Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

SELF-STUDY REPORT

Prepared for the Council on Education for Public Health

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Glossary

2GW	The university-branded 2U platform for online courses
2U	2U, Inc.
AACSB	Association to Advance Collegiate Schools of Business
ACHE	American College of Health care Executives
ACR	Advisory Council for Research
ACTIV	Accelerating COVID-19 Therapeutic Interventions and Vaccines
AD	Alzheimer's Disease
APEx	MPH Applied Practice Experience
APHA	American Public Health Association
APR	Academic Program Review
APT	Appointment, Promotion and Tenure
ARAC	Antibiotic Resistance Action Center
ARL	Association of Research Libraries
ARS-30	Academic Resilience Scale
ASPPH	Association of Schools and Programs of Public Health
ASTHO	Association of State and Territorial Health Officials
BA	Bachelor of Arts
BIRT	Bias Incident Response Team
BS	Bachelor of Science
CAC	Community Advisory Committee
CDC	Centers for Disease Control and Prevention
CE	Culminating Experience
CMS	United States Centers for Medicare and Medicaid Services
COACHES	Coaching, Healthy Eating, and Sports
COTE	Committee on the Environment
COVID Alt	COVID Alternative Pathway
COVPN	COVID Vaccine Prevention Network
CPS	College of Professional Studies
CRAG	Collaborative Research Administrators Group
CRS	Congressional Research Service
CTU	Clinical Trial Unit
CV	Curriculum Vitae
DAPEx	DrPH Applied Practice Experience
DBB	Department of Biostatistics and Bioinformatics
DC	Washington, DC; District of Columbia
DEI	Diversity, Equity, and Inclusion
DrPH	Doctor of Public Health
DrPH@GW	Online Doctor of Public Health
DVS	GW Military and Veteran Services
EOH	Department of Environmental and Occupational Health
EPA	Environmental Protection Agency
EPI	Department of Epidemiology
EPR	Expedited Portfolio Review
EROC	Executive Research Oversight Committee
ERV	Endogenous retroviruses
EXNS	Department of Exercise and Nutrition Sciences
FDA	United States Food and Drug Administration
FTE	Full-Time Equivalent
GA	Graduate Assistant
GAO	United States Government Accountability Office
GH	Department of Global Health

GSEHD	Graduate School of Education and Human Development
GTAP	Graduate Teaching Assistantship Program
GW or GWU	The George Washington University
GW Nursing	School of Nursing
GWALA	GW Academic Leadership Academy
GWSPH	The Milken Institute School of Public Health
HBCUs	Historically Black Universities and Colleges
HHS	US Department of Health and Human Services
HPM	Department of Health Policy and Management
HPTN CRS	GW HIV Prevention Trials Network Clinical Research Site
HRSA	Health Resources and Services Administration
HSI	Hispanic-Serving Institutions
ILE	Integrative Learning Experience
IPA	Intergovernmental Personnel Act
IPE	Interprofessional Experience
IPEC	Interprofessional Education Collaboration
IRB	Institutional Review Board
ITL	Instructional Technology Lab
JD	Doctor of Jurisprudence or Juris Doctor (law degree)
LAI	Libraries and Academic Innovation
LEED	Leadership in Energy and Environmental Design
LLM	Master of Law
LMS	Learning Management System
MBTI	Myers-Briggs Type Indicator
MD	Doctor of Medicine (medical degree)
MET	Metabolism and Exercise Testing
MHA	Master of Health Administration
MHA@GW	Online Master of Health Administration
MPH	Master of Public Health
MPH@GW	Online Master of Public Health
MRCZ	Medical Research Council Zimbabwe
MS	Master of Science
MSN	Master of Science in Nursing
MTA	Master Teacher Academy
NAAHP	National Association of Advisors for the Health Professions
NACCHO	National Association of County and City Health Officials
NACHC	National Association of Community Health Centers
NBER	National Bureau of Economics Research
NIH	National Institutes of Health
NGS	Next-Generation Sequencing
NROTC	Naval Reserve Officer Training Corps
ODECE	Office of Diversity, Equity and Community Engagement
OHR	Office of Human Research
OIE	Office of Inclusive Excellence, Diversity and Justice
ONC	Office of the National Coordinator for Health Information Technology
ORE	Office of Research Excellence
OSHA	United States Occupational Safety and Health Administration
OVPR	Office of the Vice Provost for Research
PA	Master of Science in Physician Assistance
PAHO	Pan American Health Organization
PCH	Department of Prevention and Community Health
PE	Professional Enhancement
PhD	Doctor of Philosophy

PHSA	Public Health Student Association
PHSP	Public Health Scholars Program
RLC	Research Leadership Council
SEAS	School of Engineering and Applied Science
SIM	State Innovation Grant
SMHS	School of Medicine and Health Sciences
SOPHE	Society for Public Health Education
TEAM Milken	Milken Undergraduate Student Association
UHP	Urban Health Program
UNAIDS	United Nations Programme on AIDS
URP	Under-Represented Populations
USGBC	United States Green Building Council
USPHS	United States Public Health Service
USPHS COF	United States Public Health Service Commissioned Officers Foundation
VA	Department of Veterans Affairs
VHA	Veterans Health Administration
VSOC	VetSuccess on Campus
VSTC	Virginia Science and Technology
WES	World Education Services
WHO	World Health Organization
WID	Writing-in-the-Disciplines
WRLC	Washington Research Libraries Consortium
WW ACTG CRS	Whitman-Walker AIDS Clinical Trials Group Clinical Research Site
YTD	Year to date

Executive Summary

In its 26th year, the Milken Institute School of Public Health (GWSPH) at the George Washington University stands firmly committed to advancing population health, well-being, and social justice locally and globally. Guided by this mission, GWSPH has consistently demonstrated a dedication to applying public health knowledge to enhance policy, practice, and management, solidifying its position among the most esteemed institutions in the nation. Additionally, the school has made significant strides in conducting rigorous, basic, applied, and translational research, contributing to the ongoing development of public health practices and policies worldwide.

Experiencing substantial growth over the past quarter century, GWSPH now boasts an alum network of more than 14,000 and more than 335 faculty members spanning seven distinguished academic units. With an impressive offering of more than 55 degree programs, the institution has secured a prestigious U.S. News and World Report national ranking of No. 12, bolstered by specific accolades such as the residential and online MHA programs' No. 8 nationwide ranking and the No. 7 ranking of the Department of Health Policy and Management. In part, GWSPH's collective achievements have propelled the George Washington University into the top echelon of premier educational institutions in North America. Notably, the recent induction into the Association of American Universities (AAU) is a powerful affirmation of the institution's enduring commitment to academic research excellence and its significant contributions to the field of public health. At the age of 26, we feel that we are just getting started on the path toward preeminence.

At the heart of its endeavors, GWSPH remains steadfast in its commitment to educating the next generation of public health leaders, policymakers, practitioners, scientists, advocates and managers. With an unwavering focus on nurturing a culture of intellectual curiosity and academic excellence, the school's faculty continue to inspire and empower students, equipping them with the knowledge and skills necessary to effect meaningful change in public health. Central to the school's growth and success has been the exceptional dedication of its faculty, whose diversity and remarkable achievements have further solidified the institution's academic standing. They lead in and outside of the classroom, serving in governmental and nongovernmental agencies, serving appointments in federal, state and local advisory bodies, advising members of Congress as well as state and local governments, and disseminating impactful research findings around the world.

This reaccreditation period began with a great surge of optimism buoyed by an ambitious and creative strategic planning process, capped by a strategic plan we adopted in AY2020. There was much that could not be foreseen at the time—not only the COVID-19 pandemic and how the pandemic called our faculty, students and staff to contribute many extra hours to teaching, technical assistance, advising, research and service, but also the new challenges to address racism, gun violence and the many deaths of despair that were beginning to erase years of progress in public health even prior to the pandemic. The strategic plan also could not anticipate several significant transitions on our campus, which included experiencing several leadership changes at GW.

Amid these challenges, the school exhibited resilience and adaptability, providing leadership to our campus in controlling COVID-19, converting research equipment to a COVID testing lab and establishing an effective surveillance system to keep all GW students, staff and faculty safe. GWSPH harnessed the power of public health but also academic technology to ensure the continuity and quality of the student experience. Its robust online learning and teaching capabilities have facilitated seamless transitions between residential and virtual learning environments and fostered a culture of academic innovation, positioning the institution at the forefront of online education in public health. In doing so, GWSPH also broke through a number of barriers that have impeded progress in the past. In the first three years of the pandemic, Dean Goldman was included as a member of the university executive decision. Global Health Chair James Tielsch was elected chair of the Faculty Senate Executive Committee, the leader of all faculty across GW. Moreover, Dr. Tielsch co-chaired the GW Presidential

Search Committee that selected our current President, Dr. Ellen Granberg. This year, one of our fantastic GWSPH alums, Joseph Wright, MPH, was honored with the Distinguished Alumni Achievement Award.

Building upon these successes, the school has embraced a culture of innovation in all that we do, particularly its online programs, with the MPH@GW and MHA@GW online models standing out as a testament to this achievement. These programs have yielded positive outcomes with high student and faculty satisfaction levels, demonstrating the comparability of online students and faculty to their residential counterparts. Notably, these online classes are wholly owned and led by the esteemed faculty of GWSPH, underscoring the institution's commitment to maintaining the same academic rigor and excellence in both online and residential settings.

Even during the pandemic, the school experienced substantial growth in its Interprofessional Education (IPE) initiatives, fostering meaningful domestic and international partnerships and opportunities for students to collaborate to address the greatest challenges facing public health. Over the last five years, this strategic expansion has enriched the academic experience and positioned the institution as a global leader in fostering collaborative and interdisciplinary approaches to public health challenges.

While navigating the challenges of the pandemic and other significant stressors, the school successfully achieved nearly every goal outlined in its strategic plan.

Research:
The overall research output at GWSPH continued to grow despite pandemic-related obstacles. Noteworthy achievements include steady growth in the quality and quantity of research, the development of new research entities focusing on critical public health issues, and a dynamic range of research activities, from laboratory work on antibiotic resistance and malaria prevention to initiatives addressing family planning in densely populated regions of Tanzania and Latin America. Under the guidance of dedicated faculty, GWSPH's research confronts urgent and complex global public health challenges.

Education:
GWSPH reached several important educational goals, including the establishment of the Department of Biostatistics and Bioinformatics, the overhaul and development of an updated core for MPH programs, an increased number of joint degree programs, strengthened leadership and diversity in academic programs, and the successful development of new PhD programs. The introduction of a leadership-focused DrPH program, both on campus and online, demonstrates the school's commitment to expansion and growth, attracting a diverse cohort of students and solidifying the school’s position as a leading advanced public health education provider.

Applied Public Health:
Despite pandemic headwinds, GWSPH enhanced its applied public health program.

Global Health:
GWSPH increased funding for research and leadership activities in global health, securing roles in prestigious organizations and welcoming new faculty contributing to research in COVID-19, nutrition, and child and maternal survival.

Diversity, Equity and Inclusion:
GWSPH made strides in fostering diversity, equity and inclusion, conducting online seminars on health disparities, establishing a standing GWSPH Diversity and Inclusion Action Committee, and launching the Office of Inclusive Excellence, Diversity and Justice in 2022. Inclusive excellence is a foundational element of GWSPH's identity, critical for future achievements.

Building an International Student Base:
All goals related to building an international student base were met and exceeded.

Enhancing Student Engagement and Access to Space:
Goals were generally met and exceeded, with exceptions during pandemic-related closures.

Increasing Scholarship Support:
While the goal was met, there is recognition that further improvement in this area is needed.

Increasing Student Services:
Similar to scholarship support, the goal was met, but areas for further improvement were identified.

Infrastructure Goals:
Success in building partnerships was achieved; however, erosions in staff support have affected institutional efficacy, and GWSPH is still recovering from these challenges.

The introduction of MicroMasters in the fall of 2023, not originally included in the strategic plan, has strengthened the institution's dedication to providing accessible and innovative educational opportunities. This pioneering initiative underscores the school's dedication to providing flexible and dynamic learning pathways that meet the diverse needs and aspirations of individuals in the public health field, including students, professionals and scholars.

Our distinguished faculty members drive research within their respective departments and collaborate extensively across more than 20 centers and institutes, spanning a vast network of more than 90 countries. Notably, we are No. 10 out of schools of public health in terms of "total grants and contracts,"[1] and our federally funded grants and contracts, paired with increasing levels of philanthropy, fuel an average annual investment of more than $80 million. In FY 2023, GWSPH ranked among the top 10 schools of public health to receive NIH funding.[2]

As the only school of public health in the nation's capital, GWSPH students maximize the benefits of the location and proximity to influential institutions. With 539 residential undergraduate students and 2,084 master's and doctoral students, GWSPH provides distinct opportunities for students to collaborate and work alongside prestigious organizations such as the NIH and Congress, empowering them to utilize the resources and opportunities offered by Washington, DC. Upon graduation, GWSPH graduates move directly into the field or pursue further education, including through our own PhD and DrPH programs. Our graduates make an immediate impact in the organizations they select for employment, including federal, state and local public health agencies and departments, international and domestic nongovernmental organizations, health care organizations and delivery systems, as well as an array of organizations in the private sector.

At the core of the GWSPH's mission is an unwavering dedication to systematic and precise exploration, driving the revelation of the fundamental mechanics and root causes of disease and health disparities. This wealth of knowledge is then leveraged to craft, evaluate, and disseminate innovative strategies for treatment and prevention, ultimately revolutionizing the field of public health and public health outcomes.

Looking ahead, the Milken Institute School of Public Health remains poised to continue its journey of transformative impact, guided by a vision of global leadership and a steadfast commitment to driving

[1] ASPPH, 2022
[2] Forbes, 2024

positive change in public health education and practice. Empowered by a foundation of excellence and fueled by a spirit of innovation, GWSPH is uniquely positioned to shape the future of public health on a global scale, fostering healthier and safer communities powered by public health.

Introduction

1) Describe the institutional environment, which includes the following:

a) year institution was established and its type (e.g., private, public, land-grant, etc.)

The George Washington University, an independent private academic institution chartered by an act of Congress of the United States in 1821, dedicates itself to furthering human well-being. The University values a dynamic, student-focused community stimulated by cultural and intellectual diversity and built upon a foundation of integrity, creativity and openness to the exploration of new ideas.

b) number of schools and colleges at the institution and the number of degrees offered by the institution at each level (bachelor's, master's, doctoral and professional preparation degrees)

The George Washington University comprises three main campuses: Foggy Bottom and Mount Vernon in Washington, DC, and the GW Virginia Science and Technology Campus in Ashburn, VA. GW has various medical, academic and research centers scattered throughout the greater DC metro area including Alexandria and Arlington, VA. GW offers approximately 140 undergraduate programs and 330 graduate programs through its 10 colleges and schools.

School	Description	Degrees
Columbian College of Arts and Sciences	Formed in 1821, Columbian College of Arts and Sciences (CCAS) is GW's largest and most comprehensive academic unit. It's home to 42 academic departments, three affiliated schools, 8,000 undergraduate and graduate students, 20 research centers and more than 500 full-time faculty—including Fulbright and Guggenheim scholars, award-winning artists, cutting-edge scientists and critically acclaimed authors.	Certificate—17 Undergraduate—67 majors Graduate—48 master's; 24 doctoral Joint—35
School of Business	The School of Business (GW Business) was founded in 1928 on the premise that business and government might become partners in promoting national prosperity and international development. Initially known as the School of Government, with degree programs that integrated business and politics at national and international levels, the School of Business has a history of professional development of individuals assuming leadership roles in society. The school has eight departments.	Certificate—20 Undergraduate—8 majors Graduate—13 specialized master's; 6 MBA formats; 1 doctoral Joint—16

School	Description	Degrees
Graduate School of Education and Human Development	Since 1904, GW has offered coursework in the field of education. With fewer than a dozen faculty at first, the education division became the Teachers' College in 1909 and then eventually the School of Education in 1928, with departments of education, educational psychology and home economics. In 1994, the school became Graduate School of Education and Human Development (GSEHD) when it transitioned to a more focused mission on graduate education. Today, GSEHD's programs are organized within five departments, which house master's, education specialist, doctoral and graduate certificate programs.	Certificate–20 Undergraduate–0 majors Graduate–24 master's; 12 doctoral Joint–16
School of Engineering and Applied Science	The School of Engineering and Applied Science (SEAS) was organized in 1884 as the Corcoran Scientific School of Columbian University, named in honor of William W. Corcoran, president of the University's Board of Trustees from 1869 to 1888. While the organization and offerings of the school have evolved over the years, throughout most of its history its programs have been characterized by an emphasis on principles guiding the advancement of technology.	Certificate–20 Undergraduate–17 majors Graduate–18 master's; 12 doctoral Joint–23
Elliott School of International Affairs	The historical roots of the Elliott School extend back to the establishment of the School of Comparative Jurisprudence and Diplomacy in 1898. In 1966, the school separated from the School of Government, Business and International Affairs to become an independent unit, the School of Public and International Affairs. In 1987, the name was changed to the School of International Affairs, and in 1988 the school was renamed in honor of Evelyn E. and Lloyd H. Elliott. Lloyd Elliott served as president of George Washington University from 1965 to 1988.	Certificate–3 Undergraduate–5 majors Graduate–15 master's; 0 doctoral Joint–4
School of Medicine and Health Sciences	Founded in 1824, the School of Medicine and Health Sciences (SMHS) was the first medical school in the nation's capital and is the eleventh oldest in the country. Working together in our nation's capital with integrity and resolve, SMHS is committed to improving the health and well-being of our local, national and global communities.	Certificate–20 Undergraduate–9 majors Graduate–14 master's; 7 doctoral Joint–12

School	Description	Degrees
School of Nursing	Established in 2010, the School of Nursing (GW Nursing) has a proven record of innovation, entrepreneurship and leadership. GW Nursing educates and inspires nurses to provide high-quality, compassionate, person-centered health care. It develops leaders who actively engage in health promotion, patient advocacy and health care innovation and prepares nurse educators to pursue quality and advance the profession.	Certificate–6 Undergraduate–1 major Graduate–6 master's; 8 doctoral Joint–1
College of Professional Studies	Founded in 2000, the College of Professional Studies (CPS) offers an expanding range of degree programs leading to bachelor's and master's degrees in professional studies, along with a variety of certificate programs.	Certificate–13 Undergraduate–4 majors Graduate–10 master's; 0 doctoral Joint–8
Law School	Since enrolling its first class in 1865, GW Law School has produced some of the finest minds across the spectrum of legal scholarship. That tradition continues today, as GW Law graduates use the knowledge and skills they gain here to influence the critical legal conversations of our times.	Certificate–0 Undergraduate–0 majors Graduate–2 master's; 2 doctoral Joint–10
Milken Institute School of Public Health	The only school of public health in Washington, DC, the Milken Institute School of Public Health (GWSPH) spearheads initiatives and programs that fight obesity, improve community health policy, and assess the quality of care provided nationally and around the world. GWSPH faculty, researchers and students maximize their long-standing relationships with the world's most influential health organizations to advance learning and research for the benefit of all. Together, they have developed groundbreaking models for national and international health care reform.	Certificate–3 Undergraduate–4 majors Graduate–26 master's; 9 doctoral[3] Joint–13

c) number of university faculty, staff and students

As the largest institution of higher education in Washington, DC, GW has over 26,000 undergraduate and graduate students, hailing from all 50 US states, DC and over 130 countries. The university employs over 3,700 faculty and staff (instructional and noninstructional). The student-to-faculty ratio is 12:1.

[3] The two concentrations in the PhD and MS programs in Health Data Science are counted separately.

d) brief statement of distinguishing university facts and characteristics

The formation of GW was the culmination of George Washington's vision for a national university in the nation's capital with funding from benefactors including John Quincy Adams, John C. Calhoun and James Monroe. The university was established by an act of Congress and approved by President Monroe, first as Columbian College and then as Columbian University, making it one of only five universities created by congressional charter. The university was renamed George Washington University in 1904 and moved to the Foggy Bottom neighborhood in 1914.

GW has a rich history of attracting prominent politicians, activists, celebrities and other renowned individuals. GW counts among its alums 16 foreign heads of state or government, 28 US senators, 27 US governors, 18 US Cabinet members, five Nobel laureates, two Olympic medalists, two Academy Award winners and one Golden Globe winner. Former Board of Trustees members include Ulysses S. Grant, Alexander Bell and John Quincy Adams. Grant's grandson, Ulysses S. Grant III, was Vice President of the university from 1946 to 1951. The George Washington University Hospital successfully treated President Reagan after his attempted assassination in 1981, and the Emergency Department now bears his name. In 1999, GW made history as it webcast the first Presidential Town Hall featuring President Clinton. Notable faculty members have included George Gamow (scientist best known for his work on the *Big Bang Theory*), Al Gore (former US Vice President), Ketanji Brown Jackson (Supreme Court Justice), Masatoshi Koshiba (Nobel Prize winner), Edward P. Jones (Pulitzer Prize winner) and Clarence Thomas (Supreme Court Justice).

Over the last decade, GW has received many accolades and rankings, including:

- Top Universities for Producing Billionaires by *Times Higher Education's World University Rankings*
- Top Research Universities by *Forbes*
- Most Politically Active by *The Princeton Review*
- Best College Newspaper by *The Princeton Review*
- Most Popular Study Abroad Program by *The Princeton Review*
- Great College Towns by *The Princeton Review*
- Best in the Northeast by *The Princeton Review*
- Top Colleges or Universities for Internship Opportunities by *The Princeton Review*
- Best Global Universities for Social Sciences and Public Health by *U.S. News and World Report*
- American Association of Universities

e) names of all accrediting bodies (other than CEPH) to which the institution responds. The list must include the institutional accreditor for the university as well as all specialized accreditors to which any school, college or other organizational unit at the university responds

The George Washington University is accredited by its institutional accrediting agency, the Middle States Commission on Higher Education. College-level accreditation is detailed in the table below.

College/School	Accreditation
Columbian College of Arts and Sciences	• Bachelor and MFA in interior architecture—Council for Interior Design Accreditation • Department of Chemistry—American Chemical Society • PhD in clinical psychology and the PsyD in clinical psychology—American Psychological Association • MA in speech-language pathology —Education and Training Board of the Boards of Examiners in Speech-Language Pathology and Audiology. • MPA and MPP—National Association of Schools of Public Affairs and Administration • MFS in forensic chemistry and MFS in forensic molecular biology—Forensic Science Education Programs Accreditation Commission • Art therapy program—Commission on Accreditation of Allied Health Education Programs • Corcoran School of the Arts and Design—National Association of Schools of Art and Design
School of Medicine and Health Sciences	• School—Liaison Committee on Medical Education • BS in health sciences in the field of medical laboratory sciences, all post-baccalaureate certificates in medical laboratory sciences and MS in health sciences in laboratory medicine—National Accrediting Agency for Clinical Laboratory Science • MS in health sciences in physician assistant—Accreditation Review Commission on Education for the Physician Assistant • DPT—Commission on the Accreditation of Physical Therapist Education of the American Physical Therapy Association • DOT—Accreditation Council of Occupational Therapy Education (candidacy status) • MS in health science in the field of health care quality—Commission on the Accreditation of Health care Management Education
Law School	• School—Association of American Law Schools (charter member) and Section of Legal Education and Admissions to the Bar of the American Bar Association
School of Engineering and Applied Science	• BS in civil, mechanical, biomedical, systems, electrical and computer engineering—Engineering Accreditation Commission of ABET, Inc. • BS in computer science—Computing Accreditation Commission of ABET, Inc.
Graduate School of Education and Human Development	• School—American Association of Colleges for Teacher Education (charter member); Council for the Accreditation of Educator Preparation as a National Council for the Accreditation of Teacher Education legacy program; District of Columbia State Education Agency, Office of the State Superintendent of Education • MS in school counseling, clinical mental health counseling and rehabilitation counseling—Council for Accreditation of Counseling and Related Educational Programs • PhD in counseling—Council for Accreditation of Counseling and Related Educational Programs

College/School	Accreditation
School of Business	• School—The Association to Advance Collegiate Schools of Business (AACSB International) member • Undergraduate and graduate business administration and accountancy—AACSB • Programs in accountancy satisfy the educational requirements for the certified public accountant and the certified management accountant professional examinations
Elliott School of International Affairs	• School—Association of Professional Schools of International Affairs (member)
Milken Institute School of Public Health	• School—Council on Education for Public Health; Association of Schools and Programs of Public Health (member); Association of University Programs of Health Administration (member) • MHA—Commission on Accreditation of Health care Management Education
College of Professional Studies	• MPS in sustainable urban planning—Planning Accreditation Board
School of Nursing	• BSN—Commission on Collegiate Nursing Education; Virginia Board of Nursing • MSN, DNP, post-master's APN—Commission on Collegiate Nursing Education; District of Columbia Board of Nursing

f) brief history and evolution of the school of public health (SPH) and related organizational elements, if applicable (e.g., date founded, educational focus, other degrees offered, rationale for offering public health education in unit, etc.).

The Milken Institute School of Public Health (GWSPH) was formally established on July 1, 1997, as the first school of public health in Washington, DC. It remains the only public health school in the nation's capital, located on the Foggy Bottom campus of the George Washington University. When GWSPH opened its doors, it brought together a number of academic programs from across the university. For instance, the signature MPH degree was originally offered in the School of Medicine and Health Sciences. The founding of GWSPH was an opportunity to integrate these disparate public health programs and build a powerhouse school that would educate future public health leaders and practitioners. Now, the vigor and enthusiasm that created the vision for the school has been rekindled as the institution solidifies its place as a world-renowned hub for science, learning, research, community engagement and applied practice.

GWSPH has seven academic departments,[4] most of which are based at 950 New Hampshire Avenue, Washington, DC, a 115,000 square foot award-winning LEED Platinum certified building. Our home provides a central location for faculty, students, alums and staff to make face-to-face connections and convene with prominent leaders to exchange ideas. The building is also a focal point for hosting public health events as we continue the tradition of hosting dynamic and engaging speakers in the field of public health. GWSPH offers diverse programming from a wide range of degree programs. The school offers undergraduate, master's and doctoral degrees. GWSPH has 20 distinct residential and online MPH programs,

[4] Biostatistics and Bioinformatics (DBB), Prevention and Community Health (PCH), Environmental and Occupational Health (EOH), Epidemiology (Epi), Exercise and Nutrition Science (EXNS), Global Health (GH), Health Policy and Management (HPM).

meeting the needs of students. The school also offers 14 undergraduate programs, plus four minors, four combined bachelor's/master's programs, four MS programs, one DrPH program and eight PhD programs. In addition, GWSPH has both an online and a residential Master of Health Administration (MHA) degree as well as joint degrees with medicine (SMHS), law (GW Law), nursing (GW Nursing) and the physician assistant program in SMHS.

As the only school of public health in DC, we have been able to recruit a world-class faculty—335 strong—who have not only studied public health but also led and transformed public health. Our students have access to many only-in-DC opportunities, such as internships at the White House, on Capitol Hill, or with the Department of Health and Human Services, Environmental Protection Agency, World Bank, Pan American Health Organization, American Public Health Association, and other national or global health organizations, unmatched by any other schools of public health in the world. Our faculty and students are tackling public health's biggest problems domestically and globally through our groundbreaking research, whether by studying vectors and microbiomes to prevent infectious outbreaks and antimicrobial resistance in our state-of-the-science laboratories and genomic core, by working with government and community partners to end the HIV epidemic in DC, or by using big data and environmental surveillance to study the impact of climate change. GWSPH is changing the world through the research we do, the students we educate, and the practice and policies we transform.

Over the last decade, GWSPH has experienced tremendous growth in all its residential and online programs. Since 2015–2016, GWSPH has experienced an approximate 14% growth in primary faculty, 67% growth in staff FTE and 34% growth in enrolled students. The MPH@GW program, which has seen the greatest growth rate, marked its 10th anniversary this past summer. Today, the MPH@GW is the single largest program, graduating approximately 400 students each academic year.

Energized by a commitment to excellence and a vision for transformative impact, GWSPH is surging forward with an expansive array of initiatives designed to elevate the field of public health. Building upon the solid foundation of our existing residential and online programs, we proudly introduce groundbreaking MPH@GW concentrations, offering a specialized focus on key disciplines within the dynamic realm of public health. This strategic move signifies our unwavering dedication to equipping future leaders with the precise expertise needed to tackle complex health challenges with precision and insight.

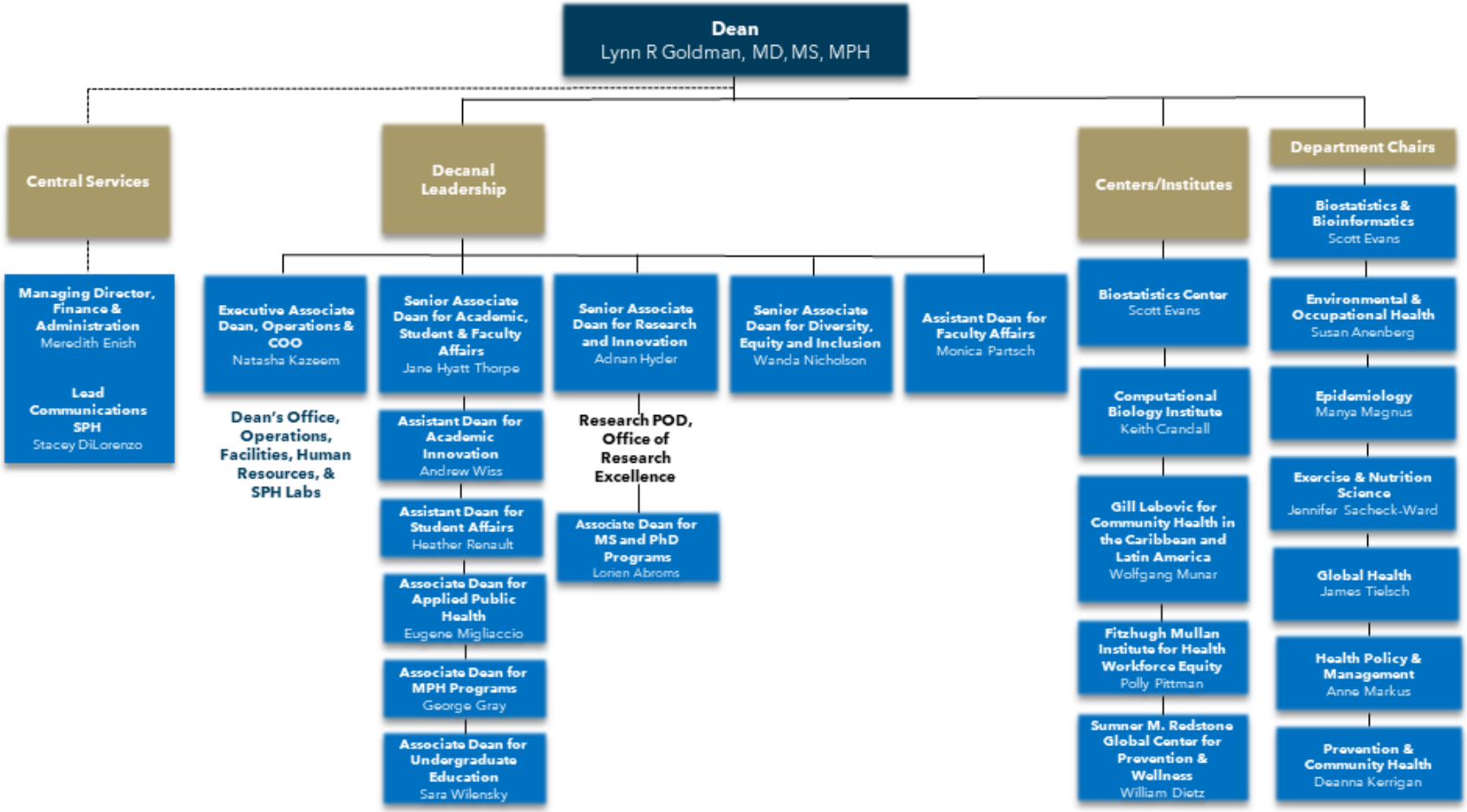
Moreover, in a bold step toward fostering exceptional leadership and groundbreaking research, we restructured our doctoral programs, strategically emphasizing the pivotal aspects of public health leadership training and research-driven excellence. A crowning achievement of this endeavor is the introduction of the pioneering DrPH program, a testament to our unwavering commitment to producing visionary public health leaders equipped with the necessary skills to architect, implement and assess impactful public health initiatives and policies. This program, available both in residential and online formats, harnesses the collective brilliance of our faculty and interdisciplinary experts, harmonizing the nexus of leadership and teaching excellence across diverse disciplines.

Simultaneously, GWSPH unveiled a constellation of signature discipline-specific PhD programs, deeply rooted in the cutting-edge research prowess of our esteemed faculty and aligned with the university's vision of global prominence. We are committed to fostering increased collaboration within our school and across the university, expanding George Washington University's influence in global health and development, particularly in low- and middle-income countries.

These distinctive programs are meticulously crafted to nurture a generation of scholars and researchers adept at unearthing groundbreaking solutions to pressing public health dilemmas on a national and global scale. Reflecting our unwavering commitment to advancing the frontiers of knowledge, our academic programs stand as beacons of innovation, poised to carve a path toward a healthier and safer future for communities worldwide, powered by public health.

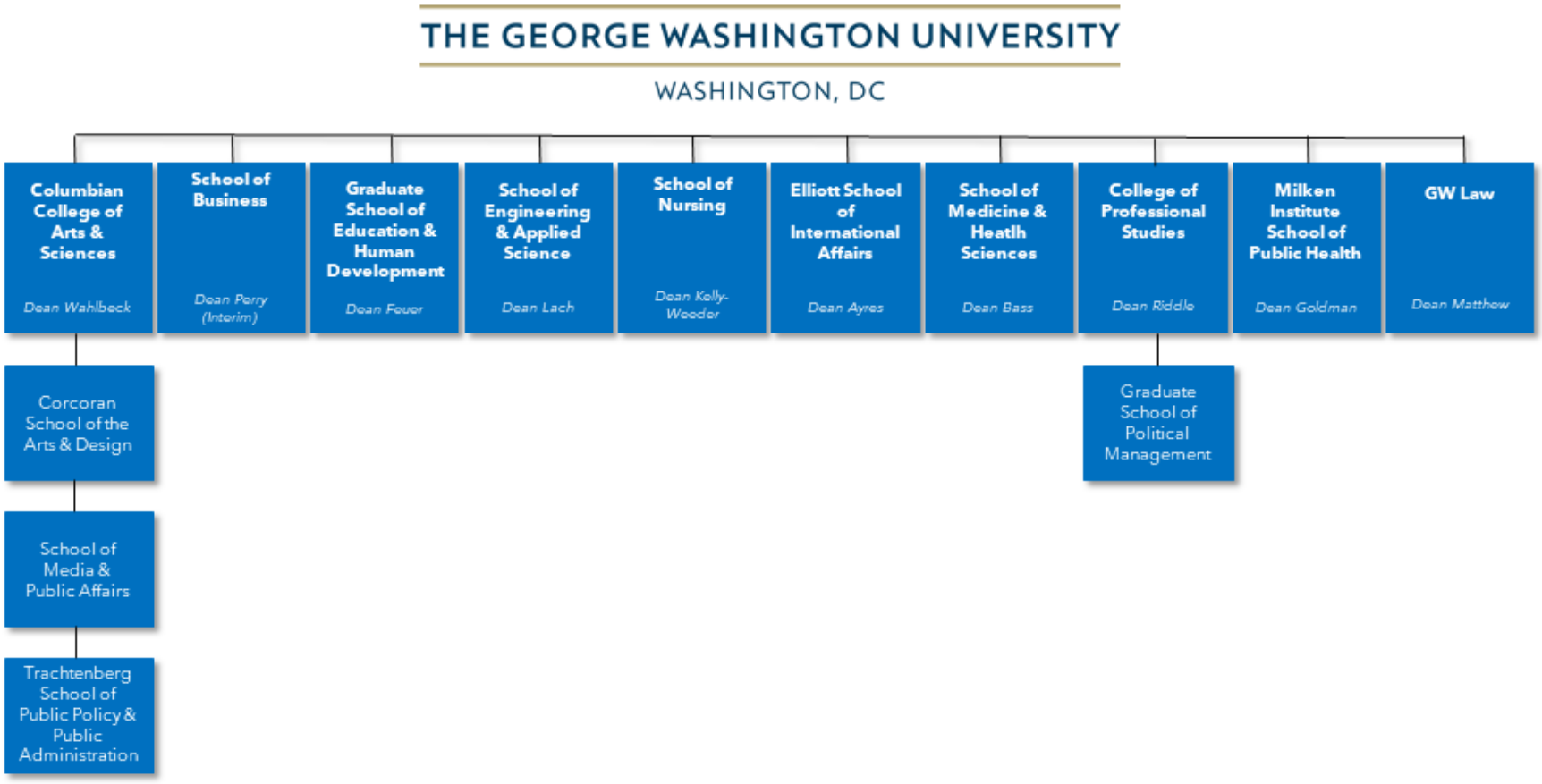
2) Organizational charts that clearly depict the following related to the school:

a) the school's internal organization, including the reporting lines to the dean



See ERF > Introduction > Organizational Charts.

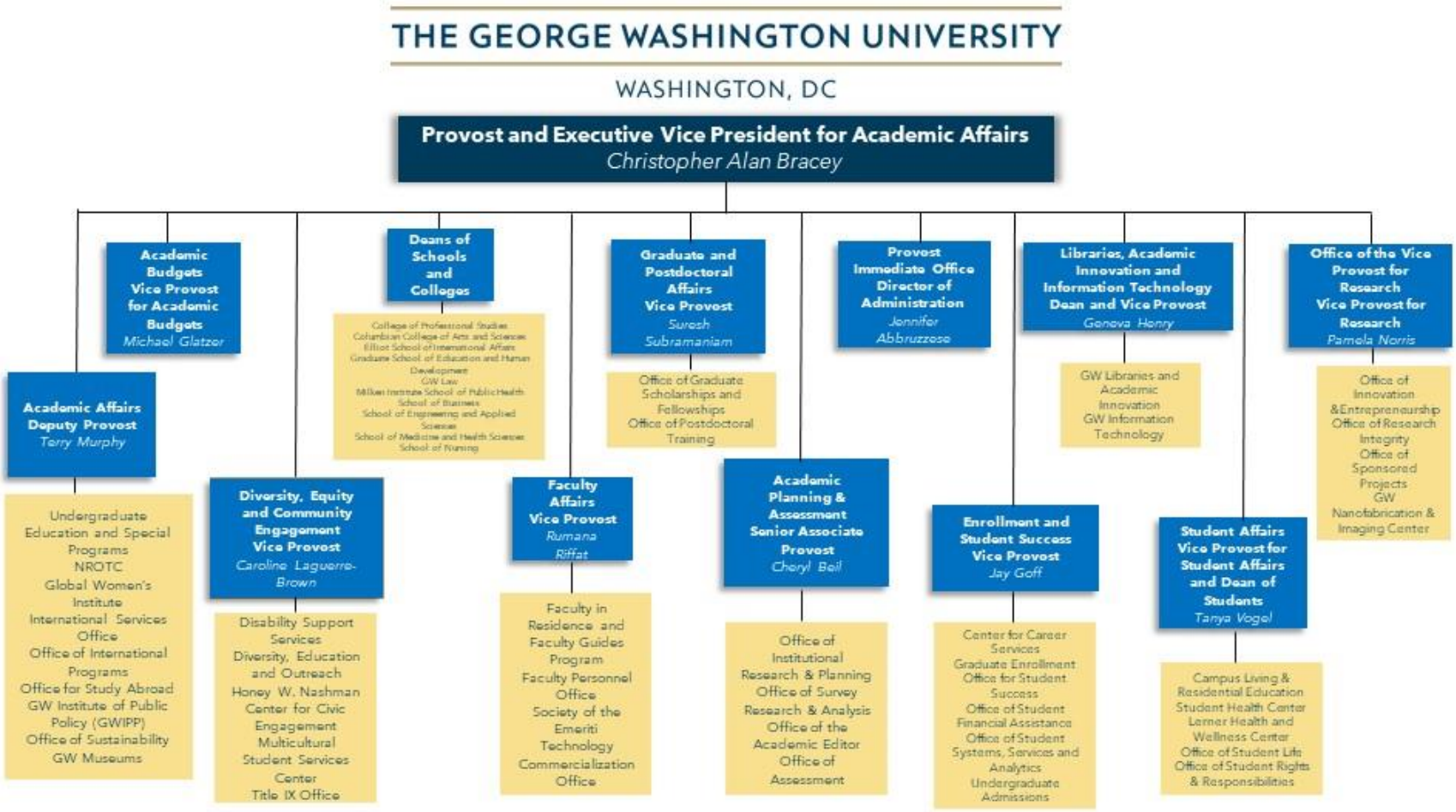
b) the relationship between school and other academic units within the institution. Organizational charts may include committee structure organization and reporting lines



See ERF > Introduction > Organizational Charts.

c) *the lines of authority from the school's leader to the institution's chief executive officer (president, chancellor, etc.), including intermediate levels (e.g., reporting to the president through the provost)*


THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC
GW President
Ellen Granberg
Vice President for Development & Alumni Relations
Donna Arbide
Provost and Executive Vice President for Academic Affairs
Christopher Alan Bracey
Executive Vice President, Chief Financial Office and Treasurer
Bruno Fernandes
Executive Vice President and Chief Administration Officer
Sharon Reich Paulsen
Vice President and General Counsel
Charles Barber
Vice President for Health Affairs and Dean of the School of Medicine & Health Sciences
Barbara Bass
Vice President for Board Relations and Secretary of the University
Jonathan E. Post
Vice President for Communications and Marketing
Ellen Moran
Associate Vice President for Ethics, Compliance and Risk and Data Privacy Officer
Dorinda Tucker
Director of Athletics
Tanya Vogel



See ERF > Introduction > Organizational Charts.

d) for multi-partner schools and schools (as defined in Criterion A2), organizational charts must depict all participating institutions

Not applicable

3) An instructional matrix presenting all of the school's degree schools and concentrations including bachelor's, master's and doctoral degrees, as appropriate. Present data in the format of Template Intro-1.

Template Intro-1

Instructional Matrix–Degrees and Concentrations					
			Categorized as public health	**Campus based**	**Distance based**
Bachelor's Degrees[5]					
Majors, Concentration	*Degree*				
Public Health, No Concentration	BS		X	X	
Public Health, Pre-Medical Concentration	BS		X	X	
Public Health, Pre-Health Concentration	BS		X	X	
Exercise Science, No Concentration	BS			X	
Exercise Science, Pre-Medical Professional	BS			X	
Exercise Science, Pre-Physical Therapy	BS			X	
Exercise Science, Pre-Athletic Training/Sports Medicine	BS			X	
Exercise Science, Strength & Conditioning	BS			X	
Nutrition, No Concentration	BS			X	
Nutrition, Applied Nutrition	BS			X	
Nutrition, Nutrition Science	BS			X	
Nutrition, Pre-Medical Professional	BS			X	
Health Data Science, No Concentration	BS			X	
Health Data Science, Pre-Medical Professional	BS			X	
Master's Degrees	**Academic**	**Professional**			
Programs	*Degree*	*Degree*			
Biostatistics		MPH	X	X	

[5] Throughout the remainder of the self-study, BS degrees are referred to solely by their major names.

Community-Oriented Primary Care		MPH	X	X	
Environmental Health Science and Policy		MPH	X	X	
Epidemiology		MPH	X	X	
Global Environmental Health		MPH	X	X	
Global Health Epidemiology and Disease Control		MPH	X	X	
Global Health Program Design, Monitoring and Evaluation		MPH	X	X	
Global Health Policy		MPH	X	X	
Health Policy		MPH	X	X	
Health Promotion		MPH	X	X	
Humanitarian Health		MPH	X	X	
Maternal and Child Health		MPH	X	X	
Physical Activity in Public Health		MPH	X	X	
Public Health Communication and Marketing		MPH	X	X	
Public Health Nutrition		MPH	X	X	
MPH@GW, Public Health Generalist[6]		MPH	X		X
MPH@GW, Global Health		MPH	X		X
MPH@GW, Health Informatics and Analytics		MPH	X		X
MPH@GW, Climate and Health		MPH	X		X
MPH@GW, Women, Youth and Child Health		MPH	X		X
Public Health Microbiology and Emerging Infectious Diseases	MS		X	X	
Health Data Science, Applied Biostatistics	MS		X	X	
Health Data Science, Applied Bioinformatics	MS		X	X	
Strength and Conditioning	MS				X
Health Administration		MHA		X	
MHA@GW		MHA			X
Doctoral Degrees	**Academic**	**Professional**			
Programs	*Degree*	*Degree*			
Public Health Generalist (DrPH and DrPH@GW)		DrPH	X	X	X

[6] The MPH@GW has multiple completion timelines, originally called tracks. Based on preliminary self-study feedback, GWSPH is working to remove the term "track" to avoid confusion. Instead, they will be called "options."

Environmental Health		PhD		X	X	
Epidemiology		PhD		X	X	
Exercise Physiology and Applied Nutrition		PhD			X	
Global Public Health Sciences		PhD		X	X	
Health Data Science, Applied Biostatistics		PhD		X	X	
Health Data Science, Applied Bioinformatics		PhD		X	X	
Health Policy		PhD		X	X	
Social and Behavioral Sciences in Public Health		PhD		X	X	
Joint Degrees (Dual, Combined, Concurrent, Accelerated Degrees)		**Academic**	**Professional**			
2nd Degree Area	**Public Health Concentration**					
Degree area earned in conjunction	*Existing or joint-specific*	*Degrees*	*Degrees*			
MD	MPH@GW, Public Health Generalist		MPH	X		X
PA (MS in Physician Assistant)	Community Oriented Primary Care		MPH	X	X	
PA (MS in Physician Assistant)	Environmental Health Science and Policy		MPH	X	X	
PA (MS in Physician Assistant)	Epidemiology		MPH	X	X	
PA (MS in Physician Assistant)	Global Environmental Health		MPH	X	X	
PA (MS in Physician Assistant)	Maternal and Child Health		MPH	X	X	
MSN	MPH@GW, Public Health Generalist		MPH	X		X
JD	Any residential MPH		MPH	X	X	
LLM (Master of Law)	Any residential MPH		MPH	X	X	
BS in Public Health	Any MPH (residential or online)		BS, MPH	X	X	X

BS in Nutrition Science	Any MPH (residential or online)		MPH	X	X	X
BS in Nutrition Science	MPH, Public Health Nutrition[7]		MPH	X	X	
Any non-GWSPH BS or BA	MPH, Environmental Health Science and Policy or MPH, Global Environmental Health		MPH	X	X	

NOTE: The DrPH, Public Health Generalist was launched in fall 2021. Prior to the launch of the generalist DrPH, there were four DrPH programs in Health Policy, Environmental Health, Global Health and Health Behaviors. These programs have been deactivated and the students currently in the programs are being supported as they are taught out. These students are identified on the table below.

Additional degree programs not listed on the above table include the joint MS in International Affairs/MPH in Global Health Epidemiology and Disease Control. It has been deactivated, and the final student is expected to graduate in 2023–2024. GWSPH used to offer an MS in Health Informatics and Analytics. The program was deactivated, and the final students graduated in 2022–2023. As of fall 2023, there are no more students in the deactivated MS in Epidemiology program. Finally, GWSPH used to operate MS and PhD programs in Biostatistics jointly with CCAS. These programs are no longer accepting new students, and the fewer than five remaining students are being taught out. Leadership of these programs was transferred to a CCAS faculty member, and the program was removed from the GWSPH website.

4) Enrollment data for all of the school's degree schools, including bachelor's, master's and doctoral degrees, in the format of Template Intro-2. Schools that house "other" degrees and concentrations (as defined in Criterion D18) should separate those degrees and concentrations from the public health degrees for reporting student enrollments.

Degree		Spring 2023	Fall 2023	Spring 2024
Master's				
	MPH, Biostatistics	21	29	28
	MPH, Community-Oriented Primary Care	44	49	46
	MPH, Environmental Health Science and Policy	25	31	31
	MPH, Epidemiology	101	116	111
	MPH, Global Environmental Health	26	17	18
	MPH, Global Health Epidemiology and Disease Control	66	69	62

[7] The BS in Nutrition Science/MPH in Public Health Nutrition is separated as the number of "crossover" credits differs from other MPH degrees.

	MPH, Global Health Program Design, Monitoring and Evaluation	40	31	26
	MPH, Global Health Policy	36	37	38
	MPH, Health Policy	135	125	125
	MPH, Health Promotion	43	40	38
	MPH, Humanitarian Health	15	11	8
	MPH, Maternal and Child Health	62	78	73
	MPH, Physical Activity in Public Health	4	4	5
	MPH, Public Health Communication and Marketing	25	23	21
	MPH, Public Health Nutrition	18	16	14
	MPH@GW, Public Health Generalist	993	843	690
	MPH@GW, Global Health	12	20	22
	MPH@GW, Health Informatics and Analytics	21	24	20
	MPH@GW, Climate and Health	0	8	9
	MPH@GW, Women, Youth and Child Health	8	20	20
	MS, Public Health Microbiology and Emerging Infectious Diseases	30	23	20
	MS, Health Data Science, Biostatistics	2	2	11
	MS, Health Data Science, Bioinformatics	14	12	10
	All remaining Master's degrees (MS in Exercise Science, Strength and Conditioning; MHA, MHA@GW)	248	242	226
Doctoral				
	DrPH, Public Health Generalist	37	75	73
	DrPH, Departmental (pre-2021 matriculation) [8]	38	28	19
	PhD, Environmental Health	8	9	9
	PhD, Epidemiology	20	22	17
	PhD, Global Public Health Sciences	7	12	10
	PhD, Health Data Science, Biostatistics	7	14	15
	PhD, Health Data Science, Bioinformatics	6	8	9
	PhD, Health Policy	15	16	15
	PhD, Social and Behavioral Sciences in Public Health	12	18	16
	All remaining doctoral degrees (PhD in Exercise Physiology and Applied Nutrition)	7	12	10

[8] These DrPH programs in Health Policy, Environmental Health, Global Health and Health Behaviors are currently deactivated and no longer accepting new students. These continuing students are expected to graduate by 2027, though most will likely graduate in the next two years.

Bachelor's				
	BS, Public Health	428	390	378
	All remaining bachelor's degrees (BS, Exercise Science; BS Nutrition)	140	149	161

A1. Organization and Administrative Processes

The school demonstrates effective administrative processes that are sufficient to affirm its ability to fulfill its mission and goals and to conform to the conditions for accreditation.

The school establishes appropriate decision-making structures for all significant functions and designates appropriate committees or individuals for decision making and implementation.

The school ensures that faculty (including full-time and part-time faculty) regularly interact with their colleagues and are engaged in ways that benefit the instructional school (e.g., participating in instructional workshops, engaging in school-specific curriculum development and oversight).

Embodying a culture of dynamic innovation and strategic foresight, the school demonstrates effective and streamlined administrative processes, meticulously tailored to not only uphold its mission and aspirations but also to exceed the benchmarks set for accreditation. Every facet of our administrative framework is thoughtfully curated to amplify efficiency and foster a vibrant ecosystem of growth and learning, enabling us to chart a course toward unparalleled excellence.

At the heart of our operational ethos lies a commitment to excellence and to robust decision-making structures that align actions with our strategic vision and that are nimble, responsive and connected to our overarching goals. Through the astute appointment of dedicated committees and individuals, we ensure that each significant function is seamlessly orchestrated, fostering a collaborative environment where ideas flourish and transformative initiatives take flight.

In fostering a culture of vibrant collaboration and continual growth, the school actively cultivates a thriving community where faculty, both full-time and part-time, succeed through constant interaction and meaningful engagement. By championing their involvement in instructional workshops, empowering their contributions to the development of a dynamic curriculum and fostering a sense of belonging within the school's fabric, we nurture a collective spirit that transcends boundaries and fosters an ecosystem of shared success.

1) *List the school's standing and significant ad hoc committees. For each, indicate the formula for membership (e.g., two appointed faculty members from each concentration) and list the current members.*

Committee	Membership Formula	Current Members (Dept, Program, Title)
Appointment, Promotion and Tenure (APT)	Members represent each academic department, tenured at the rank of Professor. Members shall be elected by the regular tenured and tenure-accruing faculty of each department. On an annual basis, a chair is elected from its members.	Keith Crandall (DBB) Lance Price (EOH) Jeanne Jordan (EPI) Loretta DiPietro (EXNS) James Tielsch (GH) Avi Dor (HPM) Melissa Napolitano (PCH)

Committee	Membership Formula	Current Members (Dept, Program, Title)
Curriculum	One member from each department, who is engaged in teaching, three schoolwide faculty members, elected on an at-large basis and representing (and engaged in teaching in) each of the undergraduate, online master's and doctoral programs, a nonvoting student member elected by the Public Health Student Association and several ex-officio nonvoting members.	Heather Hoffman (co-chair; DBB) Scott Quinlan (co-chair; EPI) Robert Canales (EPH) Heather Young (EPI) Amanda Visek (EXNS) John Sandberg (GH) Lorens Helmchen (HPM) Monica Ruiz (PCH) Carla Berg (PCH) Kim Robien (EXNS) Jonathan Lancaster (MPH, Epidemiology) Sara Wilenksy (ex-officio; HPM) George Gray (ex-officio; EOH) Jane Hyatt Thorpe (ex-officio; HPM) Katherine Puskarz (ex-officio)
Admissions	Representatives elected by the governing faculty of each department which may elect up to two departmental representatives, one member elected by the governing faculty of the school to represent the MPH@GW program, a nonvoting student member elected by the Public Health Student Association and several ex-officio nonvoting members. On an annual basis, a chair is elected from its members.	Marcos Perez-Losada (DBB) Angelo Elmi (DBB) Jordan Kuiper (EOH) Manya Magnus (EPI) Karina Lora (Co-Chair; EXNS) Adam Richards (Co-Chair; GH) Melissa Goldstein (HPM) Leah Masselink (HPM) Khadidiatou Ndiaye (PCH) Christina Heminger (PCH) George Gray (ex-officio; EOH) Gene Migliaccio (ex-officio; GH) Heather Renault (ex-officio) Jane Hyatt Thorpe (ex-officio; HPM) Rusha Patel (MPH, Global Health Program Design, Monitoring and Evaluation)
Research	One faculty member (who meets specific requirements) is elected from each department, two nonvoting doctoral students elected by their respective constituencies (one from the DrPH program and one from the PhD program) and at least one ex-officio nonvoting member. On an annual basis, a chair is elected from its members.	Ionut Bebu (DBB) Cindy Liu (EOH) Debra Bernat (EPI) Sameera Talegawker (EXNS) Emily Smith (Chair; GH, EXNS) Ali Moghtaderi (HPM) Katy Roche (PCH) Adnan Hyder (ex-officio; Senior Associate Dean for Research and Innovation) Rebecca Clifton (ex-officio; EPI) Brendan Fries (PhD, Global Public Health Science)
Student Academic Appeals	Members are elected on an at-large basis by the faculty. On an annual basis, a chair is elected from its members.	Melinda Powers (EPI) Bob Bonar (Chair; HPM) Adam Ciarleglio (DBB) Seble Frehywot (GH) Peter LaPuma (EOH) Monica Ruiz (PCH) Beverly Westerman (EXNS)

Committee	Membership Formula	Current Members (Dept, Program, Title)
Executive Advisory	Dean, chair of each department, associate deans, three faculty members elected at large by the faculty, the nonvoting president of the Public Health Student Association, a nonvoting doctoral student elected by peers and invited guests.	Scott Evans (DBB Chair) Jennifer Sacheck (EXNS Chair) James Tielsch (GH Chair) Anne Markus (HPM Chair) Deanne Kerrigan (PCH Chair) Manya Magnus (EPI Chair) Susan Anenberg (EOH Chair) Karen McDonnell (PCH, Faculty Rep) Melissa Goldstein (HPM, Faculty Rep) Rob van Dam (EXNS, Faculty Rep) Lynn Goldman (EOH, Dean) Natasha Kazeem (Executive Dean for Operations) Jane Hyatt Thorpe (HPM, Senior Associate Dean for Academic, Student and Faculty Affairs) Adnan Hyder (GH, Senior Associate Dean for Research and Innovation) George Gray (EOH, Associate Dean for MPH Programs) Gene Migliaccio (GH, Associate Dean for Applied Public Health) Heather Renault (Assistant Dean for Student Affairs) Monica Partsch (Assistant Dean for Faculty Affairs) Sara Wilensky (HPM, Associate Dean for Undergraduate Education) Lorien Abroms (PCH, Associate Dean for PhD and MS Programs) Andrew Wiss (Assistant Dean for Academic Innovation) Wanda Nicholson (PCH, Senior Associate Dean for Diversity, Equity and Inclusion) Meredith Enish (Finance) Coreene Daniels (Human Resources) Jackie Wood (Associate VP and Chief Development Officer) Sloane Hurst (Communications) Stacey DiLorenzo (Executive Dean for External Relations) Paige Kulie (PhD, Health Policy) Radha Vakkalagadda (MPH, Health Promotion)

Committee	Membership Formula	Current Members (Dept, Program, Title)
Diversity, Equity and Inclusion	Four faculty members elected from among the governing faculty of the school on an at-large basis, three staff members elected on an at-large basis, three student members from each of the three degree programs (undergraduate, master's and doctoral), an ex-officio associate dean, appointed by the Dean and other nonvoting members. On an annual basis, a chair is elected from its members.	Mark Edberg (PCH, Co-Chair) Wendy Ellis (GH, Co-Chair) Loretta DiPietro (EXNS) Jennifer Sacheck (EXNS) Robin Delk (staff) Shamaah Walls (Research) Natasha Kazeem (ex-officio) Wanda Nicholson (ex-officio) Kammikia Barnes (MPH, Community-Oriented Primary Care) Jasmine Charter-Harris (PhD, Exercise Physiology and Applied Nutrition) Mayah Bourne (BS, Exercise Science)
Rules	Members elected on an at-large basis by the faculty. On an annual basis, a chair is elected from its members.	Zoe Beckerman (HPM) Todd Miller (Chair; EXNS) Anne Markus (HPM) Jonathon Rendina (EPI) John Sandberg (GH) Manya Magnus (EPI)
Decanal Selection (ad hoc)	Members set forth in the Faculty Code Procedures.	n/a
Practice (ad hoc)	Associate Dean for Public Health Practice, departmental practice directors and one system support representative.	Gene Migliaccio (GH) Jennifer Skillicorn (OAPH) Geri Kemper Seeley (staff) Elizabeth Mason (staff) Peter LaPuma (EOH) Veronica Southerland (EOH) Georgia Middleditch (EOH) Joe Schmitthenner (EPI) Michelle Stevens (EXNS) Nino Paichadze (GH) Chloe (Nick) Nickel (GH) Melissa Goldstein (HPM) Lara Cartwright-Smith (HPM) Leticia Chavarria (HPM) Kelley Vargo (MPH@GW) Christiana Ebiasah (MPH@GW) Laura Vasisko (MPH@GW) Stephanie Shorten (MPH@GW) Malika Hook Muhammad (MPH@GW) Ann Rich (MPH@GW) Iris An (MPH@GW) Taylor Burke (MPH@GW) Nitasha Nagaraj (MPH@GW) Courtney Coffey (PCH) Katie Fernandez (PCH)

Committee	Membership Formula	Current Members (Dept, Program, Title)
Student Affairs Advisory (ad hoc)	Two undergraduate students, seven graduate students and one doctoral student, seven members of the faculty reflecting the diversity of GWSPH and the Associate Dean of Student Services (ex-officio).	n/a Heather Renault (ex-officio, Assistant Dean for Student Affairs)
PhD Directors (ad hoc)	All PhD program directors, the Associate Dean for PhD/MS Programs and one elected PhD student representative.	Lorien Abroms (PCH, Associate Dean for PhD and MS Programs) Kate Applebaum (EOH) Lance Price (EOH) Heather Young (EPI) Jennifer Sacheck (EXNS) Nirbhay Kumar (GH) Leighton Ku (HPM) Avi Dor (HPM) Keith Crandall (DBB) Guoqing Diao (DBB) Toshi Hamasaki (DBB) Jeffrey Bingenheimer (PCH) Alyssa Khan (PhD, Global Public Health Science student) Adnan Hyder (ex-officio, GH, Senior Associate Dean for Research and Innovation)
Lab PI Committee (ad hoc)	GWSPH researchers, research support and lab support.	Matthew Barberio (Chair; EXNS) Adnan Hyder (ex-officio, Senior Associate Dean for Research and Innovation) Ali Rahnavard (DBB) Andrew Stranieri (EXNS) Bahareh Sarrami (Operations and Planning) Christopher Mores (GH) Cindy Liu (EOH) Clifford Hayashi (Lab Tech) Gregory Davis (Research) Imomotimi Imomotebegha (Research) Jack Villani (Lab Manager) Jeanne Jordan (EPI) John Twomey (GWSPH Labs) Kamwing Jair (Epi) Keith Crandall (DBB) Kyle Levers (EXNS) Lance Price (EOH) Mimi Ghosh (EPI) Natasha Kazeem (Executive Associate Dean of Operations and Chief Operating Officer) Nirbhay Kumar (GH) Yi Cao (Postdoc)

Committee	Membership Formula	Current Members (Dept, Program, Title)
MPH Advisory Committee (ad hoc)	Key members of the MPH administrative team.	George Gray (EOH, Dean of MPH Programs) Scott Quinlan (EPI) Lara Cartright-Smith (HPM) Zoe Beckerman (HPM) Loretta DiPietro (EXNS) Olga Price (PCH) Heather Hoffman (DBB) Jennifer Seager (GH) Heather Young (EPI) Sarah Baird (GH) Andy Wiss (Academic Innovation) Kreda Boci (Program Operations) Iris An (MPH@GW)

See ERF > Criterion A > Criterion A1 > A1.1: Committees.

2) *Briefly describe which committee(s) or other responsible parties make decisions on each of the following areas and how the decisions are made:*

a) *degree requirements*

The GW Office of the Provost sets academic policies regarding academic integrity, credit hours and syllabi content, as well as guidelines for certificate, combined degree, doctoral and accelerated programs. The Office of Registrar sets academic policies regarding undergraduate transfer credits and is responsible for reviewing student records and awarding the degree upon graduation.

GWSPH establishes policies for degree requirements housed within the school, meeting the minimum requirements set by the university. Major initiatives, such as launching a new degree program, changing the credit requirements for an existing program or developing new modalities for an existing degree program, typically originate in the departments or schoolwide program committees in consultation with the Dean's office. Such initiatives are reviewed by the respective departmental curriculum committees or schoolwide program committee, before going through the GWSPH Curriculum Committee and Executive Advisory Committee review and approval process, followed by review and approval by the University Provost. The process of implementing new and modifications to existing courses and programs under the purview of the school are outlined in the Curriculum Guidebook (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

b) *curriculum design*

Instructors, with guidance from course leads, program directors, school and department leadership and accreditation requirements, are generally responsible for curriculum design. All departments have curriculum committees that periodically and regularly evaluate course, program and curricular content. For courses required in multiple departments, faculty regularly connect across departments to ensure content needs are met. Depending on the type of curricular change, varying levels of approval within the school and university are required, as outlined in the Curriculum Guidebook (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents). The most common updates to syllabi (e.g., changes to readings and assignment due dates) do not require any departmental or GWSPH Curriculum Committee approval and are at the sole discretion of the instructor. Departmental

curriculum committee approval is required for minor changes to syllabi (e.g., course titles, prerequisites, course descriptions, etc.) or courses (e.g., admissions requirements, program missions, etc.) that must be updated in the University Bulletin. GWSPH Curriculum Committee approval is required for major changes such as new program, concentration or course proposals and new program-specific competencies. A fourth tier of approval, the University Board of Trustees, is required only for new doctoral program proposals.

c) *student assessment policies and processes*

Instructors initially determine the methods of student assessment and develop grading rubrics for their courses. Instructors follow established policies and procedures such as using the uniform grading scale and maintaining assessments linked to competencies when developing assignments. The school maintains template syllabi for undergraduate, graduate and online courses that are reviewed and updated annually to support instructors. Assessments are reviewed when the syllabi are initially and periodically reviewed through the processes mentioned above in department and schoolwide program committees as well as the GWSPH Curriculum Committee.

Additionally, every seven years, departments conduct an Academic Program Review, which requires a thorough examination of a department's programs, program competencies and assessments of those competencies (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

d) *admissions policies and/or decisions*

The admissions process is managed by two different divisions depending on the type of program. The GW Office of Undergraduate Admissions manages undergraduate admissions, GWSPH manages all graduate residential degree admissions, and GWSPH and 2U jointly manage online degree admissions with all admissions decisions made by GWSPH. The GWSPH Admissions Committee determines policies and standards for admission to all GWSPH programs, including the ones managed by GW (i.e., undergraduate) and 2U. GWSPH Admissions works closely with school and department leadership and program directors to develop marketing and recruitment messages as well as identifying the best practices for applicant engagement and yield. While GWSPH sets eligibility criteria for undergraduate admissions, admissions decisions are made by the university, except in cases of readmittance. All graduate applications (residential and online) are reviewed by GWSPH faculty, who make the final admittance decision.

The university provides relevant data to the school through the Graduate Enrollment Management Committee for graduate students and the Undergraduate Admissions Team for bachelor's degree programs.

e) *faculty recruitment and promotion*

<u>Recruitment and Appointment</u>
Every year, department chairs present their faculty requests to the GWSPH Dean, who collates and prioritizes the requests on behalf of the school. The Dean submits these requests to the Provost, who grants approval for faculty lines. Approval of faculty lines are based on a myriad of factors including, but not limited to, budget, student enrollment numbers, strategic planning and university initiatives.

Once the Provost approves a faculty line, department chairs organize a search committee for each faculty position. Search committees generally have three to five members, of whom

one is elected chair and one is appointed as a diversity advocate. Search committees are responsible for drafting the position advertisement and identifying outreach activities. At the bare minimum, positions are posted to the *Chronicle of Higher Education* with a diversity boost. Advertisements and strategies are approved by Faculty Affairs and the Dean. Thirty days post-advertisement, search committees may begin reviewing applications and selecting candidates for interview. The search committee determines the interview process and candidate schedule. Finalists for each faculty position are typically interviewed by the Dean. Search committees make their candidate recommendation(s) to the department chair, who makes the final hiring decision. Based on guidance from the Dean, Assistant Dean for Faculty Affairs and Program Development and search committee, the offer letter states a recommended salary and rank, pending approval from the appropriate Appointment, Promotion and Tenure (APT) Committee(s) as well as the Provost.

Accepted offers at the rank of associate or full professor require a review and approval by the department APT committee and the GWSPH APT Committee. Accepted offers at the assistant professor rank generally are reviewed and approved only at the department APT committee level. At the GWSPH APT Committee level, votes may only be cast for candidates by faculty at the same rank level or higher or for tenure by tenured faculty. In either case, new hires require concurrence by the Dean and approval by the Provost, who issues the formal offer letters.

Promotion

Faculty performance is annually reviewed by chairs of each department. As part of this review process, chairs propose merit increases and nominate faculty for promotion and/or tenure. Faculty may also self-nominate for promotion. Faculty prepare a promotion dossier which is reviewed by the department APT committee. If the promotion is to the associate or full professor rank, the GWSPH APT Committee also reviews the promotion dossier. Again, at the GWSPH APT Committee level, votes may only be cast for promotion by faculty at the same rank level or higher or for tenure by tenured faculty. All faculty rank decisions are reviewed and approved by the Dean who makes the recommendations to the Provost. Tenure decisions must be approved by the Board of Trustees.

f) research and service activities

The academic department chairs, working with the Dean, establish annual expectations for research and service for each faculty member. Overall policies for faculty service and research are included in the department and school APT guidelines as well as a faculty coverage guidance document (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents). The GWSPH Research Committee provides faculty participation in decisions related to the research activities of the school.

3) A copy of the bylaws or other policy documents that determine the rights and obligations of administrators, faculty and students in governance of the school.

See ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents.

4) Briefly describe how faculty contribute to decision-making activities in the broader institutional setting, including a sample of faculty memberships and/or leadership positions on committees external to the unit of accreditation.

GWSPH faculty members are actively engaged in the university community and governance. Faculty serve on both formal and informal ad hoc university committees. Below are committees that GWSPH members have served on in the last year.

