UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

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April 20, 2026

Ms. Elena Quiroz-Livanis
Interim Secretary
Maryland Higher Education Commission
217 East Redwood Street, Suite 2100
Baltimore, MD 21202

Dear Interim Secretary Quiroz-Livanis:

I am writing to request approval for a new Area of Concentration for our existing Master of Public Health program. The new Area of Concentration will be titled Global, Environmental, and Occupational Health. The proposal for the new Area of Concentration is attached. I am also submitting this proposal to the University System of Maryland 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: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Boris Lushniak, Dean, School of Public Health

Office Use Only: PP#

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

Institution Submitting Proposal	University of Maryland, College Park

Each action below requires a separate proposal and cover sheet.

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

Payment Submitted: ◉ Yes ○ No | Payment Type: ◉ R*STARS # JJ620191 ○ Check # | Payment Amount: 250 | Date Submitted: 1/15/20

Department Proposing Program	Department of Global, Environmental, and Occupational Health
Degree Level and Degree Type	Master's; Master of Public Health
Title of Proposed Program	Area of Concentration in Global, Environmental, and Occupational Health
Total Number of Credits	45
Suggested Codes	HEGIS: 121400 CIP: 51.2201
Program Modality	○ On-campus ○ Distance Education (fully online) ◉ Both
Program Resources	◉ Using Existing Resources ○ Requiring New Resources
Projected Implementation Date (must be 60 days from proposal submisison as per COMAR 13B.02.03.03)	◉ Fall ○ Spring ○ Summer Year: 2026
Provide Link to Most Recent Academic Catalog	URL: https://academiccatalog.umd.edu/
Preferred Contact for this Proposal	Name: Michael Colson Title: Senior Coordinator for Academic Programs Phone: 301-405-5626 Email: mcolson@umd.edu
President/Chief Executive	Type Name: Darryll J. Pines Signature: Darryll J. Pines Date: 04-20-2026
	Date of Approval/Endorsement by Governing Board:

Revised 4/2025

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

Description. The University of Maryland, College Park (UMD) proposes adding **a new Area of Concentration (AOC) to our existing Master of Public Health (MPH) program.** The new concentration will be titled **Global, Environmental, and Occupational Health**. UMD's MPH is a 45-credit program that has nine existing areas of concentration. MPH students take a common set of core courses in the fundamental areas of public health for 14-15 credits and then choose a concentration area for the remaining 30-31 credits. The AOC in Global, Environmental, and Occupational Health is designed to develop practitioners and researchers equipped to assess and engage in the science, theory, and practice related to interconnected global, environmental, and occupational health needs. From pandemics to the far-reaching health effects of climate change, the most urgent public health challenges of our time often converge at the intersection of global health, environmental health, and occupational health.

Relation to Strategic Goals. The new concentration in Global, Environmental, and Occupational Health fits our fundamental mission and also aligns with our strategic priorities. As written in our mission statement, one of UMD's graduate education objectives is to "Expand professional graduate programs that are nationally recognized for excellence in their curricula, their contributions to the practice of the professions, and for their innovation and creativity." This new AOC addresses the evolving challenges of global, environmental, and occupational health. This concentration exemplifies innovation and creativity in its integration of digital health, global governance, and applied experiential learning to prepare leaders in the public health workforce.

The new AOC also aligns with our 2022 strategic plan's goal to "Place interdisciplinary grand challenges at the center of our curriculum, further integrating our education and research missions." This new concentration places interdisciplinary grand challenges, such as climate change, pandemic preparedness, and global health equity, at the core of its curriculum, ensuring that students engage with complex, real-world problems that demand collaborative solutions. By integrating environmental science, global policy, occupational health, and digital innovation, the program bridges education and research to prepare graduates to lead in evidence-based public health practice.

Funding. The new AOC, which will be housed in the Maryland School of Public Health's Department of Global, Environmental, and Occupational Health, will be funded with tuition revenue. The department will be able to leverage existing faculty, administrative capacity, and instructional infrastructure to meet the costs of the program.

Institutional Commitment. The University of Maryland is fully committed to the success of this new concentration, which aligns with the institution's mission to advance public health and well-being through education, research, and service, and reflects the Strategic Plan's focus on addressing grand challenges. Building on the School of Public Health's strong track record of delivering high-quality MPH programs, the Global, Environmental, and Occupational Health

concentration represents a natural and strategic expansion of UMD's graduate public health offerings.

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

Need. The proposed AOC in Global, Environmental, and Occupational Health addresses a critical and growing need for public health professionals who are prepared to confront the interconnected health impacts of global change, environmental degradation, and occupational risks. These issues—ranging from climate change and pandemics to hazardous work conditions and global health inequities—are among the most urgent public health challenges of our time, and they demand interdisciplinary, practice-ready leaders.

