993	254,981	1,055,105
Graduate I	106,464	38,521	1,473	1,225	71,571	219,254
Graduate II	35,855	1,980	280	46	6,750	44,909
Graduate III	27,672	591	80	0	6,812	35,155
Total	**1,039,697**	**718,439**	**16,031**	**71,790**	**682,134**	**2,528,091**

Source: USM Report on Faculty Teaching Workload

Average Student Credit Hour Production for Core Instructional Faculty

Table 6, which reports average SCH production for all core instructional faculty indicates that USM average SCH produced by FT instructional faculty increased quite a bit in 2019-20 with core instructional faculty at five of the nine institutions producing significantly more SCH as compared to 2018-19. Overall SCH production is also up significantly for the five-year period since 2014-15.

Table 6. Trends in Average SCH Generated by All Core Faculty[2]

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
BSU	387	341	332	329	355	314
CSU	285	325	325	349	355	340
FSU	371	375	348	357	352	388

[2] Due to the shift this year from calculating average SCH using faculty headcount instead of FTEs, data in this table will differ from previous reports but have been recalculated across the years for consistency and comparison purposes.

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
SU	364	347	349	356	353	407
TU	348	344	335	337	333	412
UB	146	168	167	164	151	294
UMBC	370	378	384	357	360	358
UMCP	295	294	314	307	324	359
UMES	368	346	334	337	295	264
Average	**325**	**322**	**327**	**323**	**328**	**366**

Sources: USM Report on Faculty Teaching Workload and USM Institutional Research Information System (IRIS)

Instructional Workload at the University of Maryland, Baltimore

The Maryland General Assembly requires the USM to include information regarding the workload of the University of Maryland, Baltimore in the faculty workload report each year. Until the recent shifts in USM policy, UMB has applied a different set of standards for judging faculty instructional workload from the other institutions that were more appropriate for its professional schools. Starting with next year's report, both UMB and UMGC data will be integrated into the above tables.

UMB reports that 95% of all core faculty met or exceeded the institution's standard faculty instructional workload, consistent with the attainment for previous years. In fact, nearly half of faculty exempted from teaching the standard load did so anyway to pursue opportunities for externally funded or department supported research and service.

Student Outcomes

While SCH are one measure of faculty production, student outcomes --such as number of degrees awarded and graduation rates-- are also useful indicators of faculty contributions to student success. While an increase or decrease in the number of degree recipients can reflect a number of factors such as the institution's growth in enrollment and their level of success in retaining students to graduation, students' ability to graduate in a timely fashion is also dependent on the efficiency and productivity of the faculty, the quality of advising, and the appropriateness of course offerings.

Table 7. Trends in the Undergraduate Degrees Awarded (FY 2015 to FY 2020)

	2015	2016	2017	2018	2019	2020
BSU	801	832	713	781	826	870
CSU	416	464	421	399	378	335
FSU	1,032	964	1,060	1,027	1,078	967
SU	1,935	1,982	2,026	1,873	1,805	1,907
TU	4,422	4,428	4,628	4,609	4,619	4,701
UB	694	721	755	711	615	521
UMBC	2,432	2,521	2,572	2,578	2,658	2,632
UMCP	7,166	7,253	7,292	7,559	7,768	8,295
UMES	577	574	514	482	508	516
Total	**19,475**	**19,739**	**19,981**	**20,019**	**20,255**	**20,744**

Source: USM Institutional Research Information System (IRIS)
Note: Total does not include all USM institutions.

The number of graduating students continues to rise and is at the highest level yet achieved by the USM. Table 7, above, displays the number of degree recipients for the last five years at the USM institutions included in this report. USM also continues to see overall progress in student time-to-degree. Table 8a, below, illustrates changes over time in the four-year graduation rates and Table 8b documents changes in the six-year graduation rates. Although

graduation rates reflect only part of the larger picture (and transfers are not included), they are a useful measure of student success.