University Committee	GWSPH Members (Dept, Title)
Advisory Council for Research (ACR)	Adnan Hyder (GH, Senior Associate Dean for Research and Innovation) Candice Chen (HPM) Ali Rahnavard (DBB) Jennifer Seager (GH) Tamara Taggart (PCH) Marinella Temprosa (DBB)
Collaborative Research Administrators Group (CRAG)	Michael Burdan (POD) Theresa Chapman (POD) Rita Dikdan (POD) Adnan Hyder (ex-officio, GH, Senior Associate Dean for Research and Innovation)
Council of Associate Academic Deans	Jane Hyatt Thorpe (HPM, Senior Associate Dean for Academic, Student and Faculty Affairs)
Council of Deans	Lynn Goldman (EOH, Dean)
Council of Graduate Deans	Adnan Hyder (GH, Senior Associate Dean for Research and Innovation) Jane Hyatt Thorpe (HPM, Senior Associate Dean for Academic, Student and Faculty Affairs)
Council of Undergraduate Deans	Sara Wilensky (HPM, Associate Dean of Undergraduate Education)
Graduate Enrollment Management	Heather Renault (Assistant Dean for Student Services)
Institutional Biosafety	Mimi Ghosh (Epi)
Institutional Review Board	Paul Ndebele (ORE, GH) Melissa Goldstein (HPM)
POD Leadership Committee	Adnan Hyder (GH, Senior Associate Dean for Research and Innovation)
Research Leadership Council (RLC)	Adnan Hyder (GH, Senior Associate Dean for Research and Innovation)
University Leadership Council	Lynn Goldman (EOH, Dean)
Faculty Senate	Susan Anenberg (EOH) James Tielsch (GH) Amita Vyas (PCH)

University Committee	**GWSPH Members (Dept, Title)**
University Faculty Senate Sub-Committees *Appointment, Salary and Promotion Policies*	Wendy Ellis (GH) Amita Vyas (PCH) Heather Young (EPI)
Athletics and Recreation	Kyle Levers (EXNS) Karen McDonnell (PCH) Scott Quinlan (EPI) Mark Tatelbaum (HPM) Heather Young (EPI)
Educational Policy and Technology	Amita Vyas (Faculty Senate Liaison; PCH) Scott Quinlan (EPI) Jane Hyatt Thorpe (HPM, Senior Associate Dean for Academic, Student and Faculty Affairs) Margaret Ulfers (EPI)
Fiscal Planning and Budgeting	James Tielsch (GH)
Honors and Academic Convocations	Leonard Friedman (HPM)
Libraries	Marinella Temprosa (DBB)
Physical Facilities and Safety	James Tielsch (Chair, GH) Kyle Levers (EXNS) Wendy Ellis (nonvoting, GH) Monica Ruiz (nonvoting, PCH) Richard Southby (nonvoting, emeritus GH)
Professional Ethics and Academic Freedom	Guenevere Burke (HPM) Kurt Darr (emeritus HPM) Jennifer Seager (GH)
Research	Karen McDonnell (Co-Chair, PCH) Kate Applebaum (EOH) Keith Crandall (DBB) Adnan Hyder (nonvoting, GH, Senior Associate Dean for Research and Innovation) Nirbhay Kumar (GH) Rob Van Dam (EXNS)
University and Urban Affairs	Sara Wilensky (HPM, Associate Dean of Undergraduate Education)

5) *Describe how full-time and part-time faculty regularly interact with their colleagues (self-study document) and provide documentation of recent interactions, which may include minutes, attendee lists, etc.*

Full-time and part-time faculty regularly interact with their colleagues during their routine instructional, research and service activities. This includes, but is not limited to, co-teaching courses, serving on a faculty or student committee, attending a culminating experience presentation, and attending school and student events.

Full-time GWSPH faculty are expected to attend monthly departmental faculty meetings. Generally, fewer part-time faculty teach in the residential programs and an even smaller number of these instructors teach core classes. The one exception is regular, part-time faculty, who usually commit 30% to 80% of their time to the school and attend more monthly meetings and are more likely to teach core classes. Meeting attendance is robust; for example, 95 to 100% of full-time Department of Health Policy and Management faculty attend monthly departmental meetings, and two of the three part-time faculty who teach for the department do so as well. These faculty are also the only part-time faculty who teach core courses in the department (see ERF > Criterion A > Criterion A1 > A1.5: Faculty Interaction). The master's programs in the Department of Health Policy and Management (MPH in Health Policy, MHA and MHA@GW) also hold regular program meetings with similar levels of attendance as the departmental monthly meetings. Both part-time and full-time faculty may volunteer to hold a membership position on one of the departmental committees (curriculum, APT, research and admissions). While only full-time faculty may be elected to certain schoolwide committees, part-time faculty may attend meetings, as appropriate, to promote key issues.

Biannually, GWSPH hosts a faculty assembly which is open to all GWSPH faculty. Topics such as policy and faculty and personnel changes, program and degree updates, research updates, status of the school's budget and recognition of award winners are discussed.

Part-time faculty members are included on all mass communications of the school. This includes, but is not limited to, the GWSPH faculty and staff weekly newsletter, start-of-term emails and broadcast emails from GWSPH leadership and program directors. The GWSPH website has a dedicated section for faculty resources. Faculty resources and program-specific and schoolwide content are also discussed during new faculty orientation. Contact information for GWSPH academic leadership is shared widely, and faculty are encouraged to reach out for support or guidance.

Most direct interactions between online part-time and full-time faculty are at the course level, with course directors and section leads meeting weekly or biweekly to discuss course content and assignments. In the MPH@GW program, part-time and full-time faculty are invited to the MPH@GW Faculty Forum, held three times per academic year. Similarly, faculty in the MHA@GW program convene quarterly. In both forums, faculty discuss program quality and student learning outcomes, which inform faculty development and program quality improvement activities. Approximately half of invited part-time faculty attend the Faculty Forum, with heavier attendance among newer instructors. After each term ends, course directors meet in the Community of Course Directors to debrief on lessons learned. While most course directors are full-time GWSPH faculty, there are a select few part-time faculty members who are eminently qualified and hold the course director position and, thus, attend these meetings.

See ERF > Criterion A > Criterion A1 > A1.5: Faculty interaction.

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Faculty and staff actively engage in decision-making at GWSPH through both formal and informal committees and channels. Inclusion of faculty and staff is intentional to foster diversity of engagement and viewpoints. For example, in 2021 a new GWSPH Diversity and Inclusion Action Committee launched that includes both faculty and staff members (elected by their peers) as well as student representation. Departments also have ad hoc committees that are formed to address specific issues, as needed. For example, the

Department of Health Policy and Management created faculty and staff affairs, DEI, and research committees to address matters related to professional development, diversity and inclusion issues and research funding, respectively.

- GWSPH has robust part-time faculty who benefit from regular collaboration with full-time faculty on courses intentionally designed to enable team-based approaches to teaching, particularly courses with a high volume of sections.

Challenges

- During the COVID-19 pandemic when operations were fully remote, and even upon return to campus, engagement and interaction have been strained by different in-person, remote and hybrid work schedules as well as technological challenges to fully accommodate hybrid meetings.

Future Plans

- GWSPH continues to consider how to best promote effective and meaningful engagement and interaction across our community, particularly as operations are fully resumed in person while maximizing the benefits of remote participation. The approach has been focused primarily on flexibility while seeking meaningful opportunities for engagement and interaction in a post-COVID-19 environment.

A2. Multi-Partner Schools

Not Applicable

A3. Student Engagement

Students have formal methods to participate in policy making and decision making within the school and the school engages students as members on decision-making bodies whenever appropriate.

1) *Describe student participation in policy making and decision making at the school level, including identification of all student members of school committees over the last three years and student organizations involved in school governance. Schools should focus this discussion on students in public health degree programs.*

   The Public Health Student Association (PHSA) coordinates student representatives for school committees. These committees generally meet virtually, allowing online students to participate. Students from all GWSPH programs are represented, including the online (MHA@GW, MPH@GW and DrPH@GW) and undergraduate programs (see ERF > Criterion A > Criterion A3 > A3.1: Student Organizations).

Academic Year	Committee	Student Representative (Program)
2023–2024	Curriculum	Jonathan Lancaster (MPH, Epidemiology)
	Admissions	Rusha Patel (MPH, Global Health Program Design, Monitoring and Evaluation)
	Research	Brendan Fries (PhD, Global Public Health Science)
	Executive Advisory	Paige Kulie (PhD, Health Policy)[9] Radha Vakkalagadda (MPH, Health Promotion)
	Diversity, Equity and Inclusion	Kammikia Barnes (MPH, Community-Oriented Primary Care) Jasmine Charter-Harris (PhD, Exercise Physiology and Applied Nutrition) Mayah Bourne (BS, Exercise Science)
2022–2023	Curriculum	Sweta Waghela (MPH, Global Environmental Health) through December Radha Vakkalagadda (MPH, Health Promotion) and Christina Richard MPH, Global Environmental Health) beginning January
	Admissions	Prabha Raghavan (MPH, Global Health Program Design, Monitoring and Evaluation)
	Research	Monica Forquer (DrPH, Public Health Generalist)[10] Caitlin Bailey (PhD, Social and Behavioral Health Sciences)
	Executive Advisory	Paige Kulie (PhD, Health Policy) Prabha Raghavan (MPH, Global Health Program Design, Monitoring and Evaluation)
	Diversity, Equity and Inclusion	Kammikia Barnes (MPH, Community-Oriented Primary Care) Jasmine Charter-Harris (PhD, Exercise Physiology and Applied Nutrition)
2021–2022	Curriculum	Conner Hounshell (MPH, Health Policy)
	Admissions	Christina Kelly (MPH@GW, Public Health Generalist)

[9] Graduated with an MPH in Epidemiology from GWSPH
[10] Graduated with an MS in Exercise Science from GWSPH

	Research	Rachel Sadlon (DrPH, Health Behavior)[11] through November Monica Forquer (DrPH, Public Health Generalist) Shaon Lahiri (PhD, Social and Behavioral Health Sciences) through December Morgan Byrne (PhD, Epidemiology)[12] effective January
	Executive Advisory	Brett Wargo (MPH, Health Policy and Community-Oriented Primary Care) through January Conner Hounshell (MPH, Health Policy) beginning February Beth Maclin (PhD, Social and Behavioral Health Sciences)
	Diversity, Equity and Inclusion	Presley Anokye (BS, Public Health) Priscilla Rodriguez (MPH@GW, Public Health Generalist) Simone Sawyer (PhD, Social and Behavioral Health Sciences)

Additionally, student liaisons participate in departmental committees. For example, each department has a curriculum committee, all of which include at least one graduate student member nominated by PHSA. Undergraduate public health students sit on the BS in Public Health Curriculum Committee. Undergraduate students also lead the Student Engagement Committee (part of TEAM Milken), which is responsible for student-led activities. In the Departments of Exercise and Nutrition Sciences and Prevention and Community Health, undergraduate and graduate students participated in the Academic Program Review process, providing input and meeting with site visitors. Students may sit on faculty search committees, as was the case in the Department of Health Policy and Management when the committee recommended MaryBeth Musumeci, JD.

The PHSA was granted "umbrella" authority for the school in 2014–2015, which allows them to sanction GWSPH student organizations and set appropriate budgets. Students who register for onsite classes pay a $3 student activity fee per credit, which supports PHSA's budget. Annually, graduate student organizations are sanctioned and awarded funding by PHSA if they further the goals of PHSA, which are to increase the value of students' education and experiences through events that promote student involvement, facilitate professional development and inspire a sense of community. Currently, there are about a dozen sanctioned graduate student organizations including:

- Black Public Health Student Network
- Environmental Justice Action Network
- Global Health Network
- Health e-Leaders Association
- Health Policy Students Association
- Master in Health Administration Student Association
- Maternal and Child Health Student Network
- Milken por la Salud
- NACCHO Student Group

Doctoral students, both PhD and DrPH, may participate in the Milken Doctoral Student Association (MDSA). This organization fosters an interactive space for current students to connect with colleagues across departments and raise any doctoral-related questions and concerns to be discussed. MDSA aims to provide various networking and career events to PhD and DrPH students (see ERF > Criterion A > Criterion A3 > A3.1: Student Organizations). One

[11] Graduated with a Graduate Certificate in Health Policy from GWSPH
[12] Graduated with an MPH in Biostatistics from GWSPH

PhD student representative also sits on the PhD Director Committee which is tasked with handling programmatic issues across all PhD programs.

Undergraduate students may participate in TEAM Milken. Through the Student Engagement Committee, students provide feedback and identify student concerns (see Criterion F2).

Students informally engage in decision-making through their participation in school and department committees, an "open door" policy, and via student and alum groups. The Senior Associate Dean for Academic, Student and Faculty Affairs and the Assistant Dean for Student Services connect with students during orientation and regularly throughout the year, including through virtual and in-person "Meet the Dean" events. Students are always encouraged to reach out if they have questions, concerns or would like to talk. Additionally, GWSPH has some very active alum groups including the MHA and Delta Omega alums. These graduates engage with current faculty and provide informal feedback that influences policy and decision-making.

2) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Student organizations are student led with guidance from faculty supervisors.
- Students are actively engaged in GWSPH governance through schoolwide and department committees, providing much appreciated feedback.
- Student engagement in the last year has been robust as they have activated around public health issues, networking and engaging with the broader campus community.
- Student organizations have made efforts to engage our online students and others who participate less frequently. For example, PHSA has a representative from the MPH@GW program and the Health eLeaders Association is specifically designed for MHA@GW student involvement and representation.
- Significant growth of our doctoral programs led to the creation of MDSA, which has been active, engaging students and supporting collaboration across programs and with the Office of PhD and MS Programs.

Challenges

- During the virtual years of COVID-19, student engagement fell drastically. It was slow to improve during the first two years after the return to on-campus activities.
- Student interest and involvement in student organizations is inconsistent. The level of engagement varies significantly, particularly between onsite and online students and full-time and part-time students with other commitments (e.g., employment, families). Additionally, many master's level students complete their degree programs in about two years, leading to a high rate of turnover of student representatives on GWSPH governance committees.

Future Plans

- As we embrace the transition into a more robust post-COVID-19 era, GWSPH remains dedicated to maximizing diversity and inclusion while continually enhancing the student experience. Leveraging newfound technological capabilities and advancements, we are fervently committed to fostering student engagement, both in person and online, through enriched programming and interactive sessions. We recognize that this approach is pivotal in ensuring that all students, irrespective of their mode of learning, feel an integral part of our vibrant academic community. By prioritizing these efforts, we aim to create an inclusive and dynamic learning environment that caters to the diverse needs and aspirations of our student body, amplifying their academic journey and fostering a sense of belonging that transcends physical boundaries.

A4. Autonomy for Schools of Public Health

A school of public health operates at the highest level of organizational status and independence available within the university context. If there are other professional schools in the same university (e.g., medicine, nursing, law, etc.), the school of public health shall have the same degree of independence accorded to those professional schools. Independence and status are viewed within the context of institutional policies, procedures and practices.

1) *Briefly describe the school's reporting lines up to the institution's chief executive officer. The response may refer to the organizational chart provided in the introduction.*

   The GWSPH Dean reports directly to the Provost and Executive Vice President for Academic Affairs, who in turn reports directly to the President of GW. This relationship is showcased in the organizational chart in the Introduction. The Dean has regular meetings with the Provost and President, both one-on-one and with the other deans.

2) *Describe the reporting lines and levels of autonomy of other professional schools located in the same institution and identify any differences between the school of public health's reporting lines/level of autonomy and those of other units.*

   The deans of all schools at GW report directly to the Provost and Executive Vice President for Academic Affairs. GWSPH and the other schools have generally the same levels of autonomy and reporting lines, with one exception. GWSPH and two other professional schools at GW, the School of Medicine and Health Sciences and the Law School, are considered "closed schools" for budget purposes. See Criterion C1 for more details.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths

   - The Dean at GWSPH has direct access to the Provost and Executive Vice President for Academic Affairs, as well as the deans at other GW schools and leaders of GW's administrative and research support offices. As a result, university leadership is responsive to our requests and knowledgeable about what we do.
   - In the current structure, due to the high enrollment and research productivity, GWSPH has an important role within the university and a special place in terms of decision making. For example, during the COVID-19 pandemic, GWSPH played a key role in guiding the university.

   Challenges

   - There have been several leadership changes at the university over the last few years, including the president, provost and deans of several schools as well as top leaders within several functional areas (general counsel, research, communications, human resources, IT and finance). These leadership changes, while mostly positive, have created various challenges with continuity and consistency of operations during a particularly challenging time as the university was navigating COVID-19.
   - Public health is a growing and currently high-profile field, and remaining competitive in both education and research domains requires a nimble and evolving decision-making structure. This will require more authority within the school, and it will require more autonomy with senior leadership of GWSPH to respond to opportunities in the field.

Future Plans

- We are excited to now have a permanent provost (effective February 18, 2022), new deans and vice presidents and a new president (effective July 1, 2023) after an intensive 18-month search. We look forward to the leadership that they will bring to the university.
- Our plans are to grow the school in ways that will make it one of the top 10 schools in the country. This will require not only strategy but also an enabling environment for growth, rapid decision-making and a concerted level of support for the school. We hope to work with GW and university leadership to secure this support.
- GWSPH will seek the trust and delegation of authority to make critical changes and choices over the next five years to achieve eminence among our larger and better-funded peers. This will include greater autonomy in terms of finances, human resources and key operations across the school. We hope to work closely with the provost and relevant officers to ensure such delegation of authority to support quick and strategic decisions toward increasing excellence.

A5. Degree Offerings in Schools of Public Health

A school of public health offers a professional public health master's degree (e.g., MPH) in at least three concentrations representing at least three distinct sub-disciplinary areas in public health and public health doctoral degree programs (academic or professional) in at least two concentrations representing at least two distinct sub-disciplinary areas in public health. A school may offer more degrees or concentrations at either degree level.

1) *Affirm that the school offers professional public health master's degree concentrations in at least three areas and public health doctoral degree programs of study in at least two areas. Template Intro-1 may be referenced for this purpose.*

   GWSPH offers bachelor, dual degree, master and doctoral level degrees, both academic and professional offerings, including public health and non-public health, across a number of majors, program areas and concentrations, easily satisfying CEPH criteria for diversity of program programs. See Template Intro-1.

2) *An official catalog or bulletin that lists the degrees offered by the school.*

   The official catalog, known as the GW Bulletin, is available online.

B1. Guiding Statements

The school defines a vision that describes how the community/world will be different if the school achieves its aims.

The school defines a mission statement that identifies what the school will accomplish operationally in its instructional, community engagement and scholarly activities. The mission may also define the school's setting or community and priority population(s).

The school defines goals that describe strategies to accomplish the defined mission.

The school defines a statement of values that informs stakeholders about its core principles, beliefs and priorities.

1) *The school's vision, mission, goals and values.*

GWSPH finalized a strategic plan in 2019, shortly after the most recent reaccreditation in 2016. The collaborative process among stakeholders led to the creation of a vision, mission, goals and values to enable the growth and develop GWSPH as a continuous leader in public health.

Vision
Healthier and safer communities powered by public health.

Mission
We advance population health, well-being and social justice locally, nationally and globally by:

- Applying public health knowledge to enhance policy, practice and management;
- Conducting rigorous basic, applied and translational research; and
- Educating the next generation of public health leaders, policy makers, practitioners, scientists, advocates and managers.

Goals[13]

- Provide an innovative, comprehensive public health education that produces graduates who advance population health, well-being and social justice;
- Conduct research that addresses local, national and international public health challenges; and
- Strengthen our schoolwide commitment to our community, diversity and inclusion, and culture of service.

Values
GWSPH shares the following core values:

- Achieving excellence in all of our endeavors;
- Promoting a culture of service that respects the contributions of all members of our community;
- Embracing social justice and diversity as we work to realize health equity for all individuals and communities, however they are identified;
- Aspiring to innovative ethical and evidence-based policy, research, practice, management and pedagogy; and
- Engaging in sustainable practices that promote healthy environments.

[13] These goals are a distillation of the goals and subgoals identified in the 2020 strategic plan.

2) *If applicable, a school-specific strategic plan or other comparable document.*

See ERF > Criterion B > Criterion B1 > B1.2: Strategic Plan.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Created to further our mission to champion global health advancement, our current strategic plan not only delineates strategic objectives but also embodies our commitment to fostering transformative outcomes. Harnessing the dynamic synergy of education, research and innovation, we sculpted a visionary path that paves the way for a healthier future for all.

At GWSPH, we honed a robust process, marked by inclusivity and transparency, which engaged every member of our vibrant academic community. Through a series of open and candid discussions in 2019, we coalesced diverse perspectives, crafting a clear trajectory that steers us toward impactful milestones in the years ahead. By establishing multifaceted committees dedicated to soliciting insights on critical aspects such as curriculum enrichment, degree programs, cutting-edge research and comprehensive recruitment strategies, we fostered an environment where every voice was valued and heard.

Through this collective journey, we not only identified our strengths as an institution but also set our sights on a future defined by continued collaboration, pioneering research and a steadfast commitment to fostering global health equity.

Strengths

- Our mission, values and goals were developed through a comprehensive and collaborative strategic planning process that involved university and school leadership, external stakeholders, faculty, staff and students. The Dean provides regular updates on implementation of our strategic plan through the biannual faculty and staff meetings.
- In 2022, GWSPH produced a Progress Report to highlight recent accomplishments aligned with the strategic plan such as the MPH@GW being ranked No. 1 by *Fortune* for online MPH programs, Associate Professor Cindy Liu winning the GW President's Award for her efforts combatting COVID-19 and the development of new graduate programs at GWSPH.

Challenges

- Since we developed our strategic plan, we experienced two presidential transition and one provost transition. Now with new, permanent university leadership, GW will be developing a new university-wide strategic plan, which will inform GWSPH's upcoming strategic plans.
- The world of public health underwent seismic transformations, not only in the context of the COVID-19 pandemic and its impacts on the public health system in the US and globally, but also Black Lives Matter and the impact of structural racism on health, declines in US life expectancy, rampant public health misinformation, the opioid epidemic, and global climate change and health. These changes called on us to shift our priorities (as laid out in our Objectives); however, our vision, mission statement, goals and values were important guideposts that helped us prioritize even while we shifted our emphases.

Future Plans

- The university is working toward a new strategic plan that will largely be built from the schools upward.

- Demonstrating our commitment to inclusion and guided by university priorities, GWSPH is set to embark on a new strategic planning journey in AY 2024, laying the groundwork for a comprehensive new strategic plan to be unveiled in AY 2025. This strategic endeavor will not only empower every member of our community but will also help to establish a fresh set of programmatic and facilitating goals that reflect our collective vision for the future.

B2. Evaluation and Quality Improvement

The school defines and consistently implements an evaluation plan that fulfills the following functions:

- **includes all measures listed in Appendix 1 in these Accreditation Criteria**
- **provides information that allows the school to determine its effectiveness in advancing its mission and goals (as defined in Criterion B1)**
    - **Measures must capture all aspects of the unit's mission and goals. In most cases, this will require supplementing the measures captured in Appendix 1 with additional measures that address the unit's unique context.**
- **defines a process to engage in regular, substantive review of evaluation findings, as well as strategic discussions about their implications**
- **allows the school to make data-driven quality improvements e.g., in curriculum, student services, advising, faculty functions, research and extramural service and operations, as appropriate**

1) *Present an evaluation plan in the format of Template B2-1 that lists the following for each required element in Appendix 1:*
    a. *the specific data source(s) for each listed element (e.g., alum survey, student database)*
    b. *a brief summary of the method of compiling or extracting information from the data source*
    c. *the entity or entities (generally a committee or group) responsible for reviewing and discussing each element and recommending needed improvements, when applicable*
    d. *the timeline for review (e.g., monthly, at each semester's end, annually in September)*

Template B2-1

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Student enrollment	*Intro-2*	Admissions data from SOPHAS, 2U and the Common Application are compiled by the various admissions departments. Program directors review the data prior to each matriculation term. Program directors meet with department chairs annually to review enrollment. Enrollment numbers are also discussed in the MPH Advisory Committee. Departments also discuss enrollment numbers during the APR process, every seven years.	GWSPH Admissions Committee Departmental admissions committees Executive Committee	X		
Unit-Defined Measure: *Innovative educational offerings that address population health, well-being and social justice*	*B2-1*	Curriculum committees at varying levels review syllabi for innovative educational offerings. Meetings are held monthly at both the department and school levels. Departments may discuss their innovative educational offerings every seven years during the APR process.	GWSPH Curriculum Committee Departmental curriculum committees	X		

Measures	Criteria or *Template*	Data source and method of analysis	Who has review and decision-making responsibility?	Does it measure Goal 1?	Does it measure Goal 2?	Does it measure Goal 3?
Unit-Defined Measure: *Alumni perceptions of their readiness to advance population health, well-being and social justice*	*B2-1*	Recent alums (≤3 years post-graduation) are surveyed and interviewed regarding their perceptions of their readiness to advance population health, well-being and social justice. The Director of Academic Planning and Accreditation summarizes the results, which are shared with the GWSPH Curriculum Committee every three years.	GWSPH Curriculum Committee Office of Academic Affairs	X		
Unit-Defined Measure: *Required courses that address social justice*	*B2-1*	Scan of course syllabi by the departmental content experts. Data are reviewed by the Office of Academics Affairs for potential gaps or duplication of content. Schoolwide review occurs every five years.	GWSPH Curriculum Committee Departmental curriculum committee MPH Advisory Committee	X		
Unit-Defined Measure: *Pilot funding support*	*B2-1*	The research budget is compiled and reviewed by the Office of Research Excellence under the guidance of Senior Associate Dean for Research and Innovation annually. Funding decisions are made by the GWSPH Research Committee. The budget is further reviewed by the Dean during the annual budget process.	Office of Research Excellence GWSPH Research Committee Departmental research committees		X	

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Unit-Defined Measure: *Faculty who act as Primary Investigators (PIs)*	*B2-1*	The Office of Research Excellence and GW POD 2 compiles a list of faculty who serve as PIs on IRB submissions annually. These data are also reviewed during the annual performance review process.	Office of Academic Affairs Office of Research Excellence GWSPH Research Committee Departmental research committees GWSPH APT Committee Departmental APT committees		X	
Unit-Defined Measure: *Faculty and students presenting at national and international conferences*	*B2-1*	Faculty presentations (students listed) are available on faculty CVs. Data are reviewed annually by the Office of Academics Affairs/Office of Research Excellence/Dean and by departments during the annual performance review.	Office of Academic Affairs Office of Research Excellence GWSPH Research Committee Departmental research committees		X	

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Unit-Defined Measure: *Student and faculty involvement in service projects*	*B2-1*	The Office of Research Excellence compiles a list of faculty and students who are involved in research projects. The Office of Applied Public Health tracks faculty and student involvement in the Urban Health Project and other service projects. Data are reviewed annually by the Office of Academics Affairs/Office of Research Excellence/Dean and by departments during the annual performance review. The Office of Applied Public Health produces an annual report highlighting projects. Results are also reported to the Dean as progress toward strategic plan. Departments may highlight full-time faculty service projects in their APR.	Office of Academic Affairs Office of Research Excellence GWSPH Research Committee Departmental research committees GWSPH Practice Committee			X
At least three specific examples of improvements undertaken in the last three years based on the evaluation plan. At least one of the changes must relate to an area other than the curriculum.	*B2-2*					

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Graduation rates	*B3-1*	DegreeMAP is used to confirm readiness for graduation. The GWSPH Office of Student Records compiles these data for the school, which are processed by the University Registrar and reviewed by program directors and department chairs three times per year (in accordance with graduation dates). The Office of Academic Affairs reviews all graduation rates prior to submission to CEPH. Rates are discussed and reviewed at Executive Committee once per year and at the MPH Advisory Committee, as appropriate.	Office of Academic Affairs Executive Committee GWSPH Admissions Committee Departmental admissions committees MPH Advisory Committee	X		
Doctoral student progression (e.g., number newly admitted, number completed coursework)	*B3-2*	Admissions data from SOPHAS and 2U are compiled by the various admissions departments and reviewed by program directors and the Offices of Applied Public Health (DrPH) and PhD/MS Programs before the start of each term. Student coursework is monitored in DegreeMAP by academic advisors and the GWSPH Office of Student Records. Data are reviewed by program directors.	GWSPH Practice Committee PhD Committee DrPH Committee GWSPH Admissions Committee Departmental admissions committees	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Post-graduation outcomes (e.g., employment, enrollment in further education)	*B4-1*	Students/alums supply post-graduate outcomes via the Graduation and Alum Surveys and informal conversations with faculty/staff. Informal conversations with employers may also supply some additional information. Data are reviewed by the GWSPH Office of Career Services, program directors and department chairs once per year before CEPH and ASPPH submissions.	GWSPH Office of Career Services GW Career Services Council PhD Committee DrPH Committee Office of Academic Affairs	X		
Actionable data (quantitative and/or qualitative) from recent alumni on their self-assessed preparation for post-graduation destinations	B5	Recent alums supply self-assessed preparation via the Graduation and Alum Surveys and informal conversations with faculty/staff. Additional qualitative data are gathered via interviews with alums. Data are reviewed by program directors and department chairs every 1–3 years depending on source.	Program directors Department chairs GWSPH Curriculum Committee PhD Committee DrPH Committee Office of Academic Affairs Executive Committee	X		
Budget table	*C1-1*					

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Student perceptions of faculty availability	C2	Students and alum supply perceptions on faculty availability via the Graduation and Alum Surveys and informal conversations with faculty/staff. Data are reviewed by program directors and department chairs annually.	Program directors Course leads MPH Advisory Committee Community of Online Course Directors PhD Committee DrPH Committee Office of Academic Affairs	X		
Student perceptions of class size and relationship to learning	C2	Students and alum supply perceptions of class size and relationship to learning via course evaluations and informal conversations with faculty/staff. Data are reviewed by program directors and department chairs following every term.	Program directors Course leads MPH Advisory Committee Community of Online Course Directors PhD Committee DrPH Committee Office of Academic Affairs	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
List of all faculty, which concentrations they support and their FTE allocation to the unit as a whole	*C2-1, E1-1, E1-2*					
Ratios for student academic advising (all degree levels)	*C-2*	Advising records (ratios) are reviewed biannually within programs and departments by directors and chairs, respectively. Undergraduate and online graduate ratios are further reviewed by their respective deans and program directors at least once per year. Any issues that arise between reviews are handled accordingly. Faculty advising loads are assessed annually during the annual performance review.	Program directors Department chairs GWSPH Curriculum Committee Departmental curriculum committees MPH Advisory Committee PhD Committee DrPH Committee Office of Academic Affairs	X		
Ratios for supervision of MPH ILE	*C2-2*	Records (ratios) are reviewed biannually within programs and departments by directors and chairs, respectively. Data are further reviewed by the Associate Dean for MPH programs during monthly meetings with vice chairs.	Program directors Department chairs MPH Advisory Committee	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Ratios for supervision of bachelor's cumulative/experiential activity	*C2-2*	Records (ratios) are reviewed biannually within programs and departments by directors and chairs, respectively. Data are further reviewed by the Assistant Dean of Undergraduate Education during monthly meetings with program directors.	Program directors Department chairs Undergraduate Curriculum Committee	X		
Ratios for DrPH ILE advising	*C2-2*	Records (ratios) are reviewed biannually by the program director.	Program directors DrPH Committee	X		
Ratios for PhD dissertation advising	*C2-2*	Records (ratios) are reviewed biannually within programs and departments by directors and chairs, respectively. Data are further reviewed by the Associate Dean for PhD and MS Programs with program directors on an as needed basis.	Program directors Department chairs PhD Committee	X		
Ratios for MS final project advising	*C2-2*	Records (ratios) are reviewed biannually within programs and departments by directors and chairs, respectively. Data are further reviewed by the Associate Dean for PhD and MS Programs during monthly meetings with program directors.	Program directors Department chairs MS Committee	X		
Count, FTE (if applicable), and type/categories of staff resources	*C3-1*					

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Faculty participation in activities/resources designed to improve instructional effectiveness (maintain ongoing list of exemplars)	E3	Faculty participation is catalogued and reviewed during the annual performance review process each spring. Faculty are reviewed by department chairs, Senior Associate Dean for Research and Innovation, Senior Associate Dean for Academic, Student and Faculty Affairs and the Dean. Departments may review instructional effectiveness during the APR process.	Office of Academic Affairs Office of Research Excellence Master Teacher Academy All Faculty Assembly All Staff Assembly GWSPH Practice Committee	X		
Peer/internal review of syllabi/curricula for currency of readings, topics, methods, etc.	E3	Depending on the course, the internal review of syllabi occurs either at the departmental curriculum committee meeting or the GWSPH Curriculum Committee. The review is documented in the minutes. The MPH Advisory, PhD, DrPH and MS Committees also discuss updates to their respective syllabi/courses.	GWSPH Curriculum Committee Departmental curriculum committees MPH Advisory Committee PhD Committee DrPH Committee MS Committee	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Student satisfaction with instructional quality	E3	Course/instructor-specific data are collected at the end of each term in the course evaluations. Data on overall instructional quality are collected in the Graduation and Alum surveys. Program directors review course evaluations each term and specific findings with department chairs, as needed. Trends in student satisfaction are discussed at Executive Committee and All Faculty and Staff Assemblies annually.	Program directors Department chairs GWSPH Curriculum Committee Departmental curriculum committees DrPH Committee PhD Committee MS Committee	X		
Teaching assistants trained in pedagogical techniques	E3	Completion of UNIV 0250 and completion of GTAP is confirmed in DegreeMAP by the GWSPH Office of Student Records and academic advisors. Program directors and the Office of Academic Affairs ensure these trainings have been completed prior to assignment as a GA.	GWSPH Curriculum Committee Departmental curriculum committees PhD Committee Office of Academic Affairs	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Faculty research/scholarly activities with connections to instruction (maintain ongoing list of exemplars)	E4	Faculty research/scholarly activities are catalogued and reviewed during the annual performance review process each spring. Faculty are reviewed by department chairs, Senior Associate Dean for Research and Innovation, Senior Associate Dean for Academic, Student and Faculty Affairs and the Dean. Departments may also highlight specific full-time faculty's research/scholarly activities in their APR.	Office of Academic Affairs Office of Research Excellence GWSPH Curriculum Committee Departmental curriculum committees Master Teacher Academy GWSPH Research Committee		X	
Number of faculty-initiated IRB applications	*E4-1*	The Office of Research Excellence maintains records of IRB applications submitted and these data are reviewed annually by the Dean as part of the budget development. The Senior Associate Dean for Research and Innovation also reports these data at Executive Committee and All Faculty and Staff Assemblies at least once per year.	GWSPH Research Committee Office of Research Excellence GWSPH Practice Committee MPH Advisory Committee		X	

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Total Research Funding	*E4-1*	The Senior Associate Dean for Research and Innovation and the Office of Research Excellence monitors all research funding. Proposed budgets are developed during the annual school budgeting process. Funding expectations and realities are reported out by the Senior Associate Dean for Research and Innovation at Executive Council and All Faculty and Staff Assemblies. Departments also review researching funding every seven years during the APR process.	GWSPH Research Committee Office of Research Excellence		X	
Number of grant submissions	*E4-1*	The Office of Research Excellence maintains records of grant submissions and these data are reviewed annually by the Dean as part of the budget development. The Senior Associate Dean for Research and Innovation also reports these data at Executive Committee and All Faculty and Staff Assemblies at least once per year.	GWSPH Research Committee Office of Research Excellence		X	

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Faculty extramural service activities with connections to instruction (maintain ongoing list of exemplars)	E5	Faculty extramural service activities are catalogued and reviewed during the annual performance review process each spring. Faculty are reviewed by department chairs, Senior Associate Dean for Research and Innovation, Senior Associate Dean for Academic, Student and Faculty Affairs and the Dean. They are also reviewed by the appropriate APT committee(s) when a faculty member is up for promotion or tenure.	GWSPH Research Committee Office of Academic Affairs Office of Research Excellence GWSPH APT Committee GWSPH Practice Committee Departmental APT committees	X		X

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Percent of faculty (specify primary instructional or total faculty) participating in extramural service activities	E5	Faculty extramural service activities are catalogued and reviewed during the annual performance review process each spring. Faculty are reviewed by department chairs, Senior Associate Dean for Research and Innovation, Senior Associate Dean for Academic, Student and Faculty Affairs and the Dean. They are also reviewed by the appropriate APT committee(s) when a faculty member is up for promotion or tenure. Faculty CVs (updated as part of the annual performance review) are compiled by the Accreditation team and reviewed by the Senior Associate Dean for Academic, Student and Faculty Affairs. The goal is to be more intentional in promoting and assessing extramural service.	Office of Academic Affairs Office of Research Excellence GWSPH Research Committee GWSPH APT Committee GWSPH Practice Committee Departmental APT committees	X		X

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Public/private or cross-sector partnerships for engagement and service	E5	Data on partnerships are compiled by the Offices of Applied Public Health and Research Excellence and reviewed quarterly. The Senior Associate Dean for Research and Innovation also reports these data at Executive Committee and All Faculty and Staff Assemblies. The goal is to be more intentional in promoting and assessing extramural service.	GWSPH Research Committee Office of Research Excellence GWSPH Practice Committee Executive Committee All Faculty Assembly All Staff Assembly	X	X	X
Number of community-based service projects	E5	Data on partnerships are compiled by the Offices of Applied Public Health and Research Excellence and reviewed quarterly. The Senior Associate Dean for Research and Innovation also reports these data at Executive Committee and All Faculty and Staff Assemblies. The goal is to be more intentional in promoting and assessing extramural service.	GWSPH Practice Committee GWSPH Research Committee Office of Research Excellence Executive Committee All Faculty Assembly All Staff Assembly	X	X	X

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Actionable data (quantitative and/or qualitative) from employers on graduates' preparation for post-graduation destinations	F1	The majority of data are collected during the Employer and Practicum Preceptor Survey. Informal data are collected from employers and preceptors through networking. Additional data are collected during Dean's Council meetings. Data are reviewed by the GWSPH Office of Career Services and brought to program directors and department chairs, as needed.	GWSPH Office of Career Services GW Career Services Council Department chairs Program directors	X	X	
Feedback from external stakeholders on changing practice and research needs that might impact unit priorities and/or curricula	F1	The majority of data are collected during the Dean's Council. Informal feedback is gathered from employers, practicum preceptors and alumni groups. Data are reviewed during GWSPH Curriculum Committee and by program directors and department chairs, as needed.	Department chairs Program directors Dean's Council GWSPH Curriculum Committee Departmental curriculum committees Executive Committee	X	X	
Feedback from stakeholders on guiding statements and ongoing self-evaluation data	F1	Stakeholder feedback is obtained during Dean's Council meetings. Data are reviewed by the Accreditation team.	Dean's Council Office of Academic Affairs	X	X	X

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Professional AND community service activities that students participate in (maintain ongoing list of exemplars)	F2	The student associations maintain records of activities offered to students. These data are reviewed during the annual budget process. Additional records are collected by other organizations such as the Office of Applied Public Health (UHP) and the Nashman Center for Civic Engagement and Public Service. These data are reviewed by their departments annually during the annual report stage.	GWSPH Practice Committee Nashman Center for Civic Engagement and Public Service Public Health Student Association MHA Student Association TEAM Milken Undergraduate Curriculum Committee			X
Current educational and professional development needs of self-defined communities of public health workers (individuals not currently enrolled in unit's degree programs)	F3	The Fitzhugh Mullan Institute for Health Workforce Equity collects these data through a combination of feedback from participants and experts. Data are reviewed annually during the annual report stage. Additional stakeholder feedback is obtained during Dean's Council meetings. Data are forwarded as needed to Fitzhugh Mullan Institute.	Fitzhugh Mullan Institute for Health Workforce Equity			X

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Continuing education events presented for the external community, with number of nonstudent, nonfaculty attendees per event (maintain ongoing list)	*F3-1*	The Fitzhugh Mullan Institute for Health Workforce Equity maintains records of their events and updates their website periodically. This information is reviewed annually during the annual report stage. Likewise, the Office of Research Excellence maintains a record of research webinars hosted since 2020, including attendee numbers. This information is reviewed annually during the budget approval process and reported out at Executive Council and at All Faculty and Staff Assemblies.	Fitzhugh Mullan Institute for Health Workforce Equity GWSPH Research Committee Office of Research Excellence Executive Committee All Faculty Assembly All Staff Assembly			X

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Quantitative and qualitative information that demonstrates unit's ongoing efforts to increase representation and support success of self-defined priority underserved populations—among students AND faculty (and staff if applicable)	G1	STUDENT: Admissions data are compiled from SOPHAS, 2U and Common Application. Data are reviewed by the respective admissions offices, program directors and department chairs. The university collects data on students' perceptions of representation. Data are reviewed by the Office of Inclusive Excellence, Diversity and Justice (OIE) The OIE also collects informal data via conversations with students. FACULTY: Faculty search committees document methods for recruiting URM faculty. The university collects data on faculty perceptions of representation. Data are reviewed by the OIE, which also collects informal data via conversations with faculty.	GWPH Admissions Committee Departmental admissions committees GW Office of Undergraduate Admissions GWSPH Office of Inclusive Excellence, Diversity and Justice DEI Committee MPH Advisory Committee Faculty search committees	X	X	

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Student AND faculty (staff, if applicable) perceptions of unit's climate regarding diversity and cultural competence	G1	The university conducts a DEI survey every 3–4 years. Data are shared with the university and school DEI offices. The OIE also collects data via informal conversations with faculty and students.	GW Office of Diversity, Equity and Community Engagement GWSPH Office of Inclusive Excellence, Diversity and Justice DEI Committee Executive Committee	X	X	X
Student satisfaction with academic advising	H1	Data are collected via the Graduation and Alum Surveys and reviewed by program directors and department chairs. Undergraduate students are also surveyed following each academic advising meeting. These data are reviewed annually by the Assistant Dean for Undergraduate Education.	Program directors Department chairs Undergraduate advisors meeting Office of Academic Affairs MPH Advisory Committee	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Student satisfaction with career advising	H2	Data are collected via the Graduation and Alum Surveys. Additional data are collected in Handshake following events and one-on-one meetings. The GWSPH Office of Career Services reviews data biannually to meet student needs. Undergraduate career advising data are collected and assessed by the university.	GWSPH Office of Career Services GW Center for Career Services GW Career Services Council PhD Committee MS Committee DrPH Committee	X		
Events or services provided to assist with career readiness, job search, enrollment in additional education, etc. for students and alumni (maintain ongoing list of exemplars)	H2	The GWSPH Office of Career Services maintains records of events. Handshake records event registration. These are reviewed by the GWSPH Office of Career Services biannually. The GW Center for Career Services maintains and evaluates their own records of events open to undergraduate students. The Office of PhD/MS Programs also hosts career webinars and "meet and greets" with senior faculty and role models for PhD and MS students. Maintained records are assessed annually.	GWSPH Office of Career Services GW Center for Career Services GW Career Services Council PhD Committee MS Committee DrPH Committee	X		

Measures	**Criteria or *Template***	**Data source and method of analysis**	**Who has review and decision-making responsibility?**	**Does it measure Goal 1?**	**Does it measure Goal 2?**	**Does it measure Goal 3?**
Number of student complaints filed (and info on disposition or progress)	H3	The Provost maintains a record of all student complaints. If there is a compliant, it is relayed to the Dean, who directs it to the appropriate dean (usually the Senior Associate Dean for Academic, Student and Faculty Affairs or the Senior Associate Dean for Research and Innovation).	Office of the Provost Dean Executive Committee Office of Academic Affairs	X		
Percentage of URM applicants accepting admissions	H4	Admissions data from SOPHAS, 2U and the Common Application are compiled and reviewed by the various admissions committees. Program directors review the data prior to each matriculation term. Program directors meet with department chairs annually to review enrollment.	Program directors Department chairs GWSPH Admissions Committee Departmental admissions committees	X		

2) *Provide evidence of implementation of the plan described in Template B2-1. Evidence may include reports or data summaries prepared for review, notes from meetings at which results were discussed, etc.*

   Sample reports, agendas, minutes, etc., are located in folders organized by Template B2 measures. Additional meeting agendas and notes are organized by committee type.

   See ERF > Criterion B > Criterion B2 > B2.2: Eval plan_implement.

3) *Provide at least three specific examples of improvements undertaken in the last three years based on the evaluation plan. At least one of the changes must relate to an area other than the curriculum. See Template B2-2.*

Template B2-2

	Measure that informed the change	**Data that indicated improvement was needed**	**Improvement undertaken**
Example 1	Student, faculty and staff perceptions of the school's climate regarding diversity and cultural competence	Feedback from the GWSPH Diversity and Inclusion Action Committee, Executive Committee, Public Health Student Association and Graduation Survey reinforced the need to address the school's climate regarding diversity, equity and inclusion. Faculty Affairs and Human Resources provided demographics on our professional workforce. The Office of Admissions and Recruitment provided enrollment demographics that showcased the changing dynamics of the student population and the need to build a culturally competent workforce.	A GWSPH Diversity and Inclusion Action Committee was adopted as a formal committee under the school rules and officially formed on April 7, 2021, with faculty, staff and student representation. A new Senior Associate Dean for Diversity, Equity and Inclusion was appointed in 2022.
Example 2	Innovative educational offerings that address population health, well-being and social justice	Employers (Employer Survey, Dean's Council) and students (Graduation Survey) recommended that additional innovative programs and concentrations be added to the GWSPH portfolio. Industry trends and departmental APRs supported this recommendation.	Innovative doctoral program offerings were expanded. A generalist residential DrPH was launched in fall 2021 and the online DrPH (DrPH@GW) was launched in fall 2023. Five new PhDs (Health Policy, Global Public Health Sciences, Environmental Health, Exercise Physiology and Applied Nutrition and Health Data Sciences) were launched between 2018–2022.
Example 3	Alums' perceptions of their readiness to advance population health, well-being and social justice	Alums' feedback via the Graduation Survey, informal conversations and formal interviews with graduates prompted GWSPH to explore creating concentrations in the MPH@GW program. Concentration creation was further supported by feedback from faculty, the Dean's Council and employers.	Concentrations in the MPH@GW program (Global Health, Health Informatics and Analytics, Climate and Health and Women, Youth and Child Health) were created, the last of which launched in spring 2023.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Course and program evaluation data, alums and employer feedback and other informally gathered feedback are regularly reviewed by GWSPH administration and committees. These reviews provide the basis for innovations to programs and infrastructure.
- In 2022, the Office of PhD and MS Programs implemented an annual PhD Student Survey with the goal of collecting information on students' perceptions and satisfaction with the PhD and MS programs, specifically.
- Our departmental and schoolwide committee structure allows us to review material in real time and address concerns and opportunities for improvement based on our assessment of the information.
- Part-time and full-time faculty participate in school and university-led teaching and learning workshops and seminars to improve instructional effectiveness.
- Quarterly staff check-ins and annual faculty performance reviews allow GWSPH members to self-evaluate and identify opportunities for improvement in processes, procedures and performance.

Challenges

- During the COVID-19 pandemic, it was more challenging to obtain formal and informal feedback through in-person mechanisms such as employer and alum events as well as surveys with sufficient response rates.

Future Plans

- As a function of one of our facilitating goals to develop and strengthen alum relationships, GWSPH is increasing and strengthening employer and alum engagement and channels for formal and informal feedback as well as post-graduation information and feedback. Some programs and courses will also have interim surveys to inform courses in progress, particularly for new courses.

B3. Graduation Rates

The school collects and analyzes graduation rate data for each public health degree offered (e.g., BS, MPH, MS, PhD, DrPH).

The school achieves graduation rates of 70% or greater for bachelor's and master's degrees and 60% or greater for doctoral degrees.

1) *Graduation rate data for each degree in unit of accreditation. See Template B3-1.*

   An academic year is considered summer, fall and spring. So the academic year of 2019–2020 is summer 2019, fall 2019 and spring 2020.

Template B3-1

Students in BS Degree, by Cohorts Entering Between 2017–2018 and 2022–2023							
Majors included: Public Health							
***Maximum Time to Graduate: 6 years**							
	Cohort of Students	'17–'18	'18–'19	'19–'20	'20–'21	'21–'22	'22–'23
2017–2018	# Students entering	140					
	# Students withdrew	0					
	# Students graduated	2					
	Cumulative graduation rate	1.4%					
2018–2019	# Students entering	138	103				
	# Students withdrew	1	1				
	# Students graduated	28	1				
	Cumulative graduation rate	21.4%	1.0%				
2019–2020	# Students entering	109	101	219			
	# Students withdrew	1	0	6			
	# Students graduated	37	18	3			
	Cumulative graduation rate	47.9%	18.4%	1.4%			
2020–2021	# Students entering	71	83	210	131		
	# Students withdrew	1	4	11	13		
	# Students graduated	66	6	19	1		
	Cumulative graduation rate	95.0%	24.3%	10.0%	0.8%		

2021–2022	# Students entering	4	73	180	117	133	
	# Students withdrew	1	2	2	10	9	
	# Students graduated	3	61	49	2	1	
	Cumulative graduation rate	97.1%	83.5%	32.4%	2.3%	0.8%	
2022–2023	# Students entering	0	10	135	105	123	101
	# Students withdrew	0	1	10	1	1	0
	# Students graduated	0	7	108	6	3	1
	Cumulative graduation rate	97.1%	90.3%	81.7%	6.9%	3.0%	1.0%

Students in MPH Degree, by Cohorts Entering Between 2018–2019 and 2022–2023

Programs included: Biostatistics, Public Health Generalist, Environmental Health Science and Policy, Global Environmental Health, Climate and Health, Epidemiology, Physical Activity in Public Health, Public Health Nutrition, Global Health Epidemiology and Disease Control, Global Health Program Design, Monitoring and Evaluation, Global Health Policy, Humanitarian Health, Community-Oriented Primary Care, Public Health Communication and Marketing, Health Promotion, Maternal and Child Health, Health Policy, Health Informatics and Analytics, Women, Youth and Child Health, Global Health

***Maximum Time to Graduate: 5 years**

	Cohort of Students	'18–'19	'19–'20	'20–'21	'21–'22	'22–'23
2018–2019	# Students entering	803				
	# Students withdrew	84				
	# Students graduated	0				
	Cumulative graduation rate	0%				
2019–2020	# Students entering	719	675			
	# Students withdrew	42	15			
	# Students graduated	247	0			
	Cumulative graduation rate	31%	0%			
2020–2021	# Students entering	430	660	913		
	# Students withdrew	38	71	56		
	# Students graduated	241	144	0		

	Cumulative graduation rate	61%	21%	0%		
2021–2022	# Students entering	151	445	857	865	
	# Students withdrew	10	36	85	27	
	# Students graduated	96	208	256	0	
	Cumulative graduation rate	73%	52%	28%	0%	
2022–2023	# Students entering	45	201	516	838	596
	# Students withdrew	18	7	26	43	16
	# Students graduated	27	140	255	291	0
	Cumulative graduation rate	76%	73%	56%	34%	0%

Students in DrPH Degree, by Cohorts Entering Between 2016–2017 and 2022–2023[14]								
Program included: Public Health Generalist[15]								
***Maximum Time to Graduate: 7 years**								
	Cohort of Students	’16–’17	’17–’18	’18–’19	’19–’20	’20–’21	’21–’22	’22–’23
2016–2017	# Students entering	12						
	# Students withdrew, dropped, etc.	0						
	# Students graduated	0						
	Cumulative graduation rate	0%						
2017–2018	# Students entering	12						
	# Students withdrew	0						
	# Students graduated	0						
	Cumulative graduation rate	0%						
2018–2019	# Students entering	12		18				

[14] Until 2020, the DrPH program accepted students biennially. Starting in 2021, the program began accepting students annually.
[15] Residential program only as the online DrPH@GW did not accept students until the 2023–2024 academic year.

	# Students withdrew	0		0				
	# Students graduated	0		0				
	Cumulative graduation rate	0%		0%				
2019–2020	# Students entering	12		18				
	# Students withdrew	0		0				
	# Students graduated	28		0				
	Cumulative graduation rate	17%		0%				
2020–2021	# Students entering	10		18		24		
	# Students withdrew	0		0		0		
	# Students graduated	3		3		0		
	Cumulative graduation rate	42%		17%		0%		
2021–2022	# Students entering	7		15		24	12	
	# Students withdrew	0		0		0	0	
	# Students graduated	0		2		0	0	
	Cumulative graduation rate	42%		28%		0%	0%	
2022–2023	# Students entering	7		13		24	12	25
	# Students withdrew	0		0		0	0	0
	# Students graduated	5		5		1	0	0
	Cumulative graduation rate	83%		56%		4%	0%	0%

Students in MS Degree, by Cohorts Entering Between 2018–2019 and 2022–2023						
Programs included: Public Health Microbiology and Emerging Infectious Disease, Health Data Science, Biostatistics and Health Data Science, Bioinformatics[16]						
***Maximum Time to Graduate: 5 years**						
	Cohort of Students	'18–'19	'19–'20	'20–'21	'21–'22	'22–'23
2018–2019	# Students entering	5				
	# Students withdrew	0				
	# Students graduated	0				
	Cumulative graduation rate	0%				
2019–2020	# Students entering	5	4			
	# Students withdrew	0	0			
	# Students graduated	2	0			
	Cumulative graduation rate	40%	0%			
2020–2021	# Students entering	3	4	14		
	# Students withdrew	0	0	0		
	# Students graduated	2	0	0		
	Cumulative graduation rate	80%	0%	0%		
2021–2022	# Students entering	1	4	14	19	
	# Students withdrew	0	0	0	0	
	# Students graduated	0	4	0	0	
	Cumulative graduation rate	80%	100%	0%	0%	
2022–2023	# Students entering	1	0	14	19	19
	# Students withdrew	0	0	0	0	0
	# Students graduated	1	0	10	10	0
	Cumulative graduation rate	100%	100%	71%	53%	0%

[16] Does not include deactivated programs such as the MS in Epidemiology or the MS in Health Informatics and Analytics.

Students in PhD Degree, by Cohorts Entering Between 2016–2017 and 2022–2023									
Programs included: Environmental Health, Epidemiology, Global Public Health Sciences, Health Data Science (Biostatistics and Bioinformatics concentrations), Health Policy, Social and Behavioral Sciences in Public Health									
***Maximum Time to Graduate: 8 years (pre–2019), 7 years (2019 and later)[17]**									
	Cohort of Students	'15–'16	'16–'17	'17–'18	'18–'19	'19–'20	'20–'21	'21–'22	'22–'23
2015–2016	# Students entering	5							
	# Students withdrew	0							
	# Students graduated	0							
	Cumulative graduation rate	0%							
2016–2017	# Students entering	5	2						
	# Students withdrew	0	0						
	# Students graduated	0	0						
	Cumulative graduation rate	0%	0%						
2017–2018	# Students entering	5	2	4					
	# Students withdrew	0	0	0					
	# Students graduated	0	0	0					
	Cumulative graduation rate	0%	0%	0%					
2018–2019	# Students entering	5	2	4	11				
	# Students withdrew	0	0	0	0				
	# Students graduated	0	0	0	0				
	Cumulative graduation rate	0%	0%	0%	0%				
2019–2020	# Students entering	5	2	4	11	7			
	# Students withdrew	0	0	0	0	0			

[17] Time to degree changed in 2019. Prior to 2019, students had eight years to complete the degree. In 2019 and later, that changed to seven years.

	# Students graduated	0	1	0	0	0			
	Cumulative graduation rate	0%	50%	0%	0%	0%			
2020–2021	# Students entering	5	2	4	11	7	21		
	# Students withdrew	0	0	0	0	0	0		
	# Students graduated	3	1	0	0	0	0		
	Cumulative graduation rate	60%	50%	0%	0%	0%	0%		
2021–2022	# Students entering	2	1	4	11	7	21	19	
	# Students withdrew	0	0	0	0	0	0	0	
	# Students graduated	0	0	1	3	0	0	0	
	Cumulative graduation rate	60%	50%	25%	27%	0%	0%	0%	
2022–2023	# Students entering	2	1	3	8	7	21	19	20
	# Students withdrew	0	0	0	0	0	0	0	0
	# Students graduated	1	0	0	5	0	0	0	0
	Cumulative graduation rate	80%	50%	25%	73%	0%	0%	0%	0%

2) Data on doctoral student progression in the format of Template B3-2.

Template B3-2

	DrPH[18]	PhD, Health Policy	PhD, Health Data Science, Bioinformatics	PhD, Health Data Science, Biostatistics	PhD, Environmental Health	PhD, Epidemiology	PhD, Global Public Health Sciences	PhD, Social and Behavioral Sciences in Public Health	PhD, Exercise Physiology and Applied Nutrition
# newly admitted in 2022–2023	26	3	2	3	1	4	2	4	4
# currently enrolled (total) in 2022–2023	77	15	6	7	9	21	8	12	7
# completed coursework during 2021–2022	4	0	0	0	0	2	0	6	0
# in candidacy status (cumulative) during 2021–2022	32	6	0	0	6	16	0	5	1
# graduated in 2021–2022	5	0	0	0	1	3	0	2	0

[18] DrPH includes both generalist and departmental-based DrPH students with the exception of the number of newly admitted students. In 2022–2023, only DrPH, Public Health Generalist students were admitted as the other programs were no longer accepting new students.

3) *Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors.*

All degree programs meet or exceed the graduation rate guidelines provided by CEPH.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- All degree programs (residential and online) meet or exceed the graduation rate guidelines.

Challenges

- Despite our significant achievements, the formidable surge of competition and the imminent challenge posed by an anticipated demographic cliff in the near future represent critical hurdles that necessitate ongoing innovation and adaptation.

Future Plans

- As a school, we plan to closely review the retention rates of students, particularly in the undergraduate and MPH programs. We hope to learn more about why students are withdrawing from their programs so that we can address these challenges and improve BS and MPH graduation rates.

B4. Post-Graduation Outcomes

The school collects and analyzes data on graduates' employment or enrollment in further education post-graduation, for each public health degree offered (e.g., BS, MPH, MS, PhD, DrPH).

The school achieves rates of 80% or greater employment or enrollment in further education within the defined time period for each degree.

1) *Data on post-graduation outcomes (employment or enrollment in further education) for each degree. See Template B4-1.*

Template B4-1

Post-Graduation Outcomes: BS (public health)	**'19–'20 #, %**	**'20–'21 #, %**	**'21–'22 #, %**
Employed	19, 30%	37, 39%	42, 38%
Continuing education/training (not employed)	31, 49%	41, 44%	53, 47%
Not seeking employment or not seeking additional education by choice	0, 0%	0, 0%	0, 0%
Actively seeking employment or enrollment in further education	4, 6%	2, 2%	1, 1%
Unknown	9, 14%	14, 15%	16, 14%
Total graduates (known + unknown)	63	94	112

Post-Graduation Outcomes: MPH (Biostatistics, Public Health Generalist, Environmental Health Science and Policy, Global Environmental Health, Climate and Health, Epidemiology, Physical Activity in Public Health, Public Health Nutrition, Global Health Epidemiology and Disease Control, Global Health Program Design, Monitoring and Evaluation, Global Health Policy, Humanitarian Health, Community-Oriented Primary Care, Public Health Communication and Marketing, Health Promotion, Maternal and Child Health, Health Policy, Health Informatics and Analytics, Women, Youth and Child Health, Global Health)	**'19–'20 #, %**	**'20–'21 #, %**	**'21–'22 #, %**
Employed	215, 36%	496, 75%	422, 76%
Continuing education/training (not employed)	16, 3%	45, 7%	45, 8%
Not seeking employment or not seeking additional education by choice	2, <1%	1, <1%	5, <1%
Actively seeking employment or enrollment in further education	8, 1%	38, 6%	26, 5%
Unknown	350, 59%[19]	83, 13%	59, 11%

[19] Response rates were low due to the COVID-19 pandemic. Normally, students complete a survey collecting post-graduation plans to be able to order graduation ceremony tickets. Since the pandemic canceled the spring 2020 ceremony, there was no incentive for students to respond to the survey. This

Total graduates (known + unknown)	591	663	557

Post-Graduation Outcomes: DrPH (Public Health Generalist)[20]	**'19–'20 #, %**	**'20–'21 #, %**	**'21–'22 #, %**
Employed	6, 55%	10, 91%	5, 100%
Continuing education/training (not employed)	0, 0%	0, 0%	0, 0%
Not seeking employment or not seeking additional education by choice	0, 0%	0, 0%	0, 0%
Actively seeking employment or enrollment in further education	0, 0%	0, 0%	0, 0%
Unknown	5, 46%	1, 9%	0, 0%
Total graduates (known + unknown)	11	11	5

Post-Graduation Outcomes: MS (Public Health Microbiology and Emerging Infectious Disease, Health Data Science [Biostatistics and Bioinformatics concentrations])	**'19–'20 #, %**	**'20–'21 No., %**	**'21–'22 #, %**
Employed	8, 30%	24, 75%	16, 89%
Continuing education/training (not employed)	1, 4%	0, 0%	0, 0%
Not seeking employment or not seeking additional education by choice	0, 0%	0, 0%	0, 0%
Actively seeking employment or enrollment in further education	0, 0%	1, 3%	0, 0%
Unknown	18, 67%	7, 22%	2, 11%
Total graduates (known + unknown)	27	32	18

Post-Graduation Outcomes: PhD (Epidemiology, Environmental Health, Global Public Health Sciences, Health Data Science [Biostatistics and Bioinformatics concentrations], Health Policy, Social and Behavioral Sciences in Public Health)	**'19–'20 #, %**	**'20–'21 #, %**	**'21–'22 #–, %**
Employed	1, 50%	5, 100%	6, 100%
Continuing education/training (not employed)	0, 0%	0, 0%	0, 0%
Not seeking employment or not seeking additional education by choice	0, 0%	0, 0%	0, 0%
Actively seeking employment or enrollment in further education	0, 0%	0, 0%	0, 0%
Unknown	1, 50%	0, 0%	0, 0%
Total graduates (known + unknown)	2	5	6

response rate was flagged during the annual review of that year and CEPH required an Action Plan for improvement, which was successfully achieved for 2020–2021 cohort.

[20] Only residential DrPH listed. Online DrPH@GW did not start accepting students until fall 2023.

2) *Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors.*

The GW Office of Survey Research and Analysis is responsible for emailing graduating students each spring with an exit survey (collectively referred to as Graduation Survey). Undergraduate students complete the *Graduating Senior Survey*, which is distributed when students pick up their graduation tickets for spring commencement. Graduate students complete the *Graduate Student Graduation Survey* at the time of graduation. Both surveys have a standard set of questions that cover satisfaction with the school experience, self-assessment of skills and post-graduation plans.

Undergraduate students who either don't respond to the *Graduating Senior Survey* or respond that they have yet to solidify their post-graduation plans are emailed six months after graduation by the Office of Survey Research and Analysis. The *First Destinations Survey* asks recent alums for information about their employment outcomes. Similarly, graduate students complete the *Life After GW: Graduate Student Career Outcomes Survey*.

For the sake of comparability across years, we have recalculated percentages using only those who responded to the survey. For our undergraduates, taking into consideration only reports from BS graduates responding to surveys, over these three time periods consistently 35–44% of graduates were employed, 51–63% sought higher education and only 0.5–2% were seeking jobs at the time of the survey. For MPH graduates responding to surveys over the three time periods, 85–89% were employed, 7–9% were in higher education, 0–1% were not seeking employment and 3–6% were seeking jobs. Similarly, among MS graduates responding to surveys over the three time periods, 89–96% were employed, between 0–11% in further education and between 0–11% seeking jobs. DrPH and PhD students responding to surveys universally were employed. We interpret these findings to mean that, by and large, our graduates are successfully finding work or going on to further educational opportunities, despite the challenges (described below) in response rates. As our response rates have increased, we have not seen any increases in unemployment rates, meaning that we do not see evidence of response bias in these data.

However, it has been notable that GWSPH recorded an unusually high number of unknown post-graduation outcomes in 2019–2020, most likely due to challenges with reaching people and obtaining responses during the COVID-19 pandemic. Post-graduate outcomes are typically gathered from an electronic survey sent to students in the early spring. As another factor, GW requires graduating students to complete the survey before they are able to order graduation ceremony tickets. With the cancellation of the graduation ceremony in spring 2020, fewer surveys were completed than normal. This data was flagged during the annual review process and CEPH required GWSPH to submit an Action Plan to decrease the number of unknowns. This plan involves using LinkedIn and other social medial platforms and personal communications to identify post-graduation outcomes of students who don't respond to the Office of Survey Research and Analysis surveys. GW implemented this plan for the 2020–2021 cohort and the proportion of nonresponses decreased.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

<u>Strengths</u>

- GWSPH graduates achieve a high rate of employment, particularly among master's and doctoral students; all available data indicate we meet CEPH criteria. Graduates of our BS programs are more likely to seek additional education or training opportunities but also have fairly low rates of unemployment.

Challenges

- Given the size of our graduating classes, it's challenging to maintain current contact information for all graduates. This is particularly true for our international and online students. Even minus evidence for response bias, this is a potential problem nonetheless.
- Supporting career services is a heavy lift for our large cohorts, especially in the MPH, and requires continuous investment of resources.

Future Plans

- GWSPH plans to continue efforts to boost response rates to post-graduation surveys. We are currently brainstorming ideas on how to do this. One idea that has already been implemented is to include an interview question about post-graduation outcomes in the Alum Survey and Interview.
- GWSPH intends to continue our efforts to support students with career services and career fairs, advising and mentoring practices that are evidently achieving positive post-graduation outcomes for our students. If future surveys with hoped-for higher response rates pinpoint problem areas that are currently not visible, we will assess them and take action to modify our approaches.

B5. Alums' Perceptions of Curricular Effectiveness

For each degree offered, the school collects information on alums' perceptions of their preparation for the workforce (or for further education, if applicable). Data collection must elicit information on what skills are most useful and applicable in post-graduation destinations, areas in which graduates feel well prepared and areas in which they would have benefitted from more training or preparation.

The school defines qualitative and/or quantitative methods designed to provide useful information on the issues outlined above. "Useful information" refers to information that provides the unit with a reasonable basis for making curricular and related improvements. Qualitative methods may include focus groups, key informant interviews, etc.

The school documents and regularly examines its methodology, making revisions as necessary, to ensure useful data.

1) *Summarize the findings of alums' self-assessment of their preparation for post-graduation destinations.*

   Every 2–3 years, GWSPH reaches out to recent alums to complete a brief Alum Survey and participate in an Alum Interview. The survey link is shared in emails to alums, at organized alum events, via social media and by word of mouth. At the end of the survey, alums sign up for an interview date with a member of the accreditation team. In recognition of working hours, interview appointments are available during the day, in the evenings and on weekends. Semi-structured interview questions for more recent graduates (≤3 years) and not-so-recent graduates (>3 years) guide the conversation during these interviews. Interviews are summarized using a template and reviewed by the accreditation team to identify repeating themes and topics. Results are discussed at GWSPH Curriculum Committee and Executive Committee.

   The most recent round of data collection began in September 2023 with an email to alums (N=4339; graduation year of 2023–2019). Later that fall, QR codes linked to the survey were distributed at the 2023 APHA Alumni and Friends event in Atlanta, Georgia. Data were collected through early January 2024. When the Alum Survey closed on January 1, 2024, 395 responses had been collected.[21] Of the individuals who completed the survey, 109 signed up for an interview (28% response rate; N=76 showed). Taking into consideration the fact that the request to complete the Alum Survey was emailed to alums only once and alums who had signed up for an interview but did not show were only emailed one reminder to reschedule, the number of responses and completed interviews is impressive. Interestingly, the distributed QR codes during APHA did not elicit many survey responses or interview appointments, as expected. The limiting factor in soliciting additional responses was the accreditation team's interview capabilities. A large number of interview appointments were scheduled in the weeks following the initial request email. Most interviews were carried out by the Director of Academic Planning and Accreditation with assistance from three others.

[21] Response rate is incalculable as it is not possible to count the number of individuals who saw the post on social media, were forwarded an email from a fellow alum, or were handed a QR code. Of the 395 responses collected, 38 only included information on their degrees and graduation year. These responses have been removed from the presented results. Values presented may not add to 100% due to rounding.

Completed Survey Respondents	BS	MPH	MS	MHA	DrPH	PhD	Total
Recent Graduates (2020 and later)	27	178	7	18	3	5	238
Not-So-Recent Graduates (2019 and earlier)	15	74	7	18	5	0	119

Additionally, all graduating students complete an exit survey (Graduation Survey; see Criterion B4) sent by GW Office of Survey Research and Analysis. The Graduation Survey is generally sent in anticipation of Commencement in May. Students must complete this survey in order to obtain tickets for the ceremony. Response rates were exceptionally low during the COVID-19 pandemic (2020–2021), as there was little incentive for students to complete the survey when there was no in-person Commencement Ceremony in the spring of 2021. Responses increased considerably in the following years.

Undergraduate

Results from the 2023 Alum Survey indicate that recent BS graduates (2020 and later) feel that their program prepared them very well or somewhat well for their post-graduation plans (100%, N=27). Based on their experiences in their programs, alums rated their abilities to apply the following skills using a five-point Likert scale including a "Not Applicable" option (which was not selected by any graduate indicating that all skills were applicable to all GWSPH graduates regardless of degree program or level).

Skills	Very Confident % (N)	Somewhat Confident % (N)	Somewhat Not Confident % (N)	Not Confident % (N)
Integrate the findings from qualitative and quantitative data into research, policy or applied practice settings.	52% (14)	41% (11)	4% (1)	4% (1)
Communicate public health information to a variety of audiences.	74% (20)	22% (6)	4% (1)	0% (0)
Apply knowledge of the social and biological determinants of health to a public health challenge.	74% (20)	26% (7)	0% (0)	0% (0)
Advance population health, well-being and social justice.	65% (17)	31% (8)	4% (1)	0% (0)
Work effectively on an interprofessional team.	74% (20)	22% (6)	4% (1)	0% (0)
Implement and manage a public health project.	56% (15)	30% (8)	11% (3)	4% (1)
Propose strategies to resolve public health challenges.	44% (12)	48% (13)	4% (1)	4% (1)
Approach public health research, policy and practice with cultural awareness.	63% (17)	33% (9)	4% (1)	0% (0)

Five qualitative interviews with recent undergraduate alums (2020 and later) from the BS in Public Health program were conducted between September 23, 2023, and January 4, 2024. Alums believe their programs directly impacted their current roles and positions. They mentioned such skills as writing, research methods, literature searches, data synthesis, teamwork, communicating complex information, data collection methodologies and the social determinants of health as strengths of their programs and crucial for their current roles. To improve the BS in Public Health program, alums suggested adding additional lessons on quantitative skills (including utilizing software) and adding complex issues earlier in the program. In particular, alums recommended that career development topics such as learning

about entry-level public health jobs, how to write résumés and more networking opportunities were needed.

Results from the 2023 Alum Survey indicate that not-so-recent BS graduates (2019 and earlier) feel that their program prepared them very well or somewhat well for their post-graduation plans (100%, N=15). Based on their experiences in their programs, alums rated their abilities to apply the following skills using a five-point Likert scale including a "Not Applicable" option (which was not selected by any graduate indicating that all skills were applicable to all GWSPH graduates regardless of degree program or level).