To inform the development of this concentration, the Department of Global, Environmental, and Occupational Health commissioned a market analysis that identified nearly 7,000 job postings in Maryland related to environmental health and more than 10,000 postings related to occupational health between 2022 and 2025. The majority of these postings preferred or required candidates with a master's degree, reflecting strong demand for graduate-level training in these fields. Employers span leading healthcare systems, federal and state agencies, international NGOs, and private sector organizations, all seeking professionals with interdisciplinary expertise in science, policy, communication, and data analysis. Despite this demand, there are few graduate programs that combine global, environmental, and occupational health into a single, cohesive curriculum—particularly in an accessible online format designed for working professionals.

State Plan. The proposed AOC in Global, Environmental, and Occupational Health aligns broadly with the 2022 *Maryland State Plan for Postsecondary Education,* specifically Priority 5, "Maintain the commitment to high-quality postsecondary education in Maryland," in particular, the Action Item to "Identify innovative fields of study." This innovative and timely new field unites global health, environmental health, and occupational health—areas that have traditionally been siloed in graduate education. This interdisciplinary approach reflects a shift in the public health landscape, where complex global threats such as climate change, pandemics, and labor inequities require professionals who can operate across systems and sectors. By integrating topics such as digital health, planetary health, and global governance, the program advances the State Plan's call to *"identify innovative fields of study"* that are relevant, applied, and aligned with Maryland's workforce needs and societal challenges.

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

At the national level, federal labor data confirm a strong and growing need for professionals trained in the intersecting fields of global, environmental, and occupational health. According to the U.S. Bureau of Labor Statistics (BLS), employment of occupational health and safety specialists and technicians is projected to grow 12% from 2024 to 2034—much faster than the

average for all occupations—with approximately 18,300 openings expected annually due to growth and workforce turnover.[1] Similarly, environmental scientists and specialists, including those focused on health, are projected to experience steady demand driven by continued emphasis on environmental quality, public health preparedness, and regulatory compliance.[2] These roles increasingly require advanced degrees and interdisciplinary expertise, particularly as public and private sector employers seek professionals capable of navigating complex challenges at the intersection of health systems, environmental change, and workforce safety. This national workforce demand underscores the importance of graduate programs like the proposed concentration, which prepares students with cross-cutting skills in science, policy, and practice to meet emerging health and environmental challenges.

At the state level, Environmental Science and Protection Technicians, Including Health positions are expected to rise by 8.44% in the Maryland Department of Labor's 2023-2033 Occupational Projections.[3] Occupational Health and Safety Specialists positions are projected to increase by 16.41% and Occupational Health and Safety Technicians positions are projected to increase by 12.20%. Our marketing analysis found 6,781 unique job postings in Maryland containing the keywords "environmental health." There were more than 10,000 unique job postings containing "occupational health." The majority of these postings requested or required candidates with a master's degree or higher, affirming the importance of graduate-level credentials for advancement in these roles.

D. Reasonableness of Program Duplication

Several Maryland-based institutions offer MPH programs, but none are similar to our proposed MPH AOC in Global, Environmental, and Occupational Health. The University of Maryland, Baltimore offers traditional on-campus MPH concentrations in Community and Population Health, Epidemiology, and Global Health, as well as an online MS in Global Health; neither option provides the combined global, environmental, and occupational health focus of our proposed concentration. Morgan State University offers a fully online Executive MPH in Health Management, which is management-oriented and does not address global, environmental, and occupational health competencies. Johns Hopkins University offers an MPH with a concentration in Global Environmental Sustainability and Health, but it remains a broad MPH and does not include courses focused on occupational health. Our proposed MPH AOC will not unreasonably duplicate existing Maryland offerings. It fills a clear gap by delivering a unique program concentrated specifically on the intersection of global, environmental, and occupational health, complementing (rather than competing with) Maryland's current MPH

[1] U.S. Bureau of Labor Statistics. Occupational Outlook Handbook. Occupational Health and Safety Specialists and Technicians. https://www.bls.gov/ooh/healthcare/occupational-health-and-safety-specialists-and-technicians.htm
[2] U.S. Bureau of Labor Statistics. Occupational Outlook Handbook. Environmental Scientists and Specialists. https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scientists-and-specialists.htm
[3] Maryland Department of Labor. Maryland Long Term Occupational Projections (2023-2033). https://labor.maryland.gov/lmi/iandoproj/maryland.shtml

options and meeting documented workforce demand in global, environmental, and occupational health.

E. Relevance to Historically Black Institutions (HBIs)

The proposed concentration in Global, Environmental, and Occupational Health is distinct from the existing Master of Public Health (MPH) program at Morgan State University, Maryland's only Historically Black Institution (HBI) currently offering an MPH degree. Morgan's MPH is structured as a generalist program that provides foundational training across the core public health domains but does not offer specialized tracks in global health, environmental health, or occupational health. In contrast, the proposed concentration integrates these three domains into a single interdisciplinary curriculum and further incorporates emerging topics such as digital health and global governance. Our concentration also differs in its delivery format. There will be a fully online, flexible option for the concentration designed for working professionals. These differences in curricular content, specialization, and modality ensure that the proposed program does not duplicate Morgan State's offerings and instead addresses a distinct set of workforce needs and learner populations.