Table 8a. Four-Year Graduation Rate by Entering Year

	2011	2012	2013	2014	2015	2016
BSU	15%	16%	16%	17%	18%	18%
CSU	9%	9%	12%	12%	12%	9%
FSU	27%	29%	27%	27%	27%	31%
SU	50%	50%	52%	49%	49%	50%
TU	45%	46%	45%	47%	49%	47%
UB	8%	15%	17%	18%	22%	20%
UMBC	36%	40%	39%	42%	43%	45%
UMCP	63%	66%	66%	65%	69%	70%
UMES	20%	22%	21%	21%	15%	20%
All USM	**44%**	**46%**	**46%**	**47%**	**48%**	**49%**

Source: USM Institutional Research Information System (IRIS)
Notes: "All USM" includes USM institutions not reported here. Percentages reflect graduation anywhere in USM for all First-time Full-time Freshmen

Table 8b. Six-Year Graduation Rate by Entering Year

	2009	2010	2011	2012	2013	2014
BSU	44%	41%	42%	46%	46%	46%
CSU	19%	20%	23%	21%	25%	31%
FSU	61%	55%	56%	57%	57%	59%
SU	74%	74%	76%	71%	74%	70%
TU	73%	72%	74%	75%	72%	75%
UB	38%	36%	34%	41%	44%	40%
UMBC	65%	66%	65%	68%	71%	72%
UMCP	86%	86%	85%	86%	87%	87%
UMES	37%	42%	42%	44%	46%	45%
All USM	**69%**	**68%**	**70%**	**70%**	**72%**	**72%**

Source: USM Institutional Research Information System (IRIS)
Notes: "All USM" includes USM institutions not otherwise reported here. Percentages reflect graduation anywhere in USM for all First-time Full-time Freshmen

MEASURES OF FACULTY CONTRIBUTIONS TO THEIR DISCIPLINES AND SERVICE

Scholarship and Service Activity

Table 9 is a summary of the scholarship and service activity of the USM faculty from the reporting institutions (including UMB). During the 2018-2019 academic year, USM faculty published 523 books and over 13,900 peer-reviewed articles. Faculty also participated in almost 4,800 juried and non-juried creative activities combined. USM faculty logged more than 37,000 days in public service to their communities, government, schools, and non-profit organizations. Table 10, below, provides these same data disaggregated by faculty type.

Table 9. Scholarship and Service of the USM Faculty (Academic Year 2019-2020)

	# Books Published	# Refereed Publications	# Non-Refereed Publications	# Juried Creative Works	# Non-Juried Creative Works	# Professional Presentations	# Prestigious Faculty Awards	# Faculty Awarded Externally Funded Grants and Contracts	# Patents Awarded to Faculty	Leadership in Professional Societies	# Days Spent in Public Service
Comprehensive											
BSU	7	90	52	5	43	141	3	24	3	10	1,088
CSU	1	37	5	18	0	93	2	31	0	12	1,740
FSU	7	119	60	12	404	132	1	19	0	10	1,661
SU	25	398	116	101	175	570	53	32	3	143	4,013
TU	55	745	243	122	753	695	75	79	0	179	6,287
UB	11	89	88	15	13	59	91	30	0	29	1,249
UMES	19	203	63	80	46	306	19	75	0	29	720
Research											
UMB	281	5,673	829	--	2,388	4,023	456	2,316	--	--	15,749
UMBC	31	777	217	0	290	1,421	22	173	10	498	2,393
UMCP	86	5,769	239	54	273	296	103	1,482	18	65	2,221
Total	**523**	**13,900**	**1,912**	**407**	**4,385**	**7,736**	**825**	**4,261**	**34**	**975**	**37,121**

Source: USM Report on Faculty Teaching Workload

Notes: Includes tenured/tenure track, department chairs, and full-time non-tenure track instructional and research faculty from all departments for the entire institution. UMB data reported using old reporting format, that did not separate juried/non-juried created works or include patents or professional society leadership positions.

Table 10. Measures of Research and Scholarly/Creative Productivity by Faculty Type

	FT Tenured/ TT	FT non-TT Instructional	FT non-TT Research	Other	Total
# Books Published	206	25	4	7	**242**
# Refereed Publications	7,512	181	57	477	**8,227**
# Non-refereed Publications	967	83	5	28	**1,083**
# Juried Creative Works	352	51	0	4	**407**
# Non-juried Creative Works	1,494	485	7	11	**1,997**
# Professional Presentations	3,246	337	68	62	**3,713**
# Prestigious Faculty Awards	312	29	2	26	**369**
# Faculty Awarded Externally Funded Grants and Contracts	1,150	65	99	631	**1,945**
# Patents Awarded to Faculty	33	0	1	0	**34**
# Faculty in Leadership Positions in Professional Societies	748	168	54	5	**975**
# Days spent in public service	15,441	5,625	73	233	**21,372**

Source: USM Report on Faculty Teaching Workload

External Funding

Securing external funding for research and other activities is an important aspect of faculty work and is often seen as a proxy measure for research productivity. It is also used as a criterion for ranking institutions nationally, supports the creation and transfer of new technologies, contributes to the economic development of critical areas in Maryland, provides community services to underserved populations, feeds into the creation of new curriculum and course development and, most importantly, assures that students receive their instruction from faculty members who are recognized as being at the cutting edge of their disciplines. Although USM faculty are primarily responsible for their campus' external funding levels, not all external funding is attributable to tenured/tenure-track faculty. Staff and other research faculty also attract external dollars.