Skills	**Very Confident % (N)**	**Somewhat Confident % (N)**	**Somewhat Not Confident % (N)**	**Not Confident % (N)**
Integrate the findings from qualitative and quantitative data into research, policy or applied practice settings.	53% (8)	33% (5)	7% (1)	7% (1)
Communicate public health information to a variety of audiences.	67% (10)	33% (5)	0% (0)	0% (0)
Apply knowledge of the social and biological determinants of health to a public health challenge.	87% (13)	13% (2)	0% (0)	0% (0)
Advance population health, well-being and social justice.	67% (10)	20% (3)	13% (2)	0% (0)
Work effectively on an interprofessional team.	73% (11)	27% (4)	0% (0)	0% (0)
Implement and manage a public health project.	36% (5)	36% (5)	29% (4)	0% (0)
Propose strategies to resolve public health challenges.	50% (7)	43% (6)	7% (1)	0% (0)
Approach public health research, policy and practice with cultural awareness.	79% (11)	14% (2)	7% (1)	0% (0)

Two qualitative interviews were conducted with not-so-recent BS graduates (2019 and earlier) between September 23, 2023, and January 4, 2024. Both alums stated that their bachelor's degree prepared them well for the public health workforce. One alum commended GWSPH's policy focus and recommended adding additional content on social issues such as poverty and homelessness. The other alum recommended that data analysis using software like Excel and additional lessons on group projects be added to the curriculum.

On the Graduation Survey, undergraduate alums answer several five-point Likert scale questions regarding their perceptions on the effectiveness of the curricula, with lower values representing low perceptions and higher values representing high perceptions. Response rates in 2020–2021 were 8% and increased to 97% in 2021–2022 but decreased again in 2022–2023 to 80%.

Question	2020-2021 Average (N)	2021-2022 Average (N)	2022-2023 Average (N)
Overall, how would you rate the level of engagement in the courses you took in your major?	4.5 (12)	4.4 (150)	4.2 (150)
Overall, how would you rate the level of intellectual challenge in the courses you took in your major?	3.8 (12)	3.9 (150)	3.7 (150)

In 2021–2022, 90% (N = 144) of undergraduate alums were satisfied or very satisfied with the opportunities they had to apply their learning in real world situations (e.g., internship, service learning). In comparison, approximately two-thirds of alums (66%, N = 112) were satisfied or very satisfied with the opportunities to participate in research with a faculty member.

Graduate

Results from the 2023 Alum Survey indicate that most recent master's and doctoral graduates (2020 and later) feel that their program prepared them very well or somewhat well for their post-graduation plans (94%, N=197). Based on their experiences in their programs, alums rated their abilities to apply the following skills using a five-point Likert scale including a "Not Applicable" option (which was not selected by any graduate indicating that all skills were applicable to all GWSPH graduates regardless of degree program or level).

Skills	Very Confident % (N)	Somewhat Confident % (N)	Somewhat Not Confident % (N)	Not Confident % (N)
Integrate the findings from qualitative and quantitative data into research, policy or applied practice settings.	54% (114)	37% (77)	8% (17)	1% (2)
Communicate public health information to a variety of audiences.	69% (144)	27% (57)	3% (7)	0% (0)
Apply knowledge of the social and biological determinants of health to a public health challenge.	69% (144)	30% (64)	1% (2)	0% (0)
Advance population health, well-being and social justice.	58% (119)	37% (76)	4% (8)	1% (3)
Work effectively on an interprofessional team.	84% (176)	14% (30)	2% (4)	0% (0)
Implement and manage a public health project.	53% (111)	40% (79)	6% (13)	5% (5)
Propose strategies to resolve public health challenges.	60% (126)	33% (70)	6% (12)	1% (2)
Approach public health research, policy and practice with cultural awareness.	64% (132)	32% (67)	3% (7)	<1% (1)

Between September 23, 2023, and January 4, 2024, the accreditation team interviewed 46 recent alums (2020 and later) from the school's master's programs, with the majority having earned an MPH. No recent doctoral alums were interviewed. Some reappearing themes include graduates' appreciation for their faculty (their professionalism, expertise, empathy, mentorship), that the GWU name was recognized as providing a quality program and the school's policy perspective. When asked how their programs could be improved, topics such as communicating public health information, quantitative analysis (including software skills) and practicum

assistance were mentioned multiple times. Another often-repeated suggestion was the addition of more networking opportunities for residential and online students and alums. Particularly among the distance-based graduates (non-DMV area) and working alums, it was important to be able to connect with other alums in their geographic areas in the evenings and on weekends.

Results from the 2023 Alum Survey indicate that most not-so-recent master's and doctoral graduates (2019 and earlier) feel that their program prepared them very well or somewhat well for their post-graduation plans (94%, N=98). Based on their experiences in their programs, alums rated their abilities to apply the following skills using a five-point Likert scale including a "Not Applicable" option (which was not selected by any graduate indicating that all skills were applicable to all GWSPH graduates regardless of degree program or level).

Skills	**Very Confident % (N)**	**Somewhat Confident % (N)**	**Somewhat Not Confident % (N)**	**Not Confident % (N)**
Integrate the findings from qualitative and quantitative data into research, policy or applied practice settings.	53% (55)	42% (43)	4% (4)	1% (1)
Communicate public health information to a variety of audiences.	72% (75)	21% (22)	6% (6)	1% (1)
Apply knowledge of the social and biological determinants of health to a public health challenge.	84% (81)	16% (17)	4% (4)	2% (2)
Advance population health, well-being and social justice.	55% (57)	37% (38)	6% (5)	4% (4)
Work effectively on an interprofessional team.	88% (91)	9% (9)	2% (2)	2% (2)
Implement and manage a public health project.	58% (60)	34% (35)	7% (7)	1% (1)
Propose strategies to resolve public health challenges.	56% (58)	36% (37)	7% (7)	2% (2)
Approach public health research, policy and practice with cultural awareness.	70% (73)	24% (25)	4% (4)	2% (2)

Between September 23, 2023, and January 4, 2024, the accreditation team interviewed 23 not-so-recent alums (2019 and earlier) from the school's master's and doctoral programs, with most having earned an MPH. Two of the interviews were conducted with DrPH graduates; none were with PhD graduates. Overall, interviewed alums felt that their graduate degrees from GW helped them either obtain a job after graduation or prepared them with the skills needed to perform their jobs. Based on their experiences in the public health workforce, alums recommended that GWSPH focus on communication techniques (e.g., appropriate literacy level, regaining the public's trust and process for reaching out to politicians) and offer opportunities for students to learn about various fields in public health (e.g., consulting). Most of the other recommendations discussed mirrored those of recent graduates, described above.

On the Graduation Survey, GWSPH graduates (MPH, MS, MHA, DrPH and PhD) answer a series of five-point Likert scale questions regarding their perceptions on the effectiveness of the curricula. Response rates were 5% in 2020–2021. They increased in 2021–2022 to 74% and then decreased in 2022–2023 to 57%. Most responses were from residential MPH students, though all of the other programs were represented. All data were included in the analysis as students in all residential graduate programs can take public health coursework.

Question	2020-2021 Average (N)	2021-2022 Average (N)	2022-2023 Average (N)
Integration of current developments in my field.	4.2 (39)	4.3 (559)	4.2 (494)
My education prepared me for my career.	4.2 (39)	4.2 (561)	4.2 (492)
Program content supports my research or professional goals.	4.3 (39)	4.4 (560)	4.3 (494)
Program structure encourages student collaboration and/or teamwork.	4.2 (39)	4.5 (561)	4.5 (494)
The culminating experience provided me an opportunity to apply public health principles.	4.3 (38)	4.2 (548)	4.3 (466)
The program encouraged me to take responsibility for my own learning.	4.7 (38)	4.5 (549)	4.5 (470)
The program taught me how to work in a team/group to complete a project.	4.3 (39)	4.3 (547)	4.3 (470)

Open-ended responses to the Graduation Survey highlighted the variety of courses offered at GWSPH, both residential and online, and the support of a diverse and knowledgeable faculty. In particular, the skills-based courses were appreciated, such as the statistics and program development, implementation and evaluation courses. Several alums mentioned that they felt that the curriculum helped prepare them to excel in their future careers. GWSPH practice-based instructors provided real life experiences, making alums' classroom experiences more stimulating and engaging.

Suggested topics to be emphasized in future curricula included equity, anti-colonialism in global health/colonial history, political dimensions in global health, cultural norms and behavior, internal bias, immigrant health, veterans' health, and cultural mindfulness. Concerns voiced by alums included their need for greater assistance with the APEx (practicum) and advising (see Criteria D5 and H1, respectively). While there was significant variety of course offerings, the timing of those offerings was limited, particularly for working students. One alum mentioned that she had to choose courses based on timing rather than topic and interest.

In Fall 2022, residential MHA alums were asked about their perceptions on the structure of the MHA curriculum, particularly the fellowship component. The survey consisted of 12 open-ended questions, and responses were thematically analyzed. Overall, MHA graduates regarded the MHA program highly, feeling that the curriculum prepared them for success in healthcare management and provided them with valuable skills and knowledge to help them advance their careers. Alums considered the MHA fellowship an opportunity to gain real-world experience, enhance skills and advance their careers. The high financial cost of the fellowship was also discussed and often compared to the perceived long-term benefits of the experience. Based on these data, the MHA program is considering modifying their curriculum to decrease the financial burden of the fellowships. Additional feedback on this and other potential curricular changes for the MHA program can be found in the ERF (see ERF > Criterion B > Criterion B5 > B5.2: Alum percep_methods).

2) *Provide full documentation of the methodology and findings from quantitative and/or qualitative data collection.*

   See ERF > Criterion B > Criterion B5 > B5.2: Alum percep_methods.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Response rates for the Graduation Survey are generally high (except for the significant dip during the COVID-19 pandemic). This can be attributed to the requirement that this survey be completed before Commencement Ceremony tickets can be ordered.
- Aside from the Graduation Survey, there are additional mechanisms in place for us to gather quantitative and qualitative feedback from alums regarding curricular effectiveness. For example, the Department of Health Policy and Management recently engaged almost 800 of their alums to learn about their post-graduation plans and request continued contact.

Challenges

- Given the numerous programs, the Graduation Survey is relatively generic. Feedback about specific program competencies or coursework is not systematically collected.
- Overall, doctoral graduate participation rates in the 2023 Alum Survey and Interview were low. Moving forward, GWSPH will make a concerted effort to connect with doctoral graduates through their doctoral program directors, mentors and dissertation chairs. If the request to participate comes from a faculty member whom the graduate has a relationship with, they may be more likely to participate.
- The 2023 Alum Survey and Interview asked respondents to identify their most recent earned degree from GWSPH and answer the questions based on that degree. Several graduate degree respondents mentioned during their interviews that they also earned a BS degree from GWSPH. Future iterations of the survey may address this gap in data collection.

Future Plans

- Based on feedback from residential MHA alums, the MHA program is considering reducing the credit requirements and restructuring the program so that the fellowship/residency requirement occurs in the summer between the first and second years of the program.

C1. Fiscal Resources

The school has financial resources adequate to fulfill its stated mission and goals. Financial support is adequate to sustain all core functions, including offering coursework and other elements necessary to support the full array of degrees and ongoing operations.

1) *Describe the school's budget processes, including all sources of funding. This description addresses the following, as applicable:*

GWSPH is a closed unit of the university which means that GWSPH manages revenue and expenses for its programs and administrative operations. The school is required to cover any deficits and may build reserves with surpluses. The school pays a set of levies to the university for services provided by central GW offices and is responsible for facilities payments for physical plant assets and rental properties.

a) *Briefly describe how the school pays for faculty salaries. If this varies by individual or appointment type, indicate this and provide examples.*

Most faculty are expected to raise a portion of their salary from external sources. The proportion of external funding depends on the faculty member's role and is assessed annually. Tenured and tenure track faculty are typically expected to fund at least 50% effort from external sources (grants and contracts), except for newly hired faculty in their first year, who typically receive full salary coverage from the school. Research faculty must fund a minimum of 70% effort (up to 100%) from external research grants. Limited-service teaching faculty do not have an expectation for external funding.

b) *Briefly describe how the school requests and/or obtains additional faculty or staff (additional = not replacements for individuals who left). If multiple models are possible, indicate this and provide examples.*

The Provost's Office solicits requests for faculty hire proposals annually. The Dean, in turn, solicits requests from each department chair and assesses them in light of enrollment trends and the school's teaching and research needs. A slate of requests is prepared and submitted to the Provost for review. Approved requests are then included in the school's annual budget proposal for the following year. It is possible to submit off-cycle requests for opportunity hires or unanticipated urgent needs.

Departments submit requests for additional staff to the Dean as part of the annual budget planning process. These requests are reviewed in light of the school's administrative needs and available funding. Internally approved requests are then included in the school's annual budget proposal that goes to the Provost and Chief Financial Officer. It is possible for departments to submit off-cycle requests.

GWSPH is responsible for hiring per course instructors and select teaching and research faculty without approval from the Provost's Office. These faculty are reviewed and appointed at the department level, reviewed by the Office of Academic Affairs and finally approved for hire by the Assistant Dean for Faculty Affairs.

c) *Describe how the school funds the following:*
   a. *operational costs (schools define "operational" in their own contexts; definition must be included in response)*

Operational costs include expenses that support instruction, administration and some research activities such as faculty startup packages and research infrastructure. Support for these costs is funded by a combination of tuition and fee revenues, indirect cost recovery, pledges and gifts, endowment payout and fees for service.

b. *student support, including scholarships, support for student conference travel, support for student activities, etc.*

Support for student support costs is funded by a combination of tuition and fee revenues, indirect cost recovery, pledges and gifts, endowment payout, and fees for service.

c. *faculty development expenses, including travel support. If this varies by individual or appointment type, indicate this and provide examples*

Support for faculty development costs is funded by a combination of tuition and fee revenues, indirect cost recovery, pledges and gifts, endowment payout, and fees for service.

d) *In general terms, describe how the school requests and/or obtains additional funds for operational costs, student support and faculty development expenses.*

GWSPH is responsible for securing the revenue for additional funds for operational costs, student support and faculty development expenses. However, all increases in budget areas must be vetted through the annual budget process.

The GW fiscal year begins on July 1 and ends on June 30 of each year. The budget process starts in the fall of the previous fiscal year. The school receives planning guidelines from the Provost and Chief Financial Officer and then provides instructions to department chairs and administrative managers relating to school-level budget priorities and formats.

All department chairs, administrative managers and deans present their draft budgets for the next year at a meeting held in late November/early December. They highlight requests for additional resources and cost savings relative to the current year's budget in the context of the school's strategic plan and considering the priorities set by the Dean.

The Dean makes resource allotment decisions based on expected revenues and other incoming resources. Those decisions feed into the development of a final budget proposal. In January/February, the Dean presents the school's budget proposal to the Provost, Chief Financial Officer and other university leaders, and answers any questions they have. The departments are notified of the final budget after the Board of Trustees has approved the university's budget in the spring.

e) *Explain how tuition and fees paid by students are returned to the school. If the school receives a share rather than the full amount, explain, in general terms, how the share returned is determined. If the school's funding is allocated in a way that does not bear a relationship to tuition and fees generated, indicate this and explain.*

GWSPH receives tuition and fees differently depending on the student's level.

- Undergraduate Tuition—The school receives a set amount per credit hour for each undergraduate credit hour taught as well as a fixed supplemental instructional payment. The per-credit-hour amount is adjusted annually based on tuition rate increases. Undergraduate financial aid is managed by a central office outside of the

school's budget. This allocation is not tied to the number of majors but instead to the number of students enrolled in GWSPH courses.

- Residential Graduate Tuition—GWSPH receives 100% of tuition revenue for courses taught to students who are enrolled at GWSPH. When students register for courses outside of the school in which they are enrolled, the teaching school receives 80% of tuition revenue, and the enrollment school receives 20%. Scholarships for GWSPH students are granted and administered by GWSPH.
- Online Graduate Tuition—GWSPH receives 100% of tuition revenue for online courses taught to students who are enrolled at GWSPH. These courses are not typically open to students from other schools. Scholarships for GWSPH students are granted and administered by GWSPH. Online programs are delivered in partnership with 2U for student recruitment and the course delivery platform. In accordance with the partnership contract, a reconciliation of tuition and fee revenue and scholarship expense is performed each term. A portion of revenue is shared with 2U, and a portion of scholarship expense is received from 2U.
- Application and Course Fees—Course fees constitute an insignificant source of revenue for the school. GWSPH does not charge an application fee.

f) *Explain how indirect costs associated with grants and contracts are returned to the school and/or individual faculty members. If the school and its faculty do not receive funding through this mechanism, explain.*

GWSPH retains 100% of the indirect cost received from grants and contracts and pays a proportion of it to the university for shared research services. Currently, the school does not return indirect cost to departments or to individual faculty and instead uses it to support facilities and administrative costs involved in supporting research activities.

If the school is a multi-partner unit sponsored by two or more universities (as defined in Criterion A2), the responses must make clear the financial contributions of each sponsoring university to the overall school budget. The description must explain how tuition and other income is shared, including indirect cost returns for research generated by the school of public health faculty appointed at any institution.

Not applicable.

2) *A clearly formulated school budget statement in the format of Template C1-1, showing sources of all available funds and expenditures by major categories, for the last five years.*

GWSPH does not receive any state appropriations or university funds. The Support and Investment line in Template C1-1 includes an annual transfer of positive margin generated in the operating budget to a reserve account. If the school should ever have a negative margin at the end of a fiscal year, GWSPH transfers funds from the reserve account into the operating budget. This transfer balances the operating budget at the end of each fiscal year so that revenue equals expense.

Template C1-1

Sources of Funds and Expenditures by Major Category, 2018 to 2023					
	FY '18–'19	**FY '19–'20**	**FY '20–'21**	**FY '21–'22**	**FY '22–23**
Source of Funds					
Tuition & Fees	77,118,175	77,026,122	85,362,159	91,588,586	80,522,948
Grants/Contracts (Direct)	84,683,089	81,261,220	79,301,350	73,164,131	71,680,621
Indirect Cost Recovery	10,634,368	19,845,073	12,141,911	12,665,781	13,479,858
Endowment	3,132,612	3,604,934	3,037,009	4,539,263	6,351,363
Gifts	3,947,027	4,801,802	3,026,375	997,782	1,263,413
Other Miscellaneous Revenue[22]	1,389,091	755,322	847,147	1,354,607	1,421,863
Total	**180,904,361**	**178,294,472**	**183,715,951**	**184,310,148**	**174,720,067**
Expenditures					
Faculty Salaries & Benefits	25,983,312	26,302,650	25,067,275	27,281,570	29,158,973
Staff Salaries & Benefits	16,961,701	17,933,075	13,444,679	15,038,675	16,999,317
Operations[23]	6,244,356	6,114,103	5,364,139	5,851,852	7,006,889
Travel	1,823,242	1,098,820	129,165	872,191	1,431,074
Student Support[24]	7,265,578	8,525,681	11,572,148	13,111,086	12,704,506
University Tax[25]	9,542,589	9,643,771	9,617,663	9,429,937	8,900,183
Online Education Partner[26]	25,560,013	22,863,268	26,683,764	27,260,939	21,211,121
Support and Investment[27]	2,840,481	4,551,884	12,535,767	12,299,768	5,627,382
Total	**180,904,361**	**178,294,472**	**183,715,951**	**184,310,148**	**174,720,067**

If the school is a multi-partner unit sponsored by two or more universities (as defined in Criterion A2), the budget statement must make clear the financial contributions of each sponsoring university to the overall school budget.

Not applicable

[22] Includes royalties, non-sponsored contracts, and auxiliary revenue.
[23] Includes rent, facilities expense, supplies, equipment, purchased services, communications, interdepartmental assessments.
[24] Includes scholarships, fellowships, graduate assistantships, and student wages.
[25] Includes payments for central services including IT, research administration, and library resources.
[26] Revenue share payment to online program partner per contractual agreement.
[27] Net of operating transfers between GWSPH and other university entities, transfers to reserves, and carryover balances.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH has financial resources adequate to fulfill its stated mission and goals and to sustain all core functions. The GWSPH budget process includes input from department chairs and administrative department heads across the school and emphasizes links to the strategic plan to guide the allocation of resources. There is transparency to the broader school community with biannual financial updates to faculty and staff.
- Despite the financial restrictions that GW has experienced from FY '21 to the present, GWSPH has been able to maintain a strong cadre of faculty; enrollments and research have supported the ability to replace those faculty who retired or changed careers during this very uncertain time.
- GWSPH has built a healthy level of reserves over time by consistently generating budget surpluses through responsible financial management.
- GWSPH has a track record of bringing in significant external funding and alum donations, including major gifts from Atlantic Philanthropies, RCHN Community Health Foundation and private donors.
- The mix of funders in GWSPH's research portfolio has trended toward those that have higher indirect cost rates, which has a positive impact on the school's revenue and our ability to support the research infrastructure.

Challenges

- Demographic and market demand changes present a challenge to enrollment growth. We remain confident in our ability to attract students but will need to adjust.
- Like most other universities, GW experienced budget constraints due to the COVID-19 pandemic as evidenced by the sharp drop in our staffing budget in FY '20–21; many staff positions were eliminated precipitously. Other reductions in expenditures were due to pandemic-related constraints like reduced travel in FY '20 and FY '21. While the university has largely recovered financially, continued budget pressures constrain GWSPH's resources.
- Although GWSPH remains highly competitive and continues to receive research grants, we have seen a small decline in research expenditures over the past several years due to the end of a large research study concluded by the Biostatistics Center in FY '22 and a drop in indirect cost recoveries between FY '19 and FY '20 as the study data collection was phased down. Most GWSPH departments saw notable increases in funded research during this time. For example, GWSPH experienced a 4% increase in the number of proposals submitted between FY '18 and FY '22, indirects and total non-Biostatistics Center research numbers have grown steadily since FY '20, and we are confident in renewed growth as the funding landscape improves.
- Along with cutting staff in schools, the university in FY '21 moved toward a greater use of shared university services (e.g., IT, development, marketing, research support). While GWSPH is assessed for these services (in various ways) the overall cost is higher than in prior years, particularly where expectations for service levels are misaligned with the expectations of many of our faculty. See Criterion C3 for more information.

Future Plans

- GWSPH is expanding its program offerings to include a bachelor's in Health Data Science, new concentrations in the online MPH program and an online DrPH program, which should increase student enrollment and tuition funds.
- The university continues to develop new dashboards and reports to help deans monitor financial activity, identify trends and respond more proactively.

- GWSPH continues to work toward diversification of funding resources for the Biostatistics Center with reasonable success.
- GWSPH has carried out a deep analysis of the shared service areas and is working with the central offices to create service agreements that more clearly align expectations, resources and service delivery.

C2. Faculty Resources

The school has adequate faculty, including primary instructional faculty and non-primary instructional faculty, to fulfill its stated mission and goals. This support is adequate to sustain all core functions, including offering coursework and advising students. The stability of resources is a factor in evaluating resource adequacy.

Students' access to a range of intellectual perspectives and to breadth of thought in their chosen fields of study is an important component of quality, as is faculty access to colleagues with shared interests and expertise.

All identified faculty must have regular instructional responsibility in the area. Individuals who perform research in a given area but do not have some regular expectations for instruction cannot serve as one of the three to five listed members.

1) *A table demonstrating the adequacy of the school's instructional faculty resources in the format of Template C2-1.*

Template C2-1

	FIRST DEGREE LEVEL			SECOND DEGREE LEVEL	THIRD DEGREE LEVEL	ADDITIONAL FACULTY+
CONCENTRATION	**PIF 1**	**PIF 2**	**FACULTY 3**	**PIF 4**	**PIF 5**	
Department of Biostatistics and Bioinformatics						
Biostatistics MPH	H. Hoffman 1.0	A. Elmi 1.0	A. Ciarleglio 1.0			PIF: 5 Non-PIF: 4
Health Data Science, Biostatistics MS PhD	A. Elmi 1.0	G. Diao 1.0	T. Hamasaki 1.0	K. Crandall 1.0		PIF: 1 Non-PIF: 5
Health Data Science, Bioinformatics MS PhD	K. Crandall 1.0	M. Perez-Losada 1.0	G. Rahnavard 1.0	T. Hamasaki 1.0		PIF: 2 Non-PIF: 4
Health Data Science BS	G. Diao 1.0	M. Perez-Losada 1.0	G. Rahnavard 1.0			PIF: 4 Non-PIF: 1
Schoolwide Programs (Public Health Generalist)						
Public Health BS	E. Gray 1.0	M. Ulfers 1.0	S. Wilenksy 1.0			PIF: 12 Non-PIF: 16
Public Health Generalist MPH@GW DrPH	G. Gray 1.0	C. Heminger 1.0	P. Shin 1.0	G. Migliaccio 1.0		PIF: 13 Non-PIF: 139

Department of Environmental and Occupational Health						
Environmental Health Science and Policy MPH	K. Applebaum 1.0	P. LaPuma 1.0	L. Price 1.0			PIF: 6 Non-PIF: 6
Global Environmental Health MPH	J. Kuiper 1.0	R. Canales 1.0	C. Liu 1.0			PIF: 2 Non-PIF: 1
Environmental Health PhD	K. Applebaum 1.0	L. Price 1.0	D. Michaels 1.0			PIF: 0 Non-PIF: 3
Climate and Health MPH@GW	S. Anenberg 1.0	G. George 1.0	P. LaPuma 1.0			PIF: 2 Non-PIF: 8
Department of Epidemiology						
Epidemiology MPH, MS PhD	H. Young 1.0	M. Magnus 1.0	S. Cleary 1.0	S. Quinlan 1.0		PIF: 12 Non-PIF: 19
Public Health Microbiology and Emerging Infectious Diseases MS	M. Ghosh 1.0	I. Kuo 1.0	J. Jordan 1.0			PIF: 11 Non-PIF: 6
Department of Exercise and Nutrition Sciences						
Physical Activity in Public Health MPH	L. DiPietro 1.0	J. Sacheck-Ward 1.0	M. Barberio 1.0			PIF: 6 Non-PIF: 2
Public Health Nutrition	K. Lora 1.0	K. Robien 1.0	R. van Dam 1.0			PIF: 4 Non-PIF: 2

Department of Global Health						
Global Health Epi and Disease Control MPH	C. Mores 1.0	E. Smith 1.0	J. Tielsch 1.0			PIF: 2 Non-PIF: 4
Global Health Program Design, Monitoring and Eval MPH	S. Baird 1.0	J. Muz 1.0	J. Sandburg 1.0			PIF: 3 Non-PIF: 6
Global Health MPH@GW	J. Tielsch 1.0	S. Frehywot 1.0	C. Mores 1.0			PIF: 3 Non-PIF: 1
Global Health Policy MPH	C. Santos-Burgoa 1.0	W. Munar 1.0	C. Arsenault 1.0			PIF: 3 Non-PIF: 3
Humanitarian Health MPH	R. Asgary 1.0	A. Richards 1.0	C. Santos-Burgoa 1.0			PIF: 2 Non-PIF: 3
Global Public Health Sciences PhD	N. Kumar 1.0	S. Baird 1.0	W. Munar 1.0			PIF: 5 Non-PIF: 6
Department of Health Policy and Management						
Health Policy MPH PhD	L. Cartwright-Smith 1.0	L. Ku 1.0	A. Vichare 1.0	A. Marcus 1.0		PIF: 21 Non-PIF: 21
Health Informatics and Analytics MPH@GW	P. McTaggart 1.0	P. Pittman 1.0	L. Helmchen 1.0			PIF: 13 Non-PIF: 7

Department of Prevention and Community Health						
Community-Oriented Primary Care MPH	T. Taggart 1.0	D. Conserve 1.0	D. Kerrigan 1.0			PIF: 4 Non-PIF: 7
Health Promotion MPH	J. Bingenheimer 1.0	M. Edberg 1.0	C. Berg 1.0			PIF: 6 Non-PIF: 10
Maternal and Child Health MPH	A. Vyas 1.0	K. McDonnell 1.0	M. Ruiz 1.0			PIF: 3 Non-PIF: 5
Public Health Communication and Marketing MPH	K. Ndiaye 1.0	W.D. Evans 1.0	L. Abroms 1.0			PIF: 5 Non-PIF: 0
Social and Behavioral Sciences in Public Health PhD	J. Bingenheimer 1.0	M. Napolitano 1.0	Y. Wang 1.0			PIF: 7 Non-PIF: 1
Women, Youth and Children MPH@GW	N. Nagaraj 1.0	A. Vyas 1.0	K. McDonnell 1.0			PIF: 2 Non-PIF: 1

TOTALS:

Named PIF	71
Total PIF	128
Non-PIF	200

2) *All primary instructional faculty, by definition, are allocated 1.0 FTE. Schools must explain the method for calculating FTE for any non-primary instructional faculty presented in C2-1.*

FTE calculations are outlined in the *General GWSPH Faculty Guidelines for Academic and Service Activities* (see ERF > Criteria C > C2.2: Faculty FTE). FTE calculations vary based on program and course credits. Departments are responsible for calculating FTEs. DrPH@GW FTE calculations are still under development.

Faculty	**MPH@GW**	**MHA@GW**	**Residential Programs**
Full-Time	.05 FTE for course directors per credit .01 FTE for section leads per credit	.02 FTE for course directors per credit + 0.05 FTE annual coverage for coordination .01 FTE for MHA Immersions per credit	.05 FTE per credit hour (minimum expected enrollment of 8) .035 FTE per credit hour for co-teaching (minimum expected enrollment of 15–20)
Part-Time	.05 FTE per section lead per credit hour	.10 FTE for 5-credit course .08 FTE for a 4-credit course .05 FTE for a 3-credit course .02 FTE for MHA Immersions 1 and 4 .03 FTE for MHA Immersions 2 and 3	0.05 FTE per credit hour

3) *If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates.*

Part-time faculty salaries are paid based on the per credit rates in the Collective Bargaining Agreement rather than on FTEs (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

4) *Data on the following for the most recent year in the format of Template C2–2. See Template C2–2 for additional definitions and parameters.*

Template C2–2

General advising and career counseling			
Degree level	**Average**	**Min**	**Max**
Bachelor's			
Staff[28]	143	135	150
PIF	20	1	130
Master's			
Staff (GWSPH Career Services)	861	861	861
Staff (Departmental)	26	23	30
Staff (Online)[29]	254	244	264
PIF	25	1	67
Doctoral			
Staff (GWSPH Career Services)	75	75	75
DrPH PIF	3	1	6
PhD PIF	6	1	22
PhD Non-PIF[30]	22	22	22

Advising in MPH integrative experience			
	Average	**Min**	**Max**
Residential MPH			
PIF	2	1	8
Non-PIF	1	1	2
MPH@GW			
PIF	10	10	10
Non-PIF	10	8	19
Supervision/Advising of bachelor's cumulative or experiential activity			
	Average	**Min**	**Max**
BS, Public Health			
PUBH 4140W	21	19	23

Mentoring/primary advising on thesis, dissertation or DrPH integrative project			
Degree	**Average**	**Min**	**Max**
DrPH			
PIF	2	1	4

[28] Undergraduate students have access to the University Career Center for career counseling. These numbers have been excluded from the above table. The staff numbers represented in the table are for the GWSPH professional staff academic advisors.
[29] Online master's students (MPH@GW and MHA@GW) have a professional staff academic advisor.
[30] There is a single non-PIF faculty member in the Department of Epidemiology who has an active role in advising PhD students.

PhD			
PIF	2	1	6
Non-PIF	1	1	1
MS			
PIF	3	1	6
Non-PIF	1	1	1

See ERF > Criterion C > Criterion C2 > C2.4: Temp C2–2 Advising.

5) *Quantitative data on student perceptions of the following for the most recent year. Schools should only present data on public health degrees and concentrations.*

a) *Class size and its relation to quality of learning (e.g., The class size was conducive to my learning)*

Data on student perceptions of class size and its relation to quality of learning are collected in course evaluations which are disseminated in the final weeks of each term. The data points highlighted below are all five-point Likert scale questions where a score of 5 indicates the greatest agreement or positive sentiment toward the statement. Data were separated by course level so courses with numbers less than 6,000 are at the undergraduate level and courses with numbers at 6,000 or greater are at the graduate level.

Question	Course Level	2023 Average (N)
Class size was conducive to my learning.	Undergraduate	4.5 (1,587)
	Graduate	4.6 (1,587)
Classroom space was adequate for the needs of the course.	Undergraduate	4.6 (5,005)
	Graduate	4.6 (5,005)

b) *Availability of faculty (i.e., Likert scale of 1–5, with 5 as very satisfied)*

Data on student perceptions of faculty availability are collected on the Graduation Survey. Undergraduate and graduate students receive a different survey and as a result answered slightly different questions. Both questions were Likert scale, where a higher score indicates the greatest agreement or positive sentiment toward the statement.

Question	Degree	2020-2021 Average (N)	2021-2022 Average (N)	2022-2023 Average (N)
Satisfaction with out-of-class availability of faculty (4-pt scale)	BS	3.4 (12)	3.5 (148)	3.4 (148)
Accessibility of faculty outside of class (5-pt scale)	MPH	3.9 (30)	3.9 (441)	3.9 (409)
	MS	N/A	4.1 (22)	3.4 (19)
	MHA	N/A	4.0 (82)	4.0 (50)
	PhD	4.3 (4)	4.3 (6)	4.5 (6)
	DrPH	4.4 (5)	4.6 (7)	3.6 (9)

6) *Qualitative data on student perceptions of class size and availability of faculty. Only present data on public health degrees and concentrations.*

Recent comments from course evaluations related to class size were mixed, ranging from the class size being too small to being too large. These comments also spanned degree level and courses. Interestingly, most students who commented on class size did so because they felt that size influenced class discussions (e.g., calls to increase class size because discussion was lacking; calls to decrease class size because the large class prohibited everyone from participating in discussion; class size was conducive to participation and robust discussions). One graduate during the Alum Interviews mentioned that she specifically chose GWSPH because it offered small class sizes, a feature that was important to her and her learning style.

In the Graduation Survey, perceptions of faculty availability were mixed. Some graduate students felt that most professors were approachable and departments created a sense of community. Other students wished they had a more personal connection with their professors or that faculty availability outside of class were transparent. The COVID-19 pandemic influenced many of the perceptions of undergraduate students as they felt the pandemic overshadowed their undergraduate experiences.

See ERF > Criterion C > Criterion C2 > C2.6: Student percep_qual.

7) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH is proud of the robustness of our faculty's practice, service, teaching and research experiences. Students appreciate learning from faculty about these experiences. Our faculty resources are sufficient to meet the instructional needs of the school.
- Recently, GWSPH received a $6 million endowment from Michael and Lori Milken to fund two public health professorships, one of which honors the Dean. The Lynn R. Goldman Professorship and the Michael and Lori Milken Professorship will provide support for two faculty positions.
- GWSPH offers a first-year experience course for BS in Public Health students led by GWSPH faculty, who guide discussions and support students' connections with other faculty.
- The COVID-19 pandemic resulted in faculty offering virtual office hours, which continue to this day, as many students prefer online meetings. Most faculty and staff also offer in-person meetings to students if interested.

Challenges

- Graduate students raised concerns about faculty availability for academic advising and career mentoring. A component of this may be due to the time delay between faculty leaving and faculty replacements, which leaves a gap in service. Additionally, the survey does not specify the academic advisor as the assigned one from GWSPH. Students may be answering this question with non-GWSPH faculty or informal advisors in mind.
- Faculty turnover is a reality. The university controls approval of faculty lines, including tenure/tenure track lines; when faculty depart, this centralized control can lead to time delays with the hiring of new faculty causing stress and gaps for students and faculty.

Future Plans

- While undergraduate students are assigned a professional academic advisor, a more concerted effort will be made at orientation to encourage students to reach out to faculty for general advising and mentorship.

- TEAM Milken plans to expand its mentoring processes and promote mentoring from upper-level BS students (juniors and seniors) for lower-level BS students (first-years and sophomores).
- GWSPH is reviewing the data regarding faculty availability for graduate students outside the classrooms to develop a plan to improve accessibility.
- In new faculty hires and in management of faculty, GWSPH is seeking to employ efforts to reduce faculty turnover (e.g., retention bonuses, counter-offers when faculty are being recruited away, increasing faculty morale through mentoring and other efforts to achieve stability).

C3. Staff and Other Personnel Resources

The school has staff and other personnel adequate to fulfill its stated mission and goals. The stability of resources is a factor in evaluating resource adequacy.

1) *A table defining the number of the school's staff support for the year in which the site visit will take place by role or function in the format of Template C3-1. Designate any staff resources that are shared with other units outside the unit of accreditation. Individuals whose workload is primarily as a faculty member should not be listed.*

   Staff are presented by category of responsibility. Staff that are paid through GWSPH's budget are identified in the table below. Data are from fall 2023.

Template C3-1

Role/Function	FTE
Academic Affairs (10)	10.0
Accreditation and Evaluation (1)	1.0
Admissions (3)	3.0
Career Services (2)	2.0
Development (1)	1.0
Finance and Administration (13)	13.0
Human Resources (2)	2.0
Other Non-Instructional Staff (11)	10.5
Public Health Practice and Training (6)	5.5
Research Administration—Post-Award (5)	5.0
Research Administration—Pre-Award (10)	10.0
Research Support (236)	223.52
Student Affairs (24)	23.5

   See ERF > Criterion C > Criterion C3 > C3.1: Staff FTE.

2) *Provide a narrative description, which may be supported by data if applicable, of the contributions of other personnel.*

   Several personnel are either shared with other entities at the university or are a part of the university's centralized resources and support model. All these sharing relationships were developed since our last accreditation review. These include:

   - Before the pandemic, the university eliminated the GWSPH Development and Alumni Relations unit and established a sharing arrangement with the Schools of Nursing and Medicine and Health Sciences. This office engages alums as well as public and private donors on behalf of GWSPH. The FTE listed is a composite of several individuals who provide some level of effort to GWSPH.
   - Before the pandemic, the university decided that the GWSPH Managing Director of Finance and Administration would be shared with another school, GSEHD. This individual is responsible for financial oversight of the school and supervision of other financial staff.
   - In FY '21, the university decided that the two GWSPH Human Resources Client Partner staff members would be shared with the GW Office of the General Counsel.

- Research administration at GW has long involved collaborations between departments, schools, GW's Office of the Vice Provost for Research (OVPR) and GW's Grants and Contracts Administrative Services (GCAS). The staff reductions in fall 2020 eliminated all general funded research support positions in GWSPH departments and created Research POD 2, one of three central organizations to provide research award support to faculty. Funded by GWSPH, POD 2 oversees the complete life cycle of a sponsored research project from inception to award closeout. POD 2 is shared with GW Law. Over time, OVPR has gradually pushed more responsibilities onto POD 2. Moreover, the POD has not been staffed to provide post-award support, so that GWSPH has needed to create some additional research positions in departments as well as its Office of Research Excellence to provide the needed support.
- Information technology has always been mostly centralized; however, the GWSPH client support group was eliminated, and today the university provides 24/7 generalized assistance through its centralized IT department. Within that department, there are individuals shared with SEAS and LAI who are dedicated to assisting with GWSPH's information technology support.
- Research computing and academic technology services were always centralized but were moved into IT since the last review.
- When staffing reductions occurred, the GWSPH marketing and communications team was eliminated, and there is now a centralized resource that provides two individuals (1.5 FTE) who are dedicated to marketing GWSPH programs and access to many other services. Additional hires may be forthcoming.
- Operations and Facilities Management and Events manages all university buildings, facilities and labs, coordinates the booking, set-up and break-down of rooms for events and is responsible for the operational practices for space management, equipment and contracts. GWSPH event staff and a lab manager position were eliminated in fall 2020 in favor of centralized support; however, that support did not materialize, and two new positions were created to serve these needs.

Additional personnel who support the daily activities and mission of GWSPH but are not considered staff include:

- Graduate assistants who act as teaching assistants and front desk admin and graduate research assistants who assist faculty in their research (160 students in 2022–2023)
- Federal work study students who provide project assistance (generally 1–2 per year)
- Students who provide departmental or grant assistance
- Consultants who provide expertise and support on specific projects
- Colonial temps who provide as-needed support
- Safety and security personnel who reside in the lobby of the main GWSPH building

3) *Provide narrative and/or data that support the assertion that the school's staff and other personnel support is sufficient or not sufficient.*

Overall, GWSPH staff and other personnel support are sufficient to meet the school's needs. Departments have access to department-specific as well as centralized school and university-level support.

As GWSPH has grown in students and faculty, staff support has also grown proportionally. Over the last several years, additional staff members such as Senior Associate Dean for Diversity, Equity and Inclusion, Assistant Program Director for GWSPH Program Administration and Director of Academic Planning and Accreditation were hired to address the strategic goals of the school.

Additionally, leadership changes at GW reversed plans to centralize much of our staff at the university level. As a result, several key staff members have returned to GWSPH, providing dedicated, knowledgeable support. The university recognizes that centralization of resources is not effective in all cases and is currently looking for ways to drive more resources into the schools.

In this area, as in others, GWSPH showed remarkable resilience after a material reduction in staff that created enormous challenges. In most areas, GWSPH has recovered from these reductions.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH is proud of the dedication that our staff shows to the school and our mission. This is evidenced by some staff's length of employment at GW and GWSPH. These longtimers (12+ years) provide a deep bench of invaluable institutional knowledge. We also have a number of staff with educational and practice experience in public health across the many divisions. We have hired a number of graduates of GWSPH degree programs and several already-hired staff have decided to obtain public health degrees at GWSPH.
- The tremendous expertise of the research staff at GWSPH enables the school to hold the largest research portfolio at the university. Additionally, the research staff enables the Biostatistics Center to be at the forefront of cutting-edge research by supporting large clinical trials. The Center recently celebrated its 50th anniversary.
- GWSPH employs a diverse staff. Over 42% of our benefit eligible staff self-identify as American Indian or Alaskan Native, Asian, Black or African American or two or more races. Additionally, approximately one-third of our staff served in the US military.
- The university has instituted a GW Staff Council that is intended to lift the voices and opinions of the staff at the university to help shape institutional decisions. GWSPH staff are well-represented on the Council.
- In most areas GWSPH has recovered, all or in part, from the material staff reductions, even while maintaining the morale (and loyalty) of staff.

Challenges

- Like many academic institutions, fiscal resources were constrained during the COVID-19 pandemic, limiting our ability to replace and hire additional staff. Economic recovery has been slow, though progressing. Another unexpected ramification of the pandemic is the candidate expectation of a hybrid work environment. This has made it difficult to hire for student-facing roles, which by definition cannot be hybrid.
- GWSPH faces stiff hiring competition in the DC metro area. While GWSPH is the only school of public health, there is an abundance of public health-focused private and public employers plus other universities in the area, some of which can offer better compensation packages than GWSPH. Additionally, the high cost of living in DC, a limited staff career ladder at GWSPH and limited work flexibility also hinder staff hiring and retention success.
- The centralization of services and individuals during the COVID-19 pandemic resulted in stress and confusion as roles were eliminated or reshuffled. GWSPH is still facing challenges in obtaining desired services and products from these centralized services.
- Some of the new administrative structures (like the Research POD and the centralized marketing group) have created ambiguity and have not been conducive to building staff identification with and loyalty to GWSPH.
- Unilateral decisions that certain staff could be shared across multiple schools has created a perception of overwork and has impeded communications.

Future Plans

- GWSPH is planning to expand professional development opportunities for staff in the coming years.
- GWSPH is planning to hire a joint staff member, who will be shared with University Career Services. This individual will be available onsite at GWSPH to assist undergraduate students with their career needs (as discussed in Criterion B5) and to provide a better student experience.
- GWSPH is working with GW Human Resources to review classifications and salary ranges for staff to remain competitive.
- GWSPH is also working to provide more effective onboarding strategies for staff, increasing diversity, equity and inclusion resource support (including the work that comes out of the GWSPH Diversity and Inclusion Action Committee) and expanding professional development opportunities.
- GWSPH has continued to engage leaders in shared areas like Human Resources, Finance and Development as part of the leadership of the schools.
- GWSPH hired consultants to assist the school in negotiating shared service agreements with the university's centralized services so expectations and deliverables are aligned. Additionally, GWSPH decided to hire internal staff whose sole focus is the school.

C4. Physical Resources

The school has physical resources adequate to fulfill its stated mission and goals and to support instructional schools. Physical resources include faculty and staff office space, classroom space, student shared space and laboratories, as applicable.

1) *Briefly describe, with data as applicable, the following. (Note: square footage is not required unless specifically relevant to the school's narrative.)*

GWSPH occupies space in five buildings across the District of Columbia, Maryland and Virginia. The main GWSPH building is the Milken Institute School of Public Health Building at 950 New Hampshire Avenue NW in DC. Opened on May 15, 2014, this facility houses a variety of spaces for students, faculty and staff. The nine-story building features a number of healthy design features such as a central staircase to promote walking between floors, bike rooms, water bottle filling stations, standing desks and other furniture that meets the needs of employees and staff, and a caregiver suite. The building has a platinum rating under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System of the US Green Building Council (USGBC). Sustainable features in the building include a rain-water collection system, terracotta panels, an HVAC system with chilled beam and mass air displacement technologies, an enhanced stormwater management system to reduce stormwater runoff by more than 25%, a green floor, low-flow plumbing fixtures, energy-saving lighting controls and numerous local, rapidly renewable and recycled content materials. In 2017, it won the COTE (Committee on the Environment) Top Ten award from the American Institute of Architects (see ERF > Criterion C > Criterion C4 > C4.1: Physical resources).

Research labs and the Department of Biostatistics and Bioinformatics are housed on the seventh floor of the Science and Engineering Hall on the Foggy Bottom campus in DC. Located at 800 22nd Street NW, the eight-story building features highly specialized core lab facilities, such as a three-story high bay and a nanofabrication suite. It also includes world-class teaching spaces designed for a more hands-on approach to learning, two levels of program space and ample student lounge and study space. Event spaces include the green wall space and Lehman Auditorium.

Several GWSPH offices and research groups are housed at 2175 K Street NW on the second and fifth floors. Located across Washington Circle from the GWSPH building, 2175 K Street NW is a LEED Gold Certified building that has a state-of-the-art solar system that screens the existing façade and provides passive solar energy. Non-GW offices and organizations, including the US delegation of the European Union, are also located at 2175 K Street NW.

GWSPH operates several research labs and clinics. These include, but are not limited to, the Biostatistics Center in Rockville, Maryland, and the Public Health Research Clinic, run by the Department of Epidemiology, at 2021 L Street NW in Washington, DC.

a) *Faculty office space*

The majority of GWSPH full-time faculty have dedicated office space in one of the GWSPH facilities. For part-time and fully remote faculty, shared faculty offices are provided, along with open cubicles and shared workspaces in most buildings. Each building has security personnel in the lobby, and GWorld cards must be shown and worn at all times. Public spaces are generally unlocked during normal business hours. After-hours access is available

for GWorld card holders, with appropriate permission. Spaces containing research or student confidential information are locked when not occupied.

b) Staff office space

Staff occupy space across all GWSPH buildings, with the majority in the Milken Institute SPH building at 950 New Hampshire Avenue NW and some staff and faculty on the seventh floor of the Science and Engineering Building and at 2175 K Street NW. Physical space allocation depends on a variety of factors such as remote work schedule, job title and job role. Staff occupy a mixture of cubicles and enclosed offices. Shared workspaces (e.g., offices, cubicles, conference rooms and open lounges) are also available.

c) Classrooms

Most classes are held in the GWSPH building's fourteen classrooms and two lecture halls. The ground floor of 950 New Hampshire Avenue NW includes a 227-seat auditorium as well as a separate convening center that allows the school to host a variety of conferences and academic events. The convening center is a multipurpose, flex space that can be used for large events or partitioned into up to four spaces for classes. All classrooms across campus are equipped with a "red button" that locks classroom doors in the event of emergency as well as a phone for calling GW security or DC police.

Classes that require specialized laboratory equipment or are offered by the Department of Biostatistics and Bioinformatics tend to be held in the Science and Engineering Hall. This building offers over 30 research laboratories, collaborative and computer classrooms, and auditoriums.

The few classes each term that cannot be housed at the GWSPH building or the Science and Engineering Hall due to schedule conflicts are offered elsewhere on GW's Foggy Bottom campus.

All academic spaces are outfitted with advanced audiovisual equipment that allows for virtual attendance/participation and lecture recording through GW Lecture Capture. This technology was updated during the COVID-19 pandemic and is periodically refreshed. For example, the convening center underwent audiovisual renovations to improve remote participation in summer 2023. Many spaces feature movable furniture to create a flexible classroom where professors and students can customize the environment that best facilitates learning.

d) Shared student space

Shared spaces for student meetings, studying and collaborating are available in the GWSPH building on all nine floors. During the development of the building, GWSPH focused considerable investment in the availability, and later the decorating, of common areas and study spaces for students. Activity and breakout areas accommodate both undergraduate and graduate students. Congregating spaces contain a mix of comfortable chairs, tables, booths, bars and sofas for lounging, working and eating. Three of the upper floors have kitchens available to students with microwaves, sinks, refrigerators and vending machines dispensing healthy snacks. Electrical outlets are readily available as well as free Wi-Fi. Apple desktops and printers are available for students free of charge on select floors. Over 400 lockers are available on a first-come, first-served basis, and students may bring a lock to protect their belongings. On the seventh floor, an interfaith meditation space is available for students who would like to pray or meditate in seclusion. Showers, a gender-neutral

bathroom, caregiver suite and locker rooms are available in the basement, near the exercise rooms. During final exams week, the convening center on the ground floor is converted into a study hall with fidgets, snacks, water and stress-relieving entertainment.

e) *Laboratories, if applicable to public health degree school offerings*

The two below-ground floors of the main GWSPH building house six academic laboratories for the Department of Exercise and Nutrition Sciences. Additionally, the department offers fee-based research and public testing services for GW and the greater Washington, DC, metro region through the Metabolism and Exercise Testing (MET) Laboratory Service Core. All laboratory facilities offer state-of-the-art exercise and clinical equipment for metabolic, body composition and human performance testing and academic training. The MET Lab Service Core, located in the basement of 950 New Hampshire Street NW serves to cultivate health-related research in physical activity, exercise physiology, nutrition and human performance by providing a readily accessible and professional space for principal investigators to engage in rigorous and reliable data collection.

GWSPH operates a public health research lab on the seventh floor of Science and Engineering Hall on the Foggy Bottom campus. This Biosafety Level 3 laboratory is one of the few facilities in the United States that can safely work with airborne and potentially lethal infectious agents or toxins. During the COVID-19 pandemic, the Antibiotic Resistance Action Center (ARAC), which is housed in this lab, launched a study to surveillance test GW health care workers to see if they had been infected or developed antibodies. They developed a COVID-19 diagnostic test, which was granted emergency use authorization by the US Food and Drug Administration in August 2020. The GWSPH public health research lab was the main COVID-19 test processing site for the GW community. The lab also houses the Genomics Core, which is a full-service next-generation sequencing (NGS) core lab, capable of providing project planning, nucleic acid extraction, library preparation, quality control, Illumina and Oxford Nanopore Technologies sequencing, as well as other lab services upon request. Under the direction of Dr. Keith Crandall, the Genomics Core also offers bioinformatics consultations and analysis services.

2) *Provide narrative and/or data that support the assertion that the physical space is sufficient or not sufficient.*

There is sufficient physical space for all GWSPH instructional, scholarship and service activities. The space at 950 New Hampshire Avenue is sufficient for the majority of GWSPH functions, and whatever functions cannot be held within the GWSPH building can be accommodated by one of the other spaces occupied by GWSPH or in other buildings on GW's Foggy Bottom campus. For example, less than 5% of our residential classes in Fall 2023 had to be held in buildings other than the GWSPH building due to limited classroom space. As expected, office space and classrooms are always in demand, but GWSPH has been able to successfully navigate the growing need through flexible work schedules and expanding online course options.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH has a multitude of student spaces available in the GWSPH building, and students take advantage of using these spaces for studying, eating meals and connecting with other students.
- GWSPH is invested in ensuring our employees and students have access to innovative and quality technology. The school performs technology upgrades in student classrooms and convening classes every 2 to 3 years.
- GWSPH manages the main building at 950 New Hampshire Avenue NW, which allows us to rent out spaces for additional funds, though it does require a dedicated budget for maintenance, technology improvements, facilities and security. GWSPH reconfigured the rental spaces and reallocation of shared spaces to meet in-person needs.

Challenges

- The District of Columbia has strict laws (i.e., "the cap") regarding space and population maximums, which have been prohibitive in increasing the number of admitted residential students and hosting certain events.
- The cost of real estate in the District and overall campus space planning and zoning in Foggy Bottom makes it prohibitive to expand to meet growing needs. Additional barriers to expansion include creating ADA-friendly facilities in older buildings and the high cost of construction.
- It is difficult to navigate the limitations and complexity of using leased spaces and university-owned spaces and managing occupancy levels across all.

Future Plans

- As GWSPH continues to grow, additional space will likely be needed. Some building features like gender-neutral spaces and bathrooms are high on the priority list. Construction is planned regarding the modification of the bathrooms on the second and sixth floors of the GWSPH building to become all-persons' restrooms. We are also looking for additional laboratory space, either on the Foggy Bottom campus or potentially at partner organizations like Walter Reed National Military Medical Center in Maryland.

C5. Information and Technology Resources

The school has information and technology resources adequate to fulfill its stated mission and goals and to support instructional schools. Information and technology resources include library resources, student access to hardware and software (including access to specific software or other technology required for instructional schools), faculty access to hardware and software (including access to specific software required for the instructional schools offered) and technical assistance for students and faculty.

1) *Briefly describe, with data if applicable, the following:*

   a) *library resources and support available for students and faculty*

   GW Libraries and Academic Innovation (LAI) provides teaching, learning and research services and resources for students, staff and faculty. Libraries that are part of LAI include the flagship Estelle and Melvin Gelman Library on the main campus in Foggy Bottom, Eckles Library on the Mount Vernon Campus in Northwest DC, and the Virginia Science and Technology Library (VSTC Library) on the Virginia Science and Technology Campus in Ashburn, Virginia. Members of the GWSPH community also have access to the Himmelfarb Health Sciences Library, a specialized medical and health science resources library on the Foggy Bottom campus. GW LAI is a member of the Association of Research Libraries (ARL) and part of the Washington Research Libraries Consortium (WRLC), which makes GW students, staff and faculty eligible to borrow from any WRLC library.

   Gelman Library is open 24 hours, 7 days per week, during the academic year and offers a variety of individual and group study spaces, some of which are reservable or accessible to graduate students only. The Global Resources Center on Gelman's seventh floor is open exclusively to graduate students outside of its staffed hours. Lockers are currently available for rent in Gelman Library on the fourth and fifth floors. A floor-by-floor breakdown of available spaces at Gelman Library is available on the library website.

   Himmelfarb Health Sciences Library is open 24 hours a day, Monday through Friday, during the academic year. As a center for research, learning and creativity, Himmelfarb provides resources and services focused on the health sciences. Physical access to Himmelfarb is restricted to students, residents, faculty and staff from GWSPH, SMHS and GW Nursing. Specialty services offered at Himmelfarb include free 3D printing for students, staff and faculty, systematic review services and a research profile audit service. Most public health subscriptions are made available via Himmelfarb and Himmelfarb library faculty are available to teach in GWSPH classrooms and consult on major research projects' systematic reviews. They also keep a database of all publications by current GWSPH faculty, staff and students.

   Through GW LAI, students, staff and faculty have access to:

   - Thousands of physical and e-books from most major publishers, thousands of scholarly journals, millions of articles and over 700 databases that provide website access to major news sources such as *The New York Times*, *The Washington Post* and *The Wall Street Journal*.
   - Instructional guidance for the development of both online and residential courses through the Instructional Core team.
   - Multimedia project development through the CREATE Digital Studio.
   - Free, peer-based writing support for students and faculty through the GW Writing Center (offers both virtual and in-person support appointments).

- Consultations with research librarians for strategizing and finding resources for projects, papers, presentations, articles and more.
- Consultations for assistance with quantitative, computational and spatial reasoning tasks through STEMworks (software includes GIS, R, Python, Stata, SAS).

b) *student access to hardware and software (including access to specific software or other technology required for instructional schools)*

GWSPH students, staff and faculty have access to several software licenses, including:

- GIS
- SAS
- Adobe Creative Cloud
- Microsoft 365
- Box
- Gmail/Google Drive
- Zoom
- Blackboard/Blackboard Collaborate Ultra
- VoiceThread
- Qualtrics
- RedCap
- SafeAssign (plagiarism software)
- TurningPoint (audience response system)
- Respondus LockDown Browser and Monitor (custom browser that locks down a virtual testing environment)
- 2GW (GWSPH's third-party learning management system for fully online programs and courses)

GW offers a Virtual Computer Lab, a cloud-based service that runs Windows-based software through a web-browser. This system allows users to access university-licensed applications remotely, 24/7. Available software includes Microsoft Office Apps (Excel, OneNote, PowerPoint, Publisher, Word 2016), Google Chrome Browser, ArcGIS, SAS, SPSS, NVivo12, RStudio, R, and GeoDA. Technology support services are offered through several specialized offices including GW IT Support Center, and Buff and Blue Apple Repair Center.

All students are required to have access to a laptop or desktop (see recommended specifications), secure, high-speed internet access, a web camera and headphones. GW libraries provide access to Windows and Mac workstations equipped with a variety of software, as well as printers, scanners, photocopiers and microform reader/scanners. Free Wi-Fi is available in all GW buildings. Wired connections are available in the residence halls and students may request internet connection equipment through the IT Support Center. Media equipment (e.g., camera, lights, microphones) are available for borrowing from the CREATE Digital Studio with a reservation.

c) *faculty access to hardware and software (including access to specific software or other technology required for instructional schools)*

In addition to the software listed above, faculty also have access to:

- Blackboard Ally (scores accessibility of files and provides guidance and tips).
- Echo360 (video recording, editing and sharing).

d) *technical assistance available for students and faculty*

GW Information Technology Support offers assistance to faculty, staff and students. They are available 24 hours a day, 7 days a week, by phone and have several walk-in support centers on all three GW campuses, which are open during business hours, Monday through Friday.

For support associated with 2GW, GWSPH students, staff and faculty rely on the 2U vendor. See Criterion D19.

GW LAI provides instructional technical assistance for faculty. The Instructional Technology Lab (ITL) offers faculty workshops and consultations on Blackboard, TurningPoint and other instructional technologies. They can assist faculty in the creation of multimedia course content and guide faculty through creating content for fully online courses. Last, LAI works with faculty to implement accessibility best practices.

We were the first school at the university to work extensively with GW IT Support to meet the needs of faculty and students during the COVID-19 pandemic. We have extensive experience with teaching and learning in remote settings through our online programs, with which we supported all our faculty and students remotely during the pandemic. We installed cameras and microphones in every classroom during the remote learning period and were ready for hybrid learning when students returned to campus. We also held numerous workshops for faculty on designing lessons and engaging students during remote and hybrid teaching and learning.

2) *Provide narrative and/or data that support the assertion that information and technology resources are sufficient or not sufficient.*

The information and technology resources at GWSPH are sufficient. Resources at the university level offer both generalized support and support unique to the needs of the students, staff and faculty at the school level. Library and IT services are available virtually so all our students can access them.

After the COVID-19 pandemic, GWSPH upgraded its technological equipment. Replacing the obsolete technology took longer than expected because of remote work, manufacturing delays and the loss of an in-house IT support team.

GWSPH is working to ensure that all members of the school have direct IT support. For example, GWSPH uses a classroom cloud system rather than a dedicated computer lab, which allows the entire building to become a computer lab.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Technology support is available from multiple sources, both in person and online. Students and faculty may request support 24/7 by phone, drop in at one of the many walk-in support centers or search for answers on the university website.
- We have a strong commitment to security in public health research. GWSPH invested in StrongBox and Armor software to meet the research needs of faculty, staff and students as it relates to high-speed data analysis, data storage and collaborative data sharing. Both StrongBox and Armor provide a comprehensive suite of analytical software applications and a secure centrally managed, cloud-based data storage service. This software is in addition to the university-level protocols.
- GWSPH faculty, staff and students have access to high-performance computing for research. This computing ecosystem includes Pegasus, a shared and cross-discipline

high-performance computing cluster that provides the latest in supercomputing technology and tools.

- In summer 2023, GW invested in an extensive upgrade to the university's wired and wireless networks. The infrastructure updates included replacing access points and other Wi-Fi hardware across our campuses. Along with enhanced connectivity and reliability, the upgrades provide greater visibility into network performance and enable technicians to work proactively to identify gaps and resolve issues quickly (see ERF > Criterion C > Criterion 5 > C5.1: IT Resources).
- During the 2023–2024 academic year, GWSPH upgraded the technology in all classrooms, convening center and conference rooms. All floor copiers in both the GWSPH building and Science and Engineering Hall were replaced.
- GWSPH students can print papers and articles at one of the university's printing stations. All students are given a $30 printing credit each fall. Several of the kiosks are located within the GWSPH building and the Science and Engineering Hall.
- GWSPH gained access to Panopto, which allows both full-time and part-time faculty to record and stream high quality video content for all courses. Additionally, Panopto can edit and re-record components of a lecture, allowing faculty to make real-time updates in response to global events. Faculty may also embed quizzes and reading checkpoints to ensure that students are engaged with the lecture content.
- GWSPH acquired all online lecture recordings created at 2U's recording studio and now maintains an in-house repository of these lectures, allowing the school to use content and update lectures in real time, as needed.

Challenges

- Investments related to technology require extensive financial resources and planning to ensure the technology best meets the needs of our community.
- With the centralization of IT services, IT has been less responsive to urgent classroom technology issues, which can impede instructional time and meetings.
- At times, the virtual computing lab can be slow and Wi-Fi variable. We are aware this is an issue that needs to be addressed in the context of the recent Wi-Fi update.
- Similarly, the university's recent network update has adversely affected several GWSPH website pages, and we are working to address this.

Future Plans

- GWSPH will continue to improve and enhance our technological capacity to support in-person, remote and hybrid learning and teaching and take advantage of technology to expand pedagogical methodologies and opportunities.
- As previously discussed in Criterion C3, GWSPH is actively negotiating with IT to create a shared services agreement to clearly delineate expectations and needs.

D1. MPH and DrPH Foundational Public Health Knowledge

The school ensures that all MPH and DrPH graduates are grounded in foundational public health knowledge.

The school validates MPH and DrPH students' foundational public health knowledge through appropriate methods.

1) *Provide a matrix, in the format of Template D1-1, that indicates how all MPH and DrPH students are grounded in each of the defined foundational public health learning objectives (1-12). The matrix must identify all options for MPH and DrPH students used by the school.*

Template D1-1

#	Foundational Knowledge	MPH Courses	DrPH Courses
1	Explain public health history, philosophy, and values.	PUBH 6003 Principles and Practices of Epidemiology (ex. US public health achievements, types of prevention, descriptive epidemiology, measures)[31] PUBH 6011 Environmental and Biological Foundations of Public Health (ex. air pollution history, current US environmental legislation, precautionary principle, environmental justice, risk models) Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Sessions #3 and #17)[32]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
2	Identify the core functions of public health and the 10 Essential Services.	PUBH 6012 Fundamentals of Health Policy (Week #1) Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #17)[33]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program

[31] All MPH students take PUBH 6003, including dual degree students, regardless of program.
[32] MD/MPH students take IDIS 8311. All other students take PUBH 6011.
[33] MD/MPH students take IDIS 8311. All other students take PUBH 6012.

#	Foundational Knowledge	MPH Courses	DrPH Courses
D1.3	Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	PUBH 6002 Biostatistical Applications for Public Health (Quant) Or PUBH 6853 Use of SAS for Data Management and Analysis (Quant)[34] PUBH 6009 Fundamentals of Public Health Program Evaluation (Qual) Or PUBH 6501 Program Evaluation (Qual)	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
4	List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	PUBH 6003 Principles and Practices of Epidemiology PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #31)[35]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
5	Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 6003 Principles and Practices of Epidemiology PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #31)[36]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
6	Explain the critical importance of evidence in advancing public health knowledge.	PUBH 6003 Principles and Practices of Epidemiology PUBH 6007 Social and Behavioral Approaches to Public Health PUBH 6009 Fundamentals of Public Health Program Evaluation	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
7	Explain effects of environmental factors on a population's health.	PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Sessions #3 and #8)[37]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program

[34] MPH in Biostatistics students take PUBH 6853. All other students take PUBH 6002.
[35] MD/MPH students take IDIS 8311. All other students take PUBH 6011.
[36] MD/MPH students take IDIS 8311. All other students take PUBH 6011.
[37] MD/MPH students take IDIS 8311. All other students take PUBH 6011.

#	Foundational Knowledge	MPH Courses	DrPH Courses
8	Explain biological and genetic factors that affect a population's health.	PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #3) And IDIS 8102 Infection, Inflammation and Immunohematology (Session #116) [38]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
9	Explain behavioral and psychological factors that affect a population's health.	PUBH 6007 Social and Behavioral Approaches to Public Health	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
10	Explain the social, political and economic determinants of health and how they contribute to population health and health inequities.	PUBH 6007 Social and Behavioral Approaches to Public Health	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
11	Explain how globalization affects global burdens of disease.	PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8102 Infection, Inflammation and Immunohematology (Sessions #80 and #116)[39]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program
12	Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health).	PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8102 Infection, Inflammation and Immunohematology (Sessions #116 and #161)[40]	PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program

2) *Provide supporting documentation that clearly identifies how the school ensures grounding in each area. Documentation may include detailed course schedules or outlines to selected modules from the learning management system that identify the relevant assigned readings, lecture topics, class activities, etc. For non-course-based methods, include web links or handbook excerpts that describe admissions prerequisites.*

[38] MD/MPH students take IDIS 8311 and IDIS 8102. They also complete other classes as part of medical school that addresses the biological and genetic factors that affect health. All other students take PUBH 6011.
[39] MD/MPH students take IDIS 8102. All other students take PUBH 6011.
[40] MD/MPH students take IDIS 8102. All other students take PUBH 6011.

All MPH students at GWSPH (except MD/MPH) take a set of core courses that teach and assess the D1 competencies. These core classes[41] were reassessed in 2018 in light of the new CEPH accreditation requirements. Additional core classes were added to address the competencies in leadership and interprofessional experience[42] found in Criterion D2. MD/MPH students are the only MPH students who do not take all the required core courses because they receive credit for some of the D1 competencies through their medical school curriculum.

See ERF > Criterion D > Criterion D1 > D1.2: Temp D1-1_methods.

3) *If applicable, assessment of strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- PUBH 6080 Public Health Pathways is a self-paced online course. This asynchronous course material allows students to complete the work at their convenience and review materials as needed.
- GWSPH provides options and flexibility to MPH students to meet these competencies as well as exposure to different departments, programs and faculty.
- Core courses are routinely reviewed and revisions are made based on feedback from course directors and students.

Challenges

- Navigating the transition to the new core curriculum while students were still completing prior curricula was challenging, particularly when students went on a leave of absence and then returned to their program.
- The previous mechanisms of ensuring that students completed PUBH 6080 and their completion was recorded was challenging. The new system of building PUBH 6080 into Blackboard and linking the material to existing courses should alleviate some of these burdens.

Future Plans

- PUBH 6009 is scheduled to undergo an extensive review and revision in 2023–2024 for implementation in fall 2024 to ensure consistency between online and residential versions.
- PUBH 6011 will undergo a partial revision to refresh material and address workload issues identified from student feedback.

[41] PUBH 6002 Biostatistical Applications for Public Health, PUBH 6003 Principles and Practices of Epidemiology, PUBH 6007 Social and Behavioral Approaches to Public Health, PUBH 6009/6501 Program Evaluation, PUBH 6011 Environmental and Biological Foundations of Public Health and PUBH 6012 Fundamentals of Health Policy.

[42] PUBH 6021 Essentials of Public Health Practice and Leadership 1, PUBH 6022 Essentials of Public Health Practice and Leadership 2 and PUBH 6023 Interprofessional Education Experience.

D2. MPH Foundational Competencies

The school documents at least one specific, required assessment activity (e.g., component of existing course, paper, presentation, test) for each competency, during which faculty or other qualified individuals (e.g., teaching assistants or other similar individuals without official faculty roles working under a faculty member's supervision) validate the student's ability to perform the competency.

Assessment opportunities may occur in foundational courses that are common to all students, in courses that are required for a concentration or in other educational requirements outside of designated coursework, but the school must assess all MPH students, at least once, on each competency. Assessment may occur in simulations, group projects, presentations, written products, etc. This requirement also applies to students completing an MPH in combination with another degree (e.g., joint, dual, concurrent degrees).

Since the unit must demonstrate that all students perform all competencies, units must define methods to assess individual students' competency attainment in group projects Also, assessment should occur in a setting other than an internship, which is tailored to individual student needs and designed to allow students to practice skills previously learned in a classroom. Additionally, assessment must occur outside of the integrative learning experience (see Criterion D7), which is designed to integrate previously attained skills in new ways.

These competencies are informed by the traditional public health core knowledge areas, (biostatistics, epidemiology, social and behavioral sciences, health services administration and environmental health sciences), as well as cross-cutting and emerging public health areas.

1) *List the coursework and other learning experiences required for the school's MPH degrees, including the required curriculum for each concentration. Information may be provided in the format of Template D2-1 or in hyperlinks to student handbooks or webpages, but the documentation must present a clear depiction of the requirements for each MPH degree.*

Template D2-1

Part A: Requirements for all MPH degrees (except a few joint degrees)		
Course number	**Course name**	**Credits**
Foundational Courses		
PUBH 6002 Or PUBH 6853	Biostatistical Applications for Public Health Or Use of SAS for Data Management and Analysis[43]	3
PUBH 6003	Principles and Practices of Epidemiology	3
PUBH 6007	Social and Behavioral Approaches to Public Health	2
PUBH 6009 Or PUBH 6501	Fundamentals of Public Health Program Evaluation Or Program Evaluation[44]	2 Or 3
PUBH 6011	Environmental and Biological Foundations of Public Health	3
PUBH 6012	Fundamentals of Health Policy	2
PUBH 6021	Essentials of Public Health Practice and Leadership 1	1

[43] MPH in Biostatistics only

[44] MPH in Community-Oriented Primary Care; Global Health Program Design, Monitoring and Evaluation; Health Promotion; Maternal and Child Health; and Public Health Communication and Marketing only.