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

The proposed concentration in Global, Environmental, and Occupational Health will not impact the identity of any Historically Black Institution. UMD already offers an MPH program with several concentrations, including one in Environmental Health Sciences. Our proposed concentration builds on this foundation by integrating global health, environmental health, and occupational health into a single interdisciplinary curriculum that reflects the university's land-grant mission and strategic focus on global engagement, innovation, and public health leadership. The concentration emphasizes global systems, digital health, and multisectoral approaches to public health practice. As such, our proposed concentration maintains a unique institutional identity and does not duplicate or detract from the culturally specific missions of Maryland's HBIs.

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

Curricular Development. The proposed curriculum was developed by the Department of Global, Environmental, and Occupational Health's Graduate Admissions and Curriculum Committee, in collaboration with faculty and external experts across relevant disciplines. Its design was informed by multiple factors, including market research that confirmed strong regional and national demand for graduates, persistent workforce shortages in health-related sectors, the anticipated shift of occupational health responsibilities to under-resourced state agencies following the reduction of federal programs, and feedback from students and employers involved with UMD's existing Environmental Health Sciences and Global Health programs.

The objective of this concentration is to develop practitioners and researchers equipped to assess and engage in the science, theory, and practice related to interconnected global, environmental, and occupational health needs, challenges, and opportunities. Students will build a solid foundation in the core disciplines of public health (e.g., epidemiology; biostatistics; program and policy planning, implementation and evaluation) and develop in-depth interdisciplinary knowledge in global, environmental, and occupational health. Through the practicum courses, MIEH778 Practical Experience in Public Health and MIEH786 Capstone in Public Health, students will gain hands-on experience focusing on real-world challenges and solutions.

Faculty Oversight. Faculty in the Department of Global, Environmental, and Occupational Health will serve as the primary subject matter experts for the development, delivery, and continuous improvement of the concentration. Department faculty will design and teach the concentration's cognate, elective, and capstone courses, drawing on their expertise in environmental health, occupational health, global health policy, and related disciplines. Dr. Leena Malayil, an Associate Research Professor in the department, will serve as program director.

Educational Objectives and Learning Outcomes. The learning outcomes for the MPH concentration in Global, Environmental, and Occupational Health are as follows:

1. Assess intersectional determinants of global, environmental, and occupational health.
2. Analyze the effects of social and environmental change on the interconnected health and well-being of people, animals, and plants from local to global scales.
3. Develop strategies for worker health and safety globally.
4. Describe global, environmental, and occupational health governance.
5. Demonstrate skills to design, implement, and disseminate ethical, community-based global health, environmental health, and occupational health-based interventions.
6. Apply technological approaches to improve global, environmental, and occupational health outcomes.
7. Design traditional and digital health communication and promotion strategies to address global, environmental, and occupational health issues.
8. Exercise culturally competent leadership of diverse interdisciplinary teams working in global, environmental, and occupational health.

Institutional assessment and documentation of learning outcomes. Please see Appendix A for information on learning outcomes assessment.

Course requirements. The program requires 45 credits. The MPH core is shared by other MPH concentrations, whereas cognate courses, experiential courses, and elective courses are focused on global, environmental, and occupational health content. A list of courses and descriptions is included in Appendix B.

MPH Core		
SPHL601	Core Concepts in Public Health	1
SPHL602	Foundations of Epidemiology and Biostatistics	4
SPHL603	Public Health Data Laboratory	1
SPHL610	Program and Policy Planning, Implementation, and Evaluation	5
SPHL611	Public Health Ethics	1
SPHL620	Leadership, Teams, and Coalitions: Policy to Advocacy	2
GEOH Cognate		
MIEH600	Foundations of Environmental Health	3
MIEH780	Occupational Health	3
MIEH773	Foodborne, Waterborne and Airborne Infectious Diseases	3
MIEH605	Fundamentals of Global Health	3
GBHL611	Digital Health Approaches to Advance Global, Environmental and Occupational Health	3
GBHL650	Global Health Governance and Diplomacy	3
Practicum		
MIEH778	Practical Experience in Public Health	4
MIEH786	Capstone Project in Public Health	3
Electives	**Select two of the following three-credit courses:**	**6**
ENVH615	Airborne Infection: The Science of COVID-19 and Prevention of Future Pandemics	
MIEH783	Proposal Development and Marketing for Public Health Scientists	
MIEH620	Global Health Communication and Promotion	
GBHL641	The Impact of Climate Change on Water and Food Security in Cameroon	
MIEH607	One Health: Food Safety and Security	
GBHL649	Global Health Global Classroom	
Total		**45**

Please note that courses that with the MIEH course code will be phased out and replaced by either the ENVH code or the GBHL code. The course descriptions, however, will remain the same.