Table 11 records the level of external funding received by USM institutions, as reported by each institution's Office of Sponsored Programs. Throughout the 2019-2020 academic year, the USM was awarded over $1.5 billion in external awards. This represents a 5.33% increase from the 2018-2019 academic year.

Table 11. External Funding per Institution (FY 2015 – FY 2020)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Comprehensive						
BSU	$8,786,813	$7,988,546	$8,750,023	$10,025,960	$9,870,789	$12,195,822
CSU	$6,815,776	$5,850,572	$7,765,864	$6,524,176	$8,250,738	$9,674,730
FSU	$6,975,842	$3,279,980	$7,818,382	$2,041,543	$3,564,730	$3,185,636
SU	$4,882,812	$4,584,488	$5,760,833	$5,141,941	$8,032,505	$5,791,637
TU	$17,729,843	$16,789,859	$10,439,414	$12,953,604	$14,724,204	$6,707,767
UB	$7,399,317	$7,729,907	$10,582,279	$13,698,053	$14,813,294	$16,972,599
UMES	$21,224,282	$17,827,443	$19,728,418	$15,601,754	$16,750,307	$18,772,791
UMGC	$51,321,961	$52,172,670	$51,111,131	$54,782,797	$57,041,537	$75,575,017
Research						
UMB	$497,918,281	$494,477,177	$553,170,320	$664,599,070	$664,120,371	$684,752,810
UMBC	$71,134,098	$76,215,884	$92,193,683	$77,180,308	$79,741,464	$72,517,690
UMCP	$545,633,305	$554,177,223	$509,225,382	$538,013,239	$566,559,047	$613,620,510
UMCES	$24,508,834	$24,815,908	$24,739,098	$26,833,197	$21,424,116	$23,184,557
USM Total	**$1,264,331,164**	**$1,265,909,657**	**$1,301,284,827**	**$1,427,395,642**	**$1,464,893,102**	**$1,542,951,566**

Source: USM Annual Extramural Awards Survey
Note: USM Total includes all USM institutions.

SUMMARY

This report provided summary data on faculty workload for the University System of Maryland for the 2019-2020 academic year in the areas of faculty contributions to student success, their disciplines, and service activities.

While there are variations across institutions, production of SCH outpaced overall enrollment trends in 2019-20, suggesting there are sufficient numbers of courses available for students to graduate in a timely fashion. This is further substantiated by the fact that the number of degrees awarded continues to rise and four-year and six-year graduation rates continue to improve. That said, to ensure we are keeping pace with longer-term enrollment trends, the USM continues to track SCH generated by core instructional faculty.

The data indicate that teaching responsibilities continue to shift, but less-so over to part-time faculty as is commonly thought and more-so over to full-time, non-tenure track instructional faculty whose primary responsibility is for teaching.

At the same time, non-instructional productivity in the form of scholarship and service remained at very high levels. External research funding rose again in the last year to over $1.5 billion in the last year in 2019-2020.

APPENDIX A: FACULTY PROFILE

USM Faculty Complement

In 2019-2020, the USM had a total instructional complement of 16,817 faculty by headcount across all 12 institutions. Table A-1 provides a detailed breakdown of these faculty by tenure status and full or part time employment status for the institutions represented in this year's report.

Table A-1. USM Faculty Profile (Academic Year 2019-2020)

	FT Tenured/ Tenure Track	Full Time Non-Tenure Track Instructional	FT Non-TT Research	Teaching/ Graduate Assistants	Other PT Instructional Staff	All Faculty
BSU	178	36	0	0	345	559
CSU	115	7	0	0	135	257
FSU	201	40	0	5	205	451
SU	350	97	0	23	321	791
TU	607	319	0	25	1020	1971
UB	147	39	0	0	250	436
UMB	469	1079	352	35	1778	3713
UMBC	394	148	16	28	649	1235
UMCP	1,370	500	82	506	1,648	4,106
UMES	155	52	7	18	145	377
Overall	**3,986**	**2,317**	**457**	**640**	**6,496**	**13,896**

Source: USM Report on Faculty Teaching Workload
Note: Overall totals do not include UMCES or UMGC

Tenured and Tenure-Track Faculty

Once again this year, the overall headcount of tenured and tenure-track faculty for the institutions reported here decreased both from 2014-2015 and from 2018-2019 to 2019-2020. Table A-2 displays the number of tenured/tenure-track faculty at each institution and the 1-year and 5-year percent change in number.