PUBH 6022	Essentials of Public Health Practice and Leadership 2	1
PUBH 6023	Interprofessional Education Experience	0
Applied Practice Experience		
PUBH 6000	MPH Applied Practice Experience	0
	TOTAL FOUNDATIONAL CREDITS	**17–18**

Part B: Requirements for MPH degree in Biostatistics		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6850	Introduction to SAS for Public Health Research	1
PUBH 6851	Introduction to R for Public Health Research	1
PUBH 6852	Introduction to Python for Public Health Research	1
PUBH 6862	Applied Linear Regression Analysis for Public Health Research	3
PUBH 6864	Applied Survival Analysis for Public Health Research	3
PUBH 6865	Applied Categorical Data Analysis for Public Health Research	3
PUBH 6866	Principles of Clinical Trials	3
PUBH 6868	Quantitative Methods	3
PUBH 6869	Principles of Biostatistical Consulting	1
	Electives	7
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Community-Oriented Primary Care		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6504	Social and Behavioral Science Research Methods	3
PUBH 6510	Community-Oriented Primary Care Principles and Practice	3
PUBH 6512	Community-Oriented Primary Care Policy and Issues	2
PUBH 6513	Community Health Management	2
PUBH 6514	Preventing Health Disparities	2
	Electives	10
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**27**

Part B: Requirements for MPH degree in Environmental Health Science and Policy		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6121	Environmental and Occupational Epidemiology	3
PUBH 6122	Protecting Public Health and the Environment: Policies, Politics and Programs	3
PUBH 6123	Toxicology: Applications for Public Health Policy	3
PUBH 6124	Risk Management and Communication	3
PUBH 6126	Assessment and Control of Environmental Hazards	3
PUBH 6131	Quantitative Methods in Environmental and Occupational Health	3
	Electives	8

Integrative Learning Experience		
PUBH 6137	EOH Culminating Experience 1	1
PUBH 6138	EOH Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Epidemiology		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6247	Epidemiologic Methods 1: Design of Health Studies	3
PUBH 6853	Use of SAS for Data Management and Analysis	3
PUBH 6252	Epidemiologic Methods 2: Advanced Epidemiologic Methods	3
PUBH 6260	Applied Epidemiologic Data Analysis	3
	Electives, Selectives	14
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Global Environmental Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6121	Environmental and Occupational Epidemiology	3
PUBH 6126	Assessment and Control of Environmental Hazards	3
PUBH 6128	Global Environmental and Occupational Health	2
PUBH 6131	Quantitative Methods in Environmental and Occupational Health	3
PUBH 6400	Global Health Frameworks	2
PUBH 6411	Global Health Qualitative Research Methods	2
PUBH 6435	Global Health Program Development and Implementation	2
	Electives	9
Integrative Learning Experience		
PUBH 6137	EOH Culminating Experience 1	1
PUBH 6138	EOH Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Global Health Epidemiology and Disease Control		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6400	Global Health Frameworks	2
PUBH 6247	Epidemiologic Methods 1: Design of Health Studies	3
PUBH 6252	Epidemiologic Methods 2: Advanced Epidemiologic Methods	3
PUBH 6853	Use of SAS for Data Management and Analysis	3
PUBH 6416 Or PUBH 6423	Ethical and Cultural Issues in Global Health Research and Programs Or Ethics in Public Health Practice and Policy	1
PUBH 6047	Systematic Reviews to Synthesize Evidence in Public Health Practice	1
PUBH 6486	Global Health Programs and Approaches to the Control of Infectious Diseases	2
PUBH 6492	Global Health Programs and Approaches to the Control of Chronic Diseases	2

	Electives	9
Integrative Learning Experience		
PUBH 6418	GH Culminating Experience 1	1
PUBH 6419	GH Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Global Health Program Design, Monitoring and Evaluation		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6400	Global Health Frameworks	2
PUBH 6410	Global Health Study Design	1
PUBH 6412	Global Health Quantitative Research Methods	3
PUBH 6416 Or PUBH 6423	Ethical and Cultural Issues in Global Health Research and Programs Or Ethics in Public Health Practice and Policy	1
PUBH 6435	Global Health Program Development and Implementation	2
PUBH 6047	Systematic Reviews to Synthesize Evidence in Public Health Practice	1
	Electives, Selectives	15
Integrative Learning Experience		
PUBH 6418	GH Culminating Experience 1	1
PUBH 6419	GH Culminating Experience 2	1
	TOTAL CREDITS	**27**

Part B: Requirements for MPH degree in Global Health Policy		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6400	Global Health Frameworks	2
PUBH 6447	Global Health Policy Analysis	2
PUBH 6412	Global Health Quantitative Research Methods	3
PUBH 6416 Or PUBH 6423	Ethical and Cultural Issues in Global Health Research and Programs Or Ethics in Public Health Practice and Policy	1
PUBH 6417	Cross-Cultural Approaches for Global Health Practice	1
PUBH 6450	Global Health Diplomacy	2
PUBH 6441	Global Health Organizations and Regulations	3
PUBH 6047	Systematic Reviews to Synthesize Evidence in Public Health Practice	1
PUBH 6045	National and Global Public Health Systems	1
PUBH 6442 Or PUBH 6355	Comparative Global Health Systems Or Comparative Health Policy	2
PUBH 6440 Or PUBH 6399	Global Health Economics Or Topics in Health Policy (Cost-Benefit Analysis in Health care)	2

Or PUBH 6466	Or Health Financing in Low- and Middle-Income Countries	
	Electives	6
Integrative Learning Experience		
PUBH 6418	GH Culminating Experience 1	1
PUBH 6419	GH Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Health Policy		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6310	Statistical Analysis in Health Policy	3
PUBH 6315	Introduction to Health Policy Analysis	2
PUBH 6320	Advanced Health Policy Analysis	3
PUBH 6325	Federal Policymaking and Policy Advocacy	2
PUBH 6330 Or PUBH 6335	Health Services and Law Or Public Health and Law	3
PUBH 6340	Health Economics and Finance	3
	Electives, Selectives	10
Integrative Learning Experience		
PUBH 6350	Health Policy Capstone	2
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Health Promotion		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
PUBH 6504	Social and Behavioral Science Research Methods	3
PUBH 6530	Qualitative Methods in Health Promotion	2
	Electives	14
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**27**

Part B: Requirements for MPH degree in Humanitarian Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6480	Public Health in Humanitarian Settings	2
PUBH 6467	Ethics and Accountability in Humanitarian Assistance	3

PUBH 6468	Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters	2
PUBH 6462	Nutrition and Food in Large Humanitarian Emergencies	1
PUBH 6400	Global Health Frameworks	2
PUBH 6410	Global Health Study Design	1
PUBH 6412	Global Health Quantitative Research Methods	3
PUBH 6416 Or PUBH 6423	Ethical and Cultural Issues in Global Health Research and Programs Or Ethics in Public Health Practice and Policy	1
	Electives, Selectives	11
Integrative Learning Experience		
PUBH 6418	GH Culminating Experience 1	1
PUBH 6419	GH Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Maternal and Child Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6550	Maternal and Child Health 1	3
PUBH 6551	Maternal and Child Health 2	3
	Electives, Selectives	16
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**27**

Part B: Requirements for MPH degree in Physical Activity in Public Health[45]		
Course number	**Course name**	**Credits**
Concentration Courses		
EXNS 6202	Advanced Exercise Physiology 1	3
EXNS 6203	Advanced Exercise Physiology 2	3
EXNS 6204	Biostatistical Methods and Research Design	3
EXNS 6208	Physical Activity in Public Health	2
PUBH 6247	Epidemiology Methods 1: Design of Health Studies	3
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6620	Designing Healthy Communities	2

[45] The MPH in Physical Activity in Public Health unofficially transitioned to this curriculum during 2023–2024. There were very few matriculants in this academic year and the curricular changes were related to their electives, taken during Year 2 (which is when the curriculum becomes official). The program will officially transition to this curriculum in 2024–2025. See ERF for details on the previous curriculum.

	Electives, Tailoring courses in Epidemiology, Program Design and Monitoring	7
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in Public Health Communication and Marketing		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
PUBH 6570	Advanced Public Health Communication: Theory and Practice	3
PUBH 6571	Social Marketing: Theory and Practice	3
PUBH 6504	Social and Behavioral Science Research Methods	3
	Electives	10
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**27**

Part B: Requirements for MPH degree in Public Health Nutrition		
Course number	**Course name**	**Credits**
Concentration Courses		
EXNS 6242	Nutrition Throughout the Life Cycle	2
PUBH 6611	Nutrition Assessment	2
PUBH 6612	Food Systems in Public Health	2
PUBH 6613 Or PUBH 6482	US Food Policy and Politics Or International Food and Nutrition Policy	2
PUBH 6620	Designing Healthy Communities	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6614	Study Design and Analysis in Nutritional Epidemiology	2
EXNS 6204	Biostatistical Methods and Research Design	3
	Electives, Research Methods Selective	8
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in MPH@GW, Public Health Generalist		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2

PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
	Electives	16
Integrative Learning Experience		
PUBH 6060	MPH@GW Culminating Experience 1	1
PUBH 6061	MPH@GW Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in MPH@GW, Global Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2
PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
PUBH 6400	Global Health Frameworks	2
PUBH 6486	Global Health Programs and Approaches to the Control of Infectious Diseases	2
PUBH 6563	Global Child Health	2
PUBH 6128	Global Environmental and Occupational Health	2
PUBH 6480	Public Health in Humanitarian Settings	2
	Electives	6
Integrative Learning Experience		
PUBH 6060	MPH@GW Culminating Experience 1	1
PUBH 6061	MPH@GW Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in MPH@GW, Health Informatics and Analytics		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2
PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
PUBH 6704	Health Information Technology, Informatics and Decision Making	3
PUBH 6706	Population and Community Health Analytics	3
PUBH 6703	Healthcare Delivery and Health IT	2
PUBH 6705	Health Law and Health IT	3
	Electives	5

Integrative Learning Experience		
PUBH 6060	MPH@GW Culminating Experience 1	1
PUBH 6061	MPH@GW Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in MPH@GW, Climate and Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2
PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6133	Social Dimensions in Climate Change and Health	3
PUBH 6136	Environmental and Occupational Epidemiology	3
PUBH 6128	Global Environmental and Occupational Health	2
PUBH 6135	Researching Climate Change and Human Health	3
PUBH 6140	Global Climate Change and Air Pollution	2
PUBH 6130	Sustainable Energy and the Environment	2
	Electives	4
Integrative Learning Experience		
PUBH 6060	MPH@GW Culminating Experience 1	1
PUBH 6061	MPH@GW Culminating Experience 2	1
	TOTAL CREDITS	**28**

Part B: Requirements for MPH degree in MPH@GW, Women, Youth and Child Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2
PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
PUBH 6550	Maternal and Child Health 1	3
PUBH 6552	Women's Health	2
PUBH 6563	Global Child Health	2
PUBH 6451	Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries	2
	Electives, Selectives	7
Integrative Learning Experience		
PUBH 6060	MPH@GW Culminating Experience 1	1
PUBH 6061	MPH@GW Culminating Experience 2	1
	TOTAL CREDITS	**28**

2) *List the required curriculum for each combined degree option in the same format as above, clearly indicating (using italics or shading) any requirements that differ from MPH students who are not completing a combined degree.*

Part A of Template D2-1 is the same as the template found for all other, non-joint degree MPH students.

Template D2-1

Part A: Requirements for all MPH joint degrees (except MD/MPH, JD/MPH, LLM/MPH and MSN/MPH)		
Course number	**Course name**	**Credits**
Foundational Courses		
PUBH 6002	Biostatistical Applications for Public Health	3
PUBH 6003	Principles and Practices of Epidemiology	3
PUBH 6007	Social and Behavioral Approaches to Public Health	2
PUBH 6009 Or PUBH 6501	Fundamentals of Public Health Program Evaluation Or Program Evaluation	2 Or 3
PUBH 6011	Environmental and Biological Foundations of Public Health	3
PUBH 6012	Fundamentals of Health Policy	2
PUBH 6021	Essentials of Public Health Practice and Leadership 1	1
PUBH 6022	Essentials of Public Health Practice and Leadership 2	1
PUBH 6023	Interprofessional Education Experience	0
Applied Practice Experience		
PUBH 6000	MPH Applied Practice Experience	0
	TOTAL FOUNDATIONAL CREDITS	**17–18**

PA/MPH students in the Community-Oriented Primary Care program complete the same program requirements as non-joint degree students with three exceptions: (1) they are required to enroll in PUBH 6591; (2) they take fewer electives in the MPH program; and (3) they replace PUBH 6514 Preventing Health Disparities (2 credits) with the transferred PA 6113 Clinical Medicine 2 (2 credits).

Part B: Requirements for PA/MPH degree in Community-Oriented Primary Care		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6591	PA/MPH Clinical Leadership Seminar	1
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6504	Social and Behavioral Science Research Methods	3
PUBH 6510	Community-Oriented Primary Care Principles and Practice	3
PUBH 6512	Community-Oriented Primary Care Policy and Issues	2
PUBH 6513	Community Health Management	2
	Electives	4
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2

Transferred Courses[46]		
PA 6113	Clinical Medicine 2 (in place of PUBH 6514)	2
PUBH 6242	Clinical Epidemiology and Public Health: Reading the Research (this is a required PA course; not required by any MPH program)	2
	Electives • PA 6119 Health, Justice and Society 2 • PA 6122 Role of the Physician Assistant in US Healthcare • PA 6112 Clinical Medicine 1	3
	TOTAL CREDITS	**27**

PA/MPH students in the Environmental Health Science and Policy program complete the same program requirements as non-joint degree students with three exceptions: (1) they are required to enroll in PUBH 6591; (2) they take no electives in the MPH program; and (3) they replace PUBH 6131 Quantitative Methods in Environmental and Occupational Health (3 credits) with PUBH 6853 Use of SAS for Data Management and Analysis (3 credits).

Part B: Requirements for PA/MPH degree in Environmental Health Science and Policy		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6591	PA/MPH Clinical Leadership Seminar	1
PUBH 6121	Environmental and Occupational Epidemiology	3
PUBH 6122	Protecting Public Health and the Environment: Policies, Politics and Programs	3
PUBH 6123	Toxicology: Applications for Public Health Policy	3
PUBH 6124	Risk Management and Communication	3
PUBH 6126	Assessment and Control of Environmental Hazards	3
PUBH 6853	Use of SAS for Data Management and Analysis	3
Integrative Learning Experience		
PUBH 6137	EOH Culminating Experience 1	1
PUBH 6138	EOH Culminating Experience 2	1
Transferred Courses		
PUBH 6242	Clinical Epidemiology and Public Health: Reading the Research (this is a required PA course; not required by any MPH program)	2
	Electives • PA 6119 Health, Justice and Society 2	5

[46] PA/MPH students transfer 5–7 credits (depending on MPH program) from the PA program towards their MPH degree. These credits are from a compilation of coursework. All course syllabi have been reviewed for public health content by the PA/MPH director. In some instances, only partial credits from a course are transferred to reflect just the public health content. For example, PA 6112 and PA 6113 cover public health topics such as epidemiology, risk factors, prevention, health disparities and patient education. After careful review by the PA/MPH director, the contact hours spent studying these topics were calculated to be worth at least 4 credits. In some cases, the number of eligible credits exceeds what is needed. In these instances, only the required number of credits are transferred. In total, PA/MPH students complete a minimum of 45 credits of public health coursework. A similar process is used across all joint degrees.

	• PA 6122 Role of the Physician Assistant in US Healthcare • PA 6112 Clinical Medicine 1 • PA 6113 Clinical Medicine 2	
	TOTAL CREDITS	**28**

PA/MPH students in the Epidemiology program complete the same program requirements as non-joint degree students with two exceptions: (1) they are required to enroll in PUBH 6591; and (2) they take fewer electives and selectives in the MPH program.

Part B: Requirements for PA/MPH degree in Epidemiology		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6591	PA/MPH Clinical Leadership Seminar	1
PUBH 6247	Epidemiologic Methods 1: Design of Health Studies	3
PUBH 6853	Use of SAS for Data Management and Analysis	3
PUBH 6252	Epidemiologic Methods 2: Advanced Epidemiologic Methods	3
PUBH 6260	Applied Epidemiologic Data Analysis	3
	Electives, Selectives	6
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
Transferred Courses		
PUBH 6242	Clinical Epidemiology and Public Health: Reading the Research (this is a required PA course; not required by any MPH program)	2
	Electives • PA 6119 Health, Justice and Society 2 • PA 6122 Role of the Physician Assistant in US Healthcare • PA 6112 Clinical Medicine 1 • PA 6113 Clinical Medicine 2	5
	TOTAL CREDITS	**28**

PA/MPH students in the Global Environmental Health program complete the same program requirements as non-joint degree students with three exceptions: (1) they are required to enroll in PUBH 6591; (2) they take fewer electives in the MPH program; and (3) they replace PUBH 6131 Quantitative Methods in Environmental and Occupational Health (3 credits) with PUBH 6853 Use of SAS for Data Management and Analysis (3 credits).

Part B: Requirements for PA/MPH degree in Global Environmental Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6591	PA/MPH Clinical Leadership Seminar	1
PUBH 6121	Environmental and Occupational Epidemiology	3
PUBH 6126	Assessment and Control of Environmental Hazards	3
PUBH 6128	Global Environmental and Occupational Health	2
PUBH 6400	Global Health Frameworks	2

PUBH 6411	Global Health Qualitative Research Methods	2
PUBH 6435	Global Health Program Development and Implementation	2
PUBH 6853	Use of SAS for Data Management and Analysis	3
	Electives	1
Integrative Learning Experience		
PUBH 6137	EOH Culminating Experience 1	1
PUBH 6138	EOH Culminating Experience 2	1
Transferred Courses		
PUBH 6242	Clinical Epidemiology and Public Health: Reading the Research (this is a required PA course; not required by any MPH program)	2
	Electives • PA 6119 Health, Justice and Society 2 • PA 6122 Role of the Physician Assistant in US Healthcare • PA 6112 Clinical Medicine 1 • PA 6113 Clinical Medicine 2	5
	TOTAL CREDITS	**28**

PA/MPH students in the Health Policy program complete the same program requirements as non-joint degree students with two exceptions: (1) they are required to enroll in PUBH 6591; and (2) they take fewer electives and selectives in the MPH program.

Part B: Requirements for PA/MPH degree in Health Policy		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6591	PA/MPH Clinical Leadership Seminar	1
PUBH 6310	Statistical Analysis in Health Policy	3
PUBH 6315	Introduction to Health Policy Analysis	2
PUBH 6320	Advanced Health Policy Analysis	3
PUBH 6325	Federal Policymaking and Policy Advocacy	2
PUBH 6330 Or PUBH 6335	Health Services and Law Or Public Health and Law	3
PUBH 6340	Health Economics and Finance	3
	Electives, Selectives	2
Integrative Learning Experience		
PUBH 6350	Health Policy Capstone	2
Transferred Courses		
PUBH 6242	Clinical Epidemiology and Public Health: Reading the Research (this is a required PA course; not required by any MPH program)	2
	Electives • PA 6119 Health, Justice and Society 2 • PA 6122 Role of the Physician Assistant in US Healthcare • PA 6112 Clinical Medicine 1 • PA 6113 Clinical Medicine 2	5
	TOTAL CREDITS	**28**

PA/MPH students in the Maternal and Child Health program complete the same program requirements as non-joint degree students with two exceptions: (1) they are required to enroll in PUBH 6591; and (2) they take fewer electives and selectives in the MPH program.

Part B: Requirements for PA/MPH degree in Maternal and Child Health		
Course number	**Course name**	**Credits**
Concentration Courses		
PUBH 6591	PA/MPH Clinical Leadership Seminar	1
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6550	Maternal and Child Health 1	3
PUBH 6551	Maternal and Child Health 2	3
	Electives, Selectives	8
Integrative Learning Experience		
PUBH 6015	Culminating Experience	2
Transferred Courses		
PUBH 6242	Clinical Epidemiology and Public Health: Reading the Research (this is a required PA course; not required by any MPH program)	2
	Electives • PA 6119 Health, Justice and Society 2 • PA 6122 Role of the Physician Assistant in US Healthcare • PA 6112 Clinical Medicine 1 • PA 6113 Clinical Medicine 2	5
	TOTAL CREDITS	**27**

The MD/MPH@GW program differs from the non-joint MPH@GW, Public Health Generalist program in that MD/MPH students are not required to complete the following courses:

- PUBH 6011 Environmental and Biological Foundations of Public Health (3 credits)
- PUBH 6012 Fundamentals of Health Policy (2 credits)
- PUBH 6021 Essentials of Public Health Practice and Leadership 1 (1 credit)
- PUBH 6023 Interprofessional Education Experience (0 credits)
- PUBH 6060 MPH@GW Culminating Experience 1 (1 credit)
- PUBH 6061 MPH@GW Culminating Experience 2 (1 credit).

Additionally, they take fewer electives than students in the non-joint MPH@GW, Public Health Generalist program.

Requirements for MD/MPH degree in MPH@GW, Public Health Generalist		
Course number	**Course name**	**Credits**
Foundational Courses		
PUBH 6002	Biostatistical Applications for Public Health	3
PUBH 6003	Principles and Practices of Epidemiology	3
PUBH 6007	Social and Behavioral Approaches to Public Health	2
PUBH 6009	Fundamentals of Public Health Program Evaluation	2
PUBH 6022	Essentials of Public Health Practice and Leadership 2	1
Applied Practice Experience		

PUBH 6000	MPH Applied Practice Experience	0
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2
PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
	Electives	9
Transferred Courses		
	Transferred courses[47] • IDIS 8311 Fundamentals of Patients, Populations and Systems • IDIS 8312 Patients in Health Systems • IDIS 8211 Practice of Medicine 1 • IDIS 8212 Practice of Medicine 2 • IDIS 8101 Foundations of Medicine • IDIS 8102 Infection, Inflammation and Immunohematology • Population Health Summit #4[48]	15
	TOTAL CREDITS	**45**

MSN/MPH students transfer 12 nursing school credits as electives to the MPH@GW program. They complete all other program requirements.

Requirements for MSN in Nursing Leadership and Management/MPH degree in MPH@GW, Public Health Generalist		
Course number	**Course name**	**Credits**
Foundational Courses		
PUBH 6002	Biostatistical Applications for Public Health	3
PUBH 6003	Principles and Practices of Epidemiology	3
PUBH 6007	Social and Behavioral Approaches to Public Health	2
PUBH 6009	Fundamentals of Public Health Program Evaluation	2
PUBH 6011	Environmental and Biological Foundations of Public Health	3
PUBH 6012	Fundamentals of Health Policy	2
PUBH 6021	Essentials of Public Health Practice and Leadership 1	1
PUBH 6022	Essentials of Public Health Practice and Leadership 2	1
PUBH 6023	Interprofessional Education Experience	0
Applied Practice Experience		

[47] All course syllabi have been reviewed for public health content by the MD/MPH and MPH@GW program directors. In some instances, only partial credits from a course are transferred to reflect just the public health content. See ERF > Criterion D > Criterion D2 > Joint Degrees for more details on how MD courses were mapped to public health content.

[48] The Population Health Summit #4 (found in IDIS 8334 Intersession IV) is not transferred for credit, but the experience is the basis for the applied practice experience, integrative learning experience and interprofessional experience.

PUBH 6000	MPH Applied Practice Experience	0
Concentration Courses		
PUBH 6052	Practical Data Management and Analysis for Public Health	2
PUBH 6442	Comparative Global Health Systems	2
PUBH 6500	Planning and Implementing Health Promotion Programs	3
PUBH 6503	Introduction to Public Health Communication and Marketing	3
	Electives	4
Integrative Learning Experience		
PUBH 6060	MPH@GW Culminating Experience 1	1
PUBH 6061	MPH@GW Culminating Experience 2	1
Transferred Courses		
	Transferred courses[49] • NURS 6241 The Health Care Enterprise • NURS 6274 Health Economics and Finance • NURS 8402 Knowledge Management in Health care • NURS 6264 Advancing Health care Quality and Patient Safety	12
	TOTAL CREDITS	**45**

Requirements for the JD/MPH in any residential concentration and LLM/MPH in any residential concentration

Students earning a JD/MPH and LLM/MPH may enroll in any residential MPH concentration. Students are required to enroll in all foundational, applied practice experience and culminating experience courses in the MPH program, appropriate to the concentration. Students can transfer 8 credits from law school (LAW 6410 Health Law and Policy and LAW 6411 Health Care Law Seminar)[50] as program-specific or elective courses depending on their MPH program. The program director decides how the courses are transferred after reviewing the syllabi of the transferred courses. The credits are transferred from the law school toward the MPH at the end of the program.

Requirements for the BS in Public Health/MPH degree in any concentration (except Humanitarian Health)[51]

Students who enroll in the joint BS/MPH program complete 153 credits in total. Twelve credits of graduate coursework apply toward both the BS and MPH degrees. As a result, degree requirements for both programs are met. Crossover credits include:

- PUBH 6002 Biostatistical Applications for Public Health (3 credits)
- PUBH 6003 Principles and Practices of Epidemiology (3 credits)
- PUBH 6007 Social and Behavioral Approaches to Public Health (2 credits)

[49] All course syllabi have been reviewed for public health content by the MSN/MPH program director.
[50] LAW 6411 is a seminar class that changes topic depending on the instructor. Each syllabus is carefully reviewed by the JD/LLM/MPH program director before accepted for transfer credits.
[51] Applicants to the MPH in Humanitarian Health are expected to have work experience after completing their undergraduate education. Ideal candidates are physicians, current or former Peace Corps volunteers or similarly experienced applicants. BS in Public Health/MPH students generally don't fulfill these requirements.

- PUBH 6011 Environmental and Biological Foundations of Public Health (3 credits)
- PUBH 6021 Essentials of Public Health Practice and Leadership 1 (1 credit)

Requirements for the BS in Nutrition/MPH degree in any concentration (except Public Health Nutrition)

Students who enroll in the joint BS/MPH program complete 153 credits in total. Twelve credits of graduate coursework apply toward both the BS and MPH degrees. As a result, degree requirements for both programs are met. Crossover credits include:

- PUBH 6002 Biostatistical Applications for Public Health (3 credits)
- PUBH 6003 Principles and Practices of Epidemiology (3 credits)
- PUBH 6007 Social and Behavioral Approaches to Public Health (2 credits)
- PUBH 6011 Environmental and Biological Foundations of Public Health (3 credits)
- PUBH 6021 Essentials of Public Health Practice and Leadership 1 (1 credit)

Requirements for the BS in Nutrition/MPH degree in Public Health Nutrition

Students who enroll in the joint BS/MPH program complete 154 credits in total. Eleven credits of graduate coursework apply toward both the BS and MPH degrees. As a result, degree requirements for both programs are met. Crossover credits include:

- PUBH 6002 Biostatistical Applications for Public Health (3 credits)
- PUBH 6003 Principles and Practices of Epidemiology (3 credits)
- PUBH 6007 Social and Behavioral Approaches to Public Health (2 credits)
- PUBH 6021 Essentials of Public Health Practice and Leadership 1 (1 credit)
- PUBH 6611 Nutrition Assessment (2 credits)

Requirements for any non-GWSPH Bachelor's/MPH degree in Environmental Health Science and Policy or Global Environmental Health

Students who enroll in the joint BS or BA/MPH program complete 153 credits in total. Twelve credits of graduate coursework apply toward both the BS and MPH degrees. As a result, degree requirements for both programs are met. Crossover credits include:

- PUBH 6002 Biostatistical Applications for Public Health (3 credits)
- PUBH 6003 Principles and Practices of Epidemiology (3 credits)
- PUBH 6007 Social and Behavioral Approaches to Public Health (2 credits)
- PUBH 6011 Environmental and Biological Foundations of Public Health (3 credits)
- PUBH 6021 Essentials of Public Health Practice and Leadership 1 (1 credit)

3) *Provide a matrix, in the format of Template D2-2, that indicates the assessment activity for each of the foundational competencies. If the school addresses all of the listed foundational competencies in a single, common core curriculum, the school need only present a single matrix. If combined degree students do not complete the same core curriculum as students in the standalone MPH school, the school must present a separate matrix for each combined degree. If the school relies on concentration-specific courses to assess some of the foundational competencies listed above, the school must present a separate matrix for each concentration.*

Template D2-2

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
1	Apply epidemiological methods to the breadth of settings and situations in public health practice.	PUBH 6003 Principles and Practices of Epidemiology	PUBH 6003—Homework assignments require students to apply epidemiological methods to a variety of public health scenarios. See Homework 1 (rates and measures), Homework 2 (cohort and case control studies), Homework 3 (outbreak investigations) and Homework 4 (Confounding, interaction, and bias) in ERF.
2	Select quantitative and qualitative data collection methods appropriate for a given public health context.	PUBH 6003 Principles and Practices of Epidemiology (Quant) PUBH 6009 Fundamentals of Public Health Program Evaluation (Qual) Or PUBH 6501 Program Evaluation (Qual)[52]	PUBH 6003—Students answer questions regarding quantitative data sources on a series of activities. Students participate in a case study which requires students to discuss quantitative data collection. They also have homework questions related to selection bias and other data collection challenges. See ERF. PUBH 6009—In Quiz 5, students answer questions about qualitative research methods for program evaluation, including data collection and analysis techniques. See ERF. Or PUBH 6501—Students learn about qualitative data collection methods in Week 11. They complete an in-class assignment where they identify qualitative data that they will collect for their program evaluation (final project). In Lab 4, students develop a detailed summative evaluation plan which includes qualitative data collection. See ERF.

[52] All MPH students take PUBH 6009 except COPC; Global Health Program Design, Monitoring and Evaluation; Health Promotion; Maternal and Child Health; and Public Health Communication and Marketing; MPH students in Physical Activity in Public Health may choose 6009 or 6501. MPH students who don't take PUBH 6009 instead take PUBH 6501.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
3	Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.	PUBH 6002 Biostatistical Applications for Public Health (Quant) Or PUBH 6853 Use of SAS for Data Management and Analysis (Quant)[53] PUBH 6009 Fundamentals of Public Health Program Evaluation (Qual) Or PUBH 6501 Program Evaluation (Qual)[54]	PUBH 6002—Students complete a lab exercise that requires them to use software (Excel in this case, though students are welcome to use another software if they prefer). See ERF. Or PUBH 6853—Students complete a series of five homework assignments where they use SAS to analyze quantitative data, specifically a dataset from NHANES. See ERF. PUBH 6009—Students practice analyzing qualitative data through an interactive transcript coding activity. This activity is done in class/during a synchronous session with the instructor meeting with each team and assessing students individually. See ERF. Or PUBH 6501—In the Qualitative Activity Interview Guide Themes, students develop themes/codes using Word. This activity is done in class/during a synchronous session with the instructor meeting with each team and assessing students individually. See ERF.

[53] All MPH students take PUBH 6002 except Biostatistics. Students in the Biostatistics program take PUBH 6853 instead.
[54] All MPH students take PUBH 6009 except COPC; Global Health Program Design, Monitoring and Evaluation; Health Promotion; Maternal and Child Health; and Public Health Communication and Marketing; MPH students in Physical Activity in Public Health may choose 6009 or 6501. MPH students who don't take PUBH 6009 instead take PUBH 6501.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
4	Interpret results of data analysis for public health research, policy or practice.	PUBH 6002 Biostatistical Applications for Public Health Or PUBH 6853 Use of SAS for Data Management and Analysis[55] PUBH 6003 Principles and Practices of Epidemiology	PUBH 6002—Students take several quizzes and a final exam, which focus on student ability to understand and interpret results of data analysis from descriptive statistics to multivariable models. Students also participate in labs and in-class discussions on real-world scenarios and how data analysis is applied. See ERF. Or PUBH 6853—On their homework assignments, students interpret the SAS outputs. See ERF. PUBH 6003—Students calculate and interpret rates and measures of association from epidemiologic studies on several homework assignments. See Homework 1 (rates and measures), Homework 3 (outbreak investigations) and Homework 4 (Confounding, interaction, and bias) in ERF.
5	Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings.	PUBH 6012 Fundamentals of Health Policy Or IDIS 8311 Fundamentals of Patients, Populations and Systems[56]	PUBH 6012—Students take three exams during the course that assess this competency. Students also have discussions regarding the organization, structure and function of health systems in class. See ERF. Or IDIS 8311—Students take a midterm and final exam with written cases that assess this competency. Example questions are: (1) Compare and contrast the organization and payment structures of the US health care and public health systems with two health systems in democratic, capitalist countries; (2) Discuss the regulatory role at the local, state, and federal levels in promoting public health policies to reduce the prevalence of chronic diseases and their risk factors.

[55] All MPH students take PUBH 6002 except Biostatistics. Students in the Biostatistics program take PUBH 6853 instead.
[56] All MPH students take PUBH 6012 except MD/MPH students who take IDIS 8311.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
6	Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.	PUBH 6007 Social and Behavioral Approaches to Public Health	PUBH 6007—In the Final Paper, students answer a series of questions regarding their choice of an at-risk target population. This section addresses questions such as: "What are the health equity and/or social inequity issues at play here?," "What are the roots of the social/behavioral issue?" and "How are cultural values considered in the problem and/or potential solutions?" Students then design an intervention using a theoretical model for the target population, taking into consideration their answers to the previous questions (p. 6).
7	Assess population needs, assets, and capacities that affect communities' health.	PUBH 6007 Social and Behavioral Approaches to Public Health	PUBH 6007—In the Theory Selection assignment, students complete the Theory Selection Matrix in Excel, which is used to assess population health needs, assets and capacities that affect a community's health. This matrix is used to develop the target population needs assessment, which is part of the Final Paper (pp. 4, 6).
8	Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.	PUBH 6007 Social and Behavioral Approaches to Public Health	PUBH 6007—In the Final Paper, students answer a series of questions regarding their choice of an at-risk target population. In particular, students address how cultural values and practices are considered in the public health problem and/or potential solution. Students then design an intervention using a theoretical model for the target population, taking into consideration their answers to the previous question (p. 6).
9	Design a population-based policy, program, project or intervention.	PUBH 6007 Social and Behavioral Approaches to Public Health	PUBH 6007—In the Final Paper, students design an intervention using a theoretical model for an at-risk population (p. 6).
10	Explain basic principles and tools of budget and resource management.	PUBH 6022 Essentials of Public Health Practice and Leadership 2	PUBH 6022—As part of the Organizational Design Project, groups of students develop a fictional organization's strategic plan, organizational budget and organizational chart. Each student must contribute to the video presentation of this material. Following the video, students complete individual self- and peer-assessments answering questions about the principles and tools of budget and resource management: Discuss one line-item of your organization's budget to which you specifically contributed. Explain what it is, to which budget category it belongs, why it is justified, how you arrived at its estimated cost, who in your organization will oversee it, and when it will be expended (p. 4). Additionally, there are several discussions centered around budgeting principles and resource management. See ERF.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
11	Select methods to evaluate public health programs.	PUBH 6009 Fundamentals of Public Health Program Evaluation Or PUBH 6501 Program Evaluation[57]	PUBH 6009—In the Group Project, groups of students select quantitative and qualitative methods to evaluate a public health intervention. The data driven evaluation plan includes selection of indicators, selection of measurement methods (both qualitative and quantitative), and selection of study design. The project is divided into three parts and for each part, students must submit both a self and peer evaluation, which is taken into account when students are assessed individually. Or PUBH 6501—In the Evaluation plan, students select quantitative and qualitative methods to evaluate a public health program (p. 5).
12	Discuss multiple dimensions of the policy making process, including the roles of ethics and evidence.	PUBH 6012 Fundamentals of Health Policy Or IDIS 8311 Fundamentals of Patients, Populations and Systems[58]	PUBH 6012—In the Policy Evaluation Memo, students identify a public health challenge and a decision-maker who can address this challenge through policy change. Acting as health policy analysts, students write a memo evaluating policy actions that the decision-maker can take. To complete this assignment, students must have a thorough understanding of the policy-making process to identify the appropriate decision-maker and potential policy actions. In the second exam, students are assessed on this competency through questions such as the following exam essay question: Describe the role of regulatory agencies in making health policy. Or IDIS 8311—In the midterm and final exams, students answer questions that assess this competency. Example questions include: (1) Discuss the steps in the policymaking process using the example of tobacco control among adolescents; (2) Develop an evidence-based, culturally appropriate policy to increase HIV screening in an assigned at-risk population and jurisdiction.

[57] All MPH students take PUBH 6009 except COPC; Global Health Program Design, Monitoring and Evaluation; Health Promotion; Maternal and Child Health; and Public Health Communication and Marketing; MPH students in Physical Activity in Public Health may choose 6009 or 6501). MPH students who don't take PUBH 6009 take PUBH 6501 instead.
[58] All MPH students take PUBH 6012 except MD/MPH students, who take IDIS 8311.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
13	Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.	PUBH 6022 Essentials of Public Health Practice and Leadership 2	PUBH 6022—In the Advocacy for Advancing Health Equity Mini-Presentations, students choose one health equity issue and two advocacy actions to address this issue. As part of their oral presentation (no PowerPoint), students describe strategies to engage key stakeholders in their advocacy work (p. 5).
14	Advocate for political, social or economic policies and programs that will improve health in diverse populations.	PUBH 6022 Essentials of Public Health Practice and Leadership 2	PUBH 6022—In the Advocacy for Advancing Health Equity Mini-Presentations, students choose one health equity issue and advocate for two actions to address the issue (p. 5)
15	Evaluate policies for their impact on public health and health equity.	PUBH 6012 Fundamentals of Health Policy Or IDIS 8311 Fundamentals of Patients, Populations and Systems And IDIS 8312 Patients in Health Systems[59]	PUBH 6012—In the Policy Evaluation Memo, students identify a public health challenge and, acting as a health policy analyst, write a memo evaluating three policy options for their impact on public health. See ERF. Or IDIS 8311—In the midterm and final exams, students answer questions that assess this competency. Example questions include: (1) Discuss the impact of a "non-health sector" policy on public health for a defined population; (2) Identify health indicators to detect health disparities in disease burden under the assigned policy. And IDIS 8312—In the midterm exam, students answer questions that assess this competency. Examples include: (1) Discuss 4 ACA provisions that increase access to care; (2) Design a policy to reduce the prevalence of childhood asthma among vulnerable populations in Washington, DC.

[59] All MPH students take PUBH 6012 except MD/MPH students who take IDIS 8311 and IDIS 8312.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
16	Apply leadership and/or management principles to address a relevant issue.	PUBH 6022 Essentials of Public Health Practice and Leadership 2	PUBH 6022—As part of the Organizational Design Project, groups of students develop a fictional organization's strategic plan, organizational budget and organizational chart. Each student must contribute to the video presentation of this material. Following the video, students write an individual reflection piece (Journal) applying principles of leadership, governance and management. A sample question for the reflection is: Which of the four decision-making procedures did you and your teammates use when determining your organization's vision, mission, values, goals, strategies, governing structures, budget, and org chart? If you were to redo the organizational design challenge assignment, what would you change about how you and your teammates made decisions? (p. 4).
17	Apply negotiation and mediation skills to address organizational or community challenges.	PUBH 6021 Essentials of Public Health Practice and Leadership 1 Or IDIS 8311 Fundamentals of Patients, Populations and Systems[60]	PUBH 6021—In the Public Health Challenge group assignment, groups of students explore and address a public health challenge at an assigned level of systems, organizational or community. Teams are evaluated on utilizing at least 3 negotiation and/or mediation conflict-resolution techniques. Each team presents a reflection on what made them effective in influencing the potential funders during their negotiation presentations. Teams outline adaptations they will incorporate into their next round of funding/capital acquisition negotiations. Subsequently, students will be required to submit independent written reflections for assessment. Sample questions include: (1) Name one negotiation technique you successfully contributed to your team's public health challenge presentation; (2) If you were to redo the public health challenge presentation, what would you change about how you negotiated with potential funders? (pp. 5, 12). Or IDIS 8311—Based on their work in the Population Health Summit, students write a paper (MD/MPH Leadership Assignment) identifying organizational- or community-level challenges associated with their specific public health issue. They then must describe two negotiation and mediation skills they would employ to address these issues. See ERF.

[60] All MPH students take PUBH 6012 except MD/MPH students who take IDIS 8311. This is the current assignment, effective spring 2024. Prior assignment listed in ERF.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
18	Select communication strategies for different audiences and sectors.	PUBH 6007 Social and Behavioral Approaches to Public Health PUBH 6022 Essentials of Public Health Practice and Leadership 2	PUBH 6007—In the Final Paper, students develop communication strategies to engage their target audience in their public health program (p. 6, see ERF). PUBH 6022—In Week 3, students learn about communication strategies. They apply their skills in the Organizational Design Project by integrating strategic communications and organizational change management (p. 4, see ERF).

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
19	Communicate audience-appropriate (i.e., nonacademic, non-peer audience) public health content, both in writing and through oral presentation.	PUBH 6022 Essentials of Public Health Practice and Leadership 2 PUBH 6012 Fundamentals of Health Policy Or IDIS 8311 Fundamentals of Patients, Populations and Systems And IDIS 8212 Practice of Medicine 2[61]	PUBH 6022—In the Organizational Design Project, groups create a fictional organizational design plan and present it via video. Part of the organizational design plan is creating missions, values and goals that communicate public health ideals to the public. All members are expected to participate in the presentation and complete peer evaluations which contribute to instructor's individual assessment. Additionally, each student identifies one health disparity and develops two advocacy actions to address this issue. Students are expected to target a lay audience stakeholder in their advocacy actions. Students must communicate in a presentation (sans PowerPoint) these two advocacy actions and why they communicated public health information in such a way (pp. 4–5). PUBH 6012—In the Policy Evaluation Memo, students act as health policy analysts and write a memo evaluating policy actions that a decision-maker can take regarding a specific public health challenge. The memo is geared specifically to that policy, nonacademic decision-maker, and the language used should reflect this. See ERF. Or IDIS 8311—In the Summit Activity (end of course), groups of students communicate about a public health challenge associated with HIV, both in writing and orally. An example challenge is: 1) Present a policy proposal on HIV screening for a defined population and jurisdiction to a panel of policymakers; 2) Develop educational materials for the proposal for the general public. And IDIS 8212—Students complete an interview called Cross-Cultural Doctor-Patient Relationship in which students must communicate in a culturally appropriate way with a standardized patient. See ERF.

[61] All MPH students take PUBH 6012 except MD/MPH students who take IDIS 8311 and IDIS 8212.

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
20	Describe the importance of cultural competence in communicating public health content.	PUBH 6021 Essentials of Public Health Practice and Leadership 1 Or IDIS 8212 Practice of Medicine 2[62]	PUBH 6021—Students learn about the importance of cultural competence in communicating public health information during Weeks 1, 5 and 8. During the Week 8 live session, students participate in a group discussion on the topic (all students expected to participate). Students apply their knowledge during their group Public Health Challenge. Students complete a self and peer assessment to aid faculty in individually assessing students (p. 5). Or IDIS 8212—Students complete an interview called Cross-Cultural Doctor-Patient Relationship in which students must communicate in a culturally appropriate way with a standardized patient. See ERF.
21	Integrate perspectives from other sectors and/or professions to promote and advance population health.	PUBH 6023 Interprofessional Education Experience Or Interprofessional Education (IPE) Practice Experience[63]	PUBH 6023—Students participate in at least one preapproved interprofessional experience (IPE). Multiple face-to-face and online synchronous activities are available each term. Once a student completes an IPE, they complete two post-event assignments, an Interprofessional Attitudes Scale and a written self-assessment and reflection. Current IPE opportunities are available here. See ERF. Or IPE Practice Experience—MD/MPH students complete an IPE practice experience. During each interprofessional experience, students are given a task requiring interdisciplinary collaboration. Example tasks include: (1) Collaborate to define your discipline's role in and leadership of an interdisciplinary team in response to an assigned patient case; (2) Collaborate with interdisciplinary team members to develop a case-based SBAR (Situation, Background, Assessment, Recommendation) to empower team members and facilitate prompt and appropriate communication.

[62] All MPH students take PUBH 6012 except MD/MPH students who take IDIS 8212.
[63] All MPH students take PUBH 6023 except MD/MPH students who take the IPE Practice Experience as part of medical school (IDIS 8211 Practice of Medicine 1 and IDIS 8212 Practice of Medicine 2)

#	MPH Foundational Competencies	Courses	Specific Assignment(s) that Allow(s) Assessment
22	Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative.	PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8312 Patients in Health Systems[64]	PUBH 6011—In Week 4, students draw a process map (i.e., systems thinking tool) for a commodity in the Carbon Footprint and Life Cycle Mapping Project. During the live session, selected process maps will be shared (p. 2). Or IDIS 8312—In the final exam, students answer questions that assess this competency. Examples include: (1) Develop a process mapping diagram for continuous quality improvement of processes resulting in iatrogenesis; (2) Select a tool and complete a root cause analysis of factors contributing to medical errors.

[64] All MPH students take PUBH 6011 except MD/MPH students who take IDIS 8312.

4) *Provide supporting documentation for each assessment activity listed in Template D2-2. Documentation should include the following, as relevant, for each listed assessment:*

   - *assignment instructions or guidelines as provided to students*
   - *writing prompts provided to students*
   - *sample exam question(s)*

   See ERF > Criterion D > Criterion D2 > D2.4: Temp D2-2_Assessments.

5) *Include the most recent syllabus from each course listed in Template D2-1, or written guidelines, such as a handbook, for any required elements listed in Template D2-1 that do not have a syllabus.*

   See ERF > Criterion D > Criterion D2 > D2.5: Temp D2-1_syllabi.

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths

   - The interprofessional education experience at GWSPH has won several awards and prizes in conjunction with our partner network of other universities.
     - Most recently, the Virtual Interprofessional Education Collaborative won the 2023 Interprofessional.Global Award at the All Together Better Health XI conference in Doha, Qatar.
     - Previous awards include runner-up and winner of the Health Communications & Health Technology prize awarded by the Interprofessional Education Collaboration (IPEC) and the United States Public Health Service Commissioned Officers Foundation (USPHS COF) in 2022 and 2021. The 2022 award was granted based on GWSPH's contributions in making the meso- and macro-level health issues more visible for all health sector disciplines in IPE curriculum. The 2021 award was granted on the partner network's collaborative efforts in developing a widely accepted virtual IPE model.
     - The partner network was also awarded the Lesley Diack Award for Outstanding Interprofessional Education Research in 2020 by the International Network for Health Workforce Education.
   - Collectively, GWSPH faculty bring real-world experience and scholarly distinction to every area represented by the MPH foundational competencies; the faculty enthusiastically share their wealth of knowledge with students.
   - GWSPH faculty who are strong in specialized areas bring their expertise to the relevant core courses taken by all students.
   - At the same time, all GWSPH instructors use a standard syllabus template for their courses. This template includes sections for required competencies, assignment descriptions and course learning objectives, helping to ensure that faculty are effectively addressing and assessing competencies and course learning objectives. This linkage between competency and assessment was reinforced in a series of workshops in spring and summer 2022.
   - Supporting specialization, GWSPH was able to customize the learning of foundational competencies for students in select programs. This customization allows students focusing on specific topics to bypass the foundational courses in favor of the more advanced or program-specific versions. For example, MPH in Biostatistics students, rather than enroll in the foundational statistics course, may enroll in software-specific statistics courses in SAS, R and Python. These classes give students a jump-start on

coding languages to better prepare Biostatistics students for later, more advanced courses.

- Since 2017, GWSPH has been a leading partner in establishing a network of 30+ institutions who collaborate in the design, delivery and research of virtual interprofessional education offerings, with focus on meso- and macro-level considerations of health issues alongside our clinical counterparts. GWSPH also has substantive involvement in university-based IPE activities, including GW IPE Day (all GW health sector programs), GW Clinical Public Health Summits (GW MD and MPH programs), virtual case activities (GW Nursing, MPH, MHA), Maternal and Child Health Policy and Advocacy IPE activity (GW Law, Nursing, MPH), and the GWSPH Urban Health Program. Taken together, this portfolio of IPE offerings provides GWSPH students with a broad range of opportunities to explore health issues of specific interest alongside students from other professions whom they may encounter in practice. More than 1,700 GWSPH students participated in IPEs from the spring 2020 to fall 2022.

Challenges

- To meet the needs of students, GWSPH operates a staggering number of courses each year, particularly in the MPH core. For example, in 2022–2023, there were over 45 residential and online sections of PUBH 6012 Fundamentals of Health Policy. We encourage instructors to personalize courses to some extent to reflect their area of expertise where case studies or examples are used. As a result, it is inevitable that there will be some variability in didactics and assignments.
- When the new CEPH criteria were implemented in 2018, the GWPSH core curriculum underwent significant changes including the folding of the biological and environmental factors into a single course and the creation of two new courses to address competencies such as leadership and negotiation. It took several iterations to finalize the content of these new classes in the context of student and faculty feedback.
- Between 2021 through 2022 (COVID-19), we allowed enrollment to surge without a material increase in faculty and ran multiple sections of core and required courses. Feedback from students was positive, but this put a lot of pressure on faculty to teach the extra sections.

Future Plans

- The new Director of Academic Planning and Accreditation is implementing systems to ensure more consistent and frequent review of course assessments to meet competency requirements. Currently this process occurs when syllabi are reviewed at the curriculum committee levels every few years or during the department's academic program review every seven years.

D3. DrPH Foundational Competencies

The school documents at least one specific, required assessment activity (e.g., component of existing course, paper, presentation, test) for each competency, during which faculty or other qualified individuals validate the student's ability to perform the competency.

Assessment opportunities may occur in foundational courses that are common to all students, in courses that are required for a concentration or in other educational requirements outside of designated coursework, but the school must assess all DrPH students, at least once, on each competency. Assessment may occur in simulations, group projects, presentations, written products, etc.

1) *List the coursework and other learning experiences required for the school's DrPH degrees. Information may be provided in the format of Template D3-1 or in hyperlinks to student handbooks or webpages, but the documentation must present a clear depiction of the requirements for each DrPH degree.*

Template D3-1

Requirements for DrPH degree, Public Health Generalist		
Course number	**Course name**	**Credits**
Required courses (foundational and concentration)		
PUBH 8730	Washington, DC, Immersion	2
PUBH 8706	Leadership Principles and Practice 1	3
PUBH 8708	Applied Public Health Methods	3
PUBH 8710	Public Health Project Management and Social Entrepreneurship	3
PUBH 8712	Public Health Program Planning, Implementation and Evaluation	3
PUBH 8714	Leadership Principles and Practice 2	3
PUBH 8716	Leadership in Practice: Education and Workforce Development	3
PUBH 8722	Public Health Policy Analysis	3
PUBH 8718	Public Health Communications and Marketing	3
PUBH 8720	Social Change and Collective Impact	3
PUBH 8724	Organizational Leadership and Change Management	3
PUBH 8726	Applied Public Health Methods 2	3
PUBH 6080	Pathways to Public Health[65]	0
APE and ILE courses		
PUBH 8700	DrPH Seminar and Introduction to DrPH Applied Practice Experience (DAPEx)[66]	3
PUBH 8703	Dissertation Portfolio: Independent Study 1 for DAPEx Proposal Development	0

[65] Students without a prior MPH or other public health degree from a CEPH accredited school or program are required to successfully pass the online PUBH 6080 Pathways to Public Health within one year of matriculation.

[66] This course has didactics associated with it, not related to the DAPEx and/or dissertation.

PUBH 8705	Dissertation Portfolio: Independent Study 2 for DAPEx Proposal Development	0
PUBH 8707	Dissertation Portfolio: Proposal Defense Planning[67]	2
PUBH 8709	Dissertation Portfolio: Proposal Defense	2
PUBH 8711	Dissertation Portfolio: DPAEx	2
PUBH 8713	Dissertation Portfolio: Dissertation	2
PUBH 8715	Dissertation Portfolio: Dissertation Defense	2
	TOTAL CREDITS	**48**

2) *Provide a matrix, in the format of Template D3-2, that indicates the assessment activity for each of the foundational competencies. If the school addresses all of the listed foundational competencies in a single, common core curriculum, the school need only present a single matrix. If the school relies on concentration-specific courses to assess some of the foundational competencies listed above, the school must present a separate matrix for each concentration.*

[67] This course has didactics associated with it, not related to the DAPEx and/or dissertation.

Template D3-2

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
1	Explain qualitative, quantitative, mixed methods, and policy analysis research and evaluation methods in order to address health issues at multiple (individual, group, organization, community, and population) levels.	PUBH 8708 Applied Public Health Methods 1 PUBH 8712 Public Health Program Planning, Implementation and Evaluation PUBH 8722 Public Health Policy Analysis	PUBH 8708—Students write three assignments at the end of the course modules in qualitative, quantitative and mixed methods. Students apply skills from each course module to demonstrate understanding of the basic elements of the method/approach including when to apply them, sampling considerations, and analysis and interpretation. PUBH 8712—In the Evaluation Design for a Public Health Program Team Paper and Presentation, small groups of students design an evaluation for a specified, system-level public health program. Each member of the team must contribute to the paper and presentation. Assessment of individuals will occur during the presentation portion as all group members are expected to present and answer questions. PUBH 8722—In the Final Assignment, students write a detailed policy analysis memo where they conduct the necessary research to best understand the health policy issue from the decision-makers' and stakeholders' perspectives and identify what varying audiences need.
2	Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue.	PUBH 8708 Applied Public Health Methods 1	PUBH 8708—In the Final Group Project, small groups of students will design a mixed methods approach to address a public health research question. Groups will present their proposal in a pitch to the course director and potentially other public health professionals. They also complete a short proposal paper. Students are individually assessed during the pitch as all students must present and answer questions.

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
3	Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring, and evaluating policies and programs to address a population's health.	PUBH 8726 Applied Public Health Methods 2	PUBH 8726—In the Quantitative System Dynamics Report, students develop their own quantitative system dynamics model in Stella using the CLD to identify system variables and functions. Additionally, students write a report on the modeling process, including a discussion on how the system dynamics model aligns with available surveillance, administrative, and monitoring data used in the session on data visualization and exploratory data analysis.
4	Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners.	PUBH 8720 Social Change and Collective Impact	PUBH 8720—In the Small Group Project, teams of students develop a collective impact initiative that addresses a place-based or race-based inequity. As part of this proposal, students strategize coalition building and community engagement. Groups present their proposal in a 20-minute presentation and write a paper. Each student must present a portion of the presentation and contribute to the written paper. Individuals are assessed during their presentation and the Q&A session that follows (p. 4).
5	Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies	PUBH 8718 Public Health Communications and Marketing PUBH 8700 DrPH Seminar and Introduction to DrPH Applied Practice Experience (APEx)	PUBH 8718—In the Intervention Design Paper, students describe their approach for addressing a public health communication question or problem. As part of this paper, students must propose communication strategies and messages, aimed at their target non-academic population (taking into account their lessons on health literacy). Additionally, this paper should be written as a formal proposal for funding to a prospective client, such as a government agency or foundation, using appropriate language (p. 4). PUBH 8700—In the Addressing a Public Health Problem Poster Presentation, students present the public health problem that they have been researching over the course of the term in a poster. Students are directed to use language that is appropriate for public health colleagues and invited guests (p. 5).

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
6	Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems.	PUBH 8710 Public Health Project Management and Social Entrepreneurship	PUBH 8710—In the Social Venture Feasibility Plan, groups of students integrate their knowledge, skills and multidisciplinary perspectives to develop a written business feasibility plan for a social change venture. Each member of the team must contribute to the plan. Groups also apply the perspectives of the multidisciplinary professionals teaching the course. A peer evaluation is done at the end of the course for the faculty to individually assess students' contributions. See syllabus for required components that show depth of integration (pp. 3–4).
7	Create a strategic plan.	PUBH 8706 Leadership Principles and Practice 1	PUBH 8706—In the Develop a Strategic Plan, students develop an 8-year strategic plan in line with their leadership journey (p. 5).
8	Facilitate shared decision making through negotiation and consensus-building methods.	PUBH 8714 Leadership Principles and Practice 2	PUBH 8714—On the Reflection Paper on Individual and Team Learning, students write a reflective paper on the case study facilitating shared decision-making through negotiation and consensus-building (p. 3).
9	Create organizational change strategies.	PUBH 8724 Organizational Leadership and Change Management	PUBH 8724—In the Organizational Change Management Project, small groups of students complete a series of assignments before writing a technical report and presenting their organizational change strategy. See syllabus for full description of components. Individuals are assessed through a peer evaluation process, and from the presentation (pp. 4–7).
10	Propose strategies to promote inclusion and equity within public health programs, policies, and systems.	PUBH 8720 Social Change and Collective Impact	PUBH 8720—In the Small Group Project, teams of students develop a collective impact initiative that addresses a place-based or race-based inequity. As part of this proposal, students propose strategies for community engagement and building coalitions. Groups present their proposal in a 20-minute presentation and write a paper. Each student must present a portion of the presentation and contribute to the written paper. Individuals are assessed during their presentation and the Q&A session that follows (p. 4).

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
11	Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency.	PUBH 8706 Leadership Principles and Practice 1	PUBH 8706—In the Personal Leadership Model and Leadership Frameworks assignment, students write a 6- to 8-page paper on their personal leadership model (consisting of: vision, values, mission, cultural proficiency, unconscious biases, etc.) and apply it to key leadership frameworks/theories/concepts (p. 4).
12	Propose human, fiscal, and other resources to achieve a strategic goal.	PUBH 8710 Public Health Project Management and Social Entrepreneurship	PUBH 8710—In the Social Venture Feasibility Plan, groups of students write a business feasibility plan for a social change venture. In this proposal, students must address the human, fiscal and other resources needed to achieve their plan. As part of the proposal, groups complete a Profits and Losses (P&L) Worksheet to estimate the profitability of the venture, and an Organogram (Org Chart) to identify the human capital needed. Each member of the team must contribute to the plan. A peer evaluation is done at the end of the course for the faculty to individually assess students' contributions (pp. 3–4).
13	Cultivate new resources and revenue streams to achieve a strategic goal.	PUBH 8710 Public Health Project Management and Social Entrepreneurship	PUBH 8710—As part of the Social Venture Feasibility Plan, groups of students develop a Pitch Deck, which is a set of PowerPoint slides targeting a specific audience for funding of the social venture. To develop this slide deck, groups must identify new resources and revenue streams relevant to their social venture plan. All group members must present a portion of the Pitch Deck and complete a peer evaluation. Faculty assesses individual students during the presentation, the following Q&A and through the peer evaluation (pp. 3–4).
14	Design a system-level intervention to address a public health issue.	PUBH 8712 Public Health Program Planning, Implementation and Evaluation	PUBH 8712—In the Public Health Program Design Proposal, students develop a systems-level intervention in response to a real-world request for applications. Students write a paper that includes several components outlined in the syllabus (p. 4).

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
15	Integrate knowledge of cultural values and practices in the design of public health policies and programs.	PUBH 8720 Social Change and Collective Impact PUBH 8722 Public Health Policy Analysis	PUBH 8720—In the Small Group Project, teams of students develop a collective impact initiative that addresses a place-based or race-based inequity. While strategizing how to engage community stakeholders, students integrate their knowledge of cultural values and practices. Groups present their proposal in a 20-minute presentation and write a paper. Each student must present a portion of the presentation and contribute to the written paper. Individuals are assessed during their presentation and the Q&A session that follows (p. 4). PUBH 8722—In the Policy Memo, students write a policy memo from the perspective of a stakeholder. In the role, students must consider how their stakeholder's cultural values and practices would influence their policy advocacy (p. 4).

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
16	Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis.	PUBH 8722 Public Health Policy Analysis	PUBH 8722—Students participate in a mock hearing on a topic TBD (examples include policy options for strengthening community benefit investments for the health of community residents; revitalizing and strengthening the public health and health care workforce). Students are assigned to a particular panel representing a set of interests relevant to the topic. Students choose an organization or individual to represent within the panel of interests. For example, for the community benefit hearing, panels may consist of the hospital industry, public health departments, labor unions, community- and faith-based groups, etc. with students choosing specific organizations or subgroups to represent in their testimony). Students work in groups (in class) to identify who they will represent but will develop their own individual testimony that they present in class with their fellow panelists (3 minutes each, maximum). Students need to consider scientific information, legal and regulatory issues, ethical considerations, and relevant stakeholder interests in developing their testimony. Reviewers provide students with feedback on their testimony. This assignment is intended to develop students' skills in orally communicating to policymakers an analysis of a health policy issue from the perspective of a stakeholder (Week 13, p. 11).
17	Propose interprofessional team approaches to improving public health.	PUBH 8714 Leadership Principles and Practice 2	PUBH 8714—Students spend Session 7 discussing tools they have used for enhancing multidisciplinary collaborations. They then write a Reflection Paper on Individual and Team Learning where they propose interprofessional team approaches to improving public health (p. 3).
18	Assess an audience's knowledge and learning needs.	PUBH 8716 Leadership in Practice: Education and Workforce Development	PUBH 8716—In the Pedagogical Theory-Practice Presentation 2, students teach a public health topic in a 15- to 20-minute PowerPoint presentation in an assigned setting. The presentation must include a learner needs assessment that assesses an audience's knowledge and learning needs (p. 4).

#	Competency	Courses	Specific Assignment(s) that Allow(s) Assessment
19	Deliver training or educational experiences that promote learning in academic, organizational, or community settings.	PUBH 8716 Leadership in Practice: Education and Workforce Development	PUBH 8716—In the Executive Leadership Coaching Presentation, students choose a skill (e.g., organizational change management, leadership, rapid qualitative injury, etc.) and present a 10- to 15-minute presentation integrating the best practices related to coaching, to teach their fellow classmates (workforce development) (p. 5).
20	Use best practice modalities in pedagogical practices.	PUBH 8716 Leadership in Practice: Education and Workforce Development	PUBH 8716—In the Pedagogical Theory-Practice Presentation II, students individually design and present a learning solution for a specific population and their needs. They employ best practice modalities such as identifying a target population and their needs, designing clear learning goals and objectives, and using those goals and objectives to develop, implement and evaluate that learning solution (p. 4).

3) *Provide supporting documentation for each assessment activity listed in Template D3-2. Documentation should include the following, as relevant, for each listed assessment:*

   - *assignment instructions or guidelines as provided to students*
   - *writing prompts provided to students*
   - *sample exam question(s)*

   See ERF > Criterion D > Criterion D3 > D3.3: Temp D3-2_Assessments.

4) *Include the most recent syllabus from each course listed in Template D3-1, or written guidelines, such as a handbook, for any required elements listed in Template D3-1 that do not have a syllabus.*

   See ERF > Criterion D > Criterion D3 > D3.4: Temp D3-1_syllabi.

5) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths

   - GWSPH is excited to finally have a schoolwide DrPH program that is more streamlined and has a curriculum focused on leadership skills, real-world practice and research methods. GWSPH ensures that DrPH foundational and program-specific competencies foster applied learning. This changed curriculum has allowed GWSPH to offer an online DrPH program, which enrolled its first cohort in fall of 2023.
   - The DrPH@GW aligns with the residential DrPH program. Both online and residential DrPH programs follow the same curriculum, which has been updated to include an immersion course and the dissertation portfolio. The immersion course is a onetime opportunity where residential and online students meet on campus for several days for cohort building, an introduction to the DrPH program and an immersive experience with a real-world and timely public health challenge that needs addressing. The inaugural immersion course went very well, and we received positive feedback from the students.
   - The elimination of the department-based DrPH programs has clarified the purpose of the DrPH, distinguished it from PhD programs and fostered cross-disciplinary learning that will serve students well in their future careers. Students now have a clear choice between a research-focused (PhD) and practice-based (DrPH) doctorate.

   Challenges

   - As a result of a yearlong strategic planning process, the DrPH program launched a new online DrPH and new curriculum in fall 2023. A large part of our focus and efforts moving forward over the next several years will be to implement the new online program and updated curriculum and monitor and evaluate it, making appropriate programmatic changes as necessary as it's assessed in real time.
   - In lifting the new DrPH programs, GWSPH has been challenged to meet anticipated enrollment needs. This was particularly difficult during a time when GW was trying to reduce staff and the program needed staff.
   - Launching a residential and online version of the DrPH in short order has created opportunities but also challenges, such as the additional lead time needed to record content for the online program.
   - Both platforms, but especially the DrPH@GW, needed additional practice-oriented faculty to teach new courses and find practice-based mentors for incoming students (as

expected, any of the departmental faculty who taught in the former departmental programs preferred to be PhD faculty).
- The DrPH program is navigating higher-than-expected interest from prospective students, requiring even more faculty and staff support.

Future Plans
- The current DrPH curriculum iteration was implemented in fall 2023. The program is collecting feedback on its effectiveness. It is expected that it will improve continuously over time.
- The GWSPH DrPH team plans to work with external organizations and GWSPH alums to identify DrPH-trained individuals to help support students, including service on dissertation committees.

D4. MPH and DrPH Concentration Competencies

The school defines at least five distinct competencies for each concentration or generalist degree at each degree level. These competencies articulate the unique set of knowledge and skills that justifies awarding a degree in the designated concentration (or generalist degree) and differentiates the degree offering from other concentrations offered by the unit, if applicable.

The list of competencies may expand on or enhance foundational competencies, but, in all cases, including generalist degrees, the competency statements must clearly articulate the additional depth provided beyond the foundational competencies listed in Criteria D2 and D3.

The school documents at least one specific, required assessment activity (e.g., component of existing course, paper, presentation, test) for each defined competency, during which faculty or other qualified individuals validate the student's ability to perform the competency.

If the school intends to prepare students for a specific credential (e.g., CHES/MCHES) that has defined competencies, the school documents coverage and assessment of those competencies throughout the curriculum.

1) *Provide a matrix, in the format of Template D4-1, that lists at least five competencies in addition to those defined in Criterion D2 or D3 for each MPH or DrPH concentration or generalist degree, including combined degree options and indicates at least one assessment activity for each of the listed competencies. Typically, the school will present a separate matrix for each concentration.*

There are several instances in which one or more courses are required in different programs. Each program and/or department is responsible for developing D4 competencies in line with their MPH program's mission. As a result, competency language may differ between programs. For example, the Department of Global Health took a department-level approach whereby all programs requiring PUBH 6400 Global Health Frameworks use the same competency and same assignment to show assessment. The Department of Prevention and Community Health allowed each MPH program to develop their own D4 competencies and link them to assignments. As a result, even though almost all programs require PUBH 6500 Planning and Implementing Health Promotion Programs, each program has different D4 competencies connected to the course (or in the case of Community-Oriented Primary Care, no D4 competencies linked).

Template D4-1

Assessment of Competencies for MPH, Biostatistics		
Competency	**Course**	**Describe specific assessment opportunity**
Design, Plan and Conduct Studies: Apply basic principles of biostatistics to contribute to the design, planning, and conduct of public health and biomedical studies.	PUBH 6869 Principles of Biostatistical Consulting PUBH 6866 Principles of Clinical Trials	PUBH 6869—In the Study Planning Assignment: Sample Size (Part 2), students develop testable study hypotheses and conduct a literature review to decide on certain statistics such as the standard deviation that may be needed for calculations. Students write two reports where they discuss their hypotheses, literature review findings and proposed statistical calculations (e.g., effect size and population parameter for the control group), all of which are required when designing, planning and conducting a study. See ERF. PUBH 6866—In small groups, students develop a concept proposal describing a clinical trial. They apply basic principles of biostatistics, such as randomization, blinding, control groups, endpoints, design configuration, inclusion/exclusion criteria, sample size calculation, and data analysis issues. In the final class, groups present their proposal. Students are individually assessed during the presentation as every member must present and answer questions during the Q&A session. See ERF.
Manage Data: Manage databases from public health and biomedical studies using statistical software, e.g., SAS.	PUBH 6853 Use of SAS for Data Management and Analysis	PUBH 6853—There are seven homework assignments that build on students' abilities to manage databases in SAS. For example, in Homework #4, students create a new SAS dataset by importing data from an excel file and reading raw data in a text file. See ERF.
Analyze Data and Interpret Results: Analyze data by applying methodological concepts and interpret the results from public health and biomedical studies.	PUBH 6864 Applied Survival Analysis for Public Health Research	PUBH 6864—On part 2 of the final exam, students manage a database, perform other programming tasks, analyze data using statistical software and write methods and results sections appropriate for a technical report, where they clearly and thoroughly explain the methods and interpret the results. See ERF.

Communicate Results: Communicate results from statistical analysis in layman's terms as a member of a multidisciplinary research team on public health or biomedical studies.	PUBH 6869 Principles of Biostatistical Consulting PUBH 6866 Principles of Clinical Trials	PUBH 6869—Sessions 1 and 2 cover general communication skills for biostatistics consultations through lecture material, online videos, and practice during class sessions. Session 4 focuses specifically on how to communicate in writing a sample size justification. In the Sample Size Justification, students write two reports that would be similar to what might be included in grant applications. While the justification will be partly technical, the overall descriptions provided by the students are meant to be understandable in fairly nontechnical (layman's) language. See ERF. PUBH 6866—At the start of the course, students are surveyed and placed on multidisciplinary teams based on program and experience. In the Concept Proposal assignment, these groups collaborate and communicate regarding the appropriate statistical theories and study designs. Groups present their proposal in a group presentation. Students are individually assessed in the presentation as each is required to present. The presentation is expected to be given using nontechnical language (p. 4).
Apply Ethical Principles: Identify and apply basic ethical principles pertaining to data confidentiality and interpretation of statistical results derived from public health and biomedical data.	PUBH 6869 Principles of Biostatistical Consulting	PUBH 6869—Following in- and out-of-class didactics on ethical issues in biostatistics consulting, students complete an Online Quiz, where students must recognize ethical problem(s) in a consulting scenario and discuss approaches to solve these issues. See ERF.

Assessment of Competencies for MPH in Community Oriented Primary Care		
Competency	**Course**	**Describe specific assessment opportunity**
Develop characterizations of communities and identify their health needs using the principles of COPC.	PUBH 6510 Community-Oriented Primary Care Principles and Practice	PUBH 6510—In the workgroup assignment and final paper, groups of students develop characterizations for an identified community. Groups are provided with questions they must answer in their characterization. Additionally, groups conduct a stakeholder interview and summarize their findings related to the community's health needs. Students are individually assessed through a team evaluation process and during class time when groups are given time to work on their papers. The instructor engages with each group to assess student participation and understanding. See ERF.