General Education. Not applicable for our graduate programs.

Accreditation or Certification Requirements. As with all of our MPH concentrations, this concentration will require accreditation by the Council on Education for Public Health (CEPH). Student learning outcomes will be evaluated with specific assessments mapped to specific courses as mandated by the CEPH accreditation requirements.

Students will not be expected to be licensed or certified in order to engage in or be successful in most of the program's target occupations.

Other Institutions or Organizations. The offering unit is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. The Department of Global, Environmental, and Occupational Health will provide administrative coordination for the concentration in collaboration with the Office of Extended Studies. Departmental faculty will serve as academic advisors, supporting students with capstone planning, research development, and career guidance in global, environmental, and occupational health. These advisors will be the students' primary point of contact throughout the program. The university's Office of Extended Studies will provide comprehensive student and program services—including admissions support, course scheduling, registration, billing, payment, graduation processing, and appeals—as it does for a range of University of Maryland professional programs. Students will also have access to the Graduate School's counseling services and the university's Counseling Center. Program and advising resources will be available through the School of Public Health's advising web pages and the program handbook.

For career development, students will benefit from UMD's robust support network, including general career advising, the Handshake job platform, virtual panels, and networking events hosted by the University Career Center. The UMD Alumni Association also facilitates connections through Terrapins Connect, a virtual platform that supports alumni and student mentoring and professional development. The School of Public Health's graduate education team offers workshops tailored to graduate student career preparation.

To ensure readiness for the program's online delivery format, applicants will be informed of required technical competencies and equipment, and information on learning management systems will be provided in admissions and orientation materials.

Marketing and Admissions Information. Marketing and admissions materials for the proposed concentration will be developed and maintained by the Department of Global, Environmental, and Occupational Health in coordination with the Office of Extended Studies to ensure accuracy, clarity, and accessibility. All materials will clearly communicate curriculum structure, admissions criteria, technological requirements, and available student support resources, and will be consistent with university policies and branding standards.

H. Adequacy of Articulation

Not applicable for this graduate program.

I. Adequacy of Faculty Resources

Program faculty. Appendix C contains a list of faculty members who will teach in the program. The proposed concentration in Global, Environmental, and Occupational Health will be supported by a strong and diverse group of faculty members with expertise spanning environmental health sciences, global health, occupational health, epidemiology, toxicology, health communication, and public policy. Faculty include tenured, tenure-track, and professional-track instructors from the Department of Global, Environmental, and Occupational Health, as well as affiliated faculty from across the School of Public Health.

Faculty training. Faculty receive ongoing support and professional development in evidence-based teaching strategies, including instructional design for online learning, use of the university's learning management system (Canvas/ELMS), and best practices in assessment and student engagement. The Teaching and Learning Transformation Center and the Division of Information Technology at UMD provide training, instructional consultation, and media support to ensure high-quality delivery of coursework both in person and online.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

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

The Master of Public Health is an existing program that is offered both in person and online. The core courses for the program are already offered; therefore, the physical facilities, infrastructure, and instructional resources are already in place for the program from both the in person and online standpoint. Courses that will be used for the proposed concentration have also already been developed and are offered by the Department in Global, Environmental, and Occupational Health. For the online components of the program, the program will use the University of Maryland's established digital learning infrastructure, which is well-equipped to support high-quality, accessible graduate education. The university's learning management system (Canvas/ELMS), along with platforms such as Panopto for media hosting and Zoom for synchronous engagement, provide a robust environment for instruction, collaboration, and assessment whether the program is in person or online. Faculty have access to the university's One Button Studios and Media Studio Services to develop high-quality course content, while students benefit from 24/7 access to course materials and university-supported technology services.

The School of Public Health and the Department of Global, Environmental, and Occupational Health have experience offering online MPH coursework, and no new physical classroom space is required for implementation of the concentration. Existing faculty offices, administrative workspaces, and IT infrastructure within the department and school are sufficient to support the program's operational needs. Additionally, the Teaching and Learning Transformation Center (TLTC) and the Division of Information Technology (DIT) provide ongoing instructional

design consultation, accessibility support, and training in effective use of digital tools for online teaching and learning.

L. Adequacy of Financial Resources

Tables 1 and 2 contain the details of resources and expenditures.

Table 1 Resources:
The program will be self-supported through tuition revenue.

1. Line 1 shows no reallocated funds because the concentration is supported by student tuition.
2. The tuition rate will be $1,077 per credit with an assumed annual increase of 5%.
3. After year 1, the "Annual Tuition/Fee Rate" (Row B) reflects a weighted average based on a mix of students in their first year (paying for 27 credits) and second year (paying for 18 credits). Each year's tuition revenue (Row C) is derived by multiplying the total number of full-time students (Row A) by this blended annual rate.
4. No external sources of funding are assumed.
5. No other sources of funding are assumed.