Table A-2. Tenured/Tenure Track Faculty

	2014-15	2018-19	2019-20	1-Year Change in Tenured/ Tenure Track	5-Year Change in Tenured/ Tenure Track
BSU	161	156	178	14.1%	10.6%
CSU	141	138	115	-16.7%	-18.4%
FSU	214	201	201	0.0%	-6.1%
SU	289	350	350	0.0%	21.1%
TU	514	608	607	-0.2%	18.1%
UB	173	155	147	-5.2%	-15.0%
UMB	539	488	469	-3.9%	-13.0%
UMBC	386	394	394	0.0%	2.1%
UMCP	1456	1439	1370	-4.8%	-5.9%
UMES	170	159	155	-2.5%	-8.8%
Overall	**4,043**	**4,088**	**3986**	**-2.5%**	**-1.4%**

Source: USM Report on Faculty Teaching Workload
Note: Overall totals do not include UMCES or UMGC

Full-time Non-Tenure Track Instructional faculty

The total headcount of full-time, non-tenure track instructional faculty has continued to increase. In the period from 2014-2015 through 2019-2020, the numbers increased by 269 or about 28%. Table A-3 displays the number of full-time, non-tenure track instructional faculty at each institution and the 1-year and 5-year percent change in number.

Table A-3. Full-Time Non-Tenure Track Instructional Faculty

	2014-2015	2018-2019	2019-2020	1-Year Change in Non-Tenure Track	5-Year Change in Non-Tenure Track
BSU	72	53	36	-32.08%	-50.00%
CSU	14	10	7	-30.00%	-50.00%
FSU	40	34	40	17.65%	0.00%
SU	83	96	97	1.04%	16.87%
TU	294	330	319	-3.33%	8.50%
UB	26	39	39	0.00%	50.00%
UMBC	131	141	148	4.96%	12.98%
UMCP	250	397	500	25.94%	100.00%
UMES	59	55	52	-5.45%	-11.86%
Overall	**969**	**1155**	**1238**	**7.19%**	**27.76%**

Source: USM Report on Faculty Teaching Workload
Note: Overall totals do not include UMCES or UMGC

Part-time Faculty

While part-time faculty continue to play an important role in instruction at USM institutions, the headcount of part-time faculty used to teach courses decreased dramatically in 2019-2020; by -24.15% from 2018-2019 and by -14.22% from 2014-2015. Table A-4 displays the headcount of part-time faculty at each institution and the 1-year and 5-year percent change.

Table A-4. Part-Time Faculty

	2014-2015	2018-2019	2019-2020	1-Year Change in Part-Time	5-Year Change in Part-Time
BSU	259	368	345	-6.25%	33.20%
CSU	141	135	135	0.00%	-4.26%
FSU	183	161	205	27.33%	12.02%
SU	368	399	321	-19.55%	-12.77%
TU	998	1091	1020	-6.51%	2.20%
UB	358	295	250	-15.25%	-30.17%
UMBC	570	622	649	4.34%	13.86%
UMCP	2407	2995	1648	-44.97%	-31.53%
UMES	216	154	145	-5.84%	-32.87%
Overall	**5,500**	**6,220**	**4,718**	**-24.15%**	**-14.22%**

Source: USM Report on Faculty Teaching Workload
Note: Overall totals do not include UMCES or UMGC

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Report on Extramural Funding – FY 2020

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: This report provides information on extramural awards received by USM institutions in support of specific initiatives in research, education, or service for FY 2020. In addition to detailed information by institution and funding source for FY 2019 and FY 2020, the report also provides five years of summary data by institution for comparison purposes. It is important to note that while the report on extramural awards is consistent within the USM, it is not directly comparable with NSF accounting-based reports nor with expenditure data in System budget documents.

In FY 2020, the System received a total of $1,542,951,565.87 in extramural funding, a 5.6% increase from the FY 2019 total of $1,460,932,947.34. UMB and UMCP garnered the largest extramural funding totals among System institutions. BSU, CSU, UB, UMB, UMCES, UMCP, UMES, and UMGC obtained higher levels of extramural funding than in FY 2019.

ALTERNATIVE(S): This is an information item.

FISCAL IMPACT: This is an information item.