Build a community asset map using qualitative and quantitative information about community needs and assets.	PUBH 6510 Community-Oriented Primary Care Principles and Practice	PUBH 6510—In the Asset Mapping Assignment, students build a community asset map using a mixture of qualitative and quantitative data. This asset map is built upon the previous group work of defining and characterizing the community and meeting with community stakeholders (pp. 4–5; see ERF).
Develop the ability to build partnerships and manage community health organizations by engaging stakeholders to implement community-based programs.	PUBH 6513 Community Health Management	PUBH 6513—As part of the Group Final Project, groups conduct interviews with community health stakeholders involved in implementing the TakeMeHome intervention to learn how community health organizations develop partnerships to implement the program. Following the interviews, groups of students write a paper, integrating their learnings from class and findings from interviews to discuss how leaders and managers build partnerships and manage their organizations while implementing community-based programs. Students are individually assessed during class time when groups are given time to work on their papers. The instructor engages with each group to assess student participation and understanding. See ERF.
Develop an evaluation plan for a community-based intervention or COPC program.	PUBH 6510 Community-Oriented Primary Care Principles and Practice	PUBH 6510—In the Workgroup Assignment and Final Paper, students work in a small group to develop an evaluation plan for their planned community intervention. They write a paper, tying in the aims/objectives of the intervention. Students are individually assessed by the instructor through a team evaluation process and through in-class engagement with the instructor. See ERF.
Apply COPC processes and principles to address health disparities.	PUBH 6513 Community Health Management	PUBH 6513—As part of the Group Final Project, students apply the principles of COPC processes and principles to develop an interview guide for a key stakeholder associated with community HIV testing access and the TakeMeHome intervention. Groups interview the stakeholder, create a codebook and analyze the transcript. The instructor individually assesses students during the creation of the interview guide, codebook and transcript analysis as groups are given class time to work. See ERF.
Provide health policy recommendations aimed at reducing health inequities in the US health care system.	PUBH 6512 Community-Oriented Primary Care Policy and Issues	PUBH 6512—In the Brief Review and Critique, students reflect on the US health care system and propose a health policy recommendation to reduce health inequities (p. 3; see ERF).

Assessment of Competencies for MPH, Environmental Health Science and Policy		
Competency	**Course**	**Describe specific assessment opportunity**
Identify the adverse human health effects of chemical, biological, and physical hazards.	PUBH 6123 Toxicology: Applications for Public Health Policy	PUBH 6123—Students complete a series of quiz and exam questions related to this competency. See ERF.
Conduct and interpret data analyses of environmental or occupational exposures or health outcomes.	PUBH 6131 Quantitative Methods in Environmental and Occupational Health PUBH 6853 Use of SAS for Data Management and Analysis[68]	PUBH 6131—In the Presentation and Paper, students apply computational and statistical concepts to carry out a series of data analyses and interpret the results. Students write a paper and deliver an oral presentation describing their methodologies and results which assess environmental/occupational exposures (p. 2). PUBH 6853—There are seven homework assignments that build on students' abilities to conduct and interpret data analyses using SAS. See ERF.
Assess environmental or occupational exposures to evaluate the severity of a chemical, physical, or biological hazard and potential for prevention and control strategies to reduce exposure.	PUBH 6126 Assessment and Control of Environmental Hazards	PUBH 6126—In the Literature Presentation, students synthesize and critique peer-reviewed articles that assess environmental or occupational exposures and identify the potential for prevention and control strategies to reduce exposures. Students use the human health risk paradigm/framework in their assessment (p. 2).
Evaluate observational studies that examine the relationship between environmental or occupational exposures and health, including biases and study limitations.	PUBH 6121 Environmental and Occupational Epidemiology	PUBH 6121—Students evaluate two peer-reviewed publications, both individually and within a group. Students write a critique of the article using a provided framework that assesses the competency. See ERF.

[68] PA/MPH students take PUBH 6853. All other students take PUBH 6131.

Demonstrate knowledge of processes through which science-based policies are developed to address environmental or occupational health issues.	PUBH 6122 Protecting Public Health and the Environment: Policies, Politics and Programs	PUBH 6122—In the Agency Petition assignment, students write a science-based petition to a federal agency requesting a change in policy that affects an environmental or occupational health issue. In the Public Comments assignment, students write a public comment on a proposed rule (i.e., federal regulation) related to an environmental or occupational health issue. To complete these tasks, students must demonstrate knowledge of the processed through which science-based policies are developed (p. 3).
Synthesize information to assess and manage environmental or occupational risks and engage in public health risk communication.	PUBH 6124 Risk Management and Communication	PUBH 6124—In the Final paper and presentation, students work in groups to prepare a problem-based environmental or occupational health case study. Acting as a federal, state, or local government public health official, students write a final paper where they synthesize information to assess and manage their chosen risk. In a 30-minute presentation (with PowerPoint), students communicate public health risk information as their chosen public health official. Students are individually assessed through self-reflection exercise, during the presentation Q&A, and the Session 5 proposal. See ERF.

Assessment of Competencies for MPH, Epidemiology		
Competency	**Course**	**Describe specific assessment opportunity**
Identify and assess patterns of diseases to postulate hypotheses and to identify strategies to evaluate the impact of health problems.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6252—In the Quantitative Methods Assignment, students identify appropriate measures, measures of association and disease patterns. They assess patterns of disease and interpret data analyses to identify strategies to address health issues. See ERF.
Plan and design an epidemiologic study to include observational or experimental design.	PUBH 6247 Design of Health Studies	PUBH 6247—In the Research Proposal, students plan and design an observational study. Students write a background on the topic, develop study aims, identify a study population and provide an overview of the study design and sample size. They define measures of key variables, provide an analysis timeline and develop shell tables based on proposed analyses. See ERF.
Evaluate epidemiologic studies and identify limitations and sources of bias.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6252—In the Threats to Validity Assignment, students identify and assess various sources and types of bias. See ERF.

Conduct and interpret data analyses from epidemiological studies to address research questions.	PUBH 6260 Applied Epidemiologic Data Analysis	PUBH 6260—In Homework #1, students conduct data analysis using SAS and answer a series of questions. They then write a written report that includes methods, results and conclusion sections where students interpret the analyses. See ERF.
Manage datasets from epidemiological studies using statistical software.	PUBH 6260 Applied Epidemiologic Data Analysis	PUBH 6260—In Homework #1, students manage a dataset in SAS to conduct data analyses. See ERF.
Synthesize data and literature to communicate findings.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods PUBH 6260 Applied Epidemiologic Data Analysis	PUBH 6252—In the Synthesis Module Assignment, students write a paper reviewing two peer-reviewed publications. Students synthesize information from the literature to answer a series of questions. See ERF. PUBH 6260—In Homework #1, students write a written report that includes methods, results and conclusion sections where students synthesize data and literature to communicate their findings. See ERF.

Assessment of Competencies for MPH, Global Environmental Health		
Competency	**Course**	**Describe specific assessment opportunity**
Evaluate observational studies that examine the relationship between environmental or occupational exposures and health, including biases and study limitations.	PUBH 6121 Environmental and Occupational Epidemiology	PUBH 6121—Students evaluate two peer-reviewed publications, both individually and within a group. Students write a critique of the article using a provided framework that assesses the competency. See ERF.

Conduct and interpret data analyses of environmental or occupational exposures or health outcomes.	PUBH 6131 Quantitative Methods in Environmental and Occupational Health PUBH 6853 Use of SAS for Data Management and Analysis	PUBH 6131—In the Presentation and Paper, students apply computational and statistical concepts to carry out a series of data analyses and interpret the results. Students write a paper and deliver an oral presentation describing their methodologies and results which assess environmental/occupational exposures. PUBH 6853—There are seven homework assignments that build on students' abilities to conduct and interpret data analyses using SAS. See ERF.
Assess environmental or occupational exposures to evaluate the severity of a chemical, physical, or biological hazard and potential for prevention and control strategies to reduce exposure.	PUBH 6126 Assessment and Control of Environmental Hazards	PUBH 6126—In the Literature Presentation, students synthesize, critique and present peer reviewed articles that assess environmental or occupational exposures and identify the potential for prevention and control strategies to reduce exposures. Students present this information in a PowerPoint presentation (p. 2).
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6435 Global Health Program Development and Implementation	PUBH 6435—Over the course of term, groups of students work to develop a global health intervention. The course is co-taught by a multidisciplinary team, and students are expected to apply these perspectives to their project design and implementation plans. Students are individually assessed through a peer evaluation process (p. 3).
Synthesize scientific evidence to inform global environmental health interventions and reduce and prevent environmental health related disease and injury.	PUBH 6128 Global Environmental and Occupational Health	PUBH 6128—Groups of students work together to identify a global environmental health challenge and present a topic defense which includes an evidence-based summary of the background and scope of the issue, and an articulation of the proposed intervention's primary aims. Then, individually, students write a paper detailing the methods of their proposed intervention. Students must synthesize information to write about appropriate methods (pp. 3–4).
Utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions.	PUBH 6435 Global Health Program Development and Implementation	PUBH 6435—In the final exam, students utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions. Students then peer-review designs and answer a series of questions regarding the proposal, which assess this competency. See ERF.

Assessment of Competencies for MPH, Global Health Epidemiology and Disease Control		
Competency	**Course**	**Describe specific assessment opportunity**
Conduct and interpret data analyses from epidemiological studies to address research questions.	PUBH 6853 Use of SAS for Data Management and Analysis PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6853—Students conduct and interpret data analysis from epidemiological studies on homework and the final exam. See ERF. PUBH 6252—Students conduct and interpret data analysis from epidemiological studies on several assignments. See ERF.
Plan and design epidemiologic studies including observational and experimental designs.	PUBH 6247 Epidemiologic Methods 1: Design of Health Studies	PUBH 6247—In the Research Proposal, students plan and design an observational study. In Section 1, students write a background on the topic, develop study aims, identify a study population, and provide an overview of the study design and sample size. In Section 2, students define measures of key variables, provide an analysis timeline and develop shell tables based on proposed analyses. See ERF.
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice	PUBH 6047—In the Case Studies and Related Class Discussions, students examine meta-analyses and related decision-making as related to three current controversies in global health. For each case study, students critically assess the papers for discussion in class. For two of the case studies, students submit a "PRISMA Checklist" to assess research quality. In class, students interpret and critique the research and best practices before writing a short reflection essay on the case (p. 3).
Analyze multilevel determinants in global health problems that form the basis for disease control strategies and interventions.	PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases	PUBH 6486—In the Final Exam, students write an essay where they analyze multilevel determinants in global health problems and develop evidence-based solutions. See ERF.
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary, coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.

Analyze the ethical issues of global health programs, policies and research.	PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs Or PUBH 6423 Ethics in Public Health Practice and Policy	PUBH 6416—In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. or PUBH 6423—In the Case Study Write-Up and Analysis, students analyze ethical issues in a global health policy/program/research by focusing on a public health case study of their choice. They develop a public health case study presenting a moral dilemma and are expected to conduct a detailed moral analysis of the case study and moral dilemma using ethical theories and principles. See ERF.

Assessment of Competencies for MPH, Global Health Policy		
Competency	**Course**	**Describe specific assessment opportunity**
Identify and analyze evidence to design cultural and equity-specific global health policies in the appropriate context for the national, regional, and/or global health system or institutions.	PUBH 6417 Cross-Cultural Approaches for Global Health Practice	PUBH 6417—In the Case Study of Program/Policy Assessment of Cultural Approaches, groups of students assess the extent to which cross-cultural considerations were included in the policy, plan, strategy or evaluation. Groups present their assessment and recommendations for improvements to the policy or program in a PowerPoint presentation and in a final written report. Through the presentation in which all students contribute and a peer assessment, students are individually assessed. See ERF.
Explain the governance, organization and policy-making of the current global health system architecture.	PUBH 6441 Global Health Organizations and Regulations	PUBH 6441—In the Global Health Organizations Assessment and Presentation, groups of two students will review the history, aims, governance, organizational structures and current strategies of a pre-identified global health organization, framework or treaty. Students will present their findings to the class. Both members of the group are expected to present and complete a peer evaluation. The instructor assesses students individually during their presentation, the following Q&A and through the peer evaluation (p. 2).
Interpret and analyze health policies for health diplomacy.	PUBH 6450 Global Health Diplomacy	PUBH 6450—Assignment #2 is a position paper and a live mock of a negotiation at a multilateral organization (World Health Assembly). Students will be assigned a country and need to write a two-page memo and represent the country during the live session, where they will apply their diplomacy skills in interpreting and analyzing the policy. See ERF.

Evaluate the impact of the economic dimensions (cost, benefits, effectiveness, and financing) of global health policies, particularly in low- and middle-income countries.	PUBH 6466 Health Financing in Low- and Middle-Income Countries Or PUBH 6440 Global Health Economics Or PUBH 6399 Topics in Health Policy (Cost-Benefit Analysis in Health care)[69]	PUBH 6466—Final exam has questions that address this competency. See ERF. Or PUBH 6440—In the policy blog, students describe a specific challenge related to global health in a low- and middle-income country and suggest policy improvements using an economic rationale. See ERF. Or PUBH 6399—In the final project, students write a cost-benefit analysis/cost-effectiveness analysis. Students in the Global Health Policy program choose a global health policy in a low- or middle-income country.
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice	PUBH 6047—In the Case Studies and Related Class Discussions, students examine meta-analyses and related decision-making as related to three current controversies in global public health. For each case study, students critically assess the papers for discussion in class. For two of the case studies, students submit a "PRISMA Checklist" to assess research quality. In class, students interpret and critique the research and best practices before writing a short reflection essay on the case.
Apply relevant quantitative tools to inform different audiences and public health topics.	PUBH 6412 Global Health Quantitative Research Methods	PUBH 6412—In the Breastfeeding Assignment, students seek to understand the relationships between duration of breastfeeding, maternal age, wealth and experience with antenatal care visits. Students perform different statistical methods/tools using STATA. Students write a short paper answering a series of questions and interpret their results, which are appropriately tabled as per the format of a journal. The resulting paper has two main audiences: students who wish to become analysts and future general public health practitioners/policy makers/stakeholders, who will use the material for evaluating the quality of statistical evidence. See ERF.

[69] This topics course is offered rarely and very few Global Health Policy students take it. It is being removed from the list of selectives in this program in 2024–2025.

Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.
Analyze the ethical issues of global health programs, policies and research.	PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs Or PUBH 6423 Ethics in Public Health Practice and Policy	PUBH 6416—In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. Or PUBH 6423—In the Case Study Write-Up and Analysis, students analyze ethical issues in a global health policy/program/research by focusing on a public health case study of their choice. They develop a public health case study presenting a moral dilemma and are expected to conduct a detailed moral analysis of the case study and moral dilemma using ethical theories and principles. See ERF.

Assessment of Competencies for MPH, Global Health Program Design, Monitoring and Evaluation		
Competency	**Course**	**Describe specific assessment opportunity**
Utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions.	PUBH 6435 Global Health Program Development and Implementation	PUBH 6435—In the final exam, students utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions. Students then peer-review designs and answer a series of questions regarding the proposal, which assesses this competency. This is an individual assignment which allows faculty to individually assess students on this competency. See ERF.
Conduct evaluation research with a particular focus on vulnerable groups or low- and middle-income contexts.	PUBH 6501 Program Evaluation	PUBH 6501—In the Evaluation plan, students select a real-world program affecting a vulnerable group or low- and middle-income context. Students develop an evaluation plan choosing either a process evaluation description and data collection or a performance measurement description and data collection (p. 3).

Apply relevant quantitative tools to inform different audiences and public health topics.	PUBH 6412 Global Health Quantitative Research	PUBH 6412—In the Breastfeeding Assignment, students seek to understand the relationships between duration of breastfeeding, maternal age, wealth and experience with antenatal care visits. Students perform different statistical methods/tools using STATA. Students write a short paper answering a series of questions and interpret their results, which are appropriately tabled as per the format of a journal. The resulting paper has two main audiences: students who wish to become analysts and future general public health practitioners/policy makers/stakeholders who will use the material for evaluating the quality of statistical evidence. See ERF.
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice	PUBH 6047—In the Case Studies and Related Class Discussions, students examine meta-analyses and related decision-making as related to three current controversies in global public health. For each case study, students critically assess the papers for discussion in class. For two of the case studies, students submit a "PRISMA Checklist" to assess research quality. In class, students interpret and critique the research and best practices before writing a short reflection essay on the case (p. 4).
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors and attendees of the class are also interdisciplinary coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.
Analyze the ethical issues of global health programs, policies and research.	PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs Or PUBH 6423 Ethics in Public Health Practice and Policy	PUBH 6416—In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. Or PUBH 6423—In the Case Study Write-Up and Analysis, students analyze ethical issues in a global health policy/program/research by focusing on a public health case study of their choice. They develop a public health case study presenting a moral dilemma and are expected to conduct a detailed moral analysis of the case study and moral dilemma using ethical theories and principles. See ERF.

Assessment of Competencies for MPH, Health Policy		
Competency	**Course**	**Describe specific assessment opportunity**
Identify and analyze health policy options to address public health and health systems problems, including their impact on equity.	PUBH 6315 Introduction to Health Policy Analysis	PUBH 6315—In the second Policy Analysis paper, acting as a policy advisor, students write a memo that describes a current health policy issue. Example health policies include access to health services for trans people and maternal mortality and morbidity in a state without Medicaid expansion. Students analyze policy options, documenting the equity/disparity issues. Afterwards, students recommend one or more policy actions, justifying their decision. See ERF.
Interpret and apply laws to health policy situations, considering relevant facts, equity, and the legal rights and responsibilities of stakeholders.	PUBH 6330 Health Services and Law Or PUBH 6335 Public Health and Law	PUBH 6330—The purpose of the final exam is to determine whether, while focusing on certain major issues in health services law, students can not only identify relevant principles, laws, cases, etc., but also think and reason critically, present analyses persuasively, and state conclusions concisely. See ERF. Or PUBH 6335—The purpose of the two exams is for students to identify and analyze how various legal principles impact major issues in public health. Students will interpret and apply laws to health policy situations, considering relevant facts, equity, and the legal rights and responsibilities of stakeholders. See ERF.
Apply microeconomic concepts and tools to analyze health policy questions.	PUBH 6340 Health Economics and Finance	PUBH 6340—The exams include both theoretical and relevant policy questions that assess students' ability to apply microeconomic theory and tools to health policy issues. See ERF.
Find, assess, and apply data (including statistics) and other evidence to do policy analysis and research.	PUBH 6310 Statistical Analysis in Health Policy PUBH 6315 Introduction to Health Policy Analysis	PUBH 6310—The take-home exam evaluates students' data management skills, their ability to perform the correct univariate, bivariate and multivariate statistical tests, and how well they interpret the findings of the statistical results they conduct. See ERF. PUBH 6315—In the First Partial Analysis, students are presented with a hypothetical scenario and must write a problem statement, background and landscape on a particular health policy topic. This requires finding data and other evidence to support the policy analysis. See ERF.

Write and speak on health policy topics clearly and persuasively in different contexts for and on behalf of a variety of stakeholders.	PUBH 6315 Introduction to Health Policy Analysis	PUBH 6315—In a series of policy analyses, students act as a key stakeholder and prepare a memo to a variety of policy stakeholders. In each written memo, students clearly describe the challenge and then persuasively argue for appropriate action by that stakeholder. In the Oral Testimony Assignment, students translate research findings for policymakers. In pairs, students are assigned a research study and then prepare testimony to summarize/highlight/translate the findings and policy relevance for a congressional committee. Students must each present part of the testimony and their presentations are assessed individually. See ERF.

Assessment of Competencies for MPH, Health Promotion		
Competency	**Course**	**Describe specific assessment opportunity**
Assess the socioecological, psychosocial and behavioral health needs of communities and populations.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment 2, groups of students will develop a needs assessment for their target population and health problem. Teams focus on the causes of psychosocial and behavioral factors that affect the health of their community. Students propose solutions to address identified needs. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 18–19)
Develop and plan health promotion strategies and programs that are theory-based, evidence-informed, and culturally appropriate.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503—In Assignments #1–3, students work in groups to develop a strategic health promotion communication plan that is grounded in an ecological framework. In Assignment #1, groups review the literature to identify a target population and evidence supporting the need for a campaign. In Assignment #2, groups flesh out their objectives and core messages. They draft some culturally appropriate materials for pretesting with the target population. In Assignment #3, groups describe the strategies for achieving the health promotion objectives. All group members are expected to participate in the presentation and answer questions. Students also complete a peer evaluation. See ERF.

Implement, administer, and manage health promotion programs.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment 4, groups of students write a paper containing four parts including an implementation plan and management plan for a health promotion program. Students must discuss the timeline of implementation, budget and justification, evaluation plan including measures, instruments and data collection plans, and a narrative on how financial, human and other resources for the program will be managed to ensure quality. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 20–23).
Evaluate health promotion programs.	PUBH 6501 Evaluation of Health Promotion and Disease Prevention Programs	PUBH 6501—In the Evaluation Plan, students prepare an evaluation plan based on a real-world program of their choice related to their MPH program. In the Midterm Exam, students answer a series of multiple-choice questions regarding program evaluation. They then write two essays, evaluating different health promotion programs. See ERF.
Use qualitative and quantitative research to inform the design of health promotion strategies and programs.	PUBH 6504 Social and Behavioral Science Research Methods (Quant) PUBH 6530 Qualitative Methods in Health Promotion (Qual)	PUBH 6504—In Assignment 1, students perform data entry, cleaning and management tasks on a provided dataset. They conduct a preliminary analysis on this dataset to characterize the community and assess the health-related needs of the population and evaluate the impact of health promotion interventions. See ERF. PUBH 6530—In the Qualitative Research Project and Paper, students conduct qualitative methods to identify knowledge, attitudes, beliefs, social dynamics and other elements of a specific group or situation. Students may complete this project individually or in a group. If completed as a group, students must have defined roles and methods should be more complex, with all students participating in data collection and analysis. The instructor assesses students individually based on their defined roles (p. 3).

Assessment of Competencies for MPH, Humanitarian Health		
Competency	**Course**	**Describe specific assessment opportunity**
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters	PUBH 6468—In the Research Response Papers, students develop evidence-based solutions that address major global health challenges. For example, Topic #1 asks students to assess the evidence and practices, and critique them regarding responses to pandemics (COVID-19 and others), balance pros and cons, and formulate the best approaches or future recommendations. Students will have to identify and assess the evidence behind and implications of improving in water quality or air quality during this pandemic and data on vaccine effectiveness, development, or introduction and testing and acceptance of tele-health or tele-medicine into health care system, or strengths or shortcoming in communications strategies and approaches during the pandemic both at health care and social settings and at the national or international levels etc. (which include different disciplines of social or health care or economic etc.). Then they need to balance the level and nature of evidence against each other and formulate a wide range of potential practices and solutions/recommendations for a wide variety of stakeholders from different disciplines (pp. 4–5; see ERF).
Explain and analyze major problems and challenges in humanitarian and disaster settings and strategies to address them.	PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters	PUBH 6468—In the Research Response Papers, students interpret and critique research and practices to explain and analyze major challenges and describe communication strategies and ways to address disasters, epidemics, pandemics, and mass health emergencies in different populations, geographic locations, and across political contexts. For example, in Topic #1, students explore the challenges of pandemics/epidemics and mass health emergencies, evaluate the evidence or its lack of behind the practices or current recommendations, assess pros and cons for different challenges, including but not limited to already implemented communication strategies, within a broader issue of pandemic, across national or international landscapes and potential ways to address them (pp. 4–5; see ERF).

Describe the institutional landscape and the governance in the aid system, and the interrelationship of foreign policy and health outcomes in humanitarian settings.	PUBH 6467 Ethics and Accountability in Humanitarian Assistance PUBH 6480 Public Health in Humanitarian Settings	PUBH 6467—In the Ethics and Accountability Short Response paper, students write a 6- to 8-page paper on a topic related to the humanitarian aid landscape. See ERF. Additionally, students complete weekly PowerPoint slides based on the readings for the week. Sessions 13 and 14 focus on the interrelationship between policy and humanitarian aid (pp. 18–19). PUBH 6480—In the Research Paper and Midterm and Final Exams, students address the governance and institutional landscape of the aid system (p. 5; see ERF).
Communicate public health and medical evidence on humanitarian and health emergency topics to a variety of audiences such as technical experts, lay population, policymakers, or other relevant stakeholders.	PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters	PUBH 6468—In the Research Response Papers, students address major global health challenges including developing communication strategies to a variety of audiences. Students write these papers with language geared toward technical experts or academic audiences. For example, Topic No. 1 specifically requires students to go outside the health care domain and dive into social and political issues that a) have different levels of evidence and related communication for average persons, and b) require evaluating data from nonscientific, grey, and lay literature, and media outlets such as newspapers, social media outlets, documentaries, blogs, political websites, and other social forums commonly used by and designed for average lay persons (pp. 4–5; see ERF).

Describe and address current main communicable, non-communicable, and other pathologies across the populations, geographic locations, and social and political contexts in the humanitarian and disaster settings.	PUBH 6462 Nutrition and Food in Large Humanitarian Emergencies PUBH 6480 Public Health in Humanitarian Settings PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies, and Disasters	PUBH 6462—In the final paper, students use the prompt to write a research paper (p. 4). PUBH 6480—In the final research paper, students explore main communicable and non-communicable diseases and pathologies (p. 5). PUBH 6468—In the Research Response Papers and Group presentations, students address a number of major problems in disaster and mass health emergencies (p. 4).
Apply relevant quantitative tools to inform different audiences and public health topics.	PUBH 6412 Global Health Quantitative Research Methods	PUBH 6412—In the Breastfeeding Assignment, students seek to understand the relationships between duration of breastfeeding, maternal age, wealth and experience with antenatal care visits. Students perform different statistical methods/tools using STATA. Students write a short paper answering a series of questions and interpret their results, which are appropriately tabled as per the format of a journal. The resulting paper has two main audiences: students who wish to become analysts and future general public health practitioners/policy makers/stakeholders, who will use the material for evaluating the quality of statistical evidence. See ERF.
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.

Analyze the ethical issues of global health programs, policies and research.	PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs PUBH 6467 Ethics and Accountability in Humanitarian Assistance	PUBH 6416—In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. PUBH 6467—In the Short Research Paper, weekly assignments and the exam, students explore and evaluate ethical challenges. See ERF.

Assessment of Competencies for MPH, Maternal and Child Health		
Competency	**Course**	**Describe specific assessment opportunity**
Assess the individual, community, organizational and societal needs of women, adolescents, or children.	PUBH 6551 Maternal and Child Health 2	PUBH 6551—The Class Project for this course is a semester-long project focused on quantitatively assessing the individual, community, organizational and societal needs of women, adolescents, and children through the conduct of research. The entire class will work as one group with several subgroups to conceptualize the project including research questions, survey design, data collection and data analysis. Students are responsible for turning in their own, individual paper based on the results of their analyses (p. 5).
Develop policies or programs based on behavioral theory frameworks to improve health outcomes of women, adolescents or children.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment #3, teams will design a health promotion program that is based on best practices, theoretically grounded and appropriate for the target population. There is specifically a section where students detail the selected behavioral theory and it's operationalized in the design. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 19–20).
Administer and implement policies or programs to improve health outcomes of an at-risk community.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment #4, teams of students build on their health promotion program design to develop an implementation and evaluation plan. Groups discuss how the program will be managed and administered. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 20–23).

Conduct evaluation and research related to the health and well-being of women, adolescents, or children.	PUBH 6551 Maternal and Child Health 2	PUBH 6551—Students complete 5 SPSS lab assignments throughout the semester. The labs will apply the materials learned in class, with a focus on analyzing a "real world" dataset—the Girl Rising dataset. The SPSS lab assignments are critical to understanding how to conduct evaluation and research using quantitative data. Each lab will focus on specific research topics including identifying research questions and variables, recoding variables, descriptive/bivariate/multivariate analysis, and interpreting the results of the analysis. See ERF.
Translate evidence and advocate for health and well-being of women, adolescents, or children.	PUBH 6551 Maternal and Child Health 2	PUBH 6551—In the Assignment on Writing Effective Public Comments: How to Bring Your Voice to the Federal Regulatory Process, students learn about the process of regulation implementation by federal agencies. They participate in a workshop that examines the structure of public comments and how to write effectively, translating evidence to advocate for the health and well-being of women, adolescents or children. Students write a public comment to a currently posted regulation (p. 4).
Incorporate a life course perspective to the health and well-being of women, adolescents, or children.	PUBH 6550 Maternal and Child Health 1	PUBH 6550—In the Final Paper, students choose an MCH topic and describe how a life course perspective is incorporated into how public health conceptualizes this MCH topic. See ERF.

Assessment of Competencies for MPH, Public Health Communications and Marketing		
Competency	**Course**	**Describe specific assessment opportunity**
Apply an ecological framework to assess and promote population health.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503—In Assignments #1–3, students work in groups to develop a strategic health promotion communication plan that is grounded in an ecological framework. In Assignment #1, groups review the literature to identify a target population and evidence supporting the need for a campaign. In Assignment #2, groups flesh out their objectives and core messages. They draft some culturally appropriate materials for pretesting with the target population. In Assignment #3, groups describe the strategies for achieving the health promotion objectives. All group members are expected to participate in the presentation and answer questions. Students also complete a peer evaluation. See ERF.

Utilize marketing research to develop and improve public health programs.	PUBH 6571 Social Marketing: Theory and Practice	PUBH 6571—In part 3 of the Campaign Proposal, groups of students describe the primary marketing research that they will use to develop their social marketing campaign. While this is a group project, individuals are assessed through the written portion, the presentation pitch and peer evaluations. See ERF.
Develop and administer communication programs to promote individual- and population-level behavior change.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503—In Assignments #1–3, students work in groups to develop a strategic health promotion communication plan that is grounded in an ecological framework. In Assignment #1, groups review the literature to identify a target population and evidence supporting the need for a campaign. In Assignment #2, groups flesh out their objectives and core messages. They draft some culturally appropriate materials for pretesting with the target population. In Assignment #3, groups describe the strategies, tactics and a timeline for their communication program for achieving the health promotion objectives. The term administer is being used in the implementation context. In other words, students are expected to learn how to research and develop their campaign (Assignments #1 and #2) and implement it (Assignment #3). Assignment #3 specifically states, "The tactics are the 'meat' of your campaign. These are the activities that you are proposing to create and implement, the set of materials you propose to develop and distribute (such as a tool kit or information kit), the partnerships you propose to arrange, the publicity events you create, etc. They will be the vehicles for your health communication messages." All group members are expected to participate in the presentation and answer questions. Students also complete a peer evaluation. See ERF.
Develop and administer marketing programs to promote individual- and population-level behavior change and improve the health capacity of communities.	PUBH 6571 Social Marketing: Theory and Practice	PUBH 6571—In part 2 of the Campaign Proposal, groups of students identify their target audience based on their research. In part 5, they use a behavior change theory to examine barriers, benefits, and motivations for individuals and populations to change their behavior. The social marketing campaign must take these into consideration. While this is a group project, individuals are assessed through the written portion, the presentation pitch and peer evaluations. See ERF.
Develop and administer communication programs to promote the adoption of policies that enhance health.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503—In the Message Map activity, students create key messages as part of a communication plan with the goal of promoting a policy to address a public health challenge. See ERF.

Evaluate effectiveness of public health communication and marketing initiatives.	PUBH 6504 Social and Behavioral Science Research Methods	PUBH 6504—In Assignments 3–5, students conduct analysis on a provided dataset. The analyses are on health promotion campaigns with communication/marketing components. Students write a report summarizing their findings. See ERF.

Assessment of Competencies for MPH, Public Health Nutrition		
Competency	**Course**	**Describe specific assessment opportunity**
Use appropriate nutrition assessment methods at the individual, community, or population levels.	PUBH 6611 Nutrition Assessment	PUBH 6611—In the Body Composition and Anthropometrics Assessment Portfolio, students conduct anthropometry and body composition assessments. These tests are appropriate nutrition assessment methods for the individual level as they relate to anthropometry. At the end of the lab period, students submit a lab worksheet with data from their assessments (p. 4).
Design, implement and evaluate food and nutrition programs and policies and their effects on population health outcomes.[70]	PUBH 6620 Designing Healthy Communities	PUBH 6620—In the Case Study assignments, students examine the social determinants of health, the food, built, and age-friendly environments of selected wards in Washington, DC, and design SMART Goals to address the needs of those communities using the Policy, Systems, and Environment framework. Students design a series of PSE recommendations along with an evaluation plan. As part of the final project (which includes the case studies), students complete a peer evaluation which assists the instructor in being able to individually assess students. See ERF.
Employ systems thinking to identify and address factors impacting the accessibility, availability, adequacy, and safety of the food supply.	PUBH 6612 Food Systems in Public Health	PUBH 6612—In the Challenge Assignment, students apply a systems thinking approach to a unique aspect of the food system. In a paper, students describe the perspectives of various stakeholders on the given topic, indicate interrelationships between stakeholders and identify opportunities to remove barriers and have stakeholders work more collaboratively to improve health outcomes (p. 3).
Apply a policy, systems and environment approach to creating healthy food environments at the population level.	PUBH 6620 Designing Healthy Communities	PUBH 6620—In the midterm exam, students answer questions that address this competency (p. 5; see ERF).

[70] Based on feedback from the preliminary self-study, "implement" is being removed from this competency for the 2024–2025 academic year.

Utilize appropriate research methods to address public health nutrition issues and support food and nutrition-related policy development.	PUBH 6613 US Food Policy and Politics Or PUBH 6482 International Food and Nutrition Policy	PUBH 6613—In the Final Paper, students conduct a literature review on a public health nutrition problem of their choice and write a paper evaluating/proposing a policy or regulatory approach to address the issue. In addition to the paper, students give a 10-minute PowerPoint presentation on their findings (p. 3). PUBH 6482—In the Final Paper (Parts A and B), students investigate major nutrition and food challenges in a particular country. Students systematically identify programs and policies to address these challenges in a paper (pp. 3–4,17).

Assessment of Competencies for MPH, Physical Activity in Public Health		
Competency	**Course**	**Describe specific assessment opportunity**
Describe the role of physical activity in the health and function of the general population.	EXNS 6208 Physical Activity in Public Health	EXNS 6208—In Assignment 4—Infographic, groups of students design an infographic that promotes daily physical activity in the setting of their choice. As part of this infographic, students describe how physical activity promotes health and function of the population. To assess individual participation and contribution on the assignment, students complete a peer evaluation form.
Explain various physiological and psychosocial mechanisms that mediate the relation between physical inactivity and chronic disease morbidity and mortality.	EXNS 6208 Physical Activity in Public Health	EXNS 6208—Students answer questions related to this competency on the midterm exam. See ERF for midterm exam.
Design physical activity interventions that are consistent with current social and behavioral theories.	EXNS 6208 Physical Activity in Public Health	EXNS 6208—In the Case Report (Homework 3), students are given a scenario (in this case cancer patients currently receiving treatment for breast cancer) and design a physical activity plan for this target population, taking into account social and behavioral theories. See ERF for Case Report.
Perform physical activity assessments using state-of-the-art technology.	EXNS 6208 Physical Activity in Public Health	EXNS 6208—In Assignment 1—PAL calculation, students collect personal data and calculate their P.A.L. using metabolic equivalents of task (METs) derived from the Compendium of Physical Activities. As part of the class discussion grade, students practice using accelerometers, step-counters, ActivPAL, and questionnaires to assess physical activity during lectures.

Apply statistical and epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level.	EXNS 6204 Biostatistical Methods and Research Design	EXNS 6204—In Homework 4, students develop and test hypotheses using various statistical tests and the NHANES dataset. Students apply statistical and epidemiological methods to answer a series of questions related to their statistical calculations. See ERF.
Design and evaluate interventions for improving physical activity at the community and population levels.	PUBH 6620 Designing Healthy Communities	PUBH 6620—In the Case Study assignments, students examine the social determinants of health, the food, built, and age-friendly environments of selected Wards in Washington, DC, and design SMART Goals to address the needs of those communities using the Policy, Systems, and Environment framework. Students design a series of PSE recommendations along with an evaluation plan. As part of the final project (which includes case studies), students complete a peer evaluation, which helps the instructor individually assess students.
Integrate the science and practice of exercise science and public health in promoting an active lifestyle at the community and population levels.	EXNS 6208 Physical Activity in Public Health	EXNS 6208—In the Final Project—Active Design Project, groups of students redesign a public space (e.g., airport, library, fast-food restaurant) to maximize physical activity and minimize sedentary behavior for the community and population that use this public space. This activity requires the integration of the science and practice of exercise science and public health to effectively redesign the public space. Groups present their ideas in a PowerPoint presentation. The instructor assesses students individually when the students present, answer questions during the Q&A and through a peer evaluation form, which contains questions on group participation and contributions to the project (p. 3).

Assessment of Competencies for MPH@GW, Public Health Generalist		
Competency	**Course**	**Describe specific assessment opportunity**
Develop a programmatic implementation and evaluation plan for a health promotion intervention.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment #4, teams develop an implementation and evaluation plan which includes a timeline, budget, evaluation questions, evaluation design (e.g., sampling, instruments, data collection techniques), and dissemination and management plans. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 19–21).
Assess the functions, capacities, management and governance of governmental, international and non-state organizations that comprise health systems.	PUBH 6442 Comparative Global Health Systems	PUBH 6442—In the Group Presentation, teams choose a topic in which they can assess the functions, capacities and management of governmental, international and non-state organizations within 2 to 3 countries. All students must contribute to the presentation. Individuals are assessed by the instructor through a combination of the presentation, Q&A following the presentation and peer evaluation feedback (pp. 3–4).
Apply appropriate theories toward the development, implementation, and evaluation of public health interventions to address health risks at the individual, interpersonal, community, and/or population levels and mitigate population health impact.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment #3, teams will design a health promotion program that is based on best practices, theoretically grounded and appropriate for the target population. There is specifically a section where students detail the selected behavioral theory and it's operationalized in the design. In Assignment #4, students build on the design to develop an implementation and evaluation plan. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 17–21).
Apply commonly employed data management techniques using appropriate software tools.	PUBH 6052 Practical Data Management and Analysis for Public Health	PUBH 6052—In Graded Assignment 1, students apply commonly employed data management techniques in SPSS. See ERF.
Describe how health systems performance is affected by various approaches to health care organization, health law, health workforce development and health care financing.	PUBH 6442 Comparative Global Health Systems	PUBH 6442—In the Group Presentation, teams choose a topic in which they can assess how the health system performance is affected by various approaches to health system organization of the six building blocks of a health system. All students must contribute to the presentation. Individuals are assessed by the instructor through a combination of the presentation, Q&A following the presentation and peer evaluation feedback (pp. 3–4).

Develop communication campaigns and strategies to disseminate health promotion information through media channels.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503—In the Group Campaign Design and Evaluation Planning Project, teams of students develop a health communication campaign strategy, tactic or program materials (Assignment #2). Students write a communication strategy statement, develop 3 key messages for the primary target audience and develop a prototype of two health communication materials. See ERF for detailed instructions (p. 6).
Investigate a public health issue through evidence-based methods, including a review of scientific literature.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500—In Assignment #2, teams will conduct a needs assessment to inform the planning of the health promotion program. The needs assessment will occur through a scientific literature review, where teams will investigate the target population, epidemiological issue, educational and ecological underlying factors, and research evidence-based programs addressing their health topic. The needs assessment will serve as the foundation for the program design and implementation plan (pp. 16–18). Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners. See ERF.

Assessment of Competencies for MPH@GW, Climate and Health		
Competency	**Course**	**Describe specific assessment opportunity**
Evaluate observational studies that examine the relationship between environmental or occupational exposures and health, including biases and study limitations.	PUBH 6136 Environmental and Occupational Epidemiology PUBH 6135 Researching Climate Change and Human Health	PUBH 6136—In the Final Assignment, students individually prepare an epidemiologic critique of one environmental epidemiologic study. They must evaluate the study for the relationship between exposures and human health. This is part of a larger group project. Members of the group project are assessed individually during the presentation and through a peer evaluation process. See ERF. PUBH 6135—In the Final group project, students work in small groups over the course of the term to evaluate existing epidemiologic research that investigates an environmental or occupational health problem related to climate change and its effects on human health, including summarizing scientific literature, methods, and results, and evaluating biases. Students write a memo and conduct an oral presentation. Students are individually assessed during the presentation, the after-presentation Q&A and through a peer evaluation process (p. 3).

Assess environmental and/or occupational exposures that are linked with climate change and evaluate health hazards associated with them.	PUBH 6140 Global Climate Change and Air Pollution	PUBH 6140—In Paper 1, students interact with the CDC Environmental Public Health Tracking Network Tool to visualize climate-relevant health exposures and evaluate the health hazards associated with those risks in a specific country. Students write a paper answering a series of questions, assessing the exposures (p. 3; see ERF).
Examine scientific approaches for studying the effects of climate change on human health.	PUBH 6135 Researching Climate Change and Human Health	PUBH 6135—In the midterm exam, students answer a series of questions related to this competency. See ERF.
Communicate the effects of climate change and sustainability actions on public health to varied audiences using evidence-based effective strategies.	PUBH 6133 Social Dimensions in Climate Change and Health	PUBH 6133—In the Paper Assignments, students work in pairs to develop a proposal for a video on the effects of climate change and sustainability action on public health to nontechnical audiences, using evidence-based effective strategies. Once approved, the students produce a documentary video in the Final Video project based on their proposal. Students are individually assessed through a peer evaluation process (p. 4).
Recommend strategies to prevent or control environmental or occupational exposures that are linked with climate change.	PUBH 6140 Global Climate Change and Air Pollution	PUBH 6140—In the Presentation 1 and Paper 1, groups of two students interact with the CDC Environmental Public Health Tracking Network Tool to visualize climate-relevant health exposures and evaluate the health hazards associated with those risks in a specific country. Students write a paper and give a ten-minute PowerPoint presentation answering a series of questions, including recommending strategies for mitigating health hazards (p. 3; see ERF).

Assessment of Competencies for MPH@GW, Global Health		
Competency	**Course**	**Describe specific assessment opportunity**
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases	PUBH 6486—The final exam is an essay exam on several topics that have been covered including disease control strategies and interventions, which will require students to analyze global health problems and develop evidence-based solutions. See ERF.
Analyze multilevel determinants in global health problems that form the basis for disease control strategies and interventions.	PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases	PUBH 6486—The final exam is an essay exam where students will need to analyze multilevel determinants in global health problems to address disease control strategies and interventions. See ERF.

Develop strategies to meet the health needs of children globally.	PUBH 6563 Global Child Health	PUBH 6563—During the midterm and final exam, students answer a series of short answer questions that address this competency. See ERF.
Recommend strategies to prevent and control environmental and occupational exposures that are linked with climate change.	PUBH 6128 Global Environmental and Occupational Health	PUBH 6128—In the Intervention Project, students work in groups and individually to develop strategies for controlling/preventing an environmental or occupational exposure. The project is structured in three parts and ultimately results in two presentations and one paper. Individuals are assessed during the Q&A sessions of each group presentation and in the individual writing sections of the paper (p. 3).
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary, coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.

Assessment of Competencies for MPH@GW, Health Informatics and Analytics		
Competency	**Course**	**Describe specific assessment opportunity**
Use appropriate health information technology (IT), informatics and data terms.	PUBH 6704 Health Information Technology, Informatics and Decision Making	PUBH 6704—Students take an exam that addresses this competency. See ERF.
Demonstrate [the use of] strategies that apply data and health IT structures, policies and processes.[71]	PUBH 6705 Health Law and Health IT	PUBH 6705—In Individual Assignment 4, students write a paper on privacy and disclosure. Taking on the role of a hospital compliance officer, students are tasked with creating privacy and security policies and procedures for their hypothetical hospital. Then, students apply their policies and procedures in five health care scenarios, demonstrating knowledge of data and health IT structures, policies and processes. See ERF.
Consult with stakeholders to identify health IT solutions and present results.	PUBH 6703 Healthcare Delivery and Health IT	PUBH 6703—In Assignment #3, students interview a health care executive tasked with delivering care to a specific population. Students write a paper and present their findings from the interview by describing and analyzing how technology is used to address key health challenges affecting the specific population. See ERF.

[71] Bracketed language included to improve clarification and intention of the competency.

Apply concepts of health informatics to areas of population health.	PUBH 6706 Population and Community Health Analytics	PUBH 6706—In the Final paper, students write a memo to a key decision-maker who influences community/population health. Using data driven evidence, students describe the problem and apply concepts of health informatics when proposing how to address the issue. See ERF.
Solve health care issues through the optimization of health IT, related data, and business processes.	PUBH 6705 Health Law and Health IT	PUBH 6705—In the Final Group Assignment, teams of students are assigned real-life health care issues. They must work together to address legal, ethical and IT concerns. Students conduct a peer and self-assessment, which helps instructors individually assess students. See ERF.
Assess the implications of health information technology and related data and processes.	PUBH 6704 Health Information Technology, Informatics and Decision Making	PUBH 6704—In the Group Final: Use Case Change Management Presentation, teams of students identify a health care issue that has impacted individual and population health in a local community. Taking on the role of health care system managers, students develop a multiyear strategy to implement delivery system changes with the necessary data flow and health IT infrastructure. In their 20-minute presentation and paper, students discuss the impact the technical change will have from a health informatics perspective and how it will affect distinct groups and stakeholders within the health care organization. See ERF.

Assessment of Competencies for MPH@GW, Women, Youth and Child Health		
Competency	**Course**	**Describe specific assessment opportunity**
Assess the individual, community, organizational and societal needs of women, youth, or children.	PUBH 6550 Maternal and Child Health 1	PUBH 6550—In the Final Paper, students choose a MCH topic, describe the individual, community, organizational and societal needs, and strengths of these populations, and provide their insights about the gaps in programs, policies and leadership in tackling these challenges. See ERF.
Apply social and behavior change models and strategies that have been shown to be successful in improving the health and well-being of women, youth, or children.	PUBH 6563 Global Child Health PUBH 6451 Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries	PUBH 6563—In the GLearning activity, Social and Behavior Change for Nutrition, students complete an online module from the Global Health eLearning Center on Social and Behavior Change (SBC) interventions related to malnutrition. At the end of the course, students apply their knowledge of evidence-based SBCs in a final exam. See ERF. PUBH 6451—In the Individual Paper (Assignment 2), students describe social and behavior change models and strategies that have shown to be successful in improving the health of women (including youth). Students choose a strategy and an intervention that has a strong theoretical basis and/or has been proven to work in other settings. The paper must include a review of literature on the effectiveness of relevant program strategies and policies to support the rationale for the intervention chosen. The description should be written from the perspective of the organization that would implement the intervention and describe the team doing the implementation. The intervention should be in line with US government policies on development assistance for sexual and reproductive health programs and should reflect current global policy frameworks in sexual and reproductive health (p. 4).

Develop a behavioral change model-based strategy or intervention logic model to improve the health of women, youth or children.	PUBH 6451 Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries	PUBH 6451—In Individual Paper (Assignment 3) students develop an intervention and include a visual explanation of the intervention's logic in the form of a logic model. A logic model should demonstrate the relationships between activities, outputs, outcomes and impact and be accompanied by a maximum of one paragraph text description of the strategy and intervention as needed. Students describe an appropriate social and behavior change model and strategy to improve the situation of women (and youth). Using the template provided in the course, students will be asked to submit a completed logframe for the intervention to be implemented they described earlier. The logframe should include clear objectives, measurable indicators including outputs, outcomes and impacts, means of verification, and any relevant assumptions about the project's success. This should be the bases for evaluating the proposed activities. Students are expected to use standard sexual and reproductive health indicators as appropriate in their logframes (p. 5).
Develop an evaluation plan for a behavioral change model-based strategy or intervention to meet the health needs of women, youth or children.	PUBH 6451 Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries	PUBH 6451—In the Project Proposal Paper (Assignment 4), students follow a template modeled on the key elements of a USAID RFA. One of the elements is a measurement and evaluation plan. Students develop a logframe with outputs, outcomes, and impact, description of measurement activities designed to evaluate, research and track progress on proposed indicators and capabilities needed to conduct measurement activities effectively (p. 5).
Apply a life course perspective to the health and well-being of women, youth, or children.	PUBH 6550 Maternal and Child Health 1	PUBH 6550—In the Final Paper, students choose a MCH topic and incorporate a life course perspective to the healthy development of MCH populations. See ERF.

Assessment of Competencies for DrPH, Public Health Generalist		
Competency	**Course**	**Describe specific assessment opportunity**
Apply implementation science approaches to improve uptake of evidence for decision-making.	PUBH 8708 Applied Public Health Methods	PUBH 8708—In the Final Project, groups of students apply implementation science approaches to address priority health challenges in a grant proposal. Teams propose topics and implementation-science oriented research questions before designing an approach. Students pitch their proposal to public health practitioners using a PowerPoint presentation and write a paper. Students are individually assessed during the oral presentation as all group members are expected to present and answer questions during the Q&A. See ERF.
Integrate leadership frameworks into practices, programs, and/or policies to address public health challenges.	PUBH 8706 Leadership Principles and Practice 1	PUBH 8706—For the Personal Leadership Model and Leadership Framework paper, students write about their personal leadership model and apply it to key leadership frameworks/theories/concepts. Students describe how they integrated or plan to integrate their leadership framework into at least one example of a public health program, policy or practice. Additionally, students write a Strategic Plan to support their Personal Leadership Framework where they develop an 8-year strategy to support their leadership framework (p. 4).
Understand how to apply a health equity lens in all aspects of public health practice, including assessments, programs, policies, and/or services.	PUBH 8720 Social Change and Collective Impact	PUBH 8720—In Homework #1 Journal Article Analysis, students discuss the role of politics, ideology and activism in public health research and practice. Students choose one of four supplied articles and write a paper answering a series of questions related to health inequities (see page 4 of syllabus). In Homework #2 Identifying Levers for Change, students identify specific policies and practices that are driving inequities as measured in health, wealth and social well-being (see page 5 of syllabus). In the Small Group Project Public Health 3.0, students write a paper and present a proposed development of a collective impact initiative to address a place-based and/or race-based inequity. Students will be individually assessed during the presentation and through a peer evaluation process (p. 4).

Develop workforce strategies that consider human motivation, adult learning principles, organizational factors, and available resources.	PUBH 8716 Pedagogical Methods and Practice for Public Health Leaders and Practitioners	PUBH 8716—In the Executive Coaching Plan, students develop a coaching plan as a workforce development strategy for the person in a case study. A comprehensive template is provided and includes an assessment of the root cause, scope of the problem, coaching goal(s), type of coaching (external vs. internal), coach, other stakeholders, check-in plans, desired outcomes, outcome measurement, etc. (p. 5). In the Critical Analysis of CEPH Competencies & Pedagogical Recommendations, students critique CEPH's DrPH competencies from a public health practitioner-leader perspective and propose 3–5 new or improved competencies needed to train the next generation of public health workforce (p. 4).
Apply the core elements of a policy analysis to issues in health policy (health services and public health policy).	PUBH 8722 Public Health Policy Analysis	PUBH 8722—In the Final Assignment, students write a detailed policy analysis memo for a key decision-maker about a health problem that requires that a policy or programmatic solution be designed. Students will then conduct an oral presentation during the last week. The final policy analysis assignment will include all the components of a polished analysis of a health policy topic chosen by the student and approved by the instructor. The analysis will reflect a more in-depth and thorough comparative assessment than was required in the two-page policy analysis assignment. At a minimum, students must assess proposed policy options on the effectiveness, cost, and equity of the distinct options. See ERF.

2) *For degrees that allow students to tailor competencies at an individual level in consultation with an advisor, the school must present evidence, including policies and sample documents, that demonstrate that each student and advisor create a matrix in the format of Template D4-1 for the plan of study. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file.*

   See ERF > Criterion D > Criterion D4 > D4.2: Temp D4-1_samples.

3) *Provide supporting documentation for each assessment activity listed in Template D4-1. Documentation should include the following, as relevant, for each listed assessment:*

   - *assignment instructions or guidelines as provided to students*
   - *writing prompts provided to students*
   - *sample exam question(s)*

   See ERF > Criterion D > Criterion D4 > D4.3: Temp D4-1_syllabi.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths
   - GWSPH is proud to be able to provide students with a broad array of distinctive opportunities to specialize (via offered concentrations) within the MPH. This is especially important in the context of our location in Washington, DC, where specialization is highly valued for entry-level positions for MPH graduates.
   - In every case, GWSPH concentrations are bolstered by faculty members who are thought leaders in specific areas: scholars, practitioners and policy experts who can provide students with up-to-date knowledge and competencies gained through firsthand knowledge of the field.
   - GWSPH advisors and faculty are well-versed in the requirements of these concentrations and prepared to provide students with needed guidance and advice; the MPH Advisory Committee provides a solid mechanism for coordination and collaboration.
   - The GWSPH Office of Student Affairs held multiple workshops sessions in 2022 to assist faculty in reviewing their program-specific competencies. The workshops were well-received, and subsequent review of program-specific competencies shows increased use of Bloom's taxonomy verbs and the use of competency language in assessment instructions.

   Challenges
   - Not surprisingly, some courses meet competencies in more than one program, necessitating considerable review to ensure the assessments are appropriate for each course and program.
   - It is a challenge to have a multitude of residential programs (15 total) that are managed by different departments. This requires coordination through the MPH Advisory Committee.

   Future Plans
   - As with the MPH foundational knowledge competencies, the new Director of Academic Planning and Accreditation plans to implement processes to review program-specific competencies and linked didactics and assessments more regularly and consistently.

D5. MPH Applied Practice Experiences

MPH students demonstrate competency attainment through applied practice experiences.

The applied practice experiences allow each student to demonstrate attainment of at least five competencies, of which at least three must be foundational competencies (as defined in Criterion D2). The competencies need not be identical from student to student, but the applied experiences must be structured to ensure that all students complete experiences addressing at least five competencies, as specified above. The applied experiences may also address additional foundational or concentration-specific competencies, if appropriate.

The school assesses each student's competency attainment in practical and applied settings through a portfolio approach, which reviews practical, applied work products that were produced for the site's use and benefit. Review of the student's performance in the APE must be based on at least two practical, non-academic work products AND on validating that the work products demonstrate the student's attainment of the designated competencies.

Examples of suitable work products include project plans, grant proposals, training manuals or lesson plans, surveys, memos, videos, podcasts, presentations, spreadsheets, websites, photos (with accompanying explanatory text), or other digital artifacts of learning. Reflection papers, contact hour logs, scholarly papers prepared to allow faculty to assess the experience, poster presentations and other documents required for academic purposes may not be counted toward the minimum of two work products.

1) *Briefly describe how the school identifies competencies attained in applied practice experiences for each MPH student, including a description of any relevant policies.*

   MPH students in all concentrations and programs at GWSPH complete an Applied Practice Experience (APEx), generally either through an internship (e.g., practicum) or a professional portfolio (i.e., expedited portfolio review). All GWSPH students enroll in an APEx course based on their matriculation term, which are called cohorts. There currently exist three cohorts based on matriculation term. Students enrolled prior to fall 2019 enroll in a two-credit course, Cohort 6014; students who matriculated between fall 2019 and fall 2021 enrolled in a one-credit Public Health Leadership course, Cohort 6022; and all students who matriculated in fall 2021 or later enroll in a zero-credit APEx course, Cohort 6000.

   The Office of Applied Public Health coordinates the APEx process across the school and curates its own webpage, populated with resources such as APEx site search strategies, international funding tips and APEx handbooks. In addition to the Office of Applied Public Health, students receive departmental support from practice teams, consisting of practicum directors and practicum managers/associates. Housed within each department, these teams guide students through APEx expectations, identify internship sites that align with students' interests and career goals as much as possible and share relevant resources and handbooks. Practice teams are the GWSPH point of contact for practicum preceptors. Practice teams share relevant preceptor resources such as the preceptor handbook and work closely with preceptors before, during and at the completion of the practicum to ensure students are performing well and any concerns are addressed.

   <u>Practicum</u>
   Students on the practicum pathway complete a minimum of 120 hours of a mentored internship experience with an outside agency and preceptor, submit two work products that align with their five selected competencies and submit a final evaluation.

During the practicum approval process, students develop a practicum plan in collaboration with the student's preceptor. The practicum plan identifies specific competencies and nonacademic work products and describes how, through the development of the work products, the student will attain the selected competencies. Also included in the practicum plan are the experience's expected activities and a description of the preceptor's professional background and experience mentoring other students. Using GWSPH's tracking system, preceptors and practice teams approve the practicum plan. Once approved, students proceed through a mini-ethics review led by the GWSPH Office of Research Excellence (ORE) to determine if an official Institutional Review Board (IRB) review is required to proceed with the experience. If ORE determines that no IRB review is required, students receive a determination email stating that they are allowed to proceed with the experience. The date of the determination email is the official date of approval of the practicum plan and the date in which students are allowed to count hours toward the practicum.

During the practicum, students log their hours in the GWSPH tracking system. At the midpoint of their experience (around 60 hours), students submit an attestation that declares any significant deviations from the practicum plan, highlighting any revisions to the competencies and/or work products. If changes were made, a full review of the updated practicum plan is undertaken and a second mini-ethics review is conducted.

At the end of the 120-hour experience, students upload their two work products and complete a final evaluation to the GWSPH tracking system. For the evaluation, students reflect on the status of their practicum plan activities and competencies, their overall experience and their preceptor. Their departmental practicum director assesses the submitted work products for quality and alignment with competencies. Students are given "credit" for the course, based on the quality of the work products, their alignment with the selected competencies and the preceptor's feedback. If a student's submissions do not appropriately align with the competencies, the practicum director provides feedback to the student and requests a resubmit.

Most students complete a practicum. There are a few specialized practicum experiences, such as the Peace Corps Coverdell Fellowship, the Health Resources and Services Administration (HRSA) Public Health Scholars Program (PHSP) and the COVID-19 Alternative Pathway. These are discussed in greater detail in the ERF (see ERF > Criterion D > Criterion D5 > D5.2: MPH APEx_reqs).

Expedited Portfolio Review

Students who have a minimum of five years of full-time public health experience post-undergraduate degree or three years of full-time public health experience[72] post-graduate degree (non-MPH), may opt for an expedited portfolio review (EPR). Only 1% of MPH students follow the EPR pathway in a given year.

Students complete a centralized work history assessment, which is reviewed by the Office of Applied Public Health to determine the relevance of the professional experiences and if the experiences align with appropriate public health professional work, consistent with a practicum. If approved by the Office of Applied Public Health, departmental practice teams support the student through the proposal process.

Students complete a proposal, similar to practicum plan, that describes past public health activities, identifies five competencies attained during those activities and proposes two work

[72] The years of experience must have taken place within the five years immediately prior to matriculation into GWSPH.

products showcasing mastery of the selected competencies. Practice teams assess the submitted proposal and work products for quality and alignment with competencies. Students are given "credit" in PUBH 6000, based on the quality of the work products and their alignment with the selected competencies. If a student's submissions do not meet expectations, the practice team either provides feedback to the student and requests a resubmit or directs the student to complete a practicum.

MSN/MPH

Students in the MSN/MPH program enroll in NURS 6258 Leadership Capstone Practicum 1 (3 credits) and NURS 6259 Leadership Capstone Practicum 2 (3 credits) as part of their nursing school curriculum. While these credits don't transfer into the MPH program, the practicum experience may be used to meet the MPH APEx requirements, pending approval from the departmental practice team. Under the guidance of their MSN Clinical Coordinator and MPH practice team, students identify and participate in a public health nursing practicum. All requirements related to the student's practicum are similar to what all other MPH students complete except that the site must be within a clinical setting that integrates public health. MSN/MPH students enroll in PUBH 6000 toward the end of their experience and the practice team will apply "credit" once all items are submitted. As of fall 2023, there have not yet been any MSN/MPH students who have completed the applied practice experience.

PA/MPH

Most PA/MPH students complete a practicum as described above, except for students in the Environmental Health Science Policy or Global Environmental Health programs, who have the option to use their PA clinical practicums as their APEx. Aside from a clinical setting, all other practicum requirements are the same as other MPH students. Few PA/MPH students choose this option. These students have an MPH advisor during these activities.

MD/MPH

MD/MPH students may choose to do a traditional practicum, as described above, though most use a course-based approach in Population Health Summit #4, which addresses a student-identified public health issue. MD students complete a total of four Clinical Public Health Summits during medical school. During the spring of MS4, MD/MPH students participate in their final summit, Population Health Summit #4, which is a longitudinal project addressing both MD and MPH competencies and runs the majority of MS4. Students who choose to use the Population Health Summit #4 for their APEx, design a practicum plan based on their work in the Summit and identify five MPH competencies they will attain through this extended experience, and it is reviewed by their MPH practice team. MD/MPH students do not have an identified preceptor for their experience, though they operate under the guidance of a GW faculty member with input from external stakeholder(s). Students also do not integrate their practicum plan into or track hours in GWSPH's tracking system, however, the Summit has defined expectations and students' experiences last upwards of a year following the Summit, so the experience far exceeds the 120-hour minimum. Generally, MD/MPH students work on their Summit deliverables during their year of MPH coursework and enroll in PUBH 6000 toward the end of the experience. Students submit an implementation plan and a communication strategy as APEx work products which are reviewed by their departmental practice team. Depending on the project topic, students may work on behalf of an organization or may make their final project available to an organization. All students are required to engage with stakeholder(s) during the Summit. Students consult with their stakeholder(s), public health practitioner faculty and the MPH practice team during the development process for their plans, incorporating feedback and advice. The resulting implementation plan and communication strategy are shaped by these consultations and meet the needs of the stakeholder(s) involved.

NOTE: MD/MPH students also use their Population Health Summit #4 experience to meet the requirements of the ILE. One of the CE deliverables, the Clinical Public Health Action Plan, is the culmination of the student's year-long Summit activities. The deliverables produced for both the APEx and CE are distinct, though related. See Criterion D7.2.

JD/MPH and LLM/MPH
All JD/MPH and LLM/MPH students complete a practicum as described above. To date, there have not been any LLM/MPH students who have completed a practicum.

2) *Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the applied practice experience.*

See ERF > Criterion D > Criterion D5 > D5.2: MPH APEx_reqs.

3) *Provide samples of practice-related materials for individual students from each concentration or generalist degree. The samples must also include materials from students completing combined degree schools, if applicable. The school must provide samples of complete sets of materials (i.e., Template D5-1 and the work products/documents that demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school has not produced five students for which complete samples are available, note this and provide all available samples.*

Proposed work products identified in a student's proposal may vary from final submitted work products. GWSPH understands that practicums can change depending on funding, organizational needs and current events. As a result, students work closely with their practice team to confirm that submitted items meet competency requirements.

Each department/program has its own practice team. Given the size of the GWSPH MPH student population, it is inevitable that there will be slight deviations in how individual practice team members evaluate students' APEx deliverables and evaluation practice may also change from year to year. To maintain overall quality control and ensure that there is a measure of consistency across departmental practice teams, all teams meet monthly during the GWSPH Practice Committee. During this meeting, practice teams discuss APEx changes and address questions or concerns that arise. The MPH Advisory Committee also meets monthly and addresses APEx issues as they arise.

Each departmental practice team is responsible for ensuring students submit their required deliverables on the electronic tracking system. However, practice team-produced notes, checklists or evaluations cannot be stored on the same system. As a result, some evaluation forms were identified and included in the ERF, but not all. We opted to provide what we could rather than remaining consistent and leaving such documents out of the ERF.

Fewer than five samples were provided for the MD/MPH, PA/MPH, BS/MPH and JD/MPH joint degrees for two main reasons:

- These joint degrees have fewer students.
- Students in these joint degrees engage in nearly identical practicums as non-joint degree students in the same MPH program. They work for similar organizations, identify similar competencies, are supervised by competent preceptors and departmental practice teams and produce quality deliverables.

The following programs have yet to have a student complete an APEx:

- LLM/MPH
- MSN/MPH

- MPH@GW, Global Health
- MPH@GW, Health Informatics and Analytics
- MPH@GW, Climate and Health
- MPH@GW, Women, Youth and Child Health

See ERF > Criterion D > Criterion D5 > D5.3: MPH APEx_samples.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH has long been committed to applied public health as an integral part of the educational experience, and all departments are strongly supportive. Feedback from students and from GWSPH partners has been enthusiastically positive.
- The EPR pathway is well-received by students who have existing professional work experience. It has relieved a burden for some who are managing families, full-time positions and their education.
- Practicum experiences are conducted at a range of public health organizations, with over 2,100 practice partners who have supported GWSPH students over the school's 25-year history, in all 50 states and 40 countries. With such a range of offerings, students generally can identify a practicum that aligns with their professional and academic interests.
- The COVID Alt pathway established during the COVID-19 pandemic allowed students to both successfully complete their APEx requirements and support in COVID-19 response work as well without delay to their planned graduation date.
- The GWSPH ORE developed and implemented a streamlined process to review and approve APEx projects (thousands per academic year) to ensure they meet human subjects research requirements. Project approvals and waivers are processed much more quickly enabling students to engage in their work in a timely manner.

Challenges

- With so many students, program administration is a challenge. In May 2020, GWSPH phased out Symplicity and transitioned to a new tracking system, Exxat. In May 2023, the Office of Applied Public Health transitioned from Exxat to Handshake, the same system used by GWSPH for career advising and events. This final system appears to meet the needs of students, practicum preceptors and advisors, even though these transitions have been difficult.
- A robust team of 25 practice team members across GWSPH assists students through the APEx process, ensuring students receive the support and mentorship they need to meet their professional goals. However, each departmental practice team implements the APEx in a unique manner. The Office of Applied Public Health has taken steps to streamline the overall process and is in the final phases of ensuring more consistent implementation.
- While the Office of Applied Public Health has strong connections and partnerships with DC metro area organizations, students searching for APEx opportunities beyond the GWSPH network may find it difficult to secure an attractive APEx site in their area of interest. This is particularly true for MPH@GW students.

Future Plans

- The Office of Applied Public Health will be monitoring and evaluating the implementation of Handshake and supporting and guiding students, practice teams and practicum preceptors.

- The Office of Applied Public Health will continue to develop a database of organizations that have supported (or can support) students on their APEx across broader areas of the world.
- To ensure more consistent evaluation of APEx deliverables across programs and departments, the GWSPH Practice Committee is considering developing an evaluation tool. The aim of the tool is to confirm demonstration of competency attainment.

D6. DrPH Applied Practice Experience

The work product may be a single project or a set of related projects that demonstrate a depth of competence. It may be completed as a discrete experience (such as a practicum or internship) or integrated into school coursework. In either case, the deliverable must contain a reflective component that includes the student's expression of personal and/or professional reactions to the applied practice experience. This may take the form of a journal or other written product, a professional portfolio, or another deliverable as appropriate for the school.

The school identifies a minimum of five foundational and/or concentration-specific competencies (as defined in Criteria D3 and D4) that are reinforced and/or assessed through application. The school may either choose at least one competency from the leadership, management and governance domain in Criterion D3 or choose a concentration-specific competency identified in Criterion D4 if it relates to leadership skills. Competencies may differ from student to student.

1) *Briefly describe how the school identifies competencies attained in applied practice experiences for each DrPH student, including a description of any relevant policies.*

   The DrPH Applied Practice Experience (DAPEx) is a required leadership experience in a public health setting for doctoral public health students. The goal of the DAPEx is to advance students' development of higher-level applied competencies and critical thinking skills. Through the DAPEx, students apply principles of leadership and management, public health theories and research methodologies demonstrating mastery of evidence-based public health decision-making and strong leadership skills in practice, the integration of multiple disciplines and the ability to translate empirical knowledge into effective public health practice.

   Through the practice opportunity, students must be directly exposed to a leadership experience in a public health practice setting. The DAPEx plan must identify a minimum of five DrPH competencies that will be addressed in the project. At least one competency must come from the Leadership, Management and Governance category. The DAPEx must be structured with explicit learning objectives, concrete activities and work product-related outcomes identified in advance. These are summarized in the practice plan. Starting in fall 2023, all opportunities are approved by practice and dissertation committee members and program leadership before the start of the experience and prior to uploading required materials into our online tracking platform for DAPEx.[73] This review ensures that five competencies are selected, that they align with the academic and practice-based interests of each student and that the activities and deliverables all align appropriately.

   To achieve these competencies, DrPH students are responsible for identifying an appropriate practice setting and securing a commitment from the site preceptor. This negotiation is a critical component of a student's applied leadership skills. Typically, students choose sites external to where they work, but students may complete their DAPEx project within their own work setting if the scope of the work is distinct from their current role and allows them to fulfill the identified competencies and engage in advanced-level practice. Most residential DrPH students choose a DAPEx site in the Washington, DC, metro area, though national and international sites are also acceptable. To date, there have not yet been any DrPH@GW students, so there are no data on online students' DAPEx sites. During the DAPEx, a qualified site preceptor supervises and supports students, ultimately evaluating the student's project and professional competence.

[73] Prior to fall 2023, practice plans were approved by academic advisors.

While the primary goal for this experience is to further the student's mastery of identified competencies through applied practice in real-world settings, a secondary intent is for students to contribute to the sponsoring organization and further its public health mission. The practice plan should include work product deliverable(s) that contributes in this capacity and also addresses all identified competencies. This experience should be mutually beneficial and strengthen our collective public health impact.

The expectation is that students' proposed work products contribute to the sponsoring organization (DAPEx site) and further its public health mission. Ideally, the experience is mutually beneficial for both the student and organization and strengthens the collective public health impact. The DAPEx and dissertation are developed from the same project/work. While there is no minimum number of hours required for the DAPEx, students generally spend 160–240 hours completing the activities outlined in their DAPEx plan.

Like MPH APEx students, DrPH DAPEx students use GWSPH's tracking system. Once the site preceptor and DrPH program leadership approve the practicum plan in the system, students proceed through a mini-ethics review led by the ORE to determine if official IRB review is required to proceed with the experience. If ORE determines that no IRB review is required, students receive a determination email stating that they are allowed to proceed with registering for PUBH 8711 DAPEx and beginning their DAPEx. Generally, the experience takes one to two semesters, depending on the scope of work, and finishes before the student sits for the comprehensive exam.