Table 2 Expenditures:

In the initial years of implementation, the concentration will leverage existing instructional and administrative capacity within the School of Public Health, particularly for MPH core courses that are already offered on a regular basis. As a result, a portion of faculty effort associated with these courses is not reflected as new program cost in Years 1 and 2.

As enrollment grows and the concentration expands, additional instructional and administrative resources are incorporated into the budget to support concentration-specific coursework, practicum and capstone supervision, and student services. This phased approach reflects the program's transition from reliance on existing infrastructure to a more fully resourced and self-sustaining model. Additional notes are as follows:

1. Faculty salaries are based on cost per course. The first year reflects that most of the credits will consist of core courses that are already offered by departments in the School of Public Health.
2. We assume an annual increase of 3% in faculty salaries with a corresponding 33% benefits rate.
3. Administrative positions include one administrative staff person starting in year 3 with an annual 3% increase and a corresponding benefits rate of 33%.
4. Other expenses include an administrative fee for Office of Extended Studies support, develop and design of instructional materials, and recruiting and marketing materials. Other Expenses in Year 1 reflect one-time start-up investments required

to launch the concentration, including course development and instructional design, initial marketing and recruitment efforts, and program setup.

M. Adequacy of Program Evaluation

The proposed concentration will be evaluated through a combination of institutional program review processes and ongoing assessment of student learning outcomes. The program will participate in the University of Maryland's established cycle for periodic review of academic programs, which examines program quality, student outcomes, and alignment with institutional goals.

Student learning outcomes will be assessed on a regular basis through course-embedded assessments aligned with the program's stated learning objectives. Faculty will review assessment results to identify areas for improvement and to ensure that the curriculum continues to meet professional and academic standards, including the School of Public Health's accreditation requirements from the Council on Education for Public Health (CEPH).

In addition, the program will utilize student course evaluations and feedback mechanisms to monitor instructional quality and student satisfaction. These data will be reviewed by program faculty and administrators and used to inform continuous improvement of curriculum, instruction, and student support services.

These processes are conducted in accordance with established University of Maryland policies and procedures, including the Policy on Periodic Review of Academic Units (http://www.president.umd.edu/policies/2014-i-600a.html), the campus-wide Learning Outcomes Assessment cycle (https://irpa.umd.edu/Assessment/loa_overview.html), and the Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html).

N. Consistency with Minority Student Achievement goals

Recruitment strategies include targeted outreach to graduating seniors, alumni, working professionals, and individuals from historically underrepresented backgrounds through digital engagement, virtual information sessions, and participation in relevant public health conferences and career events. To support retention, the program provides structured academic advising, early academic alerts, and access to a wide range of university resources including counseling, financial support, and career development services. These efforts are designed to create an inclusive and supportive learning environment that enables all students to succeed and thrive.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

As stated above, the Master of Public Health and its concentrations are offered both in person and online. The online version of the proposed concentration will be primarily asynchronous and delivered through the Canvas learning management system (ELMS), which supports multimedia content, online discussions, assessments, and integration with tools such as Panopto and Zoom. Students will also participate in periodic synchronous sessions for cohort-building, group projects, and live advising. All online courses are designed in consultation with UMD's Teaching and Learning Transformation Center (TLTC) and follow accessibility and instructional best practices to ensure equitable learning experiences.

Faculty are trained in evidence-based online pedagogy and supported by the Division of Information Technology and TLTC to maintain excellence in course delivery. Students will be provided with clear information regarding technical requirements and learning expectations through admissions materials and the program handbook. The program also incorporates tools such as Turnitin for academic integrity and follows university policies for AI literacy and ethical use of generative technologies. These measures collectively ensure that the concentration in Global, Environmental, and Occupational Health meets or exceeds standards for online graduate education.

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)	$232,632	$376,290	$694,395	$953,190	$930,699
a. #FT Students	8	15	24	34	32
b. Annual Tuition/Fee Rate	$29,079	$25,086	$28,933	$28,035	$29,084
c. Annual FT Revenue (a x b)	$232,632	$376,290	$694,395	$953,190	$930,699
d. # PT Students	$0	$0	$0	$0	$0
e. Credit Hour Rate	$1,077	$1,130	$1,187	$1,246	$1,309
f. Annual Credit Hours	27	45	45	45	45
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	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	$232,632	$376,290	$694,395	$953,190	$930,699