CHANCELLOR'S RECOMMENDATION: This is an information item.

COMMITTEE ACTION: Information Only		DATE: January 12, 2021
BOARD ACTION:		DATE:
SUBMITTED BY: Joann A. Boughman	301-445-1992	jboughman@usmd.edu

University System of Maryland

USM Report on Extramural Funding
FY 2020

Major sources of support for the activities on the campuses of the USM institutions come from extramural sources, including grants and contracts. The faculty and staff of USM institutions obtain funding for research, education, and public service activities from many sources. This report shows how many proposals each institution generated, how many awards were received, and the total amount of funding received from external sources.

In FY 2020, the System received a total of $1,542,951,565.87 in extramural funding, a 5.6% increase from the FY 2019 total of $1,460,932,947.34. As noted on table 2, overall external funding to the USM has been steadily increasing since FY 2016. These increases are promising, although securing federal funding is still challenging.

Table 1 shows how much income each institution generated in each of the past two years from grants and contracts from the federal government, Maryland state agencies, non-profit foundations, corporations, and other sources, such as non-governmental organizations. Table 1 also shows the number of proposals submitted to each type of funding source and the number of grants received. Awards are counted in the year they are received. It should also be noted that in this report, the number of awards represents not only new awards but also amendments to existing awards that provide additional funding not previously accounted for. Institutions that receive a high percentage of awards funded in increments will have a higher number of awards than proposals, since one initial proposal could result in multiple funding actions. It should also be noted that some awards received were the result of proposals submitted in a prior fiscal year and that notification regarding the funding of some proposals submitted in FY 2019 were still pending as the fiscal year closed.

The degree to which institution secured funding from the various sources differs by institution. Although the federal government is the largest funding source for the System as a whole (64% of the USM total) and the majority of our institutions (nine of twelve), the state government, corporations and foundations, and other sources provide critical support on the same order of magnitude for several of our comprehensive universities. Institutions whose funding levels increased this year attribute those increases to the diversification of funding streams, intra-institutional partnerships and coordination, employment of a director of sponsored research, closer tracking of individual faculty federal awards, and growth in State partnerships.

Table 1
Extramural Funding for the USM – Fiscal Years 2019 and 2020

FY 2019

USM

Source	Award Amount	Awards	Proposals
Federal	$945,169,762.10	2,715	3,557
State	$186,050,088.57	1,430	900
Corporate	$94,570,670.60	1,714	1,206
Foundations	$117,808,425.00	827	768
Other	$135,051,783.98	3,955	2,004
TOTAL	**$1,478,650,730.25**	10,641	8,435
Total Less Other USM	**$1,460,932,947.34**		

BSU

Source	Award Amount	Awards	Proposals
Federal	$9,339,032.00	27	29
State	$448,756.50	9	10
Corporate	$83,000.00	3	0
Foundations	$0.00	0	0
Other	$6,800.00	4	4
TOTAL	**$9,877,588.50**	43	43
Total Less Other USM	**$9,870,788.50**		

CSU

Source	Award Amount	Awards	Proposals
Federal	$5,597,728.64	23	38
State	$779,799.21	14	17
Corporate	$362,577.00	13	20
Foundations	$1,510,633.00	16	27
Other	$205,223.00	14	18
TOTAL	**$8,455,960.85**	80	120
Total Less Other USM	**$8,250,737.85**		

FSU

Source	Award Amount	Awards	Proposals
Federal	$2,232,772.00	13	16
State	$1,097,996.00	16	15
Corporate	$0.00	0	0
Foundations	$46,750.00	10	9
Other	$572,690.00	10	13
TOTAL	**$3,950,208.00**	49	53
Total Less Other USM	**$3,564,730.00**		

SU

Source	Award Amount	Awards	Proposals
Federal	$3,045,771.00	10	21
State	$4,648,708.00	52	52
Corporate	$106,225.00	22	28
Foundations	$100,284.00	20	24
Other	$804,461.00	63	64
TOTAL	**$8,705,449.00**	167	189
Total Less Other USM	**$8,032,505.00**		

FY 2020

USM

Source	Award Amount	Awards	Proposals
Federal	$1,004,627,346.76	2,626	3,375
State	$189,294,558.73	1,889	829
Corporate	$105,873,344.00	1,414	1,074
Foundations	$124,123,789.64	921	980
Other	$138,683,001.79	2,492	2,187
TOTAL	**$1,562,602,040.92**	9,342	8,445
Total Less Other USM	**$1,542,951,565.87**		