Below are examples of recent DAPEx sites and topics addressed during the experience:

Site	**Topics Addressed**
Guidehouse (Health Sector)	UM analytics Predictive analytics to identify CM/DM Care coordination model Payment policy
Montgomery County Department of Health	COVID-19 vaccination Flu campaign
National Association of County and City Health Officials (NACCHO)	Health equity Behavioral health Health policy
Prince George's County Department of Health	Social justice and racism Maternal and child health Homelessness COVID-19
Trust for America's Health	Climate-related adaptation interventions COVID survey Racial and social justice
Association of State and Territorial Health Officials (ASTHO)	Strategic planning Policy-based recommendations Public health workforce challenges
2020 Mom	Survey development Physical activity promotion
Faegre Drinker Consulting	Patient-focused drug development Mental health
Children's National	Strategic planning Monitoring and evaluation

2) *Explain, with references to specific deliverables or other requirements, the manner through which the school ensures that the applied practice experience requires students to demonstrate leadership competencies.*

First, the DAPEx plan that is approved by the program must identify a minimum of five DrPH competencies that will be addressed in the project, and at least one of those competencies must come from the Leadership, Management and Governance category. A thorough review by an advisor, committee member and/or program leadership will ensure that their approved plan includes at least one leadership competency.

To ensure that these competencies are addressed and met, the program requires a midpoint check and a final evaluation. At the midpoint, students provide information on any midpoint changes to their practice and, if so, a review as to whether all competencies will still be met. During the midpoint review, the student and site preceptor hold a meeting to discuss the student's progress and then complete evaluation surveys through GWSPH's online tracking system. For the final review, the site preceptor evaluates the student's performance (including leadership capabilities) and provides constructive feedback. The student also completes a final evaluation, but this one is confidential about the site and site preceptor, and it is only reviewed by DrPH program leadership. A program director then reviews the final evaluation and the deliverables to make sure all identified activities were completed and all deliverables submitted. The reviewer ensures all competencies were addressed.

At the conclusion of the DAPEx, students submit the following final products:

a. A reflective report outlining accomplishments achieved and personal and/or professional reactions to the DAPEx. In particular, students reflect on how they achieved the preselected DrPH competencies and how the DAPEx allowed them to apply principles of leadership and management.
b. A public presentation summarizing the DAPEx. During the 15- to 20-minute presentation, students discuss their approach, performed activities, work products, achievements and how they met their learning objectives and DrPH competencies.
c. A work product. Generally, this is the product described in the DAPEx plan.

3) *Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the applied practice experience.*

See ERF > Criterion D > Criterion D6 > D6.3: DrPH APEx_reqs.

4) *Provide samples of practice-related materials for individual students from each concentration or generalist degree. The school must provide samples of complete sets of materials (i.e., Template D6-1 and the work products/documents that demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school has not produced five students for which complete samples are available, note this and provide all available samples.*

Samples of DAPExs are from students in previous cohorts. Under the new curriculum, the DAPEx work products and overarching themes remain unchanged. The key difference is that, under the new curriculum, students complete a dissertation that is related to and based on their DAPEx work. The dissertation is therefore also reviewed by the community preceptor. No samples are available from students in the DrPH@GW program, though the process and deliverables are identical to those from residential DrPH students. The first dissertation samples from the DrPH@GW are expected in fall 2026, though DAPEx samples and dissertation proposal will likely start being produced in 2024.

The planning of the DAPEx is a particularly important component of the DrPH program. Starting in fall 2023, students develop a Dissertation Portfolio that includes a strategic sequencing of courses to guide students from the planning stages of their practice experience to the defense of their project and dissertation. These two courses—PUBH 8703 Independent Study 1 for DAPEx Proposal Development and PUBH 8705 Independent Study 2 for DAPEx Proposal Development—are critical components of this portfolio that focus on the planning of the practice project. These courses are structured to allow for independent study while also incorporating guidelines and planned check-ins to ensure students put ample and continuous effort into the planning of their DAPEx. Both courses are led by instructors who advise and provide students with personalized attention and support. Each course also has instructor-facilitated sessions at the beginning, middle and end of the semester. These sessions provide opportunities for the instructor to assess student progress and provide opportunities for students to hear from their peers about their progress to date in planning. During the peer-facilitated sessions, students provide support and accountability to one another. At the end of each course, students submit roadmaps of their plans and a reflective report discussing the progress to date and ideas for moving forward. Given all this, the new dissertation portfolio and planning courses provide robust support for students to develop strong practice projects.

See ERF > Criterion D > Criterion D6 > D6.3: DrPH APEX_samples.

5) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Our students have participated in local, national and international DAPEx opportunities, applying a multitude of DrPH competencies. Students consistently rate their experiences very highly in their endpoint reviews and during their final presentations.
- ORE has streamlined process for reviewing and approving DAPEx projects, modeling adherence to ethical principles for DrPH students. Project approvals are now processed quickly enabling students to start working.
- GWSPH accommodates students' need for virtual DAPEx opportunities. This will become more important with the online DrPH students.

Challenges

- The DrPH curriculum has changed several times over the last five years, with the most recent curricular modification going into effect in fall 2023. As a result, each cohort of students has a unique curricular plan. While the overarching themes and required DAPEx products remain unchanged, the 2023–2024 curriculum, as described in this self-study, has a more streamlined DAPEx to dissertation approach. In the future, students will produce related DAPEx and dissertation products based on the same work experience. Products will be distinct in that they will still meet the separate DAPEx and dissertation requirements.
- During the last accreditation review cycle, the site visit team identified the DrPH DAPEx as an area for improvement to make sure there was a concerted emphasis on applied experiences. GWSPH immediately implemented a process to develop and launch a more robust DAPEx, and through recent curricular revisions, the DrPH program ensured adherence to CEPH criteria. A fully developed DAPEx is now embedded in the new curriculum.

Future Plans

- With the launch of the online DrPH@GW program and the increase in matriculation in the residential DrPH, the hiring of a dedicated staff or faculty member for additional DAPEx and dissertation support will likely be a priority in the next few years.

- GWSPH plans to closely monitor the implementation of the new DAPEx model as well as student experience to ensure it fully meets CEPH requirements and the needs of our students.

D7. MPH Integrative Learning Experience

MPH students complete an integrative learning experience (ILE) that demonstrates synthesis of foundational and concentration competencies. Students in consultation with faculty select foundational and concentration-specific competencies appropriate to the student's educational and professional goals; demonstrating synthesis and integration requires more than one foundational and one concentration competency.

Professional certification exams (e.g., CPH, CHES/MCHES, REHS, RHIA) may serve as an element of the ILE, but are not in and of themselves sufficient to satisfy this criterion.

The school identifies assessment methods that ensure that at least one faculty member reviews each student's performance in the ILE and ensures that the experience addresses the selected foundational and concentration-specific competencies. Faculty assessment may be supplemented with assessments from other qualified individuals (e.g., preceptors).

1) *List, in the format of Template D7-1, the integrative learning experience for each MPH concentration, generalist degree or combined degree option that includes the MPH. The template also requires the school to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies.*

   All MPH students complete a culminating experience (CE) that aligns with their career goals and program/concentration. Students may work in groups on the research or development of the project. While there are differences in types of projects accepted in each program, all students produce a high-quality, individually written product that demonstrates synthesis of competencies.

Template D7-1

MPH Integrative Learning Experience for Biostatistics and Epidemiology (including JD/MPH, LLM/MPH[74] and PA/MPH in select programs)	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6015 Culminating Experience*, they develop a quantitative research project.	All CE projects synthesize at least three competencies, pre-identified by the CE instructor and listed on the course syllabus. The student develops the project under the guidance of the CE advisor, who ensures that all competencies are met. The final paper is evaluated by the CE advisor based on a rubric.
MPH Integrative Learning Experience for Community-Oriented Primary Care, Health Promotion, Maternal and Child Health and Public Health Communication and Marketing (including JD/MPH, LLM/MPH and PA/MPH in select programs)	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6015 Culminating Experience*, they may choose one of the below integrative learning experience options. Option #1: Needs assessment	Students self-identify competencies in their proposal during PUBH 6015. The CE advisor reviews and approves the proposal, including the competencies. The final project is evaluated by the CE advisor using a rubric.

[74] There have been no LLM/MPH students in the MPH in Biostatistics and MPH in Epidemiology in the last three years.

Option #2: Development and pilot testing of an intervention program or components of a program Option #3: Development and implementation of community advocacy programs Option #4: Evaluation of programs or policies Option #5: Development and evaluation of case studies[75]	
MPH Integrative Learning Experience for Physical Activity in Public Health and Public Health Nutrition (including JD/MPH and LLM/MPH)	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6015 Culminating Experience*, they may choose one of the below integrative learning experience options. Option #1: Data analysis (primary or secondary) Option #2: Systematic review of the literature Option #3: Paper on policy issue Option #4: Paper on public health practice issue	All CE projects synthesize a minimum of three competencies, pre-identified by the CE advisor based on the type of project the student chooses. The final paper is evaluated by the CE faculty advisor, and the oral presentation is evaluated by at least three faculty.
MPH@GW Integrative Learning Experience for Public Health Generalist, Global Health, Health Informatics and Analytics, Climate and Health, and Women, Youth and Child Health (including MSN/MPH in Public Health Generalist only)	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6060* and *PUBH 6061 MPH@GW Culminating Experience*, they may choose one of the below integrative learning experience options. Option #1: Critical analysis project Option #2: Program plan Option #3: Research project	All CE projects synthesize a minimum of two foundational knowledge competencies, pre-identified by the CE instructor. A pre-identified MPH@GW, Generalist program-specific competency is also listed on the syllabus. Students select additional program-specific competencies based on their unique project and if they are in one of the MPH@GW concentrations. The student develops the project under the guidance of the CE advisor, who ensures that all competencies are met. The final paper is evaluated by the faculty advisor based on a rubric.

[75] This is a rarely chosen project type. In the case study option, students conduct an in-depth analysis of a real-life complex issue. It may or may not be done in conjunction with a community organization.

MPH Integrative Learning Experience for Global Environmental Health and Environmental Health Science and Policy (including JD/MPH, LLM/MPH and PA/MPH)	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6137* and *PUBH 6138 Environmental and Occupational Culminating Experience*, students develop a systematic review on an important environmental or occupational health issue. Students must choose a topic appropriate to their program and relevant to one of the other core areas of public health (i.e., epidemiology, social and behavioral sciences, health policy and management). Additionally, students must demonstrate quantitative and/or qualitative analytic capability and communicate their work to varied audiences.	All CE projects synthesize a minimum of three competencies that are pre-identified by the CE instructor. The student may identify additional competencies based on their specific project. The student develops the project under the guidance of the CE advisor who ensures that all competencies are met.
MPH Integrative Learning Experience for Health Policy (including JD/MPH, LLM/MPH and PA/MPH)	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6350 Health Policy Capstone*, they may choose one of the below integrative learning experience options. Option #1: Quantitative data analysis summarized in a policy brief that presents the methods, results and policy implications of the analysis Option #2: Policy options analysis for a client (real or assumed) Option #3: Design of a descriptive policy analysis (e.g., program evaluation, cost effectiveness analysis, etc.) for an agreed upon stakeholder	All CE projects synthesize a minimum of three competencies pre-identified by the CE instructor. The student develops the project under the guidance of the CE advisor, who ensures that all competencies are met. The final paper is evaluated by the faculty advisor based on a rubric.
MPH Integrative Learning Experience for Global Health Epidemiology and Disease Control, Global Health Design, Monitoring and Evaluation, Global Health Policy, and Humanitarian Health	
Integrative learning experience	**How competencies are synthesized**
When students enroll in *PUBH 6418* and *PUBH 6419 Global Health Culminating Experience*, they must develop a project that addresses a topic appropriate to their program, demonstrate analytic capability, applying quantitative, qualitative, evaluation and/or policy methods to the topic selected and be student-led under the guidance of a faculty CE advisor. Generally, students choose one of the below integrative learning experience options:	Students self-identify competencies that will be synthesized in their proposal during PUBH 6418. The CE advisor reviews and approves the proposal, including the competencies. The final project is evaluated by the CE advisor using a rubric.

Option #1: Quantitative or qualitative data analysis Option #2: Systematic literature review Option #3: Scoping or other review Option #4: Case-based analysis of a program or policy Option #5: Development of a program plan or training curriculum Option #6: Evaluation of an existing program Option #7: Development of a monitoring and/or evaluation plan	
MPH Integrative Learning Experience for MD/MPH	
Integrative learning experience	**How competencies are synthesized**
When students participate in *Population Health Summit #4*, they select real-world population health issues that directly intersect with their chosen medical specialty. Students develop an Action Plan (with an evaluation plan and metrics) to address the issue, produce a personal and professional wellness and resilience plan and give a 10-minute presentation of the Action Plan.	All CE projects synthesize four competencies, pre-identified by the MD/MPH program director. Summit instructors provide guidance on the Action Plan requirements and the MD/MPH program director guide students during the process. The final paper is evaluated by the MD/MPH program director using a rubric.

2) *Briefly summarize the process, expectations and assessment for each integrative learning experience.*

All students earning an MPH at GWSPH complete a CE that requires synthesizing and integrating knowledge acquired in coursework and other learning experiences, and applying theory and principles in a situation that approximates some aspect of professional practice. It is through the culminating experience that faculty members evaluate students' mastery of program competencies.

All CEs address a topic appropriate to the student's program and are student-led with the guidance of a faculty advisor. Example projects include qualitative or quantitative research, systematic literature review, policy analysis, program or intervention evaluation, software application and health training module. Students are encouraged to think creatively when designing their project but also consider feasibility. Students write a high-quality, scientific paper and present an oral PowerPoint presentation regarding their CE. Students are assessed on these two deliverables as well as their work drafting these items.

Except for MD/MPH students, all MPH students enroll in 2 credits' worth of CE course(s) at GWSPH. Students enroll in this CE coursework toward the end of their program. Each CE course also lists required and recommended courses that should be completed prior to enrollment. Often these are foundational courses that provide expertise a student will need to complete the CE. MD/MPH students complete a public health focused CE in their medical school curriculum. Details on this process are provided separately.

Course	MPH Concentration
PUBH 6015 Culminating Experience	Biostatistics Community-Oriented Primary Care Epidemiology Health Promotion Maternal and Child Health Physical Activity in Public Health Public Health Communication and Marketing Public Health Nutrition PA/MPH, Community-Oriented Primary Care PA/MPH, Epidemiology PA/MPH, Maternal and Child Health
PUBH 6060 MPH@GW Culminating Experience 1 PUBH 6061 MPH@GW Culminating Experience 2	MPH@GW, Public Health Generalist MPH@GW, Global Health MPH@GW, Health Informatics and Analytics MPH@GW, Climate and Health MPH@GW, Women, Youth and Child Health MSN/MPH, MPH@GW, Public Health Generalist
PUBH 6137 EOH Culminating Experience 1 PUBH 6138 EOH Culminating Experience 2	Global Environmental Health Environmental Health Science and Policy PA/MPH, Global Environmental Health PA/MPH, Environmental Health Science and Policy
PUBH 6350 Health Policy Capstone	Health Policy PA/MPH, Health Policy
PUBH 6418 GH Culminating Experience 1 PUBH 6419 GH Culminating Experience 2	Global Health Epidemiology and Disease Control Global Health Design, Monitoring and Evaluation Global Health Policy Humanitarian Health
IDIS 8334 Intersession IV (Population Health Summit #4)	MD/MPH

PUBH 6015 Biostatistics and Epidemiology Culminating Experience

In this single course, students work with their CE instructor to develop a public health quantitative data analysis project. This course is highly personalized, and students mostly work independently and one-on-one with their faculty advisor, practicum site preceptor, practicum director and SAS Coach, as needed. During the semester, students produce a concept paper outlining the topic and method. The concept paper is expanded into a proposal that provides greater details and the first drafts of the background and methods sections of the final manuscript. At the end of the course, students submit an 18- to 20-page research paper consistent with *New England Journal of Medicine* organizational guidelines and provide a 15-minute PowerPoint presentation in a public forum.

PUBH 6015 Community-Oriented Primary Care, Health Promotion, Maternal and Child Health and Public Health Communication and Marketing Culminating Experience

In this single course, students work with their CE advisor to develop a major written paper such as a thesis or applied research project, which presents the results of a needs assessment, development and pilot testing of an intervention program or components of a program, development and implementation of a community advocacy program, evaluation of a program or policy, or development and evaluation of a case study. Students work closely with their CE

advisor to develop a concept paper, proposal/IRB application, final report and oral presentation. The final report is expected to be 25–50 double-spaced pages and follow the outline of a published research paper.

PUBH 6015 Public Health Nutrition and Physical Activity in Public Health Culminating Experience
In this single course, students work with their CE advisor to develop a public health project based on four options: data analysis, systematic review, nutrition policy or nutrition practice. Students work closely with their CE advisor to develop a proposal, IRB application (if applicable), final paper and oral presentation on a project related to their field of study. The final report is expected to be 15–25 double-spaced pages and conform to the guidelines presented in the syllabus.

PUBH 6060 and PUBH 6061 MPH@GW Culminating Experience
In this two-course sequence, the first course is designed to guide students in developing a CE proposal. Example topics and methods are discussed in class and through the three work products (idea paragraph, concept paper and full proposal), students refine their project plans. Topics identified must be related to the students' concentrations. Students successfully complete this course when they earn credit and have an instructor and faculty advisor-approved final proposal.

In the second course, students work independently under the guidance of their faculty advisor to complete their CE. To successfully pass the class and earn credit, students submit a 25-page paper and prepare a 12-minute oral presentation with PowerPoint. Students present their projects in a live virtual session, open to the public.

PUBH 6137 and PUBH 6138 Environmental and Occupational Health Culminating Experience
In this two-course sequence, students develop a systematic review on an environmental or occupational health issue related to their program. During the first course, faculty guide students in how to choose an appropriate topic and conduct a systematic review. Students successfully complete this course when they earn credit and have an advisor-approved final paper.

In the second course, students create message maps and practice communicating their systematic review results to a variety of audiences including Congress, the media, a community town hall and a scientific conference. To successfully pass the class and earn credit, students participate in these mock scenarios and produce an abstract and poster, all of which are evaluated by the CE advisor.

PUBH 6350 Health Policy Capstone
The identification of a potential health policy topic and target stakeholder is submitted to the instructor prior to the start of the second session of the course. During the course, students provide oral presentations updating the instructor and peers regarding their project progress. Additional assignments include a literature review and research plan, a paper identifying criteria for assessing policy options and a "pitch" to encourage media hype on the topic. A final 10-minute oral presentation with PowerPoint and a 10- to 15-page written paper are submitted as deliverables. CE advisors use a rubric to assess these deliverables.

PUBH 6418 and PUBH 6419 Global Health Culminating Experience
In this two-course sequence, the first course is designed to guide students in developing a CE proposal. Example topics and methods are discussed in class, and peer and faculty advisor feedback guides students in refining their project plans. Topics identified must be related to global health, specifically the students' programs. As part of the written proposal, students must identify and provide evidence of mastery of competencies related to the project. Students

successfully complete this course when they earn credit and thus have approval to implement their CE project.

In the second course, students work independently under the guidance of their faculty advisor to complete their CE. To successfully pass the class and earn credit, students submit a 25- to 35-page paper and prepare a 15-minute oral presentation with PowerPoint. Students present their projects in a public forum.

MD/MPH

As part of the medical school curriculum, MD/MPH students complete the *Population Health Summit #4*, a longitudinal integrative educational experience that serves as a culmination and synthesis of MD students' clinical public health learning. The Summit focuses on addressing patients' social determinants of health and physician burnout. Students select real-world population health issues that directly intersect with their growing identity as practitioners in their chosen medical specialty. Working under the supervision of faculty leaders and/or experts, students research a critical population health problem and develop a Clinical Public Health Action Plan to address the problem either individually or in small groups, develop and evaluate a personal and professional wellness and resilience plan, and give a 10-minute presentation of the Action Plan to clinical department chairs, GW faculty experts and other medical students. For the CE, MD/MPH students integrate their public health education into an updated Action Plan. Based on preliminary self-study feedback, the MD/MPH CE was altered to ensure that students were submitting individual work products, effective 2024. The final Action Plan is assessed by the MD/MPH program director using a rubric. Each student already submits an individual personal and professional wellness and resilience plan and is required to individually present during the final presentation. For students who complete their Action Plans as a group (prior to the change), students self-evaluate their role, which contributes to the program director's individual assessment.

3) *Provide documentation, including syllabi and/or handbooks, that communicates integrative learning experience policies and procedures to students.*

See ERF > Criterion D > Criterion D7 > D7.3: MPH ILE_policies.

4) *Provide documentation, including rubrics or guidelines, that explains the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies.*

See ERF > Criterion D > Criterion D7 > D7.4: MPH ILE_assessment.

5) *Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations, if applicable. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.*

There are no sample CEs from the below programs because there are no students who completed CEs in the last three years.

- MPH@GW, Climate and Health
- MPH@GW, Women, Youth and Child Health
- MPH@GW, Global Health
- MSN/MPH
- LLM/MPH
- JD/MPH

See ERF > Criterion D > Criterion D7 > D7.5: MPH ILE_samples.

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Each department has specific requirements for their students' CE projects. These requirements are clearly defined, and students have the guidance of a CE advisor to help them navigate the process.
- Students complete a wide array of CE projects that showcase the depth and breadth of public health research, practice and policy analysis, while supporting the specific areas in which they may be concentrating.

Challenges

- Most students complete an end-of-CE evaluation, which assesses their overall satisfaction with the CE process and advising/mentoring. However, depending on the program, this evaluation may not be specific to the CE advisor, so the feedback may not be attributable to a single person.
- For students whose advisor is also their instructor, this advisor is responsible for guiding students on a myriad of topics, some of which they may not be an expert in. In such cases, the advisor recommends that the student speak to another faculty member or external expert for additional mentoring.
- As our programs continue to grow, the MPH@GW in particular, there will be a greater demand on faculty to provide mentorship and expertise to students during their CE project. Additional faculty may be needed.
- The identification and assessment of competencies was ingrained in the fabric of CE projects, though not always clearly documented in syllabi and rubrics. During the self-study review process, areas of improvement were identified, and programs were tasked with updating CE documentation to make competency identification and assessment clearer.

Future Plans

- Departments currently using the PUBH 6015 single course (Biostatistics, Epidemiology and Prevention and Community Health) are considering either creating a two-course sequence (like Global Health) or creating a class with a unique course number specific to their students (like Health Policy and Management).

D8. DrPH Integrative Learning Experience

As part of an integrative learning experience, DrPH candidates generate field-based products consistent with advanced practice designed to influence schools, policies or systems addressing public health. The products demonstrate synthesis of foundational and concentration-specific competencies.

The integrative learning experience is completed at or near the end of the school of study. It may take many forms consistent with advanced, doctoral-level studies and university policies but must require, at a minimum, production of a high-quality written product.

The policies, procedures and processes discussed in this criterion were implemented in fall 2023. Prior to fall 2023, the courses that students took to prepare for the dissertation were different, though the identification and assessment of competencies and the production of a high-quality dissertation remain the same. The key difference is that the topics of previous cohorts' dissertations may or may not be related to students' DAPEx, as is it under the fall 2023 curriculum (see ERF > Program Guides for information related to prior years' curricula).

1) *List, in the format of Template D8-1, the integrative learning experience for each DrPH concentration or generalist degree. The template also requires the school to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies.*

Template D8-1

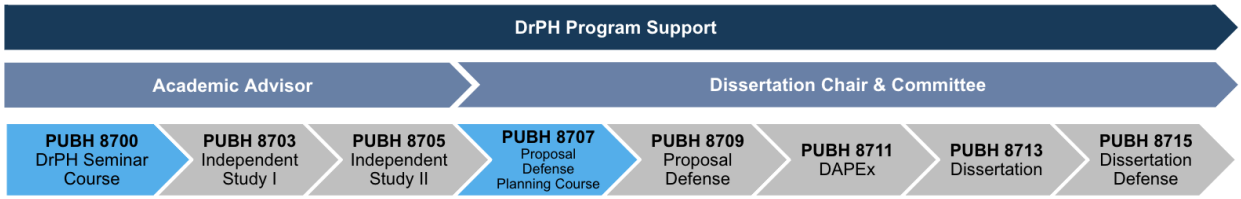
DrPH Integrative Learning Experience for Public Health Generalist	
Integrative learning experience	**How competencies are synthesized**
Doctoral Dissertation	Students self-identify competencies during the dissertation proposal development phase. Students design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue under the guidance of a Dissertation Committee and DAPEx site preceptor. The written proposal is orally defended by the student. As part of the proposal defense, students demonstrate how the project will synthesize DrPH foundational and program-specific competencies. The Dissertation Committee reviews the dissertation during the final dissertation defense for synthesis of the identified competencies.

2) *Briefly summarize the process, expectations and assessment for each integrative learning experience.*

Our program takes practice very seriously, and our focus on it goes beyond just addressing a requirement. Practicing DrPH competencies is how students learn what is necessary to move their own professional practice and leadership forward. Because of this, we have developed a dissertation portfolio that promotes practice by integrating the DAPEx throughout the curriculum and linking it to the dissertation.

Students are required to take eight courses related to the DrPH dissertation portfolio. These courses provide tailored support to DrPH students as they navigate the dissertation process, and it ensures that both online and residential cohorts take the same program of study. Two of these courses, PUBH 8700 and PUBH 8707 in the dissertation portfolio sequence, are didactic courses (highlighted in blue in the graphic below). The DAPEx serves as the practice project that students then write up as their dissertation. Our dissertation portfolio sequencing in our 2023 program

of study shows the integration of the DAPEx and dissertation throughout the entire program (see ERF > Program Guides).



Course	Summary of Content, Expectations and Assessment
PUBH 8700 DrPH Seminar and Introduction to DrPH Applied Practice Experience (DAPEx)	Introduction to the dissertation and DAPEx
PUBH 8703 Dissertation Portfolio: Independent Study 1 for DAPEx and Dissertation Proposal Development	Students identify a public health challenge and refine a feasible DAPEx and dissertation project.
PUBH 8705 Dissertation Portfolio: Independent Study 2 for DAPEx and Dissertation Proposal Development	Continuation of PUBH 8703 At the end of this course, students have an approved DAPEx project.
PUBH 8707 Dissertation Portfolio: Dissertation Proposal Development	Students develop their dissertation proposal. At the end of this course, students have a dissertation proposal that is ready for defense.
PUBH 8709 Dissertation Portfolio: Dissertation Proposal Defense	Students defend their dissertation proposal. Dissertation Committee must approve the dissertation proposal for the student to move forward.
PUBH 8711 Dissertation Portfolio: DAPEx and Dissertation Implementation	Students complete their DAPEx requirements. See Criterion D6.
PUBH 8713 Dissertation Portfolio: Dissertation Development	Students implement their dissertation under the guidance of their Dissertation Committee. At the end of this course, students have their dissertation ready for review by their Dissertation Committee in preparation for the defense.
PUBH 8715 Dissertation Portfolio: Dissertation Defense	After approval from their Dissertation Committee, students produce a written dissertation and orally defend their dissertation work. The presentation is open to the public followed by a closed-door session between the student and Dissertation Committee.

3) *Provide documentation, including syllabi and/or handbooks, that communicates integrative learning experience policies and procedures to students.*

   See ERF > Criterion D > Criterion D8 > D8.3: DrPH ILE_policies.

4) *Provide documentation, including rubrics or guidelines, that explains the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies.*

   There is no difference in the assessment methods of the DrPH dissertation between previous cohorts and the fall 2023 curriculum.

See ERF > Criterion D > Criterion D8 > D8.4: DrPH ILE_assessment.

5) *Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater. If the school does not have five recent samples for an option, note this and provide all available samples.*

Samples of DrPH dissertations are from students in previous cohorts. They reflect a departmental and specialty-based approach to preparing and completing the dissertation. Under the new curriculum, the dissertation will still be of high quality, but will be produced during a different set of courses and will be related to the DAPEx. The approach to competency mapping remains consistent. No samples are available from students in the DrPH@GW program. The first samples produced under the new curricular plan probably won't be available until fall 2026 (for both residential and online DrPH students). However, faculty assisting current DrPH students with their dissertations may transition to this model of connecting the DAPEx to the dissertation sooner than fall 2026.

See ERF > Criterion D > Criterion D8 > D8.5: DrPH ILE_samples.

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- The DrPH dissertations are increasingly practice-based, which distinguishes our DrPH program and dissertation products from our school's PhD program.
- An exciting new component of the DrPH curriculum is the dissertation portfolio, which provides students with more support, guidance and structure as they move through their practice experience and dissertation. It is a set of eight courses integrated into the curriculum that provide tailored support to DrPH students as they navigate the dissertation process, and it ensures that both online and residential cohorts follow the same program of study. The Dissertation Portfolio sequencing shows the integration of the DAPEx and dissertation throughout the entire program, starting in the first semester with PUBH 8700 DrPH Seminar and Introduction to DrPH Applied Practice Experience (DAPEx), and ending with students' dissertation defense in PUBH 8715.

Challenges

- The DrPH curriculum has changed several times over the last five years as the program transitioned to an updated curriculum and moved from department-based programs to a standardized, schoolwide program and, most recently, a change in regard to our practice experience and dissertation through the development of a dissertation portfolio, launching in fall 2023. As a result, there are several cohorts of students that have unique curricular plan (Cohorts 2021, 2022 and 2023). While the overarching themes and required dissertation products remain unchanged, the 2023–2024 curriculum, as described in this self-study, has a more streamlined approach for DAPEx to dissertation. In the future, students will produce related DAPEx and dissertation products based on the same work experience. Products will be distinct in that they will still meet the separate DAPEx and dissertation requirements.
- As part of the transition from department-based DrPH programs to a schoolwide DrPH program, some students expressed confusion about available opportunities that best met their academic and career goals. Ultimately, some students transferred from a department-based DrPH program to a PhD program or the schoolwide DrPH program or elected to remain in their current department-based DrPH. Until current department-

based DrPH students complete their degrees, GWSPH is effectively running multiple DrPH programs. This is resource-intensive and requires faculty to support students across multiple programs. GWSPH remains committed to ensuring all students, regardless of program choice, successfully complete their degrees.

- As the DrPH and DrPH@GW programs continue to grow, there will be additional challenges in ensuring students have DAPEx-to-dissertation opportunities and GWSPH faculty expertise, particularly practice-based expertise, on their dissertation committees. With the transition to a wholly new curriculum and dissertation model for DrPH (distinct from our PhD programs), it has been a challenge to ensure faculty are appropriately familiar with dissertation and committee expectations for all DrPH and PhD programs, especially the differences in dissertation work and committee work across programs.

Future Plans

- The new curriculum and streamlined plan for DAPEx and dissertation have yet to be implemented. It will be a few more years until this occurs because the curricular changes were implemented in fall 2023.

D9. Public Health Bachelor's Degree Foundational Domains

The requirements for the public health major or concentration provide instruction in the domains. The curriculum addresses these domains through any combination of learning experiences throughout the requirements for the major or concentration coursework (i.e., the school may identify multiple learning experiences that address a domain––the domains listed below do not each require a single designated course).

If the school intends to prepare students for a specific credential, the curriculum must also address the areas of instruction required for credential eligibility (e.g., CHES).

1) *Provide a matrix, in the format of Template D9-1, that indicates the courses/experience(s) that ensure that students are exposed to each of the domains indicated. Template D9-1 requires the school to identify the learning experiences that introduce and reinforce each domain. Include a footnote with the template that provides the school's definition of "introduced" and "covered."*

Template D9-1

Public Health Domains	*Select natural science courses**	*PUBH 1010 First-Year Experience in Public Health*	*PUBH 1101 Introduction to Public Health and Health Services*	*PUBH 2110 Public Health Biology*	*PUBH 2112 Principles of Health Education and Health Promotion*	*PUBH 2142 Introduction to Biostatistics for Public Health*	*PUBH 3130 Health Services Management and Economics*	*PUBH 3131 Epidemiology*	*PUBH 3132 Health and Environment*	*PUBH 3133 Global Health and Development*	*PUBH 3135W Health Policy*	*PUBH 3199 or EXNS 3111W Research Methods*	*PUBH 4140W Senior Seminar*
Math/Quantitative Reasoning: Identify and apply the concepts and applications of basic statistics													
Concepts of basic statistics						C		I				I	
Applications of basic statistics						C		C				C	
Science: Address the foundations of biological and life sciences													
Foundations of biological and life sciences	C			C	I				I				
Overview of Public Health: Address the history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society													
Public health history			C	I					C	I			I
Public health philosophy		I	I		C				I	I			I
Core PH values		I	I	I	C					C			C
Core PH concepts		I	I	C	C	I				C			C
Global functions of PH			I						C	C			
Societal functions of PH			I		I				C	C			

Role and Importance of Data in Public Health: Address the basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice													
Basic concepts of data collection			I			I		I	I	I	I	C	C
Basic methods of data collection		I			I	I	I	I		I		C	C
Basic tools of data collection		I			I	I	I	I				C	C
Data usage						C	I	I	C		I	C	I
Data analysis						C	I	I		I		C	I
Evidence-based approaches			I	C	I	I	I	I	I	C	I	C	C
Identifying and Addressing Population Health Challenges: Address the concepts of population health, and the basic processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations													
Population health concepts		I	I	C	I	I							
Introduction to processes and approaches to identify needs and concerns of populations			I	C	I	I	I	I	C		I	I	I
Introduction to approaches and interventions to address needs and concerns of populations			I	C	I	I	I	I	C	C	I		I
Human Health: Address the underlying science of human health and disease including opportunities for promoting and protecting health across the life course													
Science of human health and disease		I		C					I	I			
Health promotion		I	I	C	I					I			
Health protection			I	C						C			

Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities													
Socio-economic impacts on human health and health disparities		I	I	I	C				C	C	I		
Behavioral factors impacts on human health and health disparities		I	I	I	C		I		C	C	I		I
Biological factors impacts on human health and health disparities		I	I	C	I					C			
Environmental factors impacts on human health and health disparities		I	I	C	I				C	C	I		
Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation													
Introduction to planning concepts and features					I		I			I			C
Introduction to assessment concepts and features					I					I			C
Introduction to evaluation concepts and features					I		I						C
Overview of the Health System: Address the fundamental characteristics and organizational structures of the U.S. health system as well as to the differences in systems in other countries													
Characteristics and structures of the U.S. health system			I				I				C		

Comparative health systems			I							C	I		
Health Policy, Law, Ethics, and Economics: Address the basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy, and the roles, influences, and responsibilities of the different agencies and branches of government													
Legal dimensions of health care and public health policy			I				I			C	I		
Ethical dimensions of health care and public health policy			I		I		C			C	C	C	I
Economical dimensions of health care and public health policy			I				C		I	C	I		
Regulatory dimensions of health care and public health policy			I				I		C	I	C		
Governmental agency roles in health care and public health policy			I				I		C	I	C		
Health Communications: Address the basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology													
Technical writing			I	C	I		I	I			C	C	C
Professional writing		I	I	C			I				C	C	C
Use of mass media		I	C		I	I				I		C	
Use of electronic technology		I	C		I	I				I	I	C	

I = Introduced: Students are familiar with the basic concept/issue and understand its role in the context of public health but do not learn a significant amount of detailed information about the concept/issue

C = Covered: Students learn in-depth knowledge about a key concept/issue in the context of public health and with a level of detail that is considered to be complete knowledge at an undergraduate level.

2) *Include the most recent syllabus from each course listed in Template D9-1, or written guidelines, such as a handbook, for any required experience(s) listed in Template D9-1 that do not have a syllabus.*

   See ERF > Criterion D > Criterion D9 > D9.2: Temp D9-1_syllabi.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths

   - Students in the BS program enroll in foundational courses taught by faculty in almost all the school's departments. This exposes students to a variety of public health fields and topics. These faculty often teach at the graduate level as well. Recent additions to the curriculum include Biostatistics and Foundations of Research Methods. Previously, students took similar but non-public health focused courses outside of GWSPH.
   - Faculty in GWSPH BS programs are well recognized by undergraduates across GW (as evidenced by GWSPH faculty's having won recognition by undergraduate student athletes as best professors over the last three years).

   Challenges

   - It is challenging to have consistent staffing for our courses because faculty have departmental obligations for their graduate courses as well. In addition, we have a limited number of public health electives due to faculty constraints.
   - The BS-to-MPH (joint BS/MPH) students face administrative challenges associated with their dual-degree status. GW's internal record-keeping systems do not allow students to be dually enrolled, which leads to registration problems for students and appropriate categorization errors. Unfortunately, this is not a problem we can address internally. Additionally, students may face advising challenges as they navigate requirements at the master's and bachelor's levels as well as continuity of advising across master's and bachelor's advisors.
   - For most of the first year and part of the second undergraduate year, students take limited public health courses because of extensive university-wide minimum breadth requirements, so there is limited connection to GWSPH faculty.

   Future Plans

   - GWSPH now offers three versions of our senior seminar. We hope to offer additional versions so students can select the one that best matches their interests. The departments are discussing plans to better support staffing for our schoolwide programs. We hope to make greater use of qualified doctoral students to teach introductory courses where appropriate.
   - GWSPH plans to bolster first-year transfer outreach and encourage students to connect with GWSPH faculty during their first and second years. There has already been success through PUBH 1010 First-Year Experience in Public Health to connect with first-year students more directly.

D10. Public Health Bachelor's Degree Foundational Competencies

Students must demonstrate the following competencies:

- **the ability to communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences**
- **the ability to locate, use, evaluate and synthesize public health information**

1) *Provide a matrix, in the format of Template D10-1, that indicates the assessment opportunities that ensure that students demonstrate the stated competencies.*

Template D10-1

Competencies	Course	Specific assessment opportunity
Public Health Communication: Students should be able to communicate public health information, in both oral and written forms and through a variety of media, to diverse audiences		
Oral communication	PUBH 2112 Principles of Health Education and Health Promotion	PUBH 2112—Teams of students present two separate presentations—one on an article review and one on the application of a behavioral theory. In both presentations, all group members are expected to participate in the presentation and the following team-led discussion. The instructor will evaluate students individually during the presentation, Q&A and through a peer-evaluation process (pp. 6-7).
Written communication	PUBH 3130 Health Services Management and Economics	PUBH 3130—In the Pro Forma Report Project, students prepare a proposal Pro Forma report for a health prevention or promotion program at the local, state or regional level. Reports should be 12–14 pages in length (p. 4; see ERF).
Communicate with diverse audiences	PUBH 2110 Public Health Biology PUBH 3132 Health and Environment PUBH 3135W Health Policy	PUBH 2110—In the Policy Briefs, students write a policy brief on a topic of their choice. The brief is specifically geared toward a nonacademic audience, requiring students to avoid technical jargon (p. 4). PUBH 3132—In the Group Paper Presentation, groups of students prepare a PowerPoint presentation on an assigned peer-reviewed publication. Groups lead a class discussion on the paper (p. 3). PUBH 3135W—In the Policy Analysis assignments, students write a paper on a health care topic of their choice. The audience is a specific decision-maker appropriate for the topic (p. 3).
Communicate through variety of media	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students communicate through a variety of media including a photo journal, PSA video or podcast and an infographic. See ERF.
Information Literacy: Students should be able to locate, use, evaluate and synthesize public health information		
Locate information	PUBH 3133 Global Health and Development	PUBH 3133—In the Policy Communications Final Assignment, students are tasked with finding primary sources or analysis from credible sources, on a global health topic of their choice. See ERF.
Use information	PUBH 3133 Global Health and Development	PUBH 3133—In the Policy Communications Final Assignment, students use the information they find in primary or credible research sources to argue for the reasoning of prioritizing their global health challenge. See ERF.

Evaluate information	PUBH 3131 Epidemiology PUBH 2142 Introduction to Biostatistics for Public Health	PUBH 3131—In Paper #2, students use the MAARIE framework to evaluate a current article. Additionally, students evaluate information provided in a case study. See ERF. PUBH 2142—Students analyze public health data in a series of 3 homework assignments. See ERF.
Synthesize information	PUBH 3133 Global Health and Development	PUBH 3133—In the Policy Communications Final Assignment, students write a 1,000- to 1,500-word paper on a global health topic of their choice. Students are required to synthesize information from their research to write to a decision-maker advocating for an identified policy action. See ERF.

2) *Provide supporting documentation for each assessment activity listed in Template D10-1. Documentation should include the following, as relevant, for each listed assessment:*

   - *assignment instructions or guidelines as provided to students*
   - *writing prompts provided to students*
   - *sample exam question(s)*

   See ERF > Criterion D > Criterion D10 > D10.2: Temp D10-1_Assessments.

3) *Include the most recent syllabus from each course listed in Template D10-1 (if not presented in Criterion D9), or written guidelines, such as a handbook, for any required elements listed in Template D10-1 that do not have a syllabus.*

   See ERF > Criterion D > Criterion D10 > D10.3: Temp D10-1_syllabi.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths

   - GWSPH faculty who teach undergraduates bring a wealth of research and practice experience to the classroom.
   - Students engage in varied writing assignments throughout the curriculum. We have two required Writing-in-the-Disciplines (WID) courses that are small writing-intensive classes.
   - Undergraduate classes at GWSPH typically have a max of 35–40 students. WID courses are capped at 25, so students receive personalized writing support. As shown in Criterion B5, graduates of the BS in Public Health program acknowledge the GWSPH's strength in teaching writing skills, and they mention they use these skills in their post-graduation careers.
   - Writing assignments are scaffolded so early assignments provide foundational experience to be built on for upper-level courses.
   - Students have multiple opportunities to locate, use, evaluate and synthesize public health information.
   - Students conduct important research with faculty.
   - We added a service-learning writing-focused senior seminar course that allows students to develop written products that will be used by a community partner.

   Challenges

   - The curriculum could have more courses focused on communication through a variety of media.
   - Students would prefer more real-life scenarios for their writing and communication assignments.
   - GWSPH does not currently require an undergraduate field experience due to resource constraints.

   Future Plans

   - The BS in Public Health curriculum committee will discuss the communication criterion for appropriate places to include additional opportunities to expose students to a variety of media.
   - The BS in Public Health is hoping to build more courses with real-life applications for our students, such as more service-learning courses or internships for credit electives.

- GWSPH is currently reviewing how to best incorporate a field experience into the curricular requirements.

D11. Public Health Bachelor's Degree Cumulative and Experiential Activities

Students have opportunities to integrate, synthesize and apply knowledge through cumulative and experiential activities. All students complete a cumulative, integrative and scholarly or applied experience or inquiry project that serves as a capstone to the education experience. These experiences may include, but are not limited to, internships, service-learning projects, senior seminars, portfolio projects, research papers or honors theses. Schools encourage exposure to local-level public health professionals and/or agencies that engage in public health practice.

1) *Provide a matrix, in the format of Template D11-1, that identifies the cumulative and experiential activities through which students integrate, synthesize and apply knowledge as indicated.*

Template D11-1

Cumulative and Experiential Activity	**Narrative describing how activity provides students the opportunity to integrate, synthesize and apply knowledge.**
Final paper, conference presentations, application exercises in PUBH 4140W Senior Seminar	This course offers both experiential and cumulative activities. Throughout the course, students engage in practice-oriented discussions through a series of guest lecturer presentations, instructor-led guidance on grant writing, program design, evaluation techniques and/or project management, and preparation for academic dissemination of work. Public health practitioners from the Congressional Research Service, US Department of Health and Human Services and Foundations for Families present their work in program development, grant writing, etc., and the challenges they face. Students apply these real-life learnings to their own project. Using the knowledge and tools of analysis including theoretical frameworks, students submit a final project that showcases their ability to write succinctly and produce a deliverable that uses professional and technical writing skills to address a public health concern. Students also present their final projects in class. All final products integrate, synthesize and apply knowledge. For example, in the Grant Writing version of this course, students write a grant application in response to a federal funding opportunity announcement. At the end of the term, students prepare a mini-conference presentation, in accordance with standard conference poster session rules. Students develop a poster on their proposed project and a 2- to 3-minute presentation for a panel of judges. The judges provide feedback in accordance with their practitioner experience.
Building a career in PUBH 1010 First-Year Experience in Public Health	Students meet with the GW Career Services Center to discuss potential public health careers, résumé building and cover-letter writing.
"Real Life" Scenarios in PUBH 3133 Global Health and Development	Students engage with a variety of global public health guest lecturers who speak on their experiences navigating global public health work. In the past, lecturers have included experts from the United Nations, UNICEF and the FDA. Students apply this practice experience when developing their elevator pitch and final paper.
Optional electives that offer experiential learning activities	Students may enroll in one of the below experiential-learning courses. Generally, students who have an established activity or internship register for these courses to earn credits. See Criterion D11.3. • PUBH 2117—Service Learning in Public Health • PUBH 3995—Undergraduate Research in Public • CCAS 2154—Internship • PUBH 4199—Independent Study • EXNS 3120—Experiences in Community Nutrition

2) *Include examples of student work that relate to the cumulative and experiential activities.*

See ERF > Criterion D > Criterion D11 > D11.2: Bachelor cumulative_e.g.

3) *Briefly describe the means through which the school implements the cumulative experience and field exposure requirements.*

Students enroll in PUBH 4140W Senior Seminar during the last semester of the program. This WID course integrates writing skills and culminating and experiential activities. There are several versions of PUBH 4140W. In all, students apply public health principles, theories and methods, and produce a high-quality written product through a reiterative editing process. For example, public health professionals provide guest lectures on their real-world experiences related to the class's project. Example guest lecturers include:

- Eric Heinz, MD PhD—Associate Professor of Anesthesiology and Critical Care Medicine
- Bryce Mendez, M.P.H., M.A., B.A.—Analyst in Defense Health Care Policy at the Congressional Research Service (CRS)
- Wendy Ellis, DrPH, MPH—Assistant Professor, Global Health, GWU School of Public Health
- Kristen Hayes, MA—Program Manager, Center for Community Resilience, GWU School of Public Health
- Larissa Zoot, MPH—Program Operations Manager, Office of Head Start, Administration for Children and Families, US Department of Health and Human Services
- Amy Augenblick—Executive Director, Foundations for Families

Students integrate learnings from these lectures into their project development and in the in-class case studies. These case studies address varied public health issues and require students to think critically, utilize high-level analytical skills and engage thoughtful discussions, which will be used as the basis of the case study analysis.

Additionally, students have the option to enroll in one of several internship electives.

Course	**Field Exposure**
PUBH 2117 Service Learning in Public Health	Students volunteer at a public health-related service site as well as participate in an academic class. The course is framed around the concept of serving populations at risk for poor health outcomes. Students integrate, synthesize and apply the knowledge they learn in class and through their service site through a collection of written reflections and demonstration of creative, persuasive and explanatory skills via a variety of deliverable types.
PUBH 3995 Undergraduate Research in Public Health	Students work as a Research Assistant for a university faculty member on a topic directly related to public health (participating faculty typically hold appointments at GWSPH or the School of Medicine and Health Sciences). To earn course credit for this work, students must be engaged in meaningful research activities under the faculty member's direct guidance. Each research project has its own unique learning objectives but must include the acquisition of knowledge and skills central to the design, conduct, and/or analysis of scientific (public health) research.

CCAS 2154 Internship	This is an elective course that requires students to identify, apply, and acquire a semester-long internship. This is a general, university-wide internship course, so students must tailor their experiences to align with their program. Public health students acquire an internship with a public health organization and solicit and obtain a faculty supervisor with a public health background. Students must apply the knowledge gained throughout the internship to develop a final project in consultation with their faculty supervisor that explores a relevant public health issue.
PUBH 4199 Independent Study	Students work with a faculty member at GWSPH to design a semester-long independent study course focusing on a specific issue within public health. Students identify numerous relevant readings and other instructional materials to supplement their work, attend regular meetings with their faculty supervisor, complete ongoing assignments for evaluation and develop a final culminating project that synthesizes their knowledge and research on the identified public health issue.
EXNS 3120 Experiences in Community Nutrition	This is an elective course that requires students to deliver nutrition-related health information to multicultural preschool-aged children using posters, age-appropriate games, book readings and food tastings. Students apply their skills at a local DC nonprofit.

4) *Include handbooks, websites, forms and other documentation relating to the cumulative experience and field exposure. Provide hyperlinks to documents if they are available online, or include electronic copies of any documents that are not available online.*

   See ERF > Criterion D > Criterion D11 > D11.4: Bachelor cumulative_doc.

D12. Public Health Bachelor's Degree Cross-Cutting Concepts and Experiences

The overall undergraduate curriculum and public health major curriculum expose students to concepts and experiences necessary for success in the workplace, further education and lifelong learning. Students are exposed to concepts through any combination of learning experiences and co-curricular experiences.

1) *Briefly describe, in the format of Template D12-1, of the manner in which the curriculum and co-curricular experiences expose students to the identified concepts.*

Template D12-1

Concept	Manner in which the curriculum and co-curricular experiences expose students to the concepts
Advocacy for protection and promotion of the public's health at all levels of society	PUBH 2112 Principles of Health Education and Health Promotion—Students learn the foundations of health promotion and education. The determinants of health at all levels of society are discussed and through the theoretical application presentation, students advocate for the protection and promotion of the public's health on a variety of issues.
Community dynamics	PUBH 3132 Heath and Environment—Students discuss the community dynamics in relation to environmental health exposures. Using an exposure assessment framework, students consider upstream/downstream impacts of exposures and the stakeholders involved in environmental policy, hazard assessment and control.
Critical thinking and creativity	PUBH 2110 Public Health Biology—In the midterm exam, students must think critically about the information they have learned throughout the course to be able to answer both multiple choice and short answer questions. See ERF. PUBH 3133 Global Health and Development—Student write an emotional (yet evidence-based) Elevator Pitch on a global health topic of their choice. It is intended to appeal to a decision-maker who can prioritize this issue. The Policy Communications Final Assignment requires the use of primary source data so that students think critically about their topic and advocate for prioritization. See ERF.
Cultural contexts in which public health professionals work	PUBH 2112 Principles of Health Education and Health Promotion—In discussions on health promotion and education, students learn about implementation practices and the importance of understanding the cultural context in which programs and interventions are implemented and evaluated.
Ethical decision making as related to self and society	Program Requirement—Student complete an Academic Integrity Quiz, which assesses students' personal ethics around academic integrity. They also complete CITI training, which focuses on research ethics.
Independent work and a personal work ethic	PUBH 1010 First-Year Experience in Public Health—In the Time Management Exercise, students develop a detailed one-week schedule to promote good time management skills. In the Four-Year Plan, students develop a plan based on their major/concentration that includes classes as well as co-curricular goals such as study abroad and joint programs. This activity is intended to promote a personal work ethic. PUBH 2142 Introduction to Biostatistics for Public Health—Students complete independent work in the form of homework, quizzes and an exam. Late assignments are not accepted, so students are expected to management their time effectively and develop a personal work ethic.
Networking	PUBH 1010 First-Year Experience in Public Health—Students receive a lecture from GW Career Services about careers in public health and the importance of networking. Students complete a Career Explorations Activity where they develop a personalized list of potential careers. Students then draft a résumé and work with the Career Services Center to identify a potential job and draft a cover letter (p. 12–13).

Organizational dynamics	PUBH 3130 Health Services Management and Economics—In Organizational Assessment report, evaluate the Mission, Vision, Values of 2 not-for-profit public health service organizations and assess the composition/backgrounds of Board leadership as crucial stakeholders in the achievement of strategic goals. An assignment includes analysis of organizational finances in terms of sustainability and appropriateness of scale to achieve stated mission. See ERF.
Professionalism	PUBH 1010 First-Year Experience in Public Health—GW Career Services guest lectures in the class on a variety of topics including professionalism. Students draft a professional résumé and cover letter (pp. 12–13). PUBH 4140W Senior Seminar—Students learn about professionalism in the context of their final written deliverable and class presentation. Usually, the presentation is in front of community partners or stakeholders.
Research methods	PUBH 3199 or EXNS 3111W—Students complete quizzes and produce a final project that assesses students' understanding of public health research methods. Content covered during the course includes developing research questions, writing research papers/proposals and various research methodologies.
Systems thinking	PUBH 1101 Introduction to Public Health and Health Services—During two sessions, the concept of systems thinking is taught and applied to public health challenges. These discussions rely on knowledge of the US public health and health care system, taught in the previous sessions (p. 9).
Teamwork and leadership	PUBH 3130 Health Services Management and Economics—Teamwork in health care organizations is addressed in Session 23. Topics discussed include the different types of teams, the stages of team development, and the benefits and challenges of teamwork in health care organizations. Students consider the health care manager's role on teams and strategies for managing team conflict (p. 15). Additionally, students work extensively together through a multi-step peer review process on their Pro Forma reports, promoting teamwork.

2) *Provide syllabi for all required coursework for the major and/or courses that relate to the domains listed above. Syllabi should be provided as individual files in the electronic resource file and should reflect the current semester or most recent offering of the course.*

   See ERF > Criterion D > Criterion D12 > D12.2: Cross-cutting_syllabi.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

   Strengths

   - Faculty take advantage of our location in Washington, DC, to bring in guest lecturers who practice in the field. These opportunities provide students with career insights as well as substantive knowledge.
   - Students also take advantage of our DC location to find internships or part-time work in the field.
   - GWSPH is working with GW Career Services to create a career service position dedicated to undergraduates and co-housed within GWSPH to provide our students with more hands-on and relevant career preparation opportunities.
   - TEAM Milken provides opportunities to engage students in career development and mentoring.

   Challenges

   - Given the number of students in the undergraduate program, it is not feasible at this moment to require students to participate in an organized internship experience. However, students are strongly encouraged to engage in public health work outside of the classroom, regardless of whether they earn credit for the activity.

   Future Plans

   - The BS in Public Health program is discussing creating a credit-bearing public health-specific internship course. Right now, public health students can take a general university internship course, public health research course or public health service-learning course. Additionally, GWSPH is exploring moving to a required internship model rather than the current optional internship model.
   - Given the variability in project types in PUBH 4140W, the BS in Public Health program will be separating them out into different course numbers in 2024–2025. Each option will meet the requirements of culminating and experiential activities and allow students to choose the option that best meets their career goals. Each class will address the same competencies.

D13. MPH Program Length

An MPH degree requires at least 42 semester-credits, 56 quarter-credits or the equivalent for completion.

Schools use university definitions for credit hours.

1) *Provide information about the minimum credit-hour requirements for all MPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.*

   All MPH degrees at GWSPH, including joint degrees, require the completion of 45 semester credit hours.

2) *Define a credit with regard to classroom/contact hours.*

   According to GW policy, one credit hour is equal to a minimum of 37.5 hours of direct and/or indirect learning per semester.

D14. DrPH Program Length

The DrPH degree requires a minimum of 36 semester-credits, 48 quarter-credits of post-master's coursework or its equivalent. Credits associated with the integrative learning experience and, if applicable, a residency, internship or other applied practice experience conducted outside of a didactic course, do not count toward this requirement. The minimum credit requirement also does not count MPH-level prerequisite courses or their equivalent.

Schools use university definitions for credit hours.

1) *Provide information about the minimum credit-hour requirements for all DrPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.*

   The DrPH at GWSPH requires the completion of 48 semester credit hours, of which at least 37 semester credits are post-master's coursework (minus credits associated with the DAPEx and dissertation process). These courses include:

   - PUBH 8730 Washington, DC, Immersion (2 credits)
   - PUBH 8706 Leadership Principles and Practice 1 (3 credits)
   - PUBH 8708 Applied Public Health Methods (3 credits)
   - PUBH 8710 Public Health Project Management and Social Entrepreneurship (3 credits)
   - PUBH 8712 Public Health Program Planning, Implementation and Evaluation (3 credits)
   - PUBH 8714 Leadership Principles and Practice 2 (3 credits)
   - PUBH 8716 Leadership in Practice: Education and Workforce Development (3 credits)
   - PUBH 8722 Public Health Policy Analysis (3 credits)
   - PUBH 8718 Public Health Communications and Marketing (3 credits)
   - PUBH 8720 Social Change and Collective Impact (3 credits)
   - PUBH 8724 Organizational Leadership and Change Management (3 credits)
   - PUBH 8726 Applied Public Health Methods 2 (3 credits)
   - PUBH 8700 DrPH Seminar and Introduction to DrPH Applied Practice Experience (DAPEx) (3 credits)[76]

2) *Define a credit with regard to classroom/contact hours.*

   According to GW policy, one credit hour is equal to a minimum of 37.5 hours of direct and/or indirect learning per semester.

[76] This course has didactics associated with it, not related to the DAPEx and/or dissertation, accounting for 2 credits of post-master's coursework.

D15. Bachelor's Degree Program Length

A public health bachelor's degree requires completion of a total number of credit units commensurate with other similar degree schools in the university.

Schools use university definitions for credit hours.

1) *Provide information about the minimum credit-hour requirements for all bachelor's degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form.*

   The university requires all bachelor's degrees to meet a minimum of 120 credits. According to GW policy, students earn these credits through university general education, school-specific general education and major requirements. All bachelor's degrees at GWSPH require a minimum of 120 credits.

2) *Define a credit with regard to classroom/contact hours.*

   According to GW policy, one credit hour is equal to a minimum of 37.5 hours of direct and/or indirect learning per semester.

3) *Describe policies and procedures for acceptance of coursework completed at other institutions, including community colleges.*

   The University Office of the Registrar oversees the undergraduate transfer credit evaluation process for GWSPH. All domestic transfer credit must have been taken at a regionally accredited institution. International transfer credit must have been taken at an institution recognized by the country's Ministry of Education. Generally, courses that are similar in level, content and learning outcomes to existing GW courses will transfer, provided the student has receive a letter grade of C- or higher. The GW undergraduate transfer policy is available online.

4) *If applicable, provide articulation agreements with community colleges that address acceptance of coursework.*

   Not applicable

5) *Provide information about the minimum credit-hour requirements for coursework for the major in at least two similar bachelor's degree programs in the home institution.*

   To earn an undergraduate degree at GW, the university requires students to:
   - Successfully complete at least 120 credits
   - Fulfill the university general education requirement (Tier One)
     - One course in quantitative reasoning (must be in mathematics or statistics)
     - One course in scientific reasoning (must be in natural and/or physical laboratory sciences)
     - Two courses in critical thinking, quantitative reasoning or scientific reasoning in the social sciences
     - One course in critical thinking in the humanities
     - First Year Writing (UW 1020)
     - Two writing intensive courses, WID, after successful completion of UW 1020 (6 credits)
     - One course that has an approved oral communication component

- Fulfill the school-specific general education and distribution requirements (Tier Two)
- Fulfill the requirements of at least one major in their home school (Tier Three)

At GWSPH, the requirements for school-specific requirements (Tier Two) are limited, and a greater emphasis is placed on major requirements (Tier Three).

Bachelor of Science in International Affairs

The Elliott School of International Affairs offers a BS in International Affairs that requires the completion of at least 120 credits. In addition to the university general education requirement, the degree program requires coursework in advanced research methods, international economics, international and comparative politics, STEM disciplines and foreign languages. Students complete a set of required major courses and enroll in electives, as needed, to meet credit requirements.

Bachelor of Arts in Human Services and Social Justice

The Columbian College of Arts and Science offers a BA in Human Services and Social Justice that requires the completion of at least 120 credits. In addition to the university general education requirement, the degree program requires a liberal arts education as a college-level requirement, prerequisite courses and required major core courses and electives.

D16. Academic and Highly Specialized Public Health Master's Degrees

Students enrolled in the unit of accreditation's academic and highly specialized public health master's degrees (e.g., MS in biostatistics, MS in industrial hygiene, MS in data analytics, etc.) complete a curriculum that is based on defined competencies; produce an appropriately rigorous discovery-based paper or project at or near the end of the program of study; and engage in research at a level appropriate to the degree program's objectives.

These students also complete coursework and other experiences, outside of the major paper or project, that substantively address scientific and analytic approaches to discovery and/or translation of public health knowledge.

Finally, students complete coursework that provides instruction in the foundational public health knowledge at an appropriate level of complexity. This instruction may be delivered through online, in-person or blended methodologies, but it must meet the following requirements while covering the defined content areas.

The school identifies at least one required assessment activity for each of the foundational public health learning objectives.

The school validates academic public health master's students' foundational public health knowledge through appropriate methods.

1) *List the curricular requirements for each relevant degree in the unit of accreditation.*

GWSPH offers three academic and highly specialized public health master's degrees:

- MS in Health Data Science, Biostatistics (36 credits)
- MS in Health Data Science, Bioinformatics (36 credits)
- MS in Public Health Microbiology and Emerging Infectious Diseases (45 credits)

Students without a prior public health degree from a CEPH accredited school or program are required to successfully pass the online PUBH 6080 Pathways to Public Health within one year of matriculation. See Criterion D16.6.

Requirements for MS in Health Data Science degree, Biostatistics Concentration		
Course number	**Course name**	**Credits**
Core courses (including consulting/research/thesis)		
PUBH 6850	Introduction to SAS for Public Health Research	1
PUBH 6851	Introduction to R for Public Health Research	1
PUBH 6852	Introduction to Python for Public Health Research	1
PUBH 6860	Principles of Bioinformatics	3
PUBH 8870	Statistical Inference for Public Health Research 1	3
PUBH 6869	Principles of Biostatistical Consulting	1
PUBH 6898	Master of Science Thesis	1
PUBH 6080	Pathways to Public Health	0
Concentration courses		
PUBH 6862	Applied Linear Regression Analysis for Public Health Research	3
PUBH 6864	Applied Survival Analysis for Public Health Research	3

PUBH 6865	Applied Categorical Data Analysis for Public Health Research	3
PUBH 6866	Principles of Clinical Trials	3
PUBH 6887	Applied Longitudinal Data Analysis for Public Health Research	3
PUBH 8871	Statistical Inference for Public Health Research 2	3
	Electives	7
	TOTAL CREDITS	**36**

Requirements for MS in Health Data Science degree, Bioinformatics Concentration		
Course number	**Course name**	**Credits**
Core courses (including consulting/research/thesis)		
PUBH 6850	Introduction to SAS for Public Health Research	1
PUBH 6851	Introduction to R for Public Health Research	1
PUBH 6852	Introduction to Python for Public Health Research	1
PUBH 6860	Principles of Bioinformatics	3
PUBH 8870	Statistical Inference for Public Health Research 1	3
PUBH 6897	Research in Biostatistics and Bioinformatics[77]	2
PUBH 6898	Master of Science Thesis	1
PUBH 6080	Pathways to Public Health	0
Concentration courses		
PUBH 6859	High Performance and Cloud Computing	3
PUBH 6861	Public Health Genomics	3
PUBH 6884	Bioinformatics Algorithms and Data Structures	3
PUBH 6854	Applied Computing in Health Data Science	3
PUBH 6886	Statistical and Machine Learning for Public Health Research	3
	Electives	9
	TOTAL CREDITS	**36**

Requirements for MS in Public Health Microbiology and Emerging Infectious Diseases degree		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6002	Biostatistical Applications for Public Health	3
PUBH 6003	Principles and Practices of Epidemiology	3
PUBH 6007	Social and Behavioral Approaches to Public Health	2
PUBH 6275	Essential Public Health Laboratory Skills	2
PUBH 6245	Infectious Disease Epidemiology	2
PUBH 6247	Epidemiologic Methods 1: Design of Health Studies	3

[77] Independent research course

PUBH 6259	Epidemiology Surveillance in Public Health	2
PUBH 6262	Introduction to Geographic Information Systems	1
PUBH 6276	Public Health Microbiology	3
PUBH 6278	Public Health Virology	3
PUBH 6853	Use of SAS for Data Management and Analysis	3
PUBH 6861	Public Health Genomics	3
PUBH 6291/ MICR 8210	Infection and Immunity	3
PUBH 6016	Field/Laboratory Experience	2
PUBH 6280	Microbiology and Emerging Infectious Diseases Final Project	2
PUBH 6080	Pathways to Public Health	0
	Electives	8
	TOTAL CREDITS	**45**

2) *Provide a matrix, in the format of Template D16-1, that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1–12). Typically, the school will present a separate matrix for each degree school, but matrices may be combined if requirements are identical.*

See Criterion D16.6 for more information on how students are assessed on the foundational public health learning objectives.

Template D16-1

Content Coverage for Academic Public Health Master's Degree		
Content	**Course**	**Describe specific assessment opportunity**
1. Explain public health history, philosophy, and values.	PUBH 6080 Pathways to Public Health	Week 2 Quiz. See ERF.
2. Identify the core functions of public health and the 10 Essential Services.	PUBH 6080 Pathways to Public Health	Week 3 Quiz. See ERF.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	PUBH 6080 Pathways to Public Health	Week 4 Quiz. See ERF.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	PUBH 6080 Pathways to Public Health	Week 6 Quiz. See ERF.
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 6080 Pathways to Public Health	Week 7 Quiz. See ERF.
6. Explain the critical importance of evidence in advancing public health knowledge.	PUBH 6080 Pathways to Public Health	Week 5 Quiz. See ERF.
7. Explain effects of environmental factors on a population's health.	PUBH 6080 Pathways to Public Health	Week 9 Quiz. See ERF.
8. Explain biological and genetic factors that affect a population's health.	PUBH 6080 Pathways to Public Health	Week 8 Quiz. See ERF.
9. Explain behavioral and psychological factors that affect a population's health.	PUBH 6080 Pathways to Public Health	Week 13 Quiz. See ERF.
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.	PUBH 6080 Pathways to Public Health	Week 12 Quiz. See ERF.
11. Explain how globalization affects global burdens of disease.	PUBH 6080 Pathways to Public Health	Week 11 Quiz. See ERF.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health).	PUBH 6080 Pathways to Public Health	Week 10 Quiz. See ERF.

3) *Provide supporting documentation for each assessment activity listed in Template D16-1. Documentation should include the following, as relevant, for each listed assessment:*

   - *assignment instructions or guidelines as provided to students*
   - *writing prompts provided to students*
   - *sample exam question(s)*

   See ERF > Criterion D > Criterion D16 > D16.3: Temp D16-1_doc.

4) *Provide a matrix, in the format of Template D16-2, that lists competencies for each relevant degree and concentration. The matrix indicates how each competency is covered in the curriculum. Typically, the school will present a separate matrix for each concentration. Note: these competencies are defined by the school and are distinct from the foundational public health learning objectives defined in this criterion.*

Template D16-2

Competencies for MS, Health Data Science, Biostatistics		
Competency	**Course**	**Describe specific assessment opportunity**
Biostatistical Methodology: Summarize and evaluate biostatistical methodology applied in public health and biomedical research.	PUBH 6865 Applied Categorical Data Analysis for Public Health Research	PUBH 6865—In each session, biostatistical methods are explained along with examples of how to conduct analyses using statistical software, check relevant assumptions, and summarize and interpret findings. In the accompanying homework problem sets, students evaluate, summarize and interpret. See ERF.
Applied Statistics: Apply the principles of biostatistical methodology to perform analyses of public health and biomedical data.	PUBH 6864 Applied Survival Analysis	PUBH 6864—In Part 2 of the final exam, students apply the methods learned and analyze public health and biomedical data using statistical software. See ERF.
Statistical Programming: Use statistical software to perform programming tasks for the purposes of statistical analysis of public health and biomedical data.	PUBH 6862 Applied Linear Regression Analysis for Public Health Research	PUBH 6862—Students are taught statistical programming techniques using R or SAS. In the final exam, students perform programming tasks to obtain the required statistical output to provide appropriate interpretations of results. See ERF.
Scientific Writing: Develop components of the statistical analysis section of public health and biomedical research proposals.	PUBH 6866 Principles of Clinical Trials	PUBH 6866—In the Concept Proposal assignment, groups of students develop and write a concept proposal describing the essential elements of a clinical trial. They present a PowerPoint presentation on their proposal, during which all members of the team present. Students are assessed individually during the presentation and Q&A session. See ERF.

Communication: Communicate principles of statistical theory and study design to interprofessional team members.	PUBH 6866 Principles of Clinical Trials PUBH 6869 Principles of Biostatistical Consulting	PUBH 6866—At the start of the course, students are surveyed and placed on multidisciplinary teams based on program and experience. In the Concept Proposal assignment, these groups collaborate and communicate regarding the appropriate statistical theories and study designs. The exchange of concepts and ideas with others on the team and iterative presentations to the class on the trial are part of the course requirement. Through this teamwork, students learn how members of a team interact with one another, the accepted behaviors of a team (such as expressing ideas, voicing opinions and concerns, offering help, and resolving conflict), using various methods of communication. Mastering group communication skills, in all aspects, is essential to collaboration with investigators and other key team members and is a critical part of effective protocol development. See ERF. PUBH 6869—Students learn the principles of biostatistical consulting and communication in sessions 1 through 5. In the Online Quiz, students identify and communicate potential concerns to the lead physician in a described scenario in written format. See ERF.

Competencies for MS, Health Data Science, Bioinformatics		
Competency	**Course**	**Describe specific assessment opportunity**
Programming: Develop skills in programming, data structures, algorithms, machine learning, high-performance computing and apply these skills to create approaches that facilitate biological data analysis.	PUBH 6854 Applied Computing in Health Data Science PUBH 6859 High Performance and Cloud Computing	PUBH 6854—In Lab 4—Programming in R (sessions 25–26), students review basic scripting in R including basic arithmetic functions, vectors, summary statistics, matrices, mixed modes and data frames, graphics, scatterplots and simple linear regression. See ERF. PUBH 6859—In Assignment 3—Bioinformatics on AWS, students use AWS cloud computing to make a workflow to run the machine learning clustering algorithm omeClust, including a description of the workflow to retrieve and store data, share data, analyze data, and provide access to other users to run the script and access results. See ERF.

Biology: Develop a basis of knowledge in biology and evaluate biological data generation technologies.	PUBH 6861 Public Health Genomics	PUBH 6861—Problem Set 1 covers the human genome project and the Santa Cruz Genome browser. Students use biological knowledge to navigate human genome databases, review data types and data generation technologies, and download, analyze and compare biological data in a cohort at risk of developing breast cancer. See ERF.
Statistics: Apply statistical research methods in the context of molecular biology, genomics, medical, and population genetics research.	PUBH 6861 Public Health Genomics PUBH 6886 Statistical and Machine Learning for Public Health Research	PUBH 6861—Problem Set 4 covers different QC, data manipulation and statistical analyses of genomic data to determine differences in microbial population composition and diversity across humans. In this assignment statistical methodology and the software implementing it are explained, so students can apply both to the analysis of genomic data from a public health study and generate different types of research outcomes. Students must then interpret and discuss those results in the context of the human microbiome. See ERF. PUBH 6886—The Final Project takes the form of a scientific poster and speed presentation that assesses students' abilities to select, apply, and evaluate one or more of the statistical/machine learning methods learned in the course to address a public health or biomedical research question. An important component of the final project will be the presentation and communication of the methods used and the results obtained (pp. 4–5).