Table 2: Expenditures

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	$143,391	$344,615	$507,077	$626747	$645,550
a. #FTE	0.75	1.75	2.50	3.00	3.00
b. Total Salary	$107,813	$259,109	$381,261	$471,239	$485,376
c. Total Benefits	$35,578	$85,506	$125,816	$155,509	$160,174
2. Admin. Staff (b+c below)	0	0	$49,385	$50,866	$52,392
a. #FTE	0	0	.5	.5	.5
b. Total Salary	$0	$0	$37,132	$38,245	$39,393
c. Total Benefits	$0	$0	$12,253	$12,621	$13,000
3. Total Support Staff (b+c below)	$0	$0	$21,945	$22,604	$21,946
a. #FTE	0	0	0.33	0.33	0.33
b. Total Salary	$0	$0	$16,500	$16,995	$16,501
c. Total Benefits	$0	$0	$5,445	$5,608	$5,445
4. Graduate Assistants (b+c)	0	0	0	0	0
a. #FTE	0	0	0	0	0
b. Stipend	$0	$0	$0	$0	$0
c. Tuition Remission	$0	$0	$0	$0	$0
d. Benefits	$0	$0	$0	$0	$0
5. Equipment	$3,000	$2,000	$2,000	$2,000	$2,000
6. Library	$5,000	$5,000	$5,000	$5,000	$5,000
7. New or Renovated Space	0	0	0	0	0
8. Other Expenses: Operational Expenses	$47,600	$26,300	$30,180	$33,617	$36,741
TOTAL (Add 1 - 8)	$193,991	$377,915	$615,587	$738,834	$763,629

Appendix A: Learning Outcomes Assessment

Proposed MPH in Global, Environmental, and Occupational Health

Program Learning Outcomes Assessment Table

August 2025

LO#	Learning Outcome	CEPH domain # (see D2, p 24 for MPH)	Introduce	Reinforce	Emphasize/Master
1	Assess intersectional determinants of global, environmental, and occupational health.	Evidence-based Approaches to Public Health	ENVH 600, SPHL 601	GBHL 605, ENVH 680, ENVH 773	GBHL 605, ENVH 680, ENVH 773
2	Analyze the effects of social and environmental change on the interconnected health and well-being of people, animals, and plants from local to global scales.	Systems Thinking	ENVH 600	ENVH 773, ENVH 778, ENVH 786	ENVH 778/786
3	Develop strategies to improve worker health and safety globally.	Public Health & Health Care Systems	ENVH 600, SPHL 601	ENVH 680, GBHL 611	ENVH 778/786, ENVH 680
4	Describe global, environmental, and occupational health governance.	Policy in Public Health	ENVH 600	GBHL 605, GBHL 650	ENVH 778/786
5	Demonstrate skills to design, implement, and disseminate community-based global health, environmental health, and occupational health based ethical interventions.	Planning & Management to Promote Health	SPHL 611, SPHL 620, SPHL 610	ENVH 600	ENVH 778/786, GBLH 650, ENVH 680
6	Apply technological approaches to improve global, environmental, and occupational health outcomes.	Interprofessional and/or Intersectoral Practice	SPHL 602, SPHL 603	GBHL 611	ENVH 778/786, GBHL 605, ENVH 680
7	Design traditional and digital health communication and promotion strategies regarding global, environmental, and occupational health issues.	Communication	SPHL611	GBHL 650	ENVH 778/786, ENVH 680
8	Exercise culturally competent leadership of diverse interdisciplinary teams working in global, environmental, and occupational health.	Leadership	SPHL 620	GBHL 650	ENVH 778/786

Proposed MPH in Global, Environmental, and Occupational Health

Program Learning Outcomes Assessment Map

August 2025

	SPHL601	SPHL602	SPHL603	SPHL610	SPHL611	SPHL620	ENVH600	ENVH680
LO # Theme	Core Concepts in Public Health	Foundations of Epidemiology and Biostatistics	Public Health Data Laboratory	Program & Policy Planning, Implementation, & Eval.	Public Health Ethics	Leadership, Teams, and Coalitions: Policy to Advocacy	Foundations of Environmental Health	Occupational Health
1. Evidence-based Approaches to Public Health	I						I	R/E
2. Systems Thinking							I	
3. Public Health & Health Care Systems	I						I	R/E
4. Policy in Public Health							I	
5. Planning & Management to Promote Health				I	I	I	R	E
6. Interprofessional and/or Intersectoral Practice		I	I					E
7. Communication					I			E
8. Leadership						I		

KEY	
Introduce	I
Reinforce	R
Master/Emphasize	E
Reinforce/Master/Emphasize	R/E

ENVH773	GBHL605	GBHL611	GBHL650	ENVH778	ENVH786	
Food-, Water- and Airborne Inf. Diseases	Foundations of Global Health	Digital Approaches to Advance GEOH	Global Health Governance and Diplomacy	Practical Experience in Public Health	Capstone Project in Public Health	**LO # Theme**
R/E	**R/E**					1. Evidence-based Approaches to Public Health
R				**R/E**	**R/E**	2. Systems Thinking
		R		**E**	**E**	3. Public Health & Health Care Systems
	R		**R**	**E**	**E**	4. Policy in Public Health
			E	**E**	**E**	5. Planning & Management to Promote Health
	E	**R**		**E**	**E**	6. Interprofessional and/or Intersectoral Practice
			R	**E**	**E**	7. Communication
			R	**E**	**E**	8. Leadership
						KEY
					I	**Introduce**
					R	**Reinforce**
					E	**Master/Emphasize**
					R/E	**Reinforce/Master/Emphasize**

Appendix B: Course Descriptions

Master of Public Health Core Courses

SPHL601 Core Concepts in Public Health (1 Credit)
Introduces students to the history, functions, systems, policies, and models of public health practice in the United States and globally. The course offers seminars, interactive activities, and assessments aimed at establishing a baseline understanding of public health necessary for higher level and integrative learning in subsequent public health courses.