BSU

Source	Award Amount	Awards	Proposals
Federal	$11,700,669.12	30	37
State	$389,153.00	7	9
Corporate	$86,000.00	3	0
Foundations	$0.00	0	0
Other	$20,000.00	1	2
TOTAL	**$12,195,822.12**	41	48
Total Less Other USM	**$12,195,822.12**		

CSU

Source	Award Amount	Awards	Proposals
Federal	$7,293,268.00	9	25
State	$537,689.41	14	22
Corporate	$718,572.15	11	17
Foundations	$1,125,200.00	16	23
Other	$27,000.00	1	6
TOTAL	**$9,701,729.56**	51	93
Total Less Other USM	**$9,674,729.56**		

FSU

Source	Award Amount	Awards	Proposals
Federal	$1,363,977.00	8	12
State	$1,743,554.00	16	20
Corporate	$0.00	0	0
Foundations	$36,605.00	7	11
Other	$474,952.00	15	20
TOTAL	**$3,619,088.00**	46	63
Total Less Other USM	**$3,185,636.00**		

SU

Source	Award Amount	Awards	Proposals
Federal	$2,268,939.00	9	17
State	$3,786,917.00	45	44
Corporate	$8,700.00	4	4
Foundations	$65,023.00	17	24
Other	$566,194.00	42	46
TOTAL	**$6,695,773.00**	117	135
Total Less Other USM	**$5,791,637.00**		

FY 2019

TU

Source	Award Amount	Awards	Proposals
Federal	$4,133,472.00	22	43
State	$6,541,481.00	53	52
Corporate	$460,442.00	20	21
Foundations	$189,768.00	5	13
Other	$744,681.00	33	45
TOTAL	**$12,069,844.00**	133	174
Total Less Other USM	**$11,974,050.00**		

UB

Source	Award Amount	Awards	Proposals
Federal	$8,349,261.00	7	11
State	$3,248,213.00	35	24
Corporate	$1,541,189.00	6	3
Foundations	$1,489,451.00	30	11
Other	$398,048.00	15	12
TOTAL	**$15,026,162.00**	93	61
Total Less Other USM	**$14,813,294.00**		

UMB

Source	Award Amount	Awards	Proposals
Federal	$391,478,013.00	769	1,216
State	$86,629,892.00	353	372
Corporate	$62,085,412.00	544	444
Foundations	$89,138,302.00	299	429
Other	$35,318,469.00	396	612
TOTAL	**$664,650,088.00**	2,361	3,073
Total Less Other USM	**$662,910,370.00**		

UMBC

Source	Award Amount	Awards	Proposals
Federal	$46,526,780.00	183	300
State	$22,323,937.00	49	46
Corporate	$3,549,955.00	33	80
Foundations	$3,088,344.00	31	61
Other	$14,985,498.00	81	132
TOTAL	**$90,474,514.00**	377	619
Total Less Other USM	**$79,741,464.00**		

UMCES

Source	Award Amount	Awards	Proposals
Federal	$15,332,569.73	191	155
State	$3,549,294.05	100	52
Corporate	$373,958.60	98	8
Foundations	$1,240,970.00	30	28
Other	$1,245,090.98	209	25
TOTAL	**$21,741,883.36**	628	268
Total Less Other USM	**$21,424,116.91**		

FY 2020

TU

Source	Award Amount	Awards	Proposals
Federal	$2,854,764.00	18	48
State	$2,930,321.00	40	36
Corporate	$268,892.00	5	16
Foundations	$2,000.00	2	15
Other	$671,790.00	31	58
TOTAL	**$6,727,767.00**	96	173
Total Less Other USM	**$6,707,767.00**		

UB

Source	Award Amount	Awards	Proposals
Federal	$6,727,767.00	6	14
State	$4,558,917.00	24	24
Corporate	$1,508,029.00	4	5
Foundations	$877,220.00	22	19
Other	$1,023,383.00	9	12
TOTAL	**$17,311,342.00**	65	74
Total Less Other USM	**$16,972,599.00**		

UMB

Source	Award Amount	Awards	Proposals
Federal	$391,617,436.92	784	1,046
State	$99,868,862.75	307	297
Corporate	$62,538,594.35	514	433
Foundations	$98,087,014.64	355	598
Other	$34,763,578.55	389	743
TOTAL	**$686,875,487.21**	2,349	3,117
Total Less Other USM	**$684,752,810.33**		