Foundational Knowledge: Interpret and synthesize the various foundational concepts of bioinformatics, including genomics, algorithms, and other key tools used in bioinformatics.	PUBH 6859 High Performance and Cloud Computing PUBH 6861 Public Health Genomics	PUBH 6859—In Assignment 6 (session 14), students synthesize a variety of data and tools to develop workflows on Google Cloud where students use Google Cloud computing to make a workflow to run the machine learning clustering algorithm omeClust, including a description of the workflow to retrieve and store data, share data, analyze data, and provide access to other users to run the script and access results and then compare to their AWS approach. See ERF. PUBH 6861—Problem Set 2 covers data types, bioinformatic principles and tools. Students access, retrieve and analyze biomedical and genomic information available at the National Center for Biotechnology Information (NCBI). They synthesize the concepts learned, compare bioinformatic pipelines and search algorithms, and interpret their analytical outcomes in the context of an outbreak of the Influenza A virus. See ERF.
Conceptual Integration: Integrate concepts and data across fields of computer science, statistics, data science, biology, and health sciences through bioinformatics.	PUBH 6861 Public Health Genomics	PUBH 6861—In the Research Project, students design, carry out and present a Research Project. They integrate and summarize data, tools and concepts of genomics, statistics, biology, bioinformatics, etc. covered during the course. This semester-long assignment gives students hands-on experience in molecular techniques commonly used in genomic labs and the state-of-the-art computational approaches used to analyze genomic data. Students write a five-page scientific report, which includes all the main sections of a scientific article, summarizing and discussing their results (summative assessment; pp. 3–4).

Competencies for MS, Public Health Microbiology and Infectious Diseases		
Competency	**Course**	**Describe specific assessment opportunity**
Identify the public health presentation and impacts of infectious agents.	PUBH 6245 Infectious Disease Epidemiology	PUBH 6245—In the Final Exam, students answer multiple choice questions where they identify the presentation and impacts of various infectious agents. See ERF.

Describe the principles of microbial disease surveillance and epidemiology.	PUBH 6245 Infectious Disease Epidemiology PUBH 6259 Epidemiology Surveillance in Public Health	PUBH 6245—In the Final Exam, students answer a series of short answer questions where they describe and apply the principles of microbial diseases surveillance and epidemiology. See ERF. PUBH 6259—In the final paper, students apply the principles of microbial disease surveillance and epidemiology to design and evaluate a hypothetical surveillance system. See ERF.
Plan and implement studies to analyze patterns of disease and to evaluate the public health impact.	PUBH 6247 Design of Health Studies	PUBH 6247—In the Research Proposal, students plan and design an observational study to analyze patterns of disease and evaluate the public health impact. See ERF.
Interpret and communicate results of outbreak investigations and analytic studies.	PUBH 6245 Infectious Disease Epidemiology PUBH 6291/MICR 8210 Infection and Immunity	PUBH 6245—In the Case Study, Part 3, students interpret the evidence associated with a disease outbreak and develop key messages that need to be communicated in a press release. See ERF. PUBH 6291/MICR 8210—In the Manuscript writing assignment, students receive a figures and methods section from a published journal article. Interpreting the data, students write an abstract, results and discussion section communicating the evidence from the analytic study in academic language (p. 3).
Define public health roles and procedures of biomedical and public health laboratories.	PUBH 6275 Essential Public Health Laboratory Skills	PUBH 6275—During the semester, students complete a series of identifications of lab unknowns and compile each in a Lab Notebook. These activities require students to define the role of public health laboratories as well as details of specific procedures used and the role of those procedures. See ERF.
Understand currently used laboratory techniques and principles in public health microbiology and genomics that are used to distinguish characteristics of pathogens.	PUBH 6275 Essential Public Health Laboratory Skills	PUBH 6275—Students conduct currently used laboratory techniques and principles as part of their unknown labs. One such test is the *Candida albicans* Germ Tube Test in Session 4. See ERF.

Understand modes of transmission, pathogenic mechanisms, and immune responses as well as challenges for developing successful vaccines and/or drugs.	PUBH 6276 Public Health Microbiology PUBH 6278 Public Health Virology	PUBH 6276–Students produce a presentation and poster describing the modes of transmission, mechanism, immune response, and therapeutic/prevention challenges for a selected pathogen (p.1; see ERF). PUBH 6278–On the midterm exam, students write a partial manuscript using preliminary results from a study on the pathogenesis of the MP virus which causes encephalitis. A successful manuscript requires knowledge on the modes of transmission, pathogenic mechanisms and immune responses. For the Topic Presentation, students are assigned a scientific article and must present a PowerPoint presentation on it to their fellow classmates. The articles address challenges for developing successful vaccines and/or drugs. See ERF.

5) *Provide supporting documentation that clearly identifies how the school or program ensures that students complete a curriculum based on defined competencies. Documentation may include detailed course schedules or outlines to selected modules from the learning management system that identify the relevant assigned readings, lecture topics, class activities, etc.*

   See ERF > Criterion D > Criterion D16 > D16.5: Competencies_doc.

6) *Briefly explain how the school ensures that the instruction and assessment in basic public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course.*

   The instruction and assessment in basic public health knowledge is achieved through one of two mechanisms:

   - Students must have graduated with a public health degree from a CEPH accredited school or program; or
   - Students must successfully pass degree-required public health-related courses plus PUBH 6080 Pathways to Public Health. The online PUBH 6080 Pathways in Public Health requires students to view asynchronous lecture content, engage with assigned readings and complete short activities and assessments. Students must earn at least 80% on all twelve quizzes to pass the class; quizzes may be repeated later until a passing grade of 80% is obtained. The additional degree-required public health courses vary by degree.
     - Students in the MS in Public Health Microbiology and Infectious Diseases program are required to take PUBH 6002 Biostatistical Applications for Public Health (3 credits), PUBH 6003 Principles and Practices of Epidemiology (3 credits) and PUBH 6007 Social and Behavioral Approaches to Public Health (2 credits), all of which are required foundational courses in the MPH degree. The combination of these three classes plus PUBH 6080 exceeds the three-credit equivalency.
     - Students in the MS in Health Data Science program, both concentrations, complete PUBH 6080 as part of PUBH 6860 Principles of Bioinformatics (3 credits), which teaches more advanced skills such as analyzing and interpreting data and communicating to lay audiences. Students are not able to successfully pass the class without demonstrating that they passed the PUBH 6080 quizzes (or successfully waived the requirement). Between the two courses, students engage in instruction and assessment that exceeds the requirements of a three-semester-credit course.

7) *Identify required coursework and other experiences that address the variety of public health research methods employed in the context of a population health framework to foster discovery and/or translation of public health knowledge and a brief narrative that explains how the instruction and assessment is equivalent to that typically associated with a three-semester-credit course.*

   Typically, the school or program will present a separate list and explanation for each degree program, but these may be combined if requirements are identical.

   All students in the MS in Health Data Science, regardless of concentration, enroll in PUBH 6850 Introduction to SAS for Public Health Research (1 credit), PUBH 6851 Introduction to R for Public Health Research (1 credit), PUBH 6852 Introduction to Python for Public Health Research (1 credit), and PUBH 8870 Statistical Inference for Public Health Research 1 (3 credits), which address public health research methods with a focus on biostatistics and bioinformatics. Additional research courses are taken in each concentration.

In addition to several epidemiology courses, students in the MS in Public Health Microbiology and Infectious Diseases enroll in PUBH 6002 Biostatistical Applications for Public Health (3 credits), PUBH 6275 Essential Public Health Laboratory Skills (2 credits), PUBH 6247 Epidemiologic Methods 1: Design of Health Studies (3 credits), and PUBH 6853 Use of SAS for Data Management and Analysis (3 credits), which introduce public health research applicable to studying infectious diseases. Students also have field exposure through PUBH 6016 Field/Laboratory Experience (2 credits), where they apply public health research methods.

See ERF > Criterion D > Criterion D16 > D16.7: MS_syllabi.

8) *Briefly summarize policies and procedures relating to production and assessment of the final research project or paper.*

After successfully completing all core courses and toward the end of their program, students in the MS in Health Data Science, Biostatistics enroll in PUBH 6869 Principles of Biostatistical Consulting (1 credit) and PUBH 6898 Master of Science Thesis (1 credit). During these courses, students conduct a quantitative research project under the guidance of a faculty member. Faculty evaluate students on their work through this final project. All students must conduct master's level research and a written project.

Students in the MS in Health Data Science, Bioinformatics concentration, enroll in PUBH 6897 Research in Biostatistics and Bioinformatics (1–4 credits) and PUBH 6898 Master of Science Thesis (1 credit). Students usually take these two courses (PUBH 6897 and PUBH 6898) toward the end of their program. During these courses, students conduct an independent quantitative research project under the guidance of a faculty member who evaluates their work. This may or may not result in a traditional master's thesis, though all students must conduct master's level research and a written project. For example, one recent graduate published a paper for their final project rather than a traditional thesis.

Students in the MS in Public Health Microbiology and Infectious Diseases enroll in PUBH 6280 Microbiology and Emerging Infectious Diseases Final Project (2 credits) toward the end of their program. During this class, students produce a concept paper, proposal, 18- to 20-page final report and 15-minute oral presentation with PowerPoint slides. The site preceptor and faculty advisor assess each of the deliverables. During the oral presentation, a panel of faculty judges evaluate the student's performance. When taken together, credit is assigned for the course.

9) *Provide links to handbooks or webpages that contain the full list of policies and procedures governing production and assessment of the final research project or paper for each degree program.*

See ERF > Criterion D > Criterion D16 > D16.9: MS final rsrch_policies.

10) *Include completed, graded samples of deliverables associated with the major paper or project. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.*

See ERF > Criterion D > Criterion > D16.10: MS final rsrch_samples.

There have been four MS in Health Data Science, Bioinformatics graduates in the last three years. There have been no MS in Health Data Science, Biostatistics graduates in the last three years.

11) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

Strengths

- All MS degrees have an extensive research-focused curriculum that prepares students for post-graduation careers or further graduate studies.
- The MS in Health Data Science degree (both concentrations) changed names in the fall of 2023. Formerly the Health and Biomedical Data Science degree, the name change recognizes the trend in data science programs and should be more prominent in web searches. This program has also experienced tremendous growth in the years since its inception and shows no signs of plateauing.

Challenges

- GWSPH has had to deactivate several MS programs over the last five years due to low enrollment.

Future Plans

- The Department of Environmental and Occupational Health is discussing adding an MS in Environmental Health degree program to the school.
- The Office of PhD and MS Programs plans to ensure clear pathways and appropriate connectivity between MS programs and PhD programs. In particular, the Office intends to look at creating parallel curricula that meet students' needs, as the Health Data Sciences programs did. Currently, the Office of PhD and MS Programs is conducting a landscape analysis for future growth to identify high demand areas with the goal of creating future MS programs in those areas.

D17. Academic Public Health Doctoral Degrees

Students enrolled in the unit of accreditation's doctoral degree programs that are designed to prepare public health researchers and scholars (e.g., PhD, ScD) complete a curriculum that is based on defined competencies; engage in research appropriate to the degree program; and produce an appropriately advanced research project at or near the end of the program of study.

These students also complete coursework and other experiences, outside of the major paper or project, that substantively address scientific and analytic approaches to discovery and translation of public health knowledge.

These students complete doctoral-level, advanced coursework and other experiences that distinguish the school of study from a master's degree in the same field.

The school defines appropriate policies for advancement to candidacy, within the context of the institution.

Finally, students complete coursework that provides instruction in the foundational public health knowledge at an appropriate level of complexity. This instruction may be delivered through online, in-person or blended methodologies, but it must meet the following requirements while covering the defined content areas.

The school identifies at least one required assessment activity for each of the foundational public health learning objectives.

The school validates academic doctoral students' foundational public health knowledge through appropriate methods.

1) *List the curricular requirements for each non-DrPH public health doctoral degree in the unit of accreditation, EXCLUDING requirements associated with the final research project. The list must indicate (using shading) each required curricular element that a) is designed expressly for doctoral, rather than master's students or b) would not typically be associated with completion of a master's degree in the same area of study.*

   The school may present accompanying narrative to provide context and information that aids reviewers' understanding of the ways in which doctoral study is distinguished from master's-level study. This narrative is especially important for institutions that do not formally distinguish master's-level courses from doctoral-level courses.

   The school will present a separate list for each degree program and concentration as appropriate.

   GWSPH offers seven academic and highly specialized public health doctoral degrees:
   a. PhD in Environmental Health (48 credits)
   b. PhD in Epidemiology (48 credits)
   c. PhD in Global Public Health Sciences (48 credits)
   d. PhD in Health Data Science, Biostatistics (72 credits)
   e. PhD in Health Data Science, Bioinformatics (72 credits)
   f. PhD in Health Policy (48 credits)
   g. PhD in Social and Behavioral Sciences (48 credits)

   All PhD students take a comprehensive exam before working on their dissertation.

Courses at the 8000 level are considered doctoral courses. Some of the doctoral courses have 6000-level cross-listed courses or are preapproved electives at the master's level. Courses that are designed expressly for a doctoral degree have been shaded.

Students may transfer up to 12 or 24 graduate credits[78] toward their PhD program, assuming those credits meet the transfer criteria. For students who have earned graduate degrees, they may petition to waive and replace (or substitute) similar courses. Under this policy, the program director reviews previously taken graduate courses and determines if the student can waive the required course and replace it with another topic appropriate course. Under this waive and replace process, students complete the same number of credits. All PhD students complete the minimum number of required credits listed above to graduate. The full transfer credits and substitution policies are available in the PhD Handbook (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

Requirements for PhD in Environmental Health degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6247	Epidemiological Methods 1: Design of Health Studies	3
PUBH 6421	Responsible Conduct of Research	1
PUBH 6862	Applied Linear Regression Analysis for Public Health Research	3
PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 6121	Environmental and Occupational Epidemiology	3
PUBH 8123	Applied Toxicology for Public Health	3
PUBH 8126	Assessment and Control of Environmental Hazards	3
PUBH 8144	Environmental Health Data Development and Modeling	2
PUBH 8411	Advanced Topics: Principles of Human Health Risk Science	3
	Electives	12–18

Requirements for PhD in Epidemiology degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6247	Epidemiological Methods 1: Design of Health Studies	3
PUBH 6421	Responsible Conduct of Research	1
PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 6252	Epidemiologic Methods 2: Advanced Epidemiologic Methods	3
PUBH 6865	Applied Categorical Data Analysis for Public Health Research	3
PUBH 6866	Principles of Clinical Trials	3

[78] Allowable transfer credits dependent on total credits required by the program (i.e., program length).

PUBH 6868	Quantitative Methods	3
PUBH 8419	Measurement in Public Health and Health Services	3
PUBH 8877	Generalized Linear Models in Biostatistics	3
PUBH 6869	Principles of Biostatistical Consulting	1
PUBH 8283	Doctoral Biostatistics Consulting Practicum	2
	Electives	11

Requirements for PhD in Global Public Health Sciences degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6421	Responsible Conduct of Research	1
PUBH 6862	Applied Linear Regression Analysis for Public Health Research	3
PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 8416	Study Design and Evaluation Methods	3
PUBH 6850 Or PUBH 6851 Or PUBH 6852	Introduction to SAS for Public Health Research Or Introduction to R for Public Health Research Or Introduction to Python for Public Health Research	1
PUBH 6865	Applied Categorical Data Analysis for Public Health Research	3
PUBH 8406	Advanced Topics in Global Health Doctoral Seminar 1	2
PUBH 8407	Advanced Topics in Global Health Doctoral Seminar 2	2
PUBH 8470	Global Health Demographic Methods	3
PUBH 8475	Research Ethics and Integrity in Domestic and International Research	2
	Electives	13

Requirements for PhD in Health Data Science, Bioinformatics degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6421	Responsible Conduct of Research	1
PUBH 6850	Introduction to SAS for Public Health Research	1
PUBH 6851	Introduction to R for Public Health Research	1
PUBH 6852	Introduction to Python for Public Health Research	1
PUBH 6860	Principles of Bioinformatics	3
PUBH 6886	Statistical and Machine Learning for Public Health Research	3

PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 8870	Statistical Inference for Public Health Research 1	3
PUBH 6854	Applied Computing in Health Data Science	3
PUBH 6859	High Performance and Cloud Computing	3
PUBH 6861	Public Health Genomics	3
PUBH 6884	Bioinformatics Algorithms and Data Structures	3
PUBH 8885	Computational Biology	3
GTAP	GradTeachingAsst Certification	0
PUBH 8413	Research Leadership[79]	1
	Electives	18 minimum

Requirements for PhD in Health Data Science, Biostatistics degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6421	Responsible Conduct of Research	1
PUBH 6850	Introduction to SAS for Public Health Research	1
PUBH 6851	Introduction to R for Public Health Research	1
PUBH 6852	Introduction to Python for Public Health Research	1
PUBH 6860	Principles of Bioinformatics	3
PUBH 6886	Statistical and Machine Learning for Public Health Research	3
PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 8870	Statistical Inference for Public Health Research 1	3
PUBH 6866	Principles of Clinical Trials	3
PUBH 6869	Principles of Biostatistical Consulting	1
PUBH 8879	An Introduction to Causal Inference for Public Health Research	3
PUBH 6887	Applied Longitudinal Data Analysis for Public Health Research	3
PUBH 8871	Statistical Inference for Public Health Research 2	3
PUBH 8875	Linear Models in Biostatistics	3
PUBH 8877	Generalized Linear Models in Biostatistics	3
PUBH 8878	Statistical Genetics	3
PUBH 8880	Statistical Computing for Public Health Research	3
STAT 6227	Survival Analysis	3
GTAP	GradTeachingAsst Certification	0
PUBH 8283	Doctoral Biostatistics Consulting Practicum	2

[79] Independent research course

PUBH 8413	Research Leadership[80]	1
	Electives	12 minimum

Requirements for PhD in Health Policy degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6421 Or PUBH 8099	Responsible Conduct of Research Or Ethics in Domestic and International Research *requires waive and replace petition*	1
PUBH 8416 Or PUBH 6495	Study Design and Evaluation Methods Or Field Trial Methods and Applications + 1 cr elective *requires waive and replace petition*	3
PUBH 8418	Applied Statistical Analysis	3
PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 8620	Foundations of US Health Policy	2
PUBH 6340	Health Economics and Finance	3
PUBH 8404	Advanced Topics: Health Systems and Health Policy Research	3
PUBH 8405	Advanced Topics: Health Economics Research	3
PUBH 8417 Or PPPA 8023	Qualitative Research Methods and Analysis Or Mixed Methods in Research Design	3
PUBH 8622	Healthcare Payments, Systems and Delivery Models	3
PPPA 8022	Econometrics for Policy Research	3
	Electives	10 minimum

Requirements for PhD in Social and Behavioral Sciences degree (minus dissertation coursework)		
Course number	**Course name**	**Credits**
Required courses		
PUBH 6080	Pathways to Public Health	0
PUBH 6421	Responsible Conduct of Research	1
PUBH 8416	Study Design and Evaluation Methods	3
PUBH 8418 Or PUBH 6862	Applied Statistical Analysis Or Applied Linear Regression Analysis for Public Health Research	3
PUBH 8001	PhD Seminar on Cross-Cutting Concepts in Public Health	1
PUBH 8417	Qualitative Research Methods and Analysis	3

[80] Independent research course

PUBH 8419	Measurement in Public Health and Health Services	3
PUBH 8525	Advanced Topics in Social and Behavioral Sciences	1
PUBH 8526	Application of Structural Equation Modeling to Public Health Research	3
PUBH 8528	Advanced Topics in Critical Review of Social-Behavioral Theory and its Application in Public Health	3
PUBH 8534	Multi-Level Interventions for Health Promotion	3
	Electives	15 minimum

2) *Provide a matrix, in the format of Template D17-1, that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1–12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.*

Template D17-1

Content Coverage for Academic Doctoral Degree in a Public Health Field		
Content	**Course**	**Describe specific assessment opportunity**
1. Explain public health history, philosophy, and values.	PUBH 6080 Pathways to Public Health	Week 2 Quiz. See ERF.
2. Identify the core functions of public health and the 10 Essential Services.	PUBH 6080 Pathways to Public Health	Week 3 Quiz. See ERF.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	PUBH 6080 Pathways to Public Health	Week 4 Quiz. See ERF.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	PUBH 6080 Pathways to Public Health	Week 6 Quiz. See ERF.
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 6080 Pathways to Public Health	Week 7 Quiz. See ERF.
6. Explain the critical importance of evidence in advancing public health knowledge.	PUBH 6080 Pathways to Public Health	Week 5 Quiz. See ERF.
7. Explain effects of environmental factors on a population's health.	PUBH 6080 Pathways to Public Health	Week 9 Quiz. See ERF.
8. Explain biological and genetic factors that affect a population's health.	PUBH 6080 Pathways to Public Health	Week 8 Quiz. See ERF.
9. Explain behavioral and psychological factors that affect a population's health.	PUBH 6080 Pathways to Public Health	Week 13 Quiz. See ERF.
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.	PUBH 6080 Pathways to Public Health	Week 12 Quiz. See ERF.
11. Explain how globalization affects global burdens of disease.	PUBH 6080 Pathways to Public Health	Week 11 Quiz. See ERF.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health).	PUBH 6080 Pathways to Public Health	Week 10 Quiz. See ERF.

3) *Provide supporting documentation for each assessment activity listed in Template D17-1. Documentation should include the following, as relevant, for each listed assessment:*

   - *assignment instructions or guidelines as provided to students*
   - *writing prompts provided to students*
   - *sample exam question(s)*

   See ERF > Criterion D > Criterion D17 > D17.3: Temp D17-1.

4) *Provide a matrix, in the format of Template D17–2, that lists competencies for each relevant degree and concentration. The matrix indicates how each competency is covered in the curriculum. Typically, the school will present a separate matrix for each concentration. Note: these competencies are defined by the school and are distinct from the introductory public health learning objectives defined in this criterion.*

Template D17–2

Competencies for PhD, Environmental Health		
Competency	**Course**	**Describe specific assessment opportunity**
Plan and design assessments of environmental and/or occupational exposure prioritizing fate and transport phenomena.	PUBH 8126 Assessment and Control of Environmental Hazards	PUBH 8126—In the Project, students plan and design assessments of environmental and/or occupational exposure in the form of a literature review, computational model or the measurement of environmental hazards. The paper and accompanying presentation also incorporate the human health risk paradigm/framework, describing how fate and transport and principles of risk science are connected to your chosen hazard and exposure estimates. See ERF.
Examine biological mechanisms involved in responding to environmental agents and factors that affect susceptibility to adverse effects.	PUBH 8123 Applied Toxicology for Public Health	PUBH 8123—Students conduct a sensitivity analysis to identify and quantify the influence of key input variables. Using a preestablished Monte Carlo simulation, students examine the risk of chronic toxicity associated with exposure to Diisononyl Phthalate (DINP) in children's products. Specifically, the biological mechanisms of children are examined. See ERF.
Critique epidemiologic research investigating the relationship between environmental or occupational exposures and health, including summarizing methods and results and assessing biases.	PUBH 6121 Environmental and Occupational Epidemiology	PUBH 6121—In Homework #2, students collaborate with teammates to critique two peer-reviewed publications and present their findings to the class using a critique framework. Students are individually assessed during their presentation and via peer evaluation. See ERF.
Apply principles of risk science and risk frameworks to environmental health issues, including recognizing strengths and weaknesses of risk management decision-making.	PUBH 8411 Advanced Topics: Principles of Human Health Risk Science	PUBH 8411—In the final paper, student determine the risk science principles, frameworks and applications of sciences used in an environmental health issue, noting the strengths and weaknesses of the scientific basis for risk management decision-making. See ERF.
Generate computational models applied to environmental and/or occupational health issues.	PUBH 8144 Environmental Health Data Development and Modeling	PUBH 8144—In the Project Presentation, students generate computational model(s) that address issues in exposure science or environmental health and present them to the class. This is an individual presentation. See ERF.

Competencies for PhD, Epidemiology		
Competency	**Course**	**Describe specific assessment opportunity**
Demonstrate knowledge of advanced epidemiologic concepts including assessment of bias, confounding, issues with measurement, and modeling.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods PUBH 8419 Measurement in Public Health and Health Services	PUBH 6252—In the Threats to Validity Assignment, students identify and assess various sources and types of bias. See ERF. PUBH 8419—Students complete a series of exercises and writing assignments demonstrating their ability to conduct advanced epidemiologic analyses and discuss advanced epidemiologic concepts. See ERF.
Design epidemiological research studies including identification and development of data sources and data collection instruments and recognition of measurement issues.	PUBH 6247 Design of Health Studies PUBH 8419 Measurement in Public Health and Health Services	PUBH 6247—In the Research Proposal, students plan and design an observational study. Students write a background on the topic, develop study aims, identify a study population and provide an overview of the study design and sample size. They define measures of key variables, provide an analysis timeline and develop shell tables based on proposed analyses. See ERF. PUBH 8419—In a series of writing assignments, students address measurement of a selected public health issue. See ERF
Evaluate published epidemiologic and biomedical research and identify gaps and/or limitations of the research.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6252—In the Threats to Validity Assignment, students identify and assess various sources and types of bias. See ERF.

Conduct, evaluate, and interpret statistical analysis and assess data collection instruments.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods PUBH 8419 Measurement in Public Health and Health Services	PUBH 6252—In the Threats to Validity Assignment (Part 2), students design a new study to overcome potential threats to validity. Students write a brief paper outlining the recruitment and data collection procedures. See ERF. PUBH 8419—Students complete a series of exercises demonstrating their ability to conduct and evaluate statistical analyses. See ERF.
Disseminate and communicate epidemiological research findings.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods PUBH 6866 Principles of Clinical Trials	PUBH 6252—In the Quantitative Methods Assignment, students present and interpret the results of a data analysis using appropriate tables and write-ups. These tables and write-up should be structured as seen in a peer-reviewed publication. See ERF. PUBH 6866—In the Concept Proposal assignment, groups of students develop and write a concept proposal describing the essential elements of a clinical trial. In addition to a paper, students communicate their proposal via PowerPoint presentation, during which all members of the team present. Students are assessed individually during the presentation and Q&A session. See ERF.

Competencies for PhD, Health Data Science, Biostatistics		
Competency	**Course**	**Describe specific assessment opportunity**
Biostatistical Methodology: Develop and implement innovative biostatistical methodologies that can be utilized to solve complex problems in and improve efficiency of biomedical and public health research.	PUBH 8871 Statistical Inference for Public Health Research 2	PUBH 8871—In the Midterm and Final Exams, students develop and implement innovative biostatistical methodologies that can be utilized to solve complex problems and improve efficiency of biomedical and public health research. See ERF.

Advanced Statistics and Computation: Implement fundamental and advanced statistical methods and associated computing to effectively and accurately analyze complex public health and medical data.	PUBH 6866 Principles of Clinical Trials PUBH 8880 Statistical Computing for Public Health Research	PUBH 6866—In small groups, students develop a concept proposal describing a clinical trial. They apply fundamental and advanced statistical methods, such as randomization, blinding, control groups, endpoints, design configuration, inclusion/exclusion criteria, sample size calculation, and data analysis issues. In the final class, groups present their proposal. Students are individually assessed during the presentation as every member must present and answer questions during the Q&A session. See ERF. PUBH 8880—In the Final Project, students select one of the recently published papers in biostatistical journals chosen by the instructor and reproduce all the simulation results from the paper. Students are expected to understand the statistical methodologies in the paper and implement them in a computer program using R, C, Python or other language. Students give a presentation on the final project. See ERF.
Communication: Communicate and consult with scientific colleagues via effective listening, critical questioning, clear written documentation, and oral presentation skills.	PUBH 6866 Principles of Clinical Trials PUBH 6869 Principles of Biostatistical Consulting	PUBH 6866—In the Concept Proposal assignment, groups of students (scientific colleagues) collaborate and communicate regarding the appropriate statistical theories and study designs. The exchange of concepts and ideas with others on the team and iterative presentations to the class on the trial are part of the course requirement. Through this teamwork, students learn how members of a team interact with one another, the accepted behaviors of a team (such as expressing ideas, voicing opinions and concerns, offering help, and resolving conflict) and using various methods of communication. Groups present their proposal in a group presentation. Students are individually assessed in the presentation as each is required to present. See ERF. PUBH 6869—Students learn the principles of biostatistical consulting and communication in sessions 1 through 5. In the Online Quiz, students identify and communicate potential concerns to the lead physician in a described scenario in written format. See ERF.

Leadership: Provide biostatistical leadership in the design, conduct, analysis, and reporting of collaborative research studies.	PUBH 6866 Principles of Clinical Trials PUBH 6869 Principles of Biostatistical Consulting PUBH 8283 Doctoral Biostatistics Consulting Practicum	PUBH 6866–In the Concept Proposal assignment groups learn about biostatistical leadership in the design, conduct, analysis and reporting of collaborative research studies. Through this team assignment, students develop skills to increase engagement, influence team members, foster team cohesion and apply leadership skills. Students discuss trial monitoring and publishing of trial results, both of which are biostatistical leadership activities. See ERF. PUBH 6869–Students learn the principles of biostatistical consulting and leadership skills in sessions 1 through 5. In the Online Quiz, students apply leadership skills when discussing potential concerns in a described scenario. See ERF. PUBH 8283–Students, under the supervision of a faculty advisor, take the lead consulting position and work with clients by providing biostatistical support.
Teaching: Educate health professionals, research scientists, or students using effective didactic and instructive methodologies to relay complicated mathematical and statistical analyses.	PUBH 6869 Principles of Biostatistical Consulting PUBH 8283 Doctoral Biostatistics Consulting Practicum	PUBH 6869–In the Online Quiz, students are presented with a scenario where they consult with and educate a physician regarding appropriate tests, data findings and concerns. In the Sample Size Assignment, students write two reports, similar to what might be included in grant applications. The language used must effectively communicate complicated mathematical and statistical analyses. See ERF. PUBH 8283–Under the supervision of an assigned faculty advisor, students work with clients who need some type of biostatistical support. The faculty advisor reviews methods for explaining the approach to the client and practices to verify that the client understands the essence of the proposed method. Students educate their clients and provide evidence of good communication with regard to statistical theory and study design.

Competencies for PhD, Health Data Science, Bioinformatics		
Competency	**Course**	**Describe specific assessment opportunity**
Computation: Apply skills in software design and programming to create algorithms for biological data analyses.	PUBH 6854 Applied Computing in Health Data Science	PUBH 6854—In Lab 3, students manipulate spectral data from multiple files; merge, analyze and modify script where students run a script to merge spectra tables; add code to allow user input; and modify script to limit downstream analyses to a subset of the data. See ERF.
Biology: Apply knowledge of molecular biology, genomics, genetics, evolution, and systems biology through statistics and computation to address novel research questions.	PUBH 6861 Public Health Genomics PUBH 8885 Computational Biology	PUBH 6861—In Problem set 6, students integrate and visualize multiple Omic and genetic datasets onto the KEGG database using a systems biology approach (PaintOmics) to statistically unravel and compare differentially expressed and regulated metabolic pathways and genes in the house mouse. See ERF. PUBH 8885—In Assignment 2, (Problems 1 and 2), students describe five rare diseases caused by gene mutations, identify the chromosomal location of the genes using the integrative genome viewer at the Broad Institute, calculate the percentage of the human genome composed of genes, and then compare coding sequences in the human genome to bacterial genomes. See ERF.
Statistics: Create modeling and data analyses using statistical and mathematical applications.	PUBH 8885 Computational Biology	PUBH 8885—In Assignment 5 students create modeling and data analyses using a provided dataset and R. See ERF.
Conceptual Integration and Application in Bioinformatics: Apply integrated concepts and data across fields of computer science, statistics, data science, biology and health sciences through bioinformatics.	PUBH 8885 Computational Biology	PUBH 8885—In Assignment 2, students apply integrated concepts to compare similarity versus alignment, calculate and compare multiple distances measure from the ape package in R, explore and describe features, and implement computational tools for visualization of sequence alignments. See ERF.

Independent Research: Plan and conduct original, independent research through application and integration of skills and knowledge developed through the preliminary phase of the PhD program.	PUBH 6859 High Performance and Cloud Computing PUBH 6861 Public Health Genomics	PUBH 6859—In Projects, students choose among 12 topics ranging from scalable and automated QC of data for phylogenetic tree reconstruction to security and storage of electronic medical records on HPC and cloud computing. Students investigate and reproduce the results of a study on the topic, introduce computational tools and biological questions, apply techniques learned in class on the published data, and present their finding both as an oral presentation (5–10 minutes) and a computational demonstration of methods (10–15 minutes). See ERF. PUBH 6861—In the Short Scientific Report, students investigate an original health-related question by reviewing the topic, applying bioinformatic and statistical tools to the analysis of genomic and demographic data, and summarizing the outcome on a peer-review report written in the form of a scientific paper (pp. 3–4).

Competencies for PhD, Health Policy		
Competency	**Course**	**Describe specific assessment opportunity**
Critically assess pertinent policy, legal, regulatory, economic, and social frameworks of U.S. health and public health policy and reforms, and apply that understanding to analyze current issues.	PUBH 8404 Advanced Topics: Health Systems and Health Policy Research PUBH 8405 Advanced Topics: Health Economics Research	PUBH 8404—In Week 4, students discuss several frameworks that address policy, legal, regulatory, economic and social constructs. In Paper #1, students select a topic of their choice, develop a research question within this area of interest, select an appropriate framework and apply it to their research question. The goal of the assignment is to critically assess the health policy research question within the scope of the framework. Students are assigned three of their peers' papers to peer review. Students critically assess each paper based on criteria identified by the instructor and report their feedback in an oral presentation. See ERF. PUBH 8405—In the Critique of Economics and Health Services Research, students present their critique of current public health policy and its effects on health outcomes, such as utilization, quality, economic, behavioral and clinical outcomes (p. 3; see ERF).
Apply theories and conceptual models to help develop testable hypotheses in health policy research, select appropriate research designs and methods, and apply pertinent quantitative and qualitative methods to conduct health policy research, using responsible research methods.	PUBH 8418 Applied Statistical Analysis (Quant) PUBH 8417 Qualitative Research Methods and Analysis (Qual) Or PPPA 8023 Mixed Methods in Research Design (Qual)	PUBH 8418—In the Final Project, students identify an available dataset and a health policy research question that can be analyzed using the dataset. After developing a testable hypothesis, students design an appropriate quantitative analysis and conduct the analysis using STATA. Students write a research paper, appropriate for a peer-reviewed journal, and present their research in a 10- to 15-minute presentation (pp. 3–4). PUBH 8417—In the Final Project, groups of students conduct a qualitative research project, including conceptualization, implementation, analysis and interpretation. Students write a research paper, appropriate for submission to a peer-reviewed journal. Students are individually assessed through a peer evaluation process. See ERF. Or PPPA 8023—In the Final Project, students write a mixed methods research proposal including developing the protocol for a mixed methods study using an embedded design and experiments. Students work with the instructor to develop the mixed methods study proposal (p. 2; see ERF).

Analyze health system features, such as payment and delivery system characteristics, and assess their relationship with and effects on health outcomes, such as utilization, costs, behaviors and clinical outcomes.	PUBH 8405 Advanced Topics: Health Economics Research	PUBH 8405—Students complete five problem sets designed to enhance understanding of important economic concepts, including health insurance premium variances and risk pooling, health care market merger, cost-shifting and segmented markets, physician markets and cost effectiveness analysis. Students analyze health system features, such as payment and delivery system characteristics, and assess their relationship with and effects on health outcomes, such as utilization, costs, behaviors and clinical outcomes (p. 3; see ERF).
Identify and select datasets related to health policy, outcomes, management and markets and utilize them to assess public policies.	PUBH 8418 Applied Statistical Analysis	PUBH 8418—In the Final Project, students identify and select an appropriate quantitative dataset that they will use to conduct an independent statistical analysis. Students discuss their research question and proposed dataset in the Checkpoint #2 assignment before moving forward with the analysis (p. 4).
Produce descriptive and analytical written papers and oral presentations that apply core elements of policy analysis and research to key issues in health policy, including health services and public health policy.	PUBH 8620 Foundations of US Health Policy (descriptive) PUBH 8418 Applied Statistical Analysis (analytical)	PUBH 8620—In Paper #1, students write a paper on a current health policy topic geared toward a specific lay audience. In 2022, the topic was the Dobbs Supreme Court case. In 2023, the topic is on race-conscious admissions policies in the health professions. Students present their policy analyses through weekly in-class discussions (p. 4; see ERF). PUBH 8418—In the Final Project, students develop a testable hypothesis, design an appropriate quantitative analysis using an identified dataset and conduct the analysis using STATA. Students write an analytical research paper, appropriate for a peer-reviewed journal, and present their research in a 10- to 15-minute presentation (p. 4).

Competencies for PhD, Global Public Health Sciences		
Competency	**Course**	**Describe specific assessment opportunity**
Critique and analyze specialized concepts in global health research.	PUBH 8406 Advanced Topics in Global Health Doctoral Seminar 1	PUBH 8406—In the commentary paper, students discuss a contemporary debate in global health research and assess available theory and evidence on the topic (pp. 2–3; see ERF).
Apply rigorous quantitative methodologies to global health research.	PUBH 8470 Global Health Demographic Methods	PUBH 8470—In Assignment 2, students construct both single and multiple decrement lifetables using both tabular and regression methods. Additional assignments require students to conduct other quantitative methodologies using global health data. See ERF.

Conduct independent global health research and disseminate research findings to scientific or lay audience.	PUBH 8406 Advanced Topics in Global Health Doctoral Seminar 1	PUBH 8406—In the commentary paper, students discuss a contemporary debate in global health research by conducting independent research. The audience of these papers is a scientific audience and language used is expected to reflect this. In a blog, students conduct a rapid scoping of a specific topic or debate and apply multidisciplinary perspectives to analyze it. The resulting blog is geared toward a lay audience (pp. 2–3; see ERF).
Integrate ethical guidelines in the conduct of global health research.	PUBH 8475 Research Ethics and Integrity in Domestic and International Research	PUBH 8475—In the Case Study Write-Up and Analysis, students integrate ethical principles, theories, and guidelines in the conduct of global health research by focusing on a global health research case study. Students write a detailed ethical analysis of the case study and ethical dilemma(s) (p. 2).
Illustrate the ability to conduct global health research in multidisciplinary settings.	PUBH 8406 Advanced Topics in Global Health Doctoral Seminar 1	PUBH 8406—In the commentary and analysis paper, students write about a contemporary debate in global health. They are required to apply multidisciplinary perspectives to analyze the specific topic (pp. 2–3; see ERF).

Competencies for PhD, Social and Behavioral Sciences		
Competency	**Course**	**Describe specific assessment opportunity**
Synthesize the research literature in public health in a given topical domain, including the social and behavioral theoretical literature.	PUBH 8525 Advanced Topics in Social and Behavioral Sciences	PUBH 8525—Students demonstrate the competency in the final paper. See ERF.

Examine and employ distinct theories or a combination of theories at multiple levels to study health outcomes.	PUBH 8525 Advanced Topics in Social and Behavioral Sciences PUBH 8534 Multi-Level Interventions for Health Promotion	PUBH 8525—Students demonstrate the competency in the final paper. See ERF. PUBH 8534—Students develop a protocol paper for a clinical trial of an intervention of their design. The paper takes the format of a formal protocol that might be published in a scientific journal (e.g., JIMR-Protocols). Papers include: (a) a background section outlining the rationale/need for the intervention, (b) a description of the trial aims, (c) a detailed description of the intervention to be tested (including the theoretical foundation of the intervention, and the specific intervention activities and mechanisms of change associated with them), (d) a description of the study design and trial methods, (e) the primary outcome measures and intervention mediators to be assessed, and (f) a description of the expected outcomes of the trial and the implications for research and public health practice (p. 3).
Demonstrate advanced knowledge in the principles of evaluation and study design and data analysis as well as develop evidence-based questions.	PUBH 8417 Qualitative Research Methods and Analysis	PUBH 8417—In the Concept Paper and Final Paper, students demonstrate advanced knowledge in evaluation, study design and data analysis to first propose and then implement and write a qualitative research paper. See ERF.
Apply scientific knowledge to develop new conceptual models and/or research predictions, including justifying new questions with existing literature, selecting appropriate research models to study those questions, and indicating the potential contributions of the proposed research.	PUBH 8417 Qualitative Research Methods and Analysis	PUBH 8417—In the Concept Paper and Final Paper, students develop new conceptual models or research predictions as part of a qualitative research project. See ERF.
Demonstrate substantive knowledge within an area of social and behavioral sciences and display competency in communicating research ideas and findings to the larger scientific community.	PUBH 8528 Advanced Topics in Critical Review of Social-Behavioral Theory and Its Application in Public Health	PUBH 8528—Students present two PowerPoint presentations, which focus on measures/tools that have been used in the literature to assess change in relation to one of the theoretical perspectives examined in class lecture. For each presentation, students research articles referring to different populations and health behaviors (so that analysis of theory use and measures is not skewed) and critique three of those articles. Each presentation is 15–20 minutes, followed by a Q&A session. The presentation is geared toward the scientific community and is given to other doctoral students in the program (p. 3).

5) *Provide supporting documentation that clearly identifies how the school or program ensures that students complete a curriculum based on defined competencies. Documentation may include detailed course schedules or outlines to selected modules from the learning management system that identify the relevant assigned readings, lecture topics, class activities, etc.)*

   For joint courses that contain both master's and doctoral students (e.g., PUBH 6885/8885), instructors are responsible for ensuring that doctoral students learn and complete doctoral-level work and are given assignments that go beyond the master's level assignments. The doctoral-level assignments are developed with doctoral competencies in mind and may include a more in-depth review of the literature and/or an analysis that involves more sophisticated and formalized techniques. Doctoral students in these classes may also have separate breakout sections from the master's level students and/or would be required to meet one-on-one with the professor to explore topics in greater depth.

   See ERF > Criterion D > Criterion D17 > D17.5: PhD_Syllabi.

6) *Briefly explain how the school ensures that the instruction and assessment in introductory public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course.*

   The instruction and assessment in basic public health knowledge is achieved through one of two mechanisms:

   - Students must have graduated with a public health degree from a CEPH-accredited school or program; or
   - Students must successfully pass PUBH 6080 Pathways to Public Health, PUBH 8001 PhD Seminar on Cross-Cutting Concepts in Public Health and PUBH 6421 Responsible Conduct of Research. The online PUBH 6080 Pathways to Public Health requires students to view asynchronous lecture content, engage with assigned readings and complete short activities and assessments. Students must earn at least 80% on all 12 quizzes to pass the class; quizzes may be repeated at a later time until a passing grade of 80% is obtained. PUBH 8001 PhD Seminar on Cross-Cutting Concepts in Public Health (1 credit) and PUBH 6421 Responsible Conduct of Research (1 credit) provide additional didactics and application of the introductory public health knowledge learned. PUBH 6080 content is embedded in PUBH 8001 to encourage students to complete all requirements together. During the three courses, students engage in instruction and assessment typically associated with a three-semester-credit course.

7) *Identify required coursework and other experiences that address the variety of public health research methods employed in the context of a population health framework to foster discovery and translation of public health knowledge and a brief narrative that explains how the instruction and assessment is equivalent to that typically associated with a three-semester-credit course.*

   Typically, the school or program will present a separate list and explanation for each degree program, but these may be combined if requirements are identical.

   Students in the PhD in Environmental Health enroll in PUBH 6247 Epidemiologic Methods 1: Design of Health Studies (3 credits), PUBH 6421 Responsible Conduct of Research (1 credit), PUBH 6862 Applied Linear Regression Analysis for Public Health Research (3 credits) and PUBH 6121 Environmental and Occupational Epidemiology (3 credits), which cover public health research methodologies, statistics and environmental epidemiology research. Additional public health research courses may be taken as electives.

In addition to epidemiology classes, students in the PhD in Epidemiology enroll in a number of research classes including, but not limited to PUBH 6421 Responsible Conduct of Research (1 credit), PUBH 6866 Principles of Clinical Trials (3 credits), PUBH 6868 Quantitative Methods (3 credits) and PUBH 8419 Measurement in Public Health and Health Services (3 credits).

Students in the PhD in Global Public Health Sciences enroll in PUBH 6421 Responsible Conduct of Research (1 credit), PUBH 6862 Applied Linear Regression Analysis for Public Health Research (3 credits), PUBH 8416 Study Design and Evaluation Methods (3 credits), PUBH 8475 Research Ethics and Integrity in Domestic and International Research (2 credits) and PUBH 8470 Global Health Demographic Methods (3 credits). These students also take a number of statistics courses.

Students in the PhD in Health Data Science, regardless of concentration, enroll in a number of research classes including PUBH 6421 Responsible Conduct of Research (1 credit), PUBH 6850 Introduction to SAS for Public Health Research (1 credit), PUBH 6851 Introduction to R for Public Health Research (1 credit), PUBH 6852 Introduction to Python for Public Health Research (1 credit), PUBH 8870 Statistical Inference for Public Health Research 1 (3 credits) and PUBH 8413 Research Leadership (1 credit). Students in each concentration take additional research courses, specific to their concentration.

Students in the PhD in Health Policy are required to enroll in PUBH 8404 Advanced Topics: Health Systems and Health Policy Research (3 credits), PUBH 8405 Advanced Topics: Health Economics Research (3 credits) and PPA 8022 Econometrics for Policy Research (3 credits). They also take additional research methods courses but have several options such as deciding between a qualitative or mixed methods research course.

In addition to a statistics course, students in the PhD in Social and Behavioral Sciences enroll in PUBH 6421 Responsible Conduct of Research (1 credit), PUBH 8416 Study Design and Evaluation Methods (3 credits), PUBH 8417 Qualitative Research Methods and Analysis (3 credits), PUBH 8419 Measurement in Public Health and Health Services (3 credits) and PUBH 8526 Application of Structural Equation Modeling to Public Health Research (3 credits).

8) *Briefly summarize policies and procedures relating to production and assessment of the final research project or paper.*

All PhD students are required to write and successfully defend a dissertation to earn their doctoral degree. All programs require students to enroll in at least 8 credits of dissertation coursework, which may include a separate 2-credit proposal development course (PUBH 8435). Regardless of the program, all PhD students follow the dissertation guidelines outlined in the PhD Handbook. Dissertations are expected to:

- Use appropriate and scientifically rigorous methods
- Propose new research and result in new knowledge acquisition
- Advance public health knowledge and/or contribute to public health policy and practice, either domestically or internationally

Once students pass their comprehensive exams, they enter the candidacy phase and begin working on their dissertations. Students identify a topic and write a proposal outlining the research plan. Additionally, students identify a dissertation chair and committee members, who provide guidance through the proposal development and defense and ultimately the dissertation development and defense.

With approval from their Dissertation Committee Chair, students enroll in PUBH 8999 Dissertation Research for the required number of credits (program-specific). Generally, this research takes two to three years. It is during this phase that each program provides additional guidance and requirements specific to their degree program. Periodic check-ins with committee members and program leadership are required.

Upon approval by their dissertation committee members, students orally defend their dissertation and submit a final written dissertation. The oral defense includes a public forum where students present their research and answer questions, followed by a closed-door session for committee members to examine the work in greater detail. The committee makes one of three recommendations: pass with no revisions, conditional pass (which requires the student to make edits before submission) and fail (which results in the student's having to repeat, at a minimum, the oral defense).

9) *Provide links to handbooks or webpages that contain the full list of policies and procedures governing production and assessment of the final research project or paper for each degree program.*

See ERF > Criterion D > Criterion D17 > D17.9: PhD Final Rsrch_Policies.

The PhD in Health Policy was originally under the management of the Trachtenberg School of Public Policy and Public Administration. Most of the provided samples are from students who started their program while it was at Trachtenberg. As a result, the Trachtenberg doctoral dissertation handbook is also available in the ERF.

10) *Include completed, graded samples of deliverables associated with the advanced research project. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.*

See ERF > Criterion D > Criterion D17 > D17.10: PhD Final Rsrch_Samples.

There are no sample dissertations for the following programs as they are newer, and students haven't yet made it to the dissertation phase.

- PhD in Global Public Health Sciences
- PhD in Health Data Science, Biostatistics
- PhD in Health Data Science, Bioinformatics

The PhD in Environmental and Occupational Health is only four years old, and only two students have defended their dissertations. Those students' dissertations are included in the ERF.

11) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

<u>Strengths</u>

- GWSPH experienced tremendous growth in PhD offerings and number of PhD students since 2019, meeting and exceeding our objectives in this area.
- All PhD programs are under the leadership of the Associate Dean for PhD and MS Programs, with oversight by the Senior Associate Dean for Research and Innovation. This ensures that these programs receive centralized resources and follow consistent guidelines about dissertations and theses/final projects. The Office of PhD and MS Programs implemented several efforts to improve communications (e.g., monthly newsletters to students with updates, lectures and seminar information and opportunities for research and professional development). They also evaluate student

satisfaction (e.g., annual PhD survey, annual student progress review) and assess programmatic needs (e.g., annual PhD Directors retreat, universal core classes). Additional initiatives, such as a doctoral journal club and database of PhD teaching opportunities, are planned.
- Qualitative coursework was integrated into the required core PhD in Health Policy and PhD in Social and Behavioral Sciences programs. As a result of this change, more students are starting to develop qualitative (or entirely qualitative) components to their dissertations.
- Every department at GWSPH submitted T32 grants to fund PhD students.
- GWSPH funded its first successful T32 grant to train PhD students. It also created its first endowment to support PhD candidates. In some cases, departments are succeeding in garnering support for PhD students via research grants.

Challenges
- Some of the courses taught in the PhD programs require specialized faculty. It's been a challenge to find competent faculty to teach these courses as well as find faculty to take on new teaching needs.
- Securing substantial funding for PhD students remains an important goal for GWSPH. With a growing student body, there is an increased need for offering competitive financial aid packages to applicants to ensure matriculation.
- As the PhD programs' enrollment grows, administrative capacities, such as those in financial aid, must keep pace with the needs of the growing student body.

Future Plans
- GWSPH continues to grow our PhD programs and ensure each PhD student is well supported and engages in meaningful research experiences and that all research faculty have access to PhD students as needed.
- GWSPH plans to continue to matriculate a diverse group of students, domestically and internationally, to the PhD programs.
- GWSPH continues to monitor faculty and student feedback on the programs and make improvements on an ongoing basis. For example, a doctoral-level mixed methods course is currently being developed with a launch date scheduled for 2024–2025.
- The Office of PhD and MS Programs is looking at opportunities for GWSPH students to enroll in additional research methods and doctoral-level electives at other schools or institutions.
- The Office of PhD and MS Programs plans to review PhD program requirements and number of program credits.
- GWSPH will continue to support departments in the submission of T32 grants.

D18. All Remaining Degrees

Students enrolled in any of the SPH's degree programs that are not addressed in Criteria D2, D3, D9, D16 or D17 complete coursework that provides instruction in the foundational public health knowledge at a level of complexity appropriate to the level of the student's degree program.

The instruction and assessment of students' foundational public health knowledge are equivalent in depth to the instruction and assessment that would typically be associated with a three-semester-credit class, regardless of the number of credits awarded for the experience or the mode of delivery.

The school identifies at least one required assessment activity for each of the foundational public health learning objectives.

1) *Provide a matrix in the format of Template D18-1 that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1–12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.*

Template D18-1

Content Coverage for BS degrees, Nutrition, Exercise Science and Health Data Science		
Content	**Course**	**Describe specific assessment opportunity**
1. Explain public health history, philosophy, and values.	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students complete quiz/exam questions that address this competency. See ERF.
2. Identify the core functions of public health and the 10 Essential Services.	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students complete quiz/exam questions that address this competency. In the Paper #1: Day in the Life of Public Health, students reflect on how public health has changed their lives pre-pandemic or during the pandemic. Content covered in Week 2 (p. 9; see ERF).
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	PUBH 3199 Foundation of Research Methods or EXNS 3111W Exercise and Nutrition Sciences Research Methods	PUBH 3199—Students complete quizzes that address this competency. Additionally, students complete a research project, which requires the preparation of a survey to be disseminated and the findings reported on during the last week of the course. See ERF. EXNS 3111W—Students complete reading reflections that address this competency. Additionally, students complete a research proposal, which involves designing an appropriate research methodology to assess a population's health and address a proposed research question. See ERF.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	PUBH 1101 Introduction to Public Health and Health Services EXNS 2123 Nutrition and Chronic Disease[81]	PUBH 1101—Students complete quiz/exam questions that address this competency. Content covered in Weeks 14–22. See ERF. EXNS 2123—Students complete quizzes that address this competency. See ERF.
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students complete quiz/exam questions that address this competency. See ERF.

[81] Only students in the BS in Exercise Science and BS in Nutrition students take EXNS 2123 (in addition to PUBH 1101).

6. Explain the critical importance of evidence in advancing public health knowledge.	PUBH 3199 Foundation of Research Methods or EXNS 3111W Exercise and Nutrition Sciences Research Methods	PUBH 3199—Students complete quizzes that address this competency. Additionally, students complete a research project, which requires understanding the critical importance of evidence in advancing public health knowledge. See ERF. EXNS 3111W—Students complete reading reflections that address this competency. Additionally, students develop a research proposal, which requires understanding the critical importance of evidence in advancing public health knowledge See ERF.
7. Explain effects of environmental factors on a population's health.	EXNS 2120 Assessment of Nutritional Status[82] PUBH 1101 Introduction to Public Health and Health Services	EXNS 2120—Students complete a NEMS Questionnaire and Quiz #3, which address this competency. See ERF. PUBH 1101—Students complete quiz/exam questions that address this competency. See ERF.
8. Explain biological and genetic factors that affect a population's health.	EXNS 2123 Nutrition and Chronic Disease[83] PUBH 2110 Public Health Biology or BISC 1112 Introductory Biology: The Biology of Organisms[84]	EXNS 2123—Students answer Midterm and Final exam questions and complete a Final Project, which addresses this competency. See ERF. PUBH 2110/BISC1112—Student write a Policy Brief, which examines a complex biological factor affecting human health and uses nonacademic language (p. 4).
9. Explain behavioral and psychological factors that affect a population's health.	EXNS 2124 Lifecycle Nutrition[85] PUBH 1101 Introduction to Public Health and Health Services	EXNS 2124—Students complete case studies and two exams that address this competency. See ERF. PUBH 1101—Students complete quiz/exam questions that address this competency. See ERF.

[82] BS in Exercise Science and BS in Nutrition students take EXNS 2120 (in addition to PUBH 1101).
[83] BS in Exercise Science and BS in Nutrition students take EXNS 2123.
[84] BS in Health Data Science students take PUBH 2110 or BISC 1112.
[85] BS in Exercise Science and BS in Nutrition students take EXNS 2124 (in addition to PUBH 1101).

10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students complete quiz/exam questions that address this competency. Content covered in Weeks 8–12. See ERF.
11. Explain how globalization affects global burdens of disease.	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students complete quiz/exam questions that address this competency. Globalization is covered throughout the course as a contributor to the global health disease burden. Content is covered in Chapters 1, 6, 7, 8, and 13 in the textbook. See ERF.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health).	PUBH 1101 Introduction to Public Health and Health Services	PUBH 1101—Students complete quiz/exam questions that address this competency. Content is covered in Chapter 14 of the textbook. See ERF.

Content Coverage for all remaining graduate degrees (MHA, MHA@GW, MS in Strength and Conditioning and PhD in Exercise Physiology and Applied Nutrition)		
Content	**Course**	**Describe specific assessment opportunity**
1. Explain public health history, philosophy and values.	PUBH 6080 Pathways to Public Health	Week 2 Quiz. See ERF.
2. Identify the core functions of public health and the 10 Essential Services.	PUBH 6080 Pathways to Public Health	Week 3 Quiz. See ERF.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	PUBH 6080 Pathways to Public Health	Week 4 Quiz. See ERF.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	PUBH 6080 Pathways to Public Health	Week 6 Quiz. See ERF.
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBH 6080 Pathways to Public Health	Week 7 Quiz. See ERF.
6. Explain the critical importance of evidence in advancing public health knowledge,	PUBH 6080 Pathways to Public Health	Week 5 Quiz. See ERF.

7. Explain effects of environmental factors on a population's health.	PUBH 6080 Pathways to Public Health	Week 9 Quiz. See ERF.
8. Explain biological and genetic factors that affect a population's health.	PUBH 6080 Pathways to Public Health	Week 8 Quiz. See ERF.
9. Explain behavioral and psychological factors that affect a population's health.	PUBH 6080 Pathways to Public Health	Week 13 Quiz. See ERF.
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.	PUBH 6080 Pathways to Public Health	Week 12 Quiz. See ERF.
11. Explain how globalization affects global burdens of disease.	PUBH 6080 Pathways to Public Health	Week 11 Quiz. See ERF.
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health).	PUBH 6080 Pathways to Public Health	Week 10 Quiz. See ERF.

2) *Briefly explain how the school ensures that the instruction and assessment in introductory public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course.*

Undergraduate Programs

The instruction and assessment in basic public health knowledge is achieved through required undergraduate coursework. All students, regardless of major, enroll in PUBH 1101 Introduction to Public Health and Health Services (3 credits), which addresses the bulk of introductory public health knowledge. Depending on the major, students take one of two research methods courses: PUBH 3199 Research Methods (3 credits) or EXNS 3111W Exercise and Nutrition Sciences Research Methods (3 credits). All these courses have graded assignments, such as quizzes, exams and papers, assessed by the instructor.

Graduate Programs

The instruction and assessment in basic public health knowledge is achieved through one of two mechanisms:

- Students must have graduated with a public health degree from a CEPH accredited school or program; or
- Students must successfully pass degree-required public health-related courses plus PUBH 6080 Pathways to Public Health. The online PUBH 6080 Pathways in Public Health requires students to view asynchronous lecture content, engage with assigned readings and complete short activities and assessment. Students must earn at least 80% on all 12 quizzes to pass the class; quizzes may be repeated later until a passing grade of 80% is obtained. The workload of PUBH 6080 is equivalent to a one-credit course. The additional degree-required public health courses vary by degree.
    - Students in the residential MHA program complete PUBH 6080 to successfully earn a grade in HSML 6202 Introduction to the US Health Services Delivery (2 credits). This course addresses public health content such as the organization of the US health system. Additionally, MHA students enroll in a 2-credit public health selective course,[86] which provides additional didactics and application of the introductory public health knowledge learned. During the three courses, students engage in instruction and assessment that exceeds the requirements of a three-semester-credit course.
    - Students in the MHA@GW program complete PUBH 6080 as an embedded module in HSML 6267 Community Engagement (Module 4; 5 credits), thus exceeding the three-semester-credit course requirement. HSML 6267 focuses on the engagement with the community and the roles of federal, state and local government in public health. Students also develop a community health needs assessment plan and communicate with key stakeholders to address community and population health needs.
    - Students in the MS in Strength and Conditioning program complete PUBH 6002 Biostatistical Applications for Public Health (3 credits), which provides additional didactics and application of the introductory public health knowledge learned. Between PUBH 6080 and PUBH 6002, students engage in instruction and assessment that exceeds the requirements of a three-semester-credit course.
    - Students in the PhD in Exercise Physiology and Applied Nutrition program are required to take PUBH 8001 PhD Seminar on Cross-Cutting Concepts in Public Health (1 credit) and PUBH 6421 Responsible Conduct of Research (1 credit), which provide additional didactics and application of the introductory public

[86] A selective course is one chosen by students from a list of pre-approved public health courses (all PUBH course numbers).

health knowledge learned. PUBH 6080 content is a required component of PUBH 8001 so students may not successfully pass PUBH 8001 without passing the quizzes in PUBH 6080. During the three courses, students engage in instruction and assessment typically associated with a three-semester-credit course.

3) *Provide supporting documentation for each assessment activity listed in Template D18-1. Documentation should include the following, as relevant, for each listed assessment:*

- *assignment instructions or guidelines as provided to students*
- *writing prompts provided to students*
- *sample exam question(s)*

See ERF > Criterion D > Criterion D18 > D18.3: Remaining Deg_Syllabi.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- PUBH 6080 Pathways to Public Health is taken by all residential and online MS, PhD, and MHA students who have not previously earned a public health degree from a CEPH accredited school or program. This course is free and is fully asynchronous so students can complete the material on their own schedules.
- PUBH 6080 Pathways to Public Health was traditionally offered only on the 2U platform, which created access issues for residential students and faculty who were not as familiar with this platform. In fall 2023, GWSPH moved PUBH 6080 content into Blackboard and embedded links in specific classes. Additionally, the Assistant Dean for Academic Innovation created assignment folders for students to upload their certificates of completion, making it easier for faculty to confirm completion.
- As of October 19, 2023, three undergraduate students have declared their major to be Health Data Science. They will begin taking major courses in spring 2024.
- EXNS 3111W is now being offered both in the fall and spring semesters for greater accessibility and smaller class sizes for students.
- Enrollment is strong for both the residential MHA and MHA@GW programs. Of note, the MHA@GW program is one of the largest executive format health management programs in the country.
- The MHA@GW was designed for mid-career health sector professionals using a number of progressive online pedagogical approaches and features, such as an integrated curriculum using a five-credit module structure that students enroll in sequentially, synchronous team meetings and class sessions that leverage our learners' professional experiences as a teaching tool, a highly reflective curriculum that utilizes tools such as a longitudinal e-portfolio and assignments that draw upon our learners' workplace experiences, multiple immersions where students have an opportunity to explore topics, leadership and ethics, and perform an onsite analysis of a city's/region's health care system and services, and a novel capstone course focused on systems thinking and organizational learning. Alum interviews and an in-progress study indicate that graduates are finding a high level of utility and value in the MHA@GW program and the skills they have developed with us.
- MPH and MHA students can engage in several curricular activities together, including the onsite MHA@GW immersion experiences and several interprofessional education offerings each year.

Challenges

- Ensuring course offerings meet the needs of our growing undergraduate student body is a challenge.

Future Plans

- In fall 2024, PUBH 3199 Research Methods will receive a permanent course number of PUBH 2140 Foundation of Research Methods. The course was refreshed by a member of the Department of Biostatistics and Bioinformatics and includes additional real-life applications of statistics in public health.

D19. Distance Education

The university provides needed support for the school, including administrative, communication, information technology and student services.

There is an ongoing effort to evaluate the academic effectiveness of the format, to assess learning methods and to systematically use this information to stimulate school improvements. Evaluation of student outcomes and of the learning model are especially important in institutions that offer distance learning but do not offer a comparable in-residence school.

1) *Identify all public health distance education degree programs and/or concentrations that offer a curriculum or course of study that can be obtained via distance education. Template Intro1 may be referenced for this purpose.*

   As indicated in the Template Intro-1, any program with the moniker "@GW" is an online program at GWSPH. This includes the following public health programs:
   - MPH@GW, Public Health Generalist
   - MPH@GW, Global Health
   - MPH@GW, Health Informatics and Analytics
   - MPH@GW, Climate and Health
   - MPH@GW, Women, Youth and Child Health
   - DrPH@GW, Public Health Generalist (with a residency component)

2) *Describe the public health distance education programs, including*

   a) *an explanation of the model or methods used*

      The online programs utilize a "flipped" classroom model in which students complete each weekly unit's asynchronous course content before attending a live, virtual discussion led by their instructor. All course materials and content are located in 2GW, a proprietary online learning management system (LMS) operated by our third-party partner, 2U. In summer 2023, 2U switched LMS platforms to Canvas, though it is still branded as 2GW for students.

      The online MPH@GW program operates on a quarter system with ten-week terms. Students in the online programs may take up to 15 credits of residential classes, and residential students may take up to 15 credits of online classes. Students in the MPH@GW programs could complete their entire program remotely. The quarter system also allows online students to complete a master's degree in as little as one year (accelerated timeframe).

      The core MPH courses in the residential and online programs cover the same curricular content and competencies (accounting for the difference in term length). Ensuring that our residential and online core curriculum are equivalent is an essential feature of how we have designed and maintained these programs. Many of the online electives also have residential versions with the same curricular requirements, making them interchangeable. One significant difference between online and residential programs is that no one program is available in both formats. For example, if a student is interested in concentrating in Health Informatics and Analytics, they must enroll in the MPH@GW online program and then select that concentration, as it is not available as a residential MPH.

      Students in the DrPH@GW are required to attend a three-day immersion in Washington, DC, during their first term in the program. The onsite intensive brings together students

from both the online and residential cohorts at the start of the program to promote networking and orient students to the program. Unlike the MPH@GW program, the online DrPH@GW and residential DrPH curricula and term lengths are identical. The DrPH@GW maintains the same work experience requirement, DAPEx, academic rigor and dissertation requirements as the residential DrPH.

b) the school's rationale for offering these programs

The original MPH@GW program (Public Health Generalist) was launched in 2013 because of a schoolwide strategic planning process. To remain competitive and ensure financial stability, distance education was considered an important and missing piece of our education portfolio. The online program also allowed GWSPH to extend our reach and thus, increase the diversity of our student population. The online student body is, on average, older and has more extensive work experience compared to the residential student body. The online program also welcomes geographically diverse students, both nationally and internationally. Last, the MPH@GW is the only generalist MPH program at GWSPH, allowing students to tailor their education to meet their career interests and goals.

Interest in our online MPH@GW program dramatically increased during the COVID-19 pandemic. Along with the increased interest in our MPH@GW program, a subset of our students also wanted the ability to specialize in certain areas of public health, much like the residential students. As a result, the Global Health, Health Informatics and Analytics, Climate and Health, and Women, Youth and Child Health concentrations were developed, with the most recent launching in 2023.

Given increasing overall trends and interest in DrPH education, GWSPH launched an online DrPH program in fall 2023. Aside from one required residential component, the remainder of the DrPH@GW program is fully online. The program expands GWSPH's online offerings and allows our MPH graduates, residential and online, an option to earn a DrPH (particularly important for graduates who enter the workforce and would like to earn a DrPH part-time). The fall 2023 launch of the DrPH@GW exceeded enrollment estimates by more than 50%. The program was open only to GWSPH graduates, and this limitation indicates the need for and interest in additional education. The program will be available to the general public for a fall 2024 start. While enrollment numbers for 2024 won't be finalized until summer 2024, applications starts and submissions on SOPHAS are again exceeding expectations.

c) the manner in which it provides necessary administrative, information technology and student support services,

Our partner, 2U, is a full-service organization offering admissions, LMS, marketing and recruitment services, course planning and production and technology, faculty and student support. These services are also discussed in Criteria C3, C4, C5, H1 and H4.

Administrative

The Assistant Dean for Academic Innovation is the lead for online program activities related to teaching and learning. In terms of business operations and administration, GWSPH also employs a Director of Operations for Academic Affairs. These two roles work in tandem to maintain the level of quality and connectivity with our outside vendor support and in close collaboration with the Senior Associate Dean for Academic, Student and Faculty Affairs, the Associate Dean for MPH Programs and the Associate Dean for Applied Public Health (as well as the MHA@GW Program Director).

Directly reporting to the Director of Operations for Academic Affairs is the Assistant Program Director for GWSPH Program Administration and a program associate, who are responsible for all aspects of course scheduling, faculty relations and administrative functions required to maintain a program of this size. The MPH@GW program is under the direction of the Associate Dean for MPH Programs. Each MPH@GW concentration is embedded within an academic department with a designated faculty member serving as concentration director. The DrPH@GW program is led by the Associate Dean for Applied Public Health and the Associate Director of Doctor of Public Health Program, who also oversee the residential DrPH. They are supported by the DrPH Program Manager.

Non-PIF faculty are provided a guide to help orient them as either a section leader or course director (see ERF > Criterion D > Criterion D19 > D19.2: PH Distance Ed).

Information Technology

2U has a dedicated staff who provide continuous training and technology support services for faculty and students. They are available via phone, email and live chat. Contact information and live chat are embedded in the 2GW LMS. Support is accessible 24/7, 365 days per year.

2U also provides expertise in online and digital pedagogy under the direction of the Assistant Dean for Academic Innovation. This includes providing one-on-one training and coaching as it relates to operating effective online synchronous sessions and related interactions with students.

The Assistant Dean for Academic Innovation works in conjunction with GW IT, LAI and GWSPH administration to identify and implement other novel educational technologies that can support teaching and learning across our residential and online programs. For example, in 2020, GWSPH adopted Panopto as the schoolwide tool for self-recording online lectures and other content for fully online, flipped classrooms and other online-enabled pedagogies.

Student Support Services

Online students attend an orientation that reviews information about campus resources available to online students, such as library resources and career and IT services. Online students complete an online *Program Guide* course in 2GW that provides additional guidance on program requirements and campus services available to online students. With the COVID-19 pandemic, many of the services offered across the university have become virtual, a change that benefits the online students.

Once students matriculate into an online program, they receive support from a student success specialist, provided by 2U, and an academic advisor from GWSPH. The role of the student success specialist is to provide answers to straightforward questions about documented policies and deadlines. The GWSPH academic advisors answer more complex questions, advise on plans of study and guide students on their APEx journeys.[87] Additional information about online academic advising is in Criterion H1.

Online students have the same access to GWSPH Career Services as residential students (see Criterion H2).

[87] Two MPH@GW faculty members serve as practicum directors and assist online students during their APEx.

d) the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the university and

The academic rigor of online courses and programs is monitored in the same way and at the same level as that of their residential counterparts. MPH@GW students take the same core courses as residential MPH students. These courses assess the MPH foundational knowledge and competencies (likewise for DrPH@GW and DrPH courses). Students in both online and residential graduate programs are held to the same standards regarding minimum credit requirements, applied practice experiences and culminating activities.