SPHL602 Foundations of Epidemiology and Biostatistics (4 Credits)
An introduction to conceptual and practical tools from epidemiology and biostatistics that are necessary for the study of public health problems. Students learn epidemiologic concepts and methods, and basic statistical concepts and procedures used in public health research through applications, hands-on experience, and interpretations of statistical findings.

SPHL603 Public Health Data Laboratory (1 Credit)
An introduction to the statistical software necessary to implement the epidemiology and biostatistics concepts covered in the course EPIB 602, Foundations of Epidemiology and Biostatistics through hands-on exercises.

SPHL610 Program and Policy Planning, Implementation, and Evaluation (5 Credits)
This second course in the MPH/MHA integrated core sequence will prepare students to engage in the important tasks of assessing population and patient needs, implementing and evaluating culturally appropriate public health programs, policies, and interventions, and pursuing appropriate resources to support activities through the policy process and via effective use of power in the face of competing interests. The course will be a mix of individual and team-based assignments based upon an existing or newly identified problem, in addition to case studies, interactive simulations, and applied writing assignments.

SPHL611 Public Health Ethics (1 Credit)
Overview and discussion of ethical issues that face public health practitioners.

SPHL620 Leadership, Teams, and Coalitions: Policy to Advocacy (2 Credits)
Students learn team building, leadership, and advocacy skills through the development and presentation of a policy brief on an urgent public health issue. The class will use a combination of brief lectures, discussions, and planned activities on how to develop a policy briefing. Students will have an inter-professional experience during which they will discuss possible approaches to developing policies on their public health issues while practicing team building skills. Class will culminate with presentation of policy briefs through a persuasive advocacy speech.

Concentration Cognate Courses

MIEH600 Foundations of Environmental Health (3 Credits)
Overview of the chemical, physical and biological hazards present in our living and working environment and their effects on human health. Topics include: exposure assessment, industrial hygiene and safety, pesticides, community and indoor pollution, food-borne diseases, solid and hazardous wastes, water resources, risk assessment, ecological issues and environmental laws.

MIEH605 Fundamentals of Global Health (3 Credits)
Exploration of theoretical frameworks and practical perspectives in global health with particular attention to the analysis of the biological, epidemiological, social, cultural and behavioral interactions that affect global health study and project implementation. The emphasis is on innovative solutions to health issues in underserved populations.

MIEH773 Foodborne, Waterborne and Airborne Infectious Diseases (3 Credits)
In-depth study of foodborne, waterborne and airborne diseases caused by bacteria, viruses and parasites. Topics will include sources and detection of causative agents; their transmission to humans via food, water, air and other environmental media; and methods of disease prevention, including food safety approaches and drinking water treatment. Classes include lectures, discussions, field-trips and hands-on field sampling and laboratory activities.

MIEH780 Occupational Health (3 Credits)
A synthesis of epidemiology, toxicology, exposure science, risk assessment, and policy. Emphasis will be on methods for anticipating, recognizing, evaluating and controlling workplace hazards; the hierarchy of controls; and current hot topics in occupational health.

GBHL611 Digital Health Approaches to Advance Global, Environmental and Occupational Health (3 Credits)
An introduction to the application of digital health technologies in addressing complex challenges within global, environmental, and occupational health practice. The course focuses on how digital tools, data analytics, artificial intelligence, and mobile health technologies can enhance professional practice in disease surveillance, environmental monitoring, workplace health assessment, and health system strengthening across diverse global contexts. The course addresses ethical considerations, data governance, health equity implications, and sustainable implementation strategies essential for responsible digital health practice in diverse professional contexts. This course emphasizes practical applications that students can immediately implement in current and real-world context. Students will explore case studies, examine relevant digital health solutions, and develop skills in evaluating and implementing digital health interventions in global, environmental, and occupational health settings.

GBHL650 Global Health Governance and Diplomacy (3 Credits)
Analyze contemporary approaches to managing global health challenges by exploring how countries and other global stakeholders work together to address global health challenges. Our specific focus will be infectious and non-communicable disease pandemics and humanitarian emergencies. Assigned course materials and analytical lenses will draw from a myriad of fields, including international relations, economics, and post-colonialism.