UMBC

Source	Award Amount	Awards	Proposals
Federal	$45,960,058.00	185	279
State	$14,369,927.00	34	44
Corporate	$3,372,335.00	37	70
Foundations	$3,379,813.00	44	88
Other	$13,923,155.00	93	165
TOTAL	**$81,005,288.00**	393	646
Total Less Other USM	**$72,517,690.00**		

UMCES

Source	Award Amount	Awards	Proposals
Federal	$14,788,050.72	145	151
State	$6,135,214.57	76	47
Corporate	$680,496.50	17	5
Foundations	$1,220,996.00	24	13
Other	$1,270,498.24	8	33
TOTAL	**$24,095,256.03**	270	249
Total Less Other USM	**$23,184,556.86**		

FY 2019

UMCP

Source	Award Amount	Awards	Proposals
Federal	$387,393,059.00	1,432	1,668
State	$55,256,874.00	721	241
Corporate	$25,700,780.00	967	596
Foundations	$20,904,423.00	379	154
Other	$80,207,834.00	3,119	1,066
TOTAL	**$569,462,970.00**	6,618	3,725
Total Less Other USM	**$566,559,047.00**		

UMES

Source	Award Amount	Awards	Proposals
Federal	$15,042,878.73	33	55
State	$1,419,025.81	25	16
Corporate	$236,132.00	2	0
Foundations	$8,500.00	2	7
Other	$487,989.00	10	12
TOTAL	**$17,194,525.54**	72	90
Total Less Other USM	**$16,750,307.08**		

UMGC

Source	Award Amount	Awards	Proposals
Federal	$56,698,425.00	5	5
State	$106,112.00	3	3
Corporate	$71,000.00	6	6
Foundations	$91,000.00	5	5
Other	$75,000.00	1	1
TOTAL	**$57,041,537.00**	20	20
Total Less Other USM	**$57,041,537.00**		

FY 2020

UMCP

Source	Award Amount	Awards	Proposals
Federal	$442,217,540.00	1,397	1,695
State	$53,036,961.00	1,303	266
Corporate	$20,425,534.00	812	520
Foundations	$18,993,168.00	427	184
Other	$85,235,716.00	1,895	1,092
TOTAL	**$619,908,919.00**	5,834	3,757
Total Less Other USM	**$613,620,510.00**		

UMES

Source	Award Amount	Awards	Proposals
Federal	**$18,772,791.00**	30	51
State	$1,572,780.00	21	19
Corporate	$226,191.00	2	2
Foundations	$65,000.00	1	2
Other	$623,735.00	6	9
TOTAL	**$18,890,552.00**	60	83
Total Less Other USM	**$18,772,791.00**		

UMGC

Source	Award Amount	Awards	Proposals
Federal	$58,816,005.00	5	0
State	$364,262.00	2	1
Corporate	$16,040,000.00	5	2
Foundations	$271,750.00	6	3
Other	$83,000.00	2	1
TOTAL	**$75,575,017.00**	20	7
Total Less Other USM	**$75,575,017.00**		

Table 2
Extramural Funding Summary
Fiscal Years 2016-2020

Institution	FY2016	FY 2017	FY 2018	FY 2019	FY 2020	% Change FY19-FY20
BSU	$8,033,222.39	$8,750,022.86	$10,054,156.20	$9,877,588.50	$12,195,822.12	+23.5%
CSU	$6,105,918.50	$7,935,863.80	$7,254,220.22	$8,455,960.85	$9,701,729.56	+14.7%
FSU	$3,783,294.00	$8,166,104.00	$2,436,317.00	$3,950,208.00	$3,619,088.00	-8.4%
SU	$5,108,180.00	$6,418,587.00	$5,514,543.00	$8,705,449.00	$6,695,773.00	-23.1%
TU	$16,970,018.00	$10,849,942.00	$14,966,768.00	$12,069,844.00	$6,727,767.00	-44.3%
UB	$7,901,178.00	$10,869,373.00	$13,963,210.00	$15,026,162.00	$17,311,342.00	+15.2%
UMB	$497,537,747.00	$556,071,212.60	$667,402,728.00	$664,650,088.00	$686,875,487.21	+3.3%
UMBC	$85,305,358.00	$99,184,619.00	$86,214,206.00	$90,474,514.00	$81,005,288.00	-10.5%
UMCES	$25,723,496.06	$25,301,524.91	$27,140,666.81	$21,741,883.36	$24,095,256.03	+10.8%
UMCP	$560,216,354.00	$514,747,496.55	$545,314,107.00	$569,462,970.00	$619,908,919.00	+8.9%
UMES	$18,150,421.00	$19,969,078.79	$16,098,480.91	$17,194,525.54	$18,890,552.00	+9.9%
UMGC	$52,172,670.00	$42,081,131.00	$54,782,797.00	$57,041,537.00	$75,575,017.00	+32.5%
Institutional Total	**$1,287,007,856.95**	**$1,310,344,955.51**	**$1,451,142,200.14**	**$1,478,650,730.25**	**$1,562,602,040.92**	**+5.7%**
USM Total (LESS OTHER USM)	**$1,265,909,656.95**	**$1,292,254,826.32**	**$1,429,166,242.14**	**$1,460,932,947.34**	**$1,542,951,565.87**	**+5.6%**