Practicum Courses

MIEH778 Practical Experience in Public Health (4 Credits)
Practice experience and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the practice experience will depend upon the student's background and career goals.

MIEH786 Capstone Project in Public Health (3 Credits)
Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Elective Course Options (Students take 6 credits)

ENVH615 Airborne Infection: The Science of COVID-19 and Prevention of Future Pandemics (3 Credits)
In the wake of the COVID-19 pandemic, the elusive pathway - the aerobiological pathway - of infectious disease transmission remains controversial and the world remains unprepared to control pandemic respiratory viruses. This course will focus on the science of infectious disease aerobiology and explore the historical roots of confusion and political-economic forces that impede understanding and control of airborne infection transmission. Emphasis will be on reading and interpretation of original literature, understanding and using basic mathematical models, and evaluation of intervention strategies in the context of the hierarchy of hazard controls in public health.

GBHL641 The Impact of Climate Change on Water and Food Security in Cameroon (3 Credits)
The purpose of the global and project-based course is to provide advanced knowledge and critical insights into the intricate relationships between climate change, water and food security, with a specific emphasis on the unique vulnerabilities faced by women and children in the African context. This is a collaborative course between the University of Maryland and the University of Buea in Cameroon aims to equip students with a comprehensive understanding of the multifaceted challenges arising from climate change in Africa, particularly as they pertain to the health and welfare of women and children.

GBHL649 Global Health Global Classroom (3 Credits)

This course serves as a global health experiential learning activity that increases student exposure to global research and networks, providing alternatives to U.S.-centered policy, practice, and ideas. The student and the instructor from UMD collaborate with colleagues in partner universities abroad on the development and delivery of a set of objectives about a current global health issue that will include a) Demonstrate knowledge of and understanding of a current issue in global health. B) Identify location-specific determinants that influence health. C) Ethically engage with communities outside of the US with humility and willingness to learn from others. D) Critically analyze and interpret current issues, problems, and controversies in global health.

MIEH607 One Health: Food Safety and Security (3 Credits)
This is a collaborative course among the University of Maryland and Cairo University, Cairo, Egypt to explore the One Health Foundation and its application to improving international food safety and security. The purpose of this global class is to disseminate knowledge on One Health and its application to improving global food safety and security. Students will have the opportunity to collaborate with Cairo University and the Agriculture Research Center in Egypt to explore the current status and challenges of global food safety and security.

MIEH620 Global Health Communication and Promotion (3 Credits)
Explores the critical components in developing, implementing and evaluating health/population promotion and communication interventions. Emphasis is on theory application to a variety of cultural settings. Formative and quantitative research methods will be utilized.

MIEH783 Proposal Development and Marketing for Public Health Scientists (3 Credits)
Every scientist, whether in academia, government, or industry, must write compelling proposals if they are to succeed in having resources to pursue their passions and interests. To write a compelling proposal, we must develop clear and concise hypotheses and definitive ways to test them. But to have an impact, to get funded, to graduate, we must also excel at marketing our ideas and our achievements to other scientists and the public. This course is designed for doctoral students and postdoctoral fellows who want to develop and hone their proposal development and marketing skills.

Appendix C: Faculty Information

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated.

Name	Highest Degree Earned and Institution	Academic Field	UMD Title	Courses Taught
Heather Amato	PhD, University of California Berkeley	Environmental Health Sciences	Assistant Professor	MIEH773
Kristen Coleman	PhD, University of Toledo	Biology	Assistant Professor	ENVH615
Heather Wipfli	PhD, Graduate Institute for International & Development Studies	International Relations and Political Science	Professor	MIEH 620
Hassanatu Blake	PhD, University of Alabama Birmingham	Health Education and Promotion	Associate Clinical Professor	GBHL611/ GBHL650
Abdel-Razak Kadry	PhD, Zagazig University	Toxicology	Adjunct Professor	GBHL641
Leena Malayil	PhD, University of Maryland College Park	Toxicology	Associate Research Professor	MIEH778 / MIEH786
Kathleen McPhaul	PhD, University of Baltimore	Nursing/Occupational Health Science	Associate Research Professor	MIEH780
Jamie Trevitt	PhD, Johns Hopkins University	Public Health	Associate Clinical Professor	SPHL602 / SPHL603
Steve Ault	MS, University of Liverpool	Applied Parasitology	Lecturer	SPHL610
Paul Turner	PhD, University of Edinburgh	Chemistry	Associate Professor	MIEH600 GBHL649
Suhana Chattopadhyay	PhD, University of Maryland College Park	Environmental Health Sciences	Assistant Research Professor	MIEH605
Donald Milton	MD, Johns Hopkins University;	Public Health	Professor	MIEH783

	DrPH, Harvard School of Public Health			
Danielle Catona	PhD, Rutgers University	Health Communication	Lecturer	SPHL601/ SPHL620
Evelyn King-Marshall	PhD, University of Florida	Public Health	Assistant Research Professor	SPHL611