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Motion to Adjourn and Reconvene in Closed Session

COMMITTEE: Education Policy and Student Life

DATE OF COMMITTEE MEETING: Tuesday, January 12, 2021

SUMMARY: The Open Meetings Act permits public bodies to close their meetings to the public in special circumstances outlined in §3-305 of the Act and to carry out administrative functions exempted by §3-103 of the Act. The Board of Regents' Committee on Education Policy and Student Life will now vote to reconvene in closed session. As required by law, the vote on the closing of the session will be recorded. A written statement of the reason(s) for closing the meeting, including a citation of the authority under §3-305 and a listing of the topics to be discussed, is available for public review.

It is possible that an issue could arise during a closed session that the Committee determines should be discussed in open session or added to the closed session agenda for discussion. In that event, the Committee would reconvene in open session to discuss the open session topic or to vote to reconvene in closed session to discuss the additional closed session topic.

ALTERNATIVE(S): No alternative is suggested.

FISCAL IMPACT: There is no fiscal impact.

CHANCELLOR'S RECOMMENDATION: That the Board of Regents' Committee on Education Policy and Student Life vote to reconvene in closed session.

COMMITTEE ACTION:		DATE: January 12, 2021
BOARD ACTION:		DATE:
SUBMITTED BY: Joann A. Boughman	301-445-1992	jboughman@usmd.edu

UNIVERSITY SYSTEM of MARYLAND

STATEMENT REGARDING CLOSING A MEETING
OF THE
USM BOARD OF REGENTS

Date: Tuesday, January 12, 2021

Time: 11:30 a.m. (approximately)

Location: Virtual via Zoom

STATUTORY AUTHORITY TO CLOSE A SESSION

Md. Code, General Provisions Article §3-305(b):

(1) To discuss:

[X] (i) The appointment, employment, assignment, promotion, discipline, demotion, compensation, removal, resignation, or performance evaluation of appointees, employees, or officials over whom it has jurisdiction; or

[ ] (ii) Any other personnel matter that affects one or more specific individuals.

(2) [X] To protect the privacy or reputation of individuals with respect to a matter that is not related to public business.

(3) [ ] To consider the acquisition of real property for a public purpose and matters directly related thereto.

(4) [ ] To consider a preliminary matter that concerns the proposal for a business or industrial organization to locate, expand, or remain in the State.

(5) [ ] To consider the investment of public funds.

(6) [ ] To consider the marketing of public securities.

(7) [ ] To consult with counsel to obtain legal advice on a legal matter.

(8) [ ] To consult with staff, consultants, or other individuals about pending or potential litigation.

(9) [ ] To conduct collective bargaining negotiations or consider matters that relate to the negotiations.

(10) [ ] To discuss public security, if the public body determines that public discussions would constitute a risk to the public or public security, including:

(i) the deployment of fire and police services and staff; and

(ii) the development and implementation of emergency plans.

(11) [ ] To prepare, administer or grade a scholastic, licensing, or qualifying examination.

(12) [ ] To conduct or discuss an investigative proceeding on actual or possible criminal conduct.

(13) [ ] To comply with a specific constitutional, statutory, or judicially imposed requirement that prevents public disclosures about a particular proceeding or matter.

(14) [ ] Before a contract is awarded or bids are opened, to discuss a matter directly related to a negotiation strategy or the contents of a bid or proposal, if public discussion or disclosure would adversely impact the ability of the public body to participate in the competitive bidding or proposal process.

Md. Code, General Provisions Article §3-103(a)(1)(i):

[ ] Administrative Matters

TOPICS TO BE DISCUSSED: (List topics to be discussed)
The Committee on Education Policy and Student Life will discuss recommendations for Regents' Faculty Awards and nominations for honorary degrees.

REASON FOR CLOSING:
To maintain confidentiality of personnel-related and personal information of candidates for faculty awards and honorary degrees. (§3-305(b)(1) and (2)).