After implementing the new CEPH guidelines to the MPH core in 2019, the GWSPH Curriculum Committee engaged in a review of online and residential core courses to ensure quality and consistency across both modalities. Residential and online programs' core curricula were reviewed at the same time after 12 to 18 months of offering the new online core alongside several dimensions including student satisfaction, student achievement of course learning objectives, comparability of student outcomes across online and residential course modalities, and, specific to online programs, a review of how the new core curriculum performed using the MPH@GW team-teach approach.

The GWSPH Curriculum Committee membership is familiar with and, in many cases, teaches in our online program offerings and can provide valuable guidance and recommendations to faculty who are directing the online versions of our core courses. Based on GWSPH Curriculum Committee guidance and review of syllabi and curricula structure, our Assistant Dean for Academic Innovation and online learning vendor, 2U, can translate these plans into successful online course offerings.

Prior to developing a new online course or converting an existing residential course to online, the Assistant Dean for Academic Innovation and the Associate Dean for MPH Programs or the Associate Dean for Applied Public Health (for DrPH courses) identify interested instructors and meet with them to develop an initial strategy and approach for bringing that course online. For courses that are being converted to the online format, meetings between instructors and residential course leads or departments provide a scaffold for the structure of the online class.

The development of an online course occurs in two phases:

- In the Strategy Phase, instructors meet with the Assistant Dean for Academic Innovation and the 2U course strategy team. During these three to six meetings, the focus is on the alignment of course content and development of assignments with appropriate learning objectives and planning of interactive content. By the end of the Strategy Phase, a preliminary syllabus is ready for review.
- During the Course Production Phase, instructors work with a production-focused 2U staffer. It usually takes six to ten meetings to plan out the individual elements of the asynchronous content. In general, a weekly unit in one of our online courses contains six to twelve video segments (5–15 minutes each). Students also engage in several course pages each week, which provide directions for either independent work or interactive elements (e.g., discussion board).

Online courses and programs undergo the same review and approval process as residential courses and programs. All newly developed courses and programs are initially reviewed at the departmental level. The department's curriculum committee is

responsible for ensuring that courses meet degree standards and further the department's mission. Academic programs undergo the same review with a focus on accreditation and university requirements and ensuring that individual course offerings support the achievement of program-wide competencies. If the online course being reviewed already has a residential version, committee members carefully review both syllabi to ensure that competencies remain the same and assignments continue to assess those competencies.

Once approved at the department level, new courses and programs are sent to the GWSPH Curriculum Committee for review. Committee members evaluate syllabi and program proposals for academic rigor. For online courses with existing residential versions, the GWSPH Curriculum Committee receives official notification from the department curriculum committee that syllabi were thoroughly reviewed and deemed analogous. No review and approval by the GWSPH Curriculum Committee is required for these preexisting courses formatted for online instruction that clearly address the same learning objectives and competencies.

End-of-term course evaluations and exit surveys are carefully monitored to ensure that students' perceptions of skills and knowledge attained are equivalent in both residential and online programs.

Many full-time faculty teach both online and residential versions of the same course, and this further maintains rigor and quality across formats. Part-time faculty who teach in both the online and residential programs also have the same levels of public health experience and qualifications. These standards are ensured by the Assistant Dean for Faculty Affairs.

e) *the manner in which it evaluates the educational outcomes, as well as the format and methods.*

Educational outcomes for the online programs are evaluated at multiple levels and in the same manner as the residential programs at both the course and program levels. In both residential and online courses, instructors evaluate student performance on activities and assessments such as papers, exams, quizzes, discussion board posts, participation in live synchronous sessions, etc. The Associate Dean for MPH Programs and the Assistant Dean for Academic Innovation convene a quarterly Community of Course Directors meeting where course leads in the online program often share feedback on student performance and student learning outcomes. This program-level faculty meeting has proved to be an invaluable program-level resource, informing faculty development and program quality improvement activities. The program leadership also regularly convenes a program-wide MPH@GW Faculty Forum where all part-time and full-time faculty are invited to discuss program quality and student learning outcomes; this meeting also informs faculty development and program quality improvement activities.

MPH@GW students complete the same end-of-term course evaluations as residential students, albeit four times per academic year in line with the quarter calendar. Results of these course evaluations are reviewed on a quarterly basis by the Associate Dean for MPH Programs and the Assistant Dean for Academic Innovation. Where needed, outreach to faculty course directors on individual adjunct session performance is made, though this is a rare occurrence. A faculty recognition program is also guided by these course evaluation data (see Criterion E3). Larger trends in student satisfaction with particular courses are also monitored, and these data are used to guide efforts around course revisions and programmatic improvements overall.

Online students must meet the same academic program requirements as residential students including, but not limited to, GPA minimum, academic integrity training, individual course grade minimums, interprofessional education, continuing education CITI training, APEx/DAPEx and culminating experience/dissertation. Academic advisors monitor student progress and confirm that students have met the requirements for graduation. Advisors alert the program director if further action (e.g., academic probation, dismissal, etc.) is required.

Like residential programs, the online programs are included in the Academic Program Review process where programs/departments undergo periodic evaluation by both internal GW colleagues and an external review committee (see Criterion E3).

3) *Describe the processes that the university uses to verify that the student who registers in a distance education course (as part of a distance-based degree) or a fully distance-based degree is the same student who participates in and completes the course or degree and receives the academic credit.*

Upon matriculation, students are assigned a GWID, an alpha-numeric identifier required to access any GW system including 2GW. Student identity is verified when a student claims their GW identity. The university also employs two-step authentication, which requires students to not only know their GWID and password, but have access to a phone for authentication approval. Students are not able to log into any GW system, including 2GW, without this double authentication.

All students, online and residential, complete the GW Academic Integrity Activity within the first two weeks of their matriculation term. The code outlines the rights and responsibilities of students, such as academic behavior violations. After reading the code, students are required to earn at least an 80% on the final quiz and submit it to the GWSPH Office of Student Records.

In addition, approximately 50% of "seat time" is conducted synchronously via web camera. All students are required to turn on their camera, which allows faculty to visually confirm student identity and attendance.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- The MPH@GW is the largest MPH program at GWSPH. Enrollment further increased during the first year of the COVID-19 pandemic. MPH@GW continues to be an attractive option for a variety of learners interested in public health, particularly for students with families or busy work schedules. During Alum Interviews, the school's DC location was noted as being of importance to MPH@GW students. Even though the program is entirely online, students were still able to benefit from the school's location via such mechanisms as DC-based public health experts.
- The online teaching model employed by MPH@GW has been observed to be successful across a number of dimensions. Online courses are often led by a residential faculty member, who acts in the role of course director, overseeing a larger team of section instructors comprised of contingent and regular faculty with subject matter expertise in the course topics. In a handful of cases, we allowed contingent faculty with noted topical expertise and a history of successful teaching with GWSPH to act in the role of course director. The overall instructor rating for 2021–2022 was 4.6 (out of 5). Faculty report that online students are meeting program competencies at the same levels as their residential counterparts.

- In terms of faculty support and job role satisfaction, the online program model continues to demonstrate that instructors are driven by high levels of intrinsic motivation and organizational commitment. Our faculty report that this is due in part to the supportive team-teach approach led by a faculty course director and the planned infrastructure around our distance education programs. Internal research on faculty support and satisfaction has further confirmed these findings.
- Through our relationship with 2U, GWSPH is able to offer its online programs on an integrated education technology platform that consists of the Canvas LMS, Zoom meeting platform, chat, email and phone-based access to both faculty and student support specialists, and third-party teaching and grading support tools.
- The DrPH@GW program was launched in fall 2023 and exceeded all expectations for enrollment. This online program is organized slightly differently from the MPH@GW program in that the DrPH@GW students are required to meet on campus for a residential component (PUBH 8730 Washington, DC, Immersion). Additionally, the DrPH@GW operates in tandem with the residential DrPH program, so terms are 12 weeks in the fall and spring and 10 weeks in the summer (compared to four terms of 10 weeks each in the MPH@GW).

Challenges

- The size of the MPH@GW program results in logistical challenges. For example, creative solutions for IPE were needed to meet the needs of the online student body. Additional faculty were hired to ensure that all students received personalized support during their CE projects.

Future Plans

- The MPH@GW concentrations, Global Health, Health Informatics and Analytics, Climate and Health and Women, Youth and Child Health, are relatively new, and support will continue to grow with them. Additional concentrations may be offered.
- GWSPH is exploring ways to increase the volume and types of on-campus immersion experiences available to MPH@GW students. GWSPH has strong relationships with DC-area organizations, and we hope to leverage those connections for more meaningful on-campus experiences. One successful in-person immersion was held in 2022, and two more are planned for 2023–2024.

E1. Faculty Alignment with Degrees Offered

Faculty teach and supervise students in areas of knowledge with which they are thoroughly familiar and qualified by the totality of their education and experience.

Faculty education and experience is appropriate for the degree level (bachelor's, master's, doctoral) and the nature of the degree (research, professional practice, etc.) with which they are associated.

1) *Provide a table showing the school's primary instructional faculty in the format of Template E1-1. The template presents data effective at the beginning of the academic year in which the final self-study is submitted to CEPH and must be updated at the beginning of the site visit if any changes have occurred since final self-study submission. The identification of instructional areas must correspond to the data presented in Template C2-1.*

   Faculty's highest graduate degree level is listed under *Graduate Degrees Earned*.

Template E1-1

Primary Instructional Faculty Alignment with Degrees Offered						
Name	**Title/ Academic Rank**	**Tenure Status or Classification**	**Graduate Degrees Earned**	**Institution(s)**	**Degree discipline**	**Affiliated concentration**
Abroms, Lorien C.	Professor	Tenured	ScD	Harvard	Public Health	Public Health Communication and Marketing
Andrade, Elizabeth L.	Assistant Professor	Non-tenure track	DrPH	George Washington	Behavioral Health	Health Promotion
Anenberg, Susan	Associate Professor	Tenured	PhD	UNC	Environmental Science and Engineering	Global Environmental Health
Applebaum, Kate	Associate Professor	Tenured	ScD	Harvard	Epidemiology and Environmental Health	Environmental Health Science and Policy
Arsenault, Catherine	Assistant Professor	Tenure track	PhD	McGill	Epidemiology	Global Health Epidemiology and Disease Control
Asgary, Ramin	Associate Professor	Tenured	MD	Tehran University (Iran)	–	Humanitarian Health
Baird, Sarah J.	Assistant Professor	Tenured	PhD	UC Berkeley	Agriculture and Resource Economics	Global Health Program Design, Monitoring and Evaluation
Barberio, Matthew D.	Assistant Professor	Tenure track	PhD	Auburn	Exercise Physiology	Exercise Physiology and Applied Nutrition
Barron, Mary	Associate Professor	Non-tenure track	PhD	Michigan State	Kinesiology	Exercise Science
Beckerman, J. Zoe	Teaching Associate Professor	Non-tenure track	JD	George Washington	–	Public Health Generalist

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Bento, Ana	Assistant Professor	Tenure track	PhD	Imperial College London	Ecology and Evolution	Global Environmental Health
Berg, Carla	Professor	Tenured	PhD	University of Kansas	Health Psychology	Health Promotion
Bernat, Debra H.	Associate Professor	Tenured	PhD	University of Minnesota	Epidemiology	Epidemiology
Bingenheimer, Jeffrey (Bart)	Associate Professor	Tenured	PhD	University of Michigan	Health Behavior and Health Education	Health Promotion
Bonar, Robert (Bob)	Professor	Non-tenure track	DrHA	Medical University of South Carolina	Health Administration and Policy	MHA
Butera, Nicole	Assistant Research Professor	Non-tenure track	PhD	UNC	Biostatistics	Health Data Science, Biostatistics
Canales, Robert	Associate Professor	Non-tenure track	PhD	Stanford	Environmental Engineering and Science	Global Environmental Health
Cartwright-Smith, Lara	Associate Professor	Non-tenure track	JD	Georgetown	–	Health Policy
Castel, Amanda D.	Professor	Tenured	MD	University of Pennsylvania	–	Epidemiology
Chen, Candice	Associate Professor	Tenure track	MD	Baylor	–	Health Policy
Ciarleglio, Adam	Assistant Professor	Tenure track	PhD	Columbia	Biostatistics	Biostatistics
Cleary, Sean	Associate Professor	Tenured	PhD	Columbia	Psychiatric Epidemiology	Epidemiology
Collins, Karen K.	Teaching Assistant Professor	Non-tenure track	PhD	St. Louis	Social Psychology	Public Health Generalist

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Colon-Ramos, Uriyoan	Associate Professor	Tenured	ScD	Harvard	Public Health Nutrition	Global Health Program Design, Monitoring and Evaluation
Conserve, Donaldson F.	Associate Professor	Tenured	PhD	Penn State	Biobehavioral Health	Community-Oriented Primary Care
Crandall, Keith	Professor	Tenured	PhD	Washington University	Population and Evolutionary Biology	Health Data Science, Bioinformatics
Dangerfield, Derek	Associate Professor	Tenure track	PhD	USC	Health Behavior Research	Community-Oriented Primary Care
Diao, Guoqing	Professor	Tenured	PhD	UNC Chapel Hill	Biostatistics	Health Data Science, Biostatistics
DiPietro, Loretta	Professor	Tenured	PhD	Yale	Epidemiology	Physical Activity in Public Health
Dor, Avi	Professor	Tenured	PhD	CUNY	Economics	Health Policy
Edberg, Mark	Professor	Tenured	PhD	UVA	Cultural Anthropology	Health Promotion
Ellis, Wendy Renee	Assistant Professor	Tenure track	DrPH	George Washington	Health Policy	Global Health Policy
Elmi, Angelo	Associate Professor	Non-tenure track	PhD	University of Pennsylvania	Biostatistics	Health Data Science, Biostatistics
Evans, Scott Richard	Professor	Tenured	PhD	University of Massachusetts	Biostatistics	Health Data Science, Bioinformatics
Evans, William Douglas	Professor	Tenured	PhD	Johns Hopkins	Cognitive Science	Public Health Communication and Marketing

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Farooq, Fouzia	Assistant Research Professor	Non-tenure track	PhD	University of Pittsburgh	Epidemiology	Global Health Epidemiology and Disease Control
Fong, Kelvin (starts January 2024)	Assistant Professor	Tenure Track	ScD	Harvard	Environmental Epidemiology	Global Environmental Health
Freed, Salama	Assistant Professor	Tenure track	PhD	Vanderbilt	Economics	Health Policy
Frehywot, Seble	Teaching Professor	Non-tenure track	MD	Lady Hardinge Medical College (India)	Public Health, Infectious Disease	Global Health Policy
Friedman, Leonard Howard	Professor	Tenured	PhD	University of Southern California	Public Administration	MHA@GW
Garvey Wilson, Abigail	Teaching Assistant Professor	Non-tenure track	PhD	George Washington	Epidemiology	Epidemiology
Ghosh, Mimi	Associate Professor	Tenured	PhD	University of Pittsburgh	Infectious Diseases and Microbiology	Public Health Microbiology and Emerging Infectious Diseases
Goldstein, Melissa	Associate Teaching Professor	Non-tenure track	JD	Yale	–	Health Policy
Gray, Elizabeth	Teaching Assistant Professor	Non-tenure track	JD	George Washington	–	Public Health
Gray, George	Professor	Non-tenure track	PhD	University of Rochester	Toxicology	Public Health Generalist
Greenberg, Alan	Professor	Tenured	MD	George Washington	–	Epidemiology

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Hamasaki, Toshimitsu	Professor	Tenured	PhD	Osaka	Engineering	Health Data Science, Biostatistics
Headrick, Gabrielle	Assistant Professor	Non-tenure track	PhD	Johns Hopkins	Human Nutrition	Nutrition Sciences
Helmchen, Lorens	Associate Professor	Tenured	PhD	University of Chicago	Economics	MPH@GW, Health Informatics and Analytics
Heminger, Christina	Teaching Associate Professor	Non-tenure track	DrPH	George Washington	Health Behavior	Public Health Generalist
Henry, Tamara	Associate Professor	Non-tenure track	EdD	Columbia	Health Education and Behavior	Health Promotion
Hoffman, Heather J.	Professor	Non-tenure track	PhD	VCU	Biostatistics	Biostatistics
Huang, Cheng	Associate Professor	Tenured	PhD	University of Pennsylvania	Demography	Global Health Policy
Huebner, David	Professor	Tenured	PhD	Arizona State	Clinical Psychology	Health Promotion
Hyder, Adnan Ali	Professor	Tenured	MD, PhD	Aga Khan University (Pakistan), Johns Hopkins University	Public Health	Global Public Health Sciences
Jacobs, Feygele	Professor	Non-tenure track	DrPH	University of Illinois	Public Health	MHA
Jordan, Jeanne A.	Professor	Tenured	PhD	University of Pittsburgh	Microbiology	Public Health Microbiology and Emerging Infectious Diseases
Kerrigan, Deanna Louise	Professor	Tenured	PhD	Johns Hopkins	International Health	Community-Oriented Primary Care

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Klopper, Juan H.	Associate Professor	Non-tenure track	MMed	University of the Free State	Surgery	Biostatistics
Ku, Leighton	Professor	Tenured	PhD	BU	Health Policy	Health Policy
Kuiper, Jordan	Assistant Professor	Tenure track	PhD	Johns Hopkins	Environmental Health and Engineering	Environmental Health Science and Policy
Kumar, Nirbhay	Professor	Tenured	PhD	All India Institute of Medical Sciences	Biochemistry	Global Public Health Sciences
Kuo, Irene	Associate Research Professor	Non-tenure track	PhD	Johns Hopkins	Epidemiology	Public Health Microbiology and Emerging Infectious Diseases
LaPuma, Peter	Professor	Non-tenure track	PhD	University of Florida	Environmental Engineering Sciences	Environmental Health Science and Policy
Levers, Kyle	Assistant Professor	Non-tenure track	PhD	Texas A&M	Exercise Physiology	Exercise Science
Liu, Cindy	Associate Professor	Tenured	MD, PhD	NYU, Northern Arizona University	Biology	Environmental Health Science and Policy
Long, Michael William	Assistant Professor	Tenure track	ScD	Harvard	Social and Behavioral Sciences	Health Promotion
Lora, Karina	Assistant Professor	Non-tenure track	PhD	University of Nebraska	Nutrition	Public Health Nutrition
MacTaggart, Patricia	Teaching Instructor	Non-tenure track	MBA	Metropolitan State	Business Administration	MPH@GW, Health Informatics and Analytics
Magnus, Manya	Professor	Tenured	PhD	Tulane	Epidemiology	Epidemiology

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Markus, Anne R.	Professor	Tenured	JD, PhD	University of Lausanne (Switzerland); George Washington University	Public Policy	Health Policy
Masselink, Leah	Assistant Professor	Tenure track	PhD	UNC Chapel Hill	Sociology	MHA
McCarthy, Melissa	Professor	Tenured	ScD	Johns Hopkins	Health Services Research	Health Policy
Michaels, David	Professor	Tenured	PhD	Columbia	Sociomedical Sciences	Environmental Health
Migliaccio, Gene	Professor	Non-tenure track	DrPH	Tulane	Health Systems Management, International Health	Public Health Generalist
Miller, Todd	Associate Professor	Non-tenure track	PhD	Texas A&M	Exercise Physiology	Strength and Conditioning
Moghtaderi, Ali	Assistant Professor	Tenure track	PhD	University of Wisconsin-Milwaukee	Economics	Health Policy
Monroe, Anne K.	Associate Professor	Non-tenure	MD	SUNY Stone Brook	–	Epidemiology
Mores, Christopher N.	Professor	Tenured	ScD	Harvard	Epidemiology of Infectious Disease	Global Health Epidemiology and Disease Control
Munar, Wolfgang	Associate Professor	Tenure track	MD	Universidad del Norte (Colombia)	–	Global Public Health Sciences
Musumeci, MaryBeth	Associate Teaching Professor	Non-tenure track	JD	Harvard	–	Health Policy

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Nagaraj, Nitasha	Assistant Teaching Professor	Non-tenure track	DrPH	George Washington	Maternal and Child Health	MPH@GW, Women, Youth and Child Health
Napolitano, Melissa	Professor	Tenured	PhD	Duke	Clinical Psychology	Maternal and Child Health
Ndiaye, Khadidiatou	Assistant Professor	Non-tenure track	PhD	Pennsylvania State	Communication	Public Health Communication and Marketing
Pan, Qing	Professor	Tenured	PhD	University of Michigan	Biostatistics	Health Data Science
Perez-Losada, Marcos	Associate Professor	Tenured	PhD	University of Vigo (Spain)	Biology	Health Data Science, Bioinformatics
Phoenix, Janet	Assistant Research Professor	Non-tenure track	MD	Howard	–	Health Policy
Pittman, Patricia	Professor	Tenured	PhD	University of Buenos Aires	Medical Anthropology	MPH@GW, Health Informatics and Analytics
Power, Melinda	Associate Professor	Tenured	ScD	Harvard	Public Health	Epidemiology
Price, Lance Bradley	Professor	Tenured	PhD	Johns Hopkins	Environmental Health Sciences	Environmental Health Science and Policy
Price, Olga Acosta	Associate Professor	Non-tenure track	PhD	SUNY Buffalo	Clinical Psychology	Health Promotion
Quinlan, Scott Charles	Associate Teaching Professor	Non-tenure	PhD	George Washington	Epidemiology	Epidemiology
Rahnavard, Gholamali (Ali)	Assistant Professor	Tenure track	PhD	New Mexico State	Computer Science	Health Data Science
Regenstein, Marsha	Professor	Non-tenure track	PhD	George Washington	Health Policy	Public Health Generalist

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Richards, Adam Kimball	Associate Professor	Tenure track	MD, PhD	Johns Hopkins, UCLA	Public Health	Humanitarian Health
Riegelman, Richard	Professor	Tenured	MD, PhD	University of Wisconsin Madison, Johns Hopkins	Internal Medicine, Epidemiology	Epidemiology
Robien, Kim	Associate Professor	Tenured	PhD	University of Washington	Nutrition Science	Public Health Nutrition
Roche, Kathleen	Professor	Tenured	PhD	Johns Hopkins	Maternal and Child Health	Health Promotion
Ruiz, Monica	Associate Professor	Non-tenure track	PhD	University of Southern California	Preventative Medicine	Maternal and Child Health
Sacheck, Jennifer	Professor	Tenured	PhD	Tufts	Nutrition Science	Exercise Physiology and Applied Nutrition
Sandberg, John F.	Associate Professor	Tenured	PhD	University of Michigan	Population Studies	Global Health Program Design, Monitoring and Evaluation
Santos-Burgoa, Carlos	Professor	Tenured	MD, PhD	National Autonomous University of Mexico, Johns Hopkins	Epidemiology	Global Health Policy
Seager, Jennifer	Assistant Professor	Tenure track	PhD	UC Irvine	Economics	Global Health Program Design, Monitoring and Evaluation
Seiler, Naomi Kate	Associate Professor	Non-tenure track	JD	Yale	–	Health Policy
Shin, Peter	Associate Professor	Tenured	PhD	George Washington	Public Policy	Public Health Generalist

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Smith, Emily	Assistant Professor	Tenured	ScD	Harvard	Global Health and Population	Global Health Epidemiology and Disease Control
Sylvetsky, Allison Cara	Associate Professor	Tenured	PhD	Emory	Nutrition and Health Sciences	Public Health Nutrition
Taggart, Tamara	Assistant Professor	Tenure track	PhD	UNC	Health Behavior	Community-Oriented Primary Care
Talegawkar, Sameera	Associate Professor	Tenured	PhD	Tufts	Nutritional Epidemiology	Exercise Physiology and Applied Nutrition
Teitelbaum, Joel	Professor	Tenured	JD	Marquette University	–	Health Policy
Thorpe, Jane Hyatt	Professor	Non-tenure	JD	Vanderbilt	–	Health Policy
Tielsch, James	Professor	Tenured	PhD	Johns Hopkins	Epidemiology	MPH@GW, Global Health
Ulfers, Margaret	Associate Professor	Non-tenure track	PhD	George Washington	Epidemiology	Public Health
van Dam, Rob	Professor	Tenured	PhD	Vrije Universiteit Amsterdam	Lifestyle and Molecular Epidemiology	Public Health Nutrition
Verme, Dante A.	Professor	Non-tenure track	PhD	George Washington	Mathematical Statistics	Epidemiology
Vichare, Anushree	Assistant Professor	Non-tenure track	PhD	Virginia Commonwealth	Health care Policy and Research	Health Policy
Visek, Amanda	Associate Professor	Tenured	PhD	WVU	Sport and Exercise Psychology	Exercise Science

Name	Title/ Academic Rank	Tenure Status or Classification	Graduate Degrees Earned	Institution(s)	Degree discipline	Affiliated concentration
Volarich, Joy	Teaching Instructor	Non-tenure track	MHA, MBA	University of Pittsburgh	Health Administration	MHA
Vyas, Amita N.	Professor	Tenured	PhD	Johns Hopkins	Population and Family Health Sciences	Maternal and Child Health
Wang, Yan	Associate Professor	Tenure track	DrPH	Morgan State	Public Health and Policy	Social & Behavioral Sciences in Public Health
Westerman, Beverly Jean	Professor	Non-tenure track	EdD	George Washington	Higher Education	Exercise Science
Wilensky, Sara	Teaching Associate Professor	Non-tenure track	JD, PhD	UPENN; George Washington	Health Policy	Public Health
Young, Heather	Professor	Non-tenure track	PhD	George Washington	Epidemiology	Epidemiology

2) *Provide summary data on the qualifications of any other faculty with significant involvement in the school's public health instruction in the format of Template E1-2. Schools define "significant" in their own contexts but, at a minimum, include any individuals who regularly provide instruction or supervision for required courses and other experiences listed in the criterion on Curriculum. Reporting on individuals who supervise individual students' practice experience (preceptors, etc.) is not required. The identification of instructional areas must correspond to the data presented in Template C2-1.*

GWSPH requested CVs from non-PIFs teaching in fall 2023, all regular part-time faculty and all full-time GWSPH faculty whose primary role is not teaching (e.g., research professors). This resulted in a collated sampling of non-PIFs CVs, detailed in the below table. Faculty's highest graduate degree level is listed under *Graduate Degrees Earned*.

Template E1-2

Non-Primary Instructional Faculty Regularly Involved in Instruction							
Name*	**Academic Rank**	**Title and Current Employment**	**FTE**	**Graduate Degrees Earned**	**Institution(s)**	**Degree Discipline**	**Affiliated Concentration**
Ahmadi-Montecalvo, Halima	Adjunct Professor	Associate Vice President of Research and Evaluation, UNITE US, INC.	0.15	PhD	West Virginia University	Social and Behavioral Sciences	BS, Public Health
Andrus, Jon Kim	Professor	Retired	0.50	MD	UC Davis	–	Global Health Epidemiology and Disease Control
Bebu, Ionut	Associate Research Professor	Center for Biostatistics, GWU	1.00	PhD	UMD Baltimore	Statistics	Health Data Science, Biostatistics
Black, Jessica Donze	Professorial Lecturer	National Vice President of Community Health, The American Heart Association	0.15	MPH	University of Maryland College Park	Generalist	Exercise Science
Braffett, Barbara H.	Associate Research Professor	Department of Epidemiology and Center for Biostatistics, GWU	1.00	PhD	George Washington	Epidemiology	Epidemiology
Butera, Nicole	Assistant Research Professor	Center for Biostatistics, GWU	1.00	PhD	UNC	Biostatistics	Health Data Science, Biostatistics
Byrnes, Maureen	Teaching Instructor	Lead Research Scientist, GWU	1.00	MPA	UNC Chapel Hill	Public Administration	MHA
Chen, Kuan-Lung Daniel	Assistant Research Professor	Associate Director, Center for Community Resilience, GWU	1.00	DrPH	George Washington	Health Policy	Global Public Health Sciences

Name*	Academic Rank	Title and Current Employment	FTE	Graduate Degrees Earned	Institution(s)	Degree Discipline	Affiliated Concentration
del Río-González, Ana Maria	Associate Research Professor	Department of Psychological and Brain Sciences, GWU	1.00	PhD	George Washington	Applied Social Psychology	Community-Oriented Primary Care
Dietz, William	Professor	Director, Sumner M. Redstone Global Center for Prevention and Wellness, GWU	1.00	MD, PhD	University of Pennsylvania, MIT	Nutritional Biochemistry	Health Promotion
Duncan, Christopher	Professorial Lecturer	Assistant Athletic Trainer, George Washington University	0.20	DAT	A. T. Still	Athletic Training	Exercise Science
Ferdosi, Hamid	Professorial Lecturer	Statistician-Epidemiologist, SAMHSA	0.25	MD	Ross	–	Epidemiology
Firth, Jacqueline	Lecturer	Branch Chief, Pediatric and Maternal Clinical HIV Branch, USAID	0.05	MD	Tulane	–	Epidemiology
Gamble-Payne, Kimberly	Professorial Lecturer	Retired	0.50	MA	Stanford University	Comparative Literature	Global Health Policy
Ghosh, Alokananda	Assistant Research Professor	Center for Biostatistics, GWU	1.00	MD, PhD	Baylor, UT Houston	Biostatistics	Biostatistics
Goldberg, Daniel	Assistant Research Professor	Department of Environmental and Occupational Health, GWU	1.00	PhD	University of Maryland	Atmospheric and Oceanic Science	Public Health
Goldman, Lynn R.	Professor	Dean, GWSPH, GWU	1.00	MD	University of California San Francisco	–	Environmental Health

Name*	Academic Rank	Title and Current Employment	FTE	Graduate Degrees Earned	Institution(s)	Degree Discipline	Affiliated Concentration
Groves, Dashawn	Professorial Lecturer	Acting Director of Health Care Reform and Innovation Administration, DC Department of Health Care Finance	0.20	DrPH	George Washington	Health Policy	Health Policy
Guay, Laura	Research Professor	Department of Epidemiology, GWU	1.00	MD	George Washington	–	Epidemiology
Hansch, Steven	Lecturer	International Business and Technical Consultants, Inc (IBTCI)	0.10	MPH	Boston University	Epidemiology	Humanitarian Health
Heinrich, Janet	Research Professor	Department of Health Policy and Management, GWU	1.00	DrPH	Yale	Public Health and Administration	MHA
Heslin, Kevin	Lecturer	Health Scientist, CDC	0.25	PhD	UCLA	Health Policy and Management	Epidemiology
Hinzey, Angela	Adjunct Professor	Public-Private Partnership Portfolio Principal, MITRE Corporate	1.00	EdD	George Washington	Human and Organizational Learning	Public Health Generalist
Horton, Katie B.	Research Professor	Department of Health Policy and Management, GWU	1.00	JD	William and Mary	–	Health Policy
Janjigian, Kiersten	Lecturer	Certified Mental Performance Consultant	0.15	MS	University of Maryland College Park	Kinesiology	Exercise Science
Lachin, John	Research Professor	Center for Biostatistics, GWU	0.80	DSc	University of Pittsburgh	Biostatistics	Health Data Science, Biostatistics

Name*	Academic Rank	Title and Current Employment	FTE	Graduate Degrees Earned	Institution(s)	Degree Discipline	Affiliated Concentration
Lewin-Zwerdling, Alexandra	Lecturer	Owner, Fruitful, LLC	0.08	PhD	Cornell	Nutrition	BS in Public Health
Lillie-Blanton, Marsha	Adjunct Professor	Retired	0.50	DrPH	Johns Hopkins	Health Policy and Management	Public Health Generalist
Maclin, Beth	Professorial Lecturer	Postdoctoral Scholar, University of Pittsburgh,	0.15	PhD	George Washington	Social and Behavioral Sciences	Public Health Generalist
MacPherson, Cora	Assistant Research Professor	Department of Biostatistics, GWU	0.80	PhD	George Washington	Epidemiology	Epidemiology
Nicholson, Wanda	Professor	Senior Associate Dean for Diversity, Equity and Inclusion, GWSPH, GWU	1.00	MD	UNC	–	Community-Oriented Primary Care
Niles, Simeon L.	Lecturer	Vice President for Health Care Innovation, Morgan Health, JPMorgan Chase & Co.	0.15	JD	Emory University	–	Health Policy
Ogden, Cynthia	Adjunct Professor	HANES Analysis Branch Chief, CDC	0.25	PhD	Cornell	City and Regional Planning	Epidemiology
Oluwayemisi, Bolatito	Professorial Lecturer	Results Measurement Specialist, World Bank Group	0.10	DrPH	George Washington	Health Behavior	MPH@GW, Women, Youth and Child Health
Paichadze, Nino	Assistant Research Professor	Department of Global Health, GWU	1.00	MD	Tbilisi State University (Georgia)	–	Global Health Epidemiology and Disease Control

Name*	Academic Rank	Title and Current Employment	FTE	Graduate Degrees Earned	Institution(s)	Degree Discipline	Affiliated Concentration
Peca, Emily	Lecturer	Technical Director for Program Development and Implementation, University Research Co, LLC	0.30	DrPH	George Washington	Global Health	MPH@GW, Global Health
Phelps, Benjamin R.	Lecturer	Acting Director, US Department of State	0.05	MD	Duke	–	Public Health Microbiology and Emerging Infectious Diseases
Pullen Fedinick, Kristi	Associate Research Professor	Department of Environmental and Occupational Health, GWU	1.00	PhD	UC-Berkeley	Molecular and Cell Biology	Environmental Health Science and Policy
Rendina, H. Jonathon	Associate Research Professor	Department of Epidemiology, GWU	1.00	PhD	CUNY	Basic and Applied Social Psychology	Epidemiology
Rice, Madeline Murguia	Associate Research Professor	Associate Research Professor, Biostatistics Center	0.60	PhD	University of Washington	Epidemiology	Epidemiology
Sachdev, Nisha	Lecturer	President, Premnas Partners	0.85	PsyD	George Washington	Child and Adolescent Clinical Psychology	Public Health Generalist
Sandoval, Grecio	Assistant Research Professor	Center for Biostatistics, GWU	1.00	PhD	George Washington	Biostatistics	Health Data Science, Bioinformatics
Shine, James	Professional Lecturer	Retired	0.30	PhD	George Mason	Computational Statistics	Public Health Generalist
Southerland, Veronica	Practicum Advisor	Department of Environmental and Occupational Health, GWU	0.10	PhD	George Washington	Environmental Health	Global Environmental Health

Name*	Academic Rank	Title and Current Employment	FTE	Graduate Degrees Earned	Institution(s)	Degree Discipline	Affiliated Concentration
Stapp, Emma K.	Assistant Research Professor	Department of Epidemiology, GWU	1.00	PhD	Johns Hopkins	Psychiatric Epidemiology	Public Health Microbiology and Emerging Infectious Diseases
Strasser, Julia	Assistant Research Professor	Director of the Jacobs Institute of Women's Health, GWU	1.00	DrPH	George Washington	Health Policy	Health Policy

3) *Include CVs for all individuals listed in the templates above.*

See ERF > Criteria E > Criterion E1 > E1.3: Faculty_CVs.

4) *If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates.*

Primary instructional faculty at GWSPH include both tenured, tenure track and non-tenure track faculty. Faculty are categorized as regular, specialized (research or teaching) and visiting, with the latter two being non-tenure track. All PIF listed in E1-1 are 1.0 FTE with GWSPH. Except for research faculty, all other GWSPH 1.0 FTE faculty have a regular responsibility to teach. While research faculty do not have a requirement to teach, all of them regularly do teach. On average, research faculty teach 1.83 classes per academic year (12 faculty taught 22 classes in 2022–2023).

Non-primary instructional faculty listed in E1-2 include faculty who are 1.0 FTE with GWSPH but do not have a primary instructional role, faculty who are 1.0 FTE with the university but shared between GWSPH and another school, faculty who are less than 1.0 FTE with the university and/or GWSPH, and part-time faculty who are hired to teach one or more classes in fall 2023. Part-time faculty are ranked based on their terminal degree (or lack thereof) and the length of time the faculty member is expected to teach at GWSPH. The MPH@GW program has the greatest number of part-time faculty, particularly important for the live synchronous discussion sessions.

FTE	Track	Ranks	Titles
Full-Time	Tenure	Regular	Professor Associate professor Assistant professor Instructor
	Non-tenure	Regular Specialized—Teaching Specialized—Research	Professor Associate professor Assistant professor Instructor
Part-Time	Non-tenure		Lecturer Professorial lecturer Adjunct professor Adjunct instructor

Over the past few years, the number of full- and part-time faculty has grown, commensurate with the growth in research and educational offerings. The number of tenured faculty has steadily grown over the last several years, despite the COVID-19 pandemic. In 2020, the Department of Epidemiology and Biostatistics was split into two separate departments, so the number of primary faculty in each department increased in the intervening years.

	2019	2020	2021	2022	2023
Number of tenured faculty	51	54	61	61	63

All programs at GWSPH have full-time and part-time faculty with considerable expertise on those topics. Being in the nation's capital, GWSPH can recruit faculty with significant public health leadership experience from both the public and private sector.

5) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH is proud to have a full-time and part-time faculty body with extensive experience in public-sector (federal, state and local) and private-sector practice as well as academia and research. Many of our faculty have worked in and across sectors throughout their careers.
- GWSPH is fortunate to have a remarkable core of adjunct faculty who engage in teaching and mentoring and share their professional experience in real time with students inside and outside of the classroom.

Challenges

- Some of our most senior and experienced faculty are retiring or nearing retirement. We are focusing on recruiting early career professionals who can be mentored by the more experienced faculty.
- Navigating transitions for faculty who move from the tenure track to a different classification that better reflects their work and professional goals can be a challenge.
- Our faculty are highly visible and sought after by other schools and programs as well as other organizations. We cannot always offer competitive retention packages.

Future Plans

- We will continue to recruit, hire and retain a remarkable faculty in terms of experience and interests, who are aligned with the mission and strategic goals of the school.

E2. Integration of Faculty with Practice Experience

To assure a broad public health perspective, the school employs faculty who have professional experience in settings outside of academia and have demonstrated competence in public health practice. Schools encourage faculty to maintain ongoing practice links with public health agencies, especially at state and local levels.

To assure the relevance of curricula and individual learning experiences to current and future practice needs and opportunities, schools regularly involve public health practitioners and other individuals involved in public health work through arrangements that may include adjunct and part-time faculty appointments, guest lectures, involvement in committee work, mentoring students, etc.

1) *Describe the manner in which the public health faculty complement integrates perspectives from the field of practice, other than faculty members' participation in extramural service, as discussed in Criterion E5. The unit may identify full-time faculty with prior employment experience in practice settings outside of academia and/or units may describe employment of part-time practice-based faculty, use of guest lecturers from the practice community, etc.*

   Faculty Experience

   Given the university's prime location in Washington, DC, GWSPH has access to numerous public and private sector experts who serve as panelists for forums and symposia, guest lecturers for numerous courses and even as faculty for group discussions or course leads. These practitioners provide a multitude of learning opportunities for students, both formal and informal. Recent guest lecture highlights include Dr. Anthony Fauci, who led the 14th Annual Southby Distinguished Lectureship in Comparative Health Policy during National Public Health Week 2023, and Vice President Kamala Harris and other Cabinet Members, who visited on Martin Luther King Jr. Day 2023. In May 2023, PBS aired a documentary called *Invisible Corps*. The documentary is on the US Public Health Service (USPHS) and featured not only GWSPH but also DrPH students, who interviewed Dr. Jerome Adams, the former Surgeon General and vice admiral of the USPHS (see ERF > Criterion E > Criterion E2 > E2.1: Faculty PH Practice).

   Additionally, many GWSPH PIF have current or past public health practice experience that they incorporate into their instruction. Current experiences range from temporary placements through the Intergovernmental Personnel Act (IPA) Mobility Program, consultancy work, collaborations with field practitioners and service opportunities. Several faculty members bring years of expertise from prior careers. These perspectives are integrated into the educational experiences of our students. Students repeatedly list faculty subject-matter expertise as a strength of their program.

PIF Practice Experience
AcademyHealth
American Psychological Association
amfAR, The Foundation for AIDS Research
Booz Allen Hamilton
Bureau of Health Workforce at HRSA
California Department of Public Health
Health Policy Research and Development (affiliated with Powell Goldstein LLP)
Massachusetts Department of Public Health
Metal Workers Union of Quilmes, Argentina
National Academy of Sciences
National Bureau of Economic Research (NBER)
New York City Department of Mental Health

New York State Department of Health Office of the National Coordinator for Health Information Technology (ONC) Peace Corps Qatar Foundation The National Association of Community Health Centers The World Bank U.S. Department of Justice U.S. Government Accountability Office (GAO) United Nations Programme on AIDS (UNAIDS) United Nations World Food Programme US Centers for Medicare and Medicaid Services (CMS) US Central Intelligence Agency US Department of Energy US Department of Homeland Security US Department of Labor US Environmental Protection Agency (EPA) US Food and Drug Administration (FDA) US Occupational Safety and Health Administration (OSHA) US Public Health Service US Senate Veterans Health Administration Wisconsin Supreme Court World Health Organization
Non-PIF Practice Experience
3M Adventist Health care Alaska Department of Health and Social Services Centers for Disease Control and Prevention (CDC) Elizabeth Glaser Pediatric AIDS Foundation Hogan Lovells Law Firm Metrics for Management MITRE National Center for Health Statistics National Institutes of Health (NIH) National Hispanic Council on Aging Pan American Health Organization Sabin Vaccine Institute UNICEF United Nations World Food Programme University Research Co., LLC USAID

Example No. 1: Robert Bonar, Jr., DrHA, has 40 years of experience in health care management and leadership. Prior to joining GWSPH as the program director of the MHA degree program, Dr. Bonar served as Chief Executive Officer for several health care systems across the United States. He led Children's Hospitals and Clinics of Minnesota in Minneapolis/Saint Paul from 2014 to 2017, Seton Family of Hospitals and Dell Children's Medical Center in Austin, Texas, from 2003 to 2014 and Children's Hospital of The King's Daughters in Norfolk, Virginia, from 1994 to 2002. Dr. Bonar brings his rich background of clinical service, middle management and senior leadership with direct board of governance exposure experience to the students in the MHA program.

Example No. 2: Melissa M Goldstein, JD, is Teaching Associate Professor at GWSPH. Over the last several years, she has participated in two IPA Mobility Programs. Under the Obama administration, Professor Goldstein served in the Office of Science and Technology Policy at the White House, where she focused on the President's Precision Medicine Initiative, federal regulations governing research with human subjects (the Common Rule), the Biotechnology Coordinated Framework and other issues at the intersection of law, science and ethics. In 2010, Professor Goldstein served another IPA as Senior Advisor to the Chief Privacy Officers at the Office of the National Coordinator for Health Information Technology, HHS.

Example No. 3: David Michaels, PhD, MPH, is an epidemiologist and, since 2017, a full-time professor at GWSPH in the Department of Epidemiology. He held leadership positions at the Occupational Safety and Health Administration (OSHA) since 1998 and first became a GWSPH faculty member in 2001. Dr. Michaels was nominated by President Barack Obama and confirmed by the Senate in 2009 for the position of Assistant Secretary of Labor for OSHA and became the longest-serving administrator in OSHA's history. Dr. Michaels brings his considerable expertise to the classroom, focusing on the relationship between safety and health management systems, operational excellence and sustainability. During the COVID-19 pandemic, Dr. Michaels sought to improve the protection of workers exposed to the virus by serving on two expert panels at the National Academy of Sciences, Engineering and Medicine.

Example No. 4: MaryBeth Musumeci, JD, joined GWSPH full-time as Teaching Associate Professor of Health Policy and Management in 2022. Previously, Professor Musumeci worked for over a decade at the Kaiser Family Foundation, first as a Senior Policy Analyst and then as Associate Director in the Program on Medicaid and the Uninsured. She was responsible for providing the Foundation with legal and policy analyses related to Medicaid eligibility, benefits and delivery system reforms affecting seniors, people with disabilities and those dually eligible for Medicare and Medicaid. Professor Musumeci also spent eight years as a civil legal aid lawyer, most recently at the Community Legal Aid Society, Inc. in Wilmington, Delaware, where she focused on Medicaid, Supplemental Security Income, other public benefits programs and civil rights and accessibility issues.

Example No. 5: Paul Ndebele, PhD, MS, is Senior Research Regulatory Specialist in the GWSPH Office of Research Excellence and Professorial Lecturer in the Department of Global Health. Prior to joining GW, Dr. Ndebele served for five years (2013–2018) as Director at the Medical Research Council Zimbabwe (MRCZ). He has worked as a bioethicist across the globe, including at the US National Institutes of Health, University of Botswana, University of Malawi and Michigan State University.

Curriculum

GWSPH programs focus on developing practice-based skills, as evidenced by program competencies, course learning objectives and nonacademic requirements. For example, students in the MPH in Physical Activity in Public Health degree program perform physical activity assessments using state-of-the-art technology, available in the basement of our 950 New Hampshire building. All GWSPH students are required to complete a minimum of eight hours of professional enhancement activities which supplement the academic curriculum and prepare students to actively participate in the professional community. Oftentimes, these activities are public health-related lectures, seminars, or symposia featuring field experts. Last, recognizing the importance of engaging with thought leaders and health care decision-makers, MHA students participate in a fellowship or residency, where they work for a health care organization.

Agreements and Sponsored Projects

GWSPH faculty engage in several collaborative agreements and sponsored projects with public health practitioners. Aside from IPA placements, as discussed above, GWSPH has had formal

agreements with both national and international organizations. Examples of such sponsored projects include the following:

- Manya Magnus, PhD, MPH, worked on the District of Columbia Clinical Trials Unit (DC CTU) in the Department of Epidemiology, which houses the GW HIV Prevention Trials Network Clinical Research Site (GW HPTN CRS) and the Whitman-Walker AIDS Clinical Trials Group Clinical Research Site (WW ACTG CRS). The DC CTU is one of 35 NIH-funded CTUs globally studying novel approaches to preventing, treating and curing HIV. In 2020, with the emergence of COVID-19, the DC CTU responded by partnering with faculty from the GW School of Medicine and Health Sciences and the GW HPTN CRS to implement COVID-19 vaccine trials for the Moderna mRNA vaccine. Becoming a site of the newly founded COVPN (COVID Vaccine Prevention Network) within the DC CTU, GW recruited 350 people into the Moderna trial, with among the most diverse participants of all the sites. Meanwhile, the WW ACTG CRS became a site of the newly founded ACTIV (Accelerating COVID-19 Therapeutic Interventions and Vaccines) Network, testing novel COVID-19 treatments. The DC CTU is an excellent example of the partnership between epidemiologists, clinicians, lab scientists and the community in tackling some of the most significant public health challenges of our era.
- Marsha Regenstein, PhD, worked on a sponsored project with the Missouri Foundation for Health regarding an evaluation of the state public health system's capacity to respond to COVID-19. Dr. Regenstein used a case-study approach to document the experiences of professional stakeholders involved in the response and residents' personal experiences from three geographically diverse regions of Missouri (see ERF > Criterion E > Criterion E.2 > E2.1: Faculty PH Practice).
- Jane Hyatt Thorpe, JD, worked on several sponsored projects that focused on the exchange of protected health information. In 2019, Professor Thorpe received funding from Bloomberg Philanthropies for the Pennsylvania Department of Drug and Alcohol Programs and Vital Strategies to assess potential options to improve the ability of stakeholders to share patient health information for care coordination, public health preparedness and prevention and related purposes. In 2021–2023, Professor Thorpe received funding from the CDC to research and assess legal and policy issues regarding interoperability for public health agencies.

2) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH's location in the nation's capital supplies ready access to qualified experts from around the globe. The proximity to campus means that students can meet many public health experts in person, ask personalized questions and receive career advice. The COVID-19 pandemic opened new opportunities to bring experts from the field into the classroom and via Zoom.
- These qualified experts often serve as practicum preceptors, offer other field experiences and provide guest lectures and special event presentations and discussions.
- The school's APT criteria include practice requirements for full-term faculty. This component is highly valued during the annual performance review, promotion and tenure processes.
- Patricia MacTaggart, MBA, MMA, was named a 2024 HIMSS Changemaker in Health Award Finalist.

Challenges

- While GWSPH has geographical access to public health leaders and experts, these individuals are often tremendously busy, and scheduling conflicts may arise, forcing us

to pivot to alternative plans. For example, the head of OSHA, who is coming to give a guest lecture, may get called to the White House, and our faculty have to be ready to step in as needed.

- For practitioners to serve as adjunct faculty at GWSPH, most are required to join a union,[88] which may dissuade some experts from joining as instructors.

Future Plans

- GWSPH will continue to support faculty who work on IPAs and other collaborative agreements.
- GWSPH plans to continue to support non-PIF faculty with their practice.

[88] Exclusions and exemptions from membership to the union are found in Articles I and II of the Collective Bargaining Agreement. Membership for these individuals is optional rather than required (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

E3. Faculty Instructional Effectiveness

The school ensures that systems, policies and procedures are in place to document that all faculty (full-time and part-time) are current in their areas of instructional responsibility and in pedagogical methods.

The school establishes and consistently applies procedures for evaluating faculty competence and performance in instruction.

The school supports professional development and advancement in instructional effectiveness.

1) *Describe the school's procedures for evaluating faculty instructional effectiveness. Include a description of the processes used for student course evaluations and peer evaluations, if applicable.*

Course Evaluations

Course evaluations are the primary method for evaluating faculty instructional effectiveness. All students complete online course evaluations at the end of each term for every course in which they are registered. Course evaluations are organized at the university level through the GW Office of Survey Research and Analysis. The university uses the SmartEvals system to gather course evaluation data. All evaluation surveys have a standard set of questions containing both open-ended and Likert-scale questions. GWSPH requested that some personalized questions specific to the school and our accreditation needs be included in GWSPH students' evaluations. While evaluations are not required, student participation is encouraged through faculty promotion and SmartEvals system reminder emails, which are sent until students complete their evaluations or the evaluation period ends, whichever comes first. The evaluation period usually opens in the last week of the term and closes before final grades are posted. Data are released three weeks after the term ends and final grades have been posted.

Evaluation data are reviewed by instructors; department (vice) chairs; the Assistant Dean for Academic Innovation; Associate Dean for Undergraduate Education and Senior Associate Dean for Academic, Student and Faculty Affairs; and the Dean. Data reports include deidentified and summarized quantitative data and all open-ended responses. Faculty who receive below-average evaluation scores meet with their department chairs to review their feedback and are coached by experts at LAI; the department (vice) chair; or the Senior Associate Dean for Academic, Student and Faculty Affairs. In rare cases, if a full-time faculty member repeatedly scores below average even after coaching and mentoring the faculty is removed as course lead. Evaluation data are a required component in promotion and tenure decisions. Student evaluation data may also be used in the decision to rehire adjunct instructors.

MPH@GW faculty who consistently receive positive evaluations are recognized by the Senior Associate Dean for Academic, Student and Faculty Affairs and the Assistant Dean for Academic Innovation. These faculty receive a thank-you note and gift from GWSPH for their engagement and excellence in teaching. Faculty teaching in residential programs are recognized at the annual fall and spring faculty assemblies.

Peer Evaluations

Peer evaluations are an optional method for evaluating faculty instructional effectiveness. Most departments provide faculty with faculty mentorship in the form of co-teaching a course and/or peer evaluation for new educators. Each department has a slightly different process for providing feedback on faculty instructional effectiveness. A schoolwide process is currently in development but has yet to be finalized and implemented.

Example: The Department of Health Policy and Management currently has a faculty teaching evaluation process, which was developed through a scan of common practices across universities and designed to be open-ended and led by the instructors who are being evaluated. Instructors complete a form, provide their syllabus and provide dates for observation. A member of the department's ad hoc committee is assigned as an evaluator. Prior to the classroom observation, evaluator and instructor meet to discuss goals of the observation. Another discussion occurs after the observation so that the evaluator can provide feedback. The process in this department is for educational and personal improvement purposes; faculty teaching peer evaluations are not linked to hiring and promotion.

Team-Teach Approach

The MPH@GW program pioneers the school's team-teach approach based on the community-of-practice model.[89] Course directors meet weekly or biweekly with their section leaders to maintain consistency and address any feedback obtained from students, academic advisors and program directors. This team-teach approach and the continuous formal and informal meeting of instructional teams for each course has effectively formed a community of practice focused specifically on applied teaching strategies at the individual course level. An internal study conducted in 2019 indicated high levels of intrinsic motivation, role clarity and job satisfaction for both full-time and part-time faculty teaching in the online programs that use this team-teach approach (see ERF > Criterion E > Criterion E3 > E3.1: Instructional Effectiveness).

Annual Performance Review

Faculty instructional effectiveness is evaluated as a whole during the annual performance review process, which occurs every spring. Faculty highlight feedback from course evaluations, innovative activities they implemented in the classroom as well as resources and education they obtained and subsequently integrated into their instruction. Faculty document their instructional effectiveness in Lyterati. Annual performance reviews are conducted by department chairs with faculty during annual one-on-one review meetings as well as by the relevant academic deans (academic and research with respect to specialized faculty) and the Dean to ensure concurrence.

Promotion and Tenure

According to the APT guidelines, instructional effectiveness is required of all faculty, including research faculty. Evidence of educational responsibilities include the development of curricula, design of courses, degrees and concentration, teaching, academic advising, formal lectures in other faculty's courses, and preparation and publication of educational materials (e.g., textbooks, articles, teaching tools). Faculty undergoing promotion and tenure review prepare a dossier that includes a teaching pedagogy, course evaluation results, a list of courses taught and any peer evaluations by colleagues (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

2) *Describe available university and programmatic support for continuous improvement in teaching practices and student learning. Provide three to five examples of school involvement in or use of these resources. The description must address both primary instructional faculty and non-primary instructional faculty.*

[89] Wenger, M. S., and Hornyak, M. J. (1999). Team Teaching for Higher Level Learning: A Framework of Professional Collaboration. Journal of Management Education, 23(3), 311–327. https://doi.org/10.1177/105256299902300308

Master Teacher Academy

The Master Teacher Academy (MTA) provides ongoing education, support and expertise to GWSPH faculty, staff, and students regarding teaching excellence and pedagogical science. Composed of GWSPH educational leaders and role models who cultivate a culture of teaching and learning excellence within GWSPH, and in the broader public health and academic communities. MTA membership is both an acknowledgement of teaching excellence and an opportunity to engage collaboratively with GWSPH faculty colleagues and the larger school community in promoting personal teaching growth and pedagogical leadership activities. MTA currently has 13 members (11 full-time and two part-time) plus two ex-officio members (Senior Associate Dean for Academic, Student and Faculty Affairs and Assistant Dean for Academic Innovation) and two fellows. Membership in MTA is competitive; of the seven 2023 applications, only four were accepted (see ERF > Criterion E > Criterion E3 > E3.2: Continuous Improvement). MTA core activities have included:

- Hosting faculty webinars and teaching-related opportunities
- Testing and promoting innovative GWSPH teaching practices
- Providing technical assistance for teaching reviews/practices, as requested
- Participating in peer review of teaching/internal mentorship opportunities
- Participating in GW Teaching Day
- Developing peer-reviewed articles regarding pedological excellence and innovation

Example No. 1: In fall 2022, MTA hosted two sessions focused on Dr. James Lang's book *Cheating Lessons: Learning from Academic Dishonesty*. Dr. Lang led the first session, which was open to all GWSPH faculty and discussed strategies to reduce cheating and improve student performance by adjusting the learning environment and assessments. The session was well received by faculty, and two weeks later, a second session focused on application of learnings in an assignment design workshop. This session was also open to any GW faculty member and was highly rated by attendees.

Example No. 2: On October 20, 2023, MTA hosted a session on disability support. The workshop was attended by 30 GWSPH employees, including 19 full-time faculty, eight part-time faculty and three full-time staff members. Two members from the GW Office of Disability Support Services (DSS) led the session. Topics discussed included the types of DSS accommodations and their meanings, how to implement accommodations, how to discuss specific disability/diagnosis information with students (i.e., what can and cannot be said), how to fundamentally alter courses to meet student needs and when to engage with DSS. The session closed with a Q&A period.

Online Teaching-Faculty Development Workshops and Training

With input and guidance from the Assistant Dean for Academic Innovation, 2U provides workshop series, seminars and asynchronous training experiences around topics relating to excellence in online teaching such as student-instructor interactions; team and collaborative course activities; leveraging educational technologies for successful online course outcomes; supporting diversity, equity and inclusivity in the teaching process; and integrating progressive pedagogies.

Example No. 3: Between 2020 and 2022, 127 new instructors attended a new online faculty orientation hosted by the Assistant Dean for Academic Innovation, the Associate Dean for MPH Programs and the Program Director for MHA@GW. During these orientations, new online faculty were introduced to the online team-teach program model, offered strategies for successfully working with students in our online program model and provided administrative contact points and suggestions for being successful in a part-time faculty role at GWSPH.

Example No. 4: In 2020–2021, there were over 130 full-time and limited-service faculty teaching in our MPH@GW and MHA@GW programs who enrolled in faculty enrichment workshops. These workshops were facilitated by 2U with input from the Assistant Dean for Academic Innovation and program directors. Faculty participated alongside faculty peers from over 20 other institutions who also operate online programs with this vendor. Responses to these workshops were highly positive.

Example No. 5: Between 2020 and 2022, 2U trained 127 new instructors on the 2GW LMS platform. This training consists of guidance on asynchronous LMS features such as navigation, communicating with students and grading. The training also provided hands-on preparation for scheduling synchronous class sessions and meeting with students in the live classroom environment.

Library Teaching and Faculty Support

LAI offers services for faculty in continuous improvement in teaching practices and student learning. Faculty receive support through one-on-one consultations, in-depth workshops and teaching programs.

- The Instructional Core consists of educational consultants, instructional designers, media producers and instructional technology specialists. It partners with faculty to facilitate syllabus and course design and enhanced teaching methods (both residential and online).
- The Course Design Institute is open to a limited number of faculty each year. During this virtual event, experienced facilitators support faculty as they design new or redesign existing course syllabi. Learning-centered design principles are emphasized.
- Faculty may request access to specific course materials (articles, media, book chapters, etc.), which can be linked directly in Blackboard or searchable via the library catalog (course reserves).
- The Instructional Technology Laboratory provides technical support and guidance on choosing specific tools to help facilitate learning.
- Librarians help identify open educational resources, improving access for students.
- The Strategic Digital Learning Initiatives team guides faculty on integrating technology and creative design concepts into instructional activities.
- Librarians assist faculty with designing a class, workshop or online module focused on using library resources such as citation managers, search databases and specialty software.

Teaching Day

The university's annual Teaching Day is held every fall and promotes innovative teaching methodologies, supportive technologies and collaboration. Sessions are available in person and virtually so distance-based educators and adjuncts may participate.

Teaching Network for Early Career Faculty

The Teaching Network for Early Career Faculty is a cohort-based program for early career faculty new to teaching at GW. Faculty attend six sessions between October and March and engage in a peer review process in February. Participants read *Small Teaching: Everyday Lessons from the Science of Learning* by James Lang, develop engaging class sessions, create clear assignments and practice active learning techniques.

GWSPH Faculty Career Development

GWSPH seeks to develop and guide enrichment activities for faculty in areas of career development, teaching, research, public health practice and administration. GWSPH orients new faculty each fall. The purpose of the event is to help new faculty acclimate to academia and become familiar with university and GWSPH policies, procedures and resources. GWSPH also

encourages faculty to join professional organizations like the American Public Health Association (APHA) and Society for Public Health Education (SOPHE).

GW Leadership Academy

The GW Academic Leadership Academy (GWALA) is a yearlong, cohort-based program where participants build leadership skills and lead a project that serves as a case study to apply their learning. GWALA facilitates cross-institutional networking among academic leaders. Acceptance is through a competitive nomination process. GWSPH faculty who participated include:

- Sara Wilensky
- Amanda D. Castel
- Jane Hyatt Thorpe
- Manya Magnus
- Melissa Napolitano
- Carlos Rodriguez-Diaz
- Heather Young

Faculty Recognition and Awards

There are several university and school awards granted to faculty and graduate teaching assistants for their excellence in teaching, service and research. Awards specifically recognizing teaching excellence are:

- Oscar and Shoshana Trachtenberg Prize for Teaching Excellence is presented to a tenured member of the faculty who regularly teaches undergraduate students.
- Morton A. Bender Teaching Awards recognizes full-time and part-time faculty who teach undergraduate, graduate and professional courses at GW. Zoe Beckerman won the Bender Teaching Award in 2023.
- Philip J. Amsterdam Graduate Teaching Assistant Awards are given to GW Graduate Assistants who have had at least three semesters of GA experience. In 2019, GA Chulwoo Park from the Department of Global Health won this award.
- WID Distinguished Teaching Awards honor faculty members and graduate teaching assistants who have demonstrated excellence in teaching and planning WID courses. In 2023, Amanda Visek won the Dymond WID Distinguished Teaching Award.
- GWSPH Excellence in Teaching Award (Undergraduate) honors a GWSPH faculty member who teaches undergraduate courses. In 2023, Elizabeth Gray won the award. Past winners include Melisa Napolitano, Amanda Visek and Monica Ruiz.
- GWSPH Excellence in Teaching Award (Graduate Residential) recognizes a GWSPH faculty member teaching residential graduate courses. In 2023, Bart Bingenheimer won the award. Past winners include Manya Magnus, Scott Quinlan and Heather Hoffman.
- GWSPH Excellence in Teaching Award (Graduate Online) is given to a GWSPH instructor for excellence in teaching online graduate courses. In 2023, Seble Frehywot won the award. Past winners include Maureen Byrnes, Peter La Puma and Joy Volarich.
- Professor of the Year Award is given to a GWSPH instructor selected by GW student-athletes. In 2023, this award was earned by Kyle Levers and Elizabeth Gray.
- Instructors who have taught a number of classes in the online programs and consistently receive high student satisfaction rates receive recognition from the Senior Associate Dean for Academic, Student and Faculty Affairs and Assistant Dean of Academic Innovation.

Sabbatical Leave

GW grants sabbatical leave to faculty as "recognition of notable service through teaching and scholarly contributions and as an aid and inspiration to further achievements." Faculty request a leave to engage in "opportunities for scholarly development and contacts which shall contribute

to their professional effectiveness and to the value of their later service" to the university (see ERF > Criterion E > Criterion E3 > E3.2: Continuous Improvement).

Pivot to Virtual Teaching and Learning

In 2020 with the pivot to virtual schooling, GWSPH hosted multiple workshops for faculty on topics such as student engagement, innovative technology use and instructional adaptation and flexibility. With the return to on-campus instruction, faculty are still utilizing the techniques learned in these workshops in their residential classes.

Academic Resilience

During the COVID-19 pandemic, GWSPH sought to assess how services and support mechanisms provided by the school may have helped students maintain academic resilience and achieve their academic goals. A two-part survey consisting of 30 adapted questions from the Academic Resilience Scale (ARS-30) and 13 questions specific to GWSPH's support services was administered during spring 2021. Over 230 students participated in the survey, and of those, 83 students (69% MPH and DrPH) provided responses to at least 80% of the ARS-30 questions. GWSPH services were categorized as (1) academic support; (2) flexibility and student-centeredness; and (3) administrative and financial services. Analysis indicated that academic support and flexibility and student-centeredness services explained a significant level of variability in academic resilience scores while financial and administrative services did not. For example, "My instructor(s)' flexibility and understanding supported my learning" and "The design, structure and flow of my remote courses supported my learning" were significant predictors of high academic resilience (see ERF > Criterion E > Criterion E3 > E3.2: Continuous Improvement).

3) *Describe means through which the school or program ensures that all faculty (primary instructional and non-primary instructional) maintain currency in their areas of instructional responsibility. Provide examples as relevant. This response should focus on methods for ensuring that faculty members' disciplinary knowledge is current.*

GWSPH expects faculty to maintain currency in their areas of instructional responsibility through a variety of mechanisms. Faculty are expected to engage in research with other faculty and external collaborators to maintain currency in research methodology. Faculty are encouraged to attend professional development activities, particularly related to instructional effectiveness. Many of the activities offered by the university are free of charge, or in the case of the Course Design Institute, pay faculty to attend. Last, faculty learn of emergent public health challenges and participate in peer-to-peer learning when presenting and attending public health conferences, such as APHA and SOPHE. Financial support is available for full-time faculty to attend such meetings.

Departments evaluate all faculty on a regular basis to ensure currency. As syllabi reflect faculty preparedness and knowledge to teach in a prescribed area, departmental curriculum committees review these syllabi periodically. The reviews focus on ensuring that current readings and content are included. Likewise, course evaluations provide program directors insights into students' perceptions of faculty preparedness. On an annual basis, all faculty undergo an annual performance review, during which faculty provide evidence of their currency in their area of instructional responsibility. Faculty are further assessed when undergoing a review for promotion or tenure. Currency in instructional responsibility is evaluated using the submitted dossier.

4) *Describe the role of evaluations of instructional effectiveness in decisions about faculty advancement.*

Educational responsibilities are considered during promotion and tenure reviews for all PIF and non-PIF faculty. All faculty, regardless of whether they are designated as research or teaching, tenure or non-tenure track, are expected to demonstrate educational responsibilities, which may include teaching and mentoring. Faculty prepare dossiers documenting their teaching narrative, teaching evaluations (peer and student), courses taught, teaching awards won, mentoring activities and any other relevant information. At GWSPH, educational responsibilities encompass a wide array of activities including curricular development, design of courses, degrees and concentrations, teaching, student advisement, formal lectures, and preparation and publication of educational materials. According to the school's APT guidelines, "an effective teacher leads students to think purposely and critically, broadens the interest of students, seeks out innovative techniques and transmits knowledge effectively" (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

5) *Provide quantitative and/or qualitative information that characterizes the unit's performance over the last three years on its self-selected indicators of instructional effectiveness.*

Select at least three indicators, meaningful to the unit, with one from each listed category.

Faculty Currency

GWSPH conducts periodic internal reviews of syllabi for currency of readings, topics, methods, etc. In 2021–2022, the GWSPH Curriculum Committee thoroughly reviewed residential and online versions of core public health courses to ensure attainment of assigned competencies, alignment with course learning objectives and consistency across formats. The review process was well received and plans to review courses used across departments in multiple programs is slated for 2023–2024 (see ERF > Criterion B > Criterion B2 > B2.2: Eval Plan_Implement).

Departmental curriculum committees regularly review course syllabi, particularly ones running multiple sections or that are used in several programs. Discussions typically involve ensuring consistency across sections, proposed additions to readings or contents and carving out some content to develop new classes.

Faculty Instructional Technique

Data on student satisfaction with instructional quality are collected in course evaluations, which are disseminated in the final weeks of each term. The data points highlighted below are all five-point Likert scale questions where a score of 5 indicates the greatest agreement or positive sentiment toward the statement.

	Overall instructor rating	**Instructor knowledgeable**	**Instructor enthusiastic**	**How much learned in course**
2022–2023	4.5	4.8	4.7	4.3
2021–2022	4.5	4.8	4.7	4.2
2020–2021	4.5	4.8	4.7	4.3

School Level Outcomes

All GWSPH PhD students and graduate teaching assistants are trained in pedagogical techniques. The Graduate Teaching Assistantship Program (GTAP) is a university-wide endeavor aimed at informing newly appointed graduate assistants (GAs) on GW policy, university resources and teaching strategies. Additionally, GWSPH GAs enroll in a free credit/no credit course, UNIV 0250.DE Graduate Assistant Certification Course, designed to be an introduction to the complex process of teaching and learning in undergraduate and graduate education settings. The coursework focuses on philosophical and research foundations of higher education and practical suggestions and examples of skills relevant for GAs. Last, GAs complete

a school-specific training organized by the Office of Admissions and Recruitment. This training focuses on GWSPH-specific policies and procedures.

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH continuously and consistently collects and reviews data on the measures noted above. For example, our instructors are continually rated by students as highly knowledgeable and enthusiastic, which serves as confirmation that our instructors are experts in their fields and dedicated to student learning.
- Processes for distributing course evaluations and requiring GTAP and Graduate Assistant Certifications are well-established and well-enforced.
- Departmental curriculum committees follow consistent processes and procedures for reviewing syllabi in collaboration with the GWSPH Curriculum Committee flowing from standards set in the school's Curriculum Guidebook (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).
- The university provides some financial support for part-time faculty to engage in professional development opportunities. In 2023, the funds available increased to benefit more faculty. GWSPH will be promoting this more heavily to our part-time faculty.
- Sara Rosenbaum, JD, won the 2022 Welch-Rose Award for Distinction in Public Health from the Association of Schools and Programs of Public Health. This prestigious ASPPH Excellence Award recognizes public health leaders for their service and achievements in teaching, practice and student services.

Challenges

- The greatest challenge associated with these measures is the volume of the school. For example, the number of course offerings at GWSPH numbers in the hundreds, meaning that while curriculum committees are constantly reviewing syllabi, a course may only be reviewed once every few years.

Future Plans

- GW coordinates an annual Teaching Day and while faculty attend, there has not been a history of GWSPH faculty-submitted abstracts to present. In 2023–2024, GWSPH leadership is pushing for a stronger showing at the event.
- The MTA is currently developing a standardized faculty teaching peer evaluation process. Like the process in the Department of Health Policy and Management, the goal of the observation will be instructor-led. MTA is planning to pilot this new peer evaluation process in 2023–2024.

E4. Faculty Scholarship

The school has policies and practices in place to support faculty involvement in scholarly activities. As many faculty as possible are involved in research and scholarly activity in some form, whether funded or unfunded. Ongoing participation in research and scholarly activity ensures that faculty are relevant and current in their field of expertise, that their work is peer reviewed and that they are content experts.

The types and extent of faculty research align with university and school missions and relate to the types of degrees offered.

Faculty integrate research and scholarship with their instructional activities. Research allows faculty to bring real-world examples into the classroom to update and inspire teaching and provides opportunities for students to engage in research activities, if desired or appropriate for the degree program.

1) *Describe the school's definition of and expectations regarding faculty research and scholarly activity.*

   GWSPH defines research and scholarly activities as the creation of new knowledge. According to the APT guidelines, "critical to scholarship are the concepts of original, critical thinking, formal recognition of accomplishment by members of a field or discipline, independence and creativity, peer review (as evidence of importance to the field), and publication of results, whether through a peer-reviewed journal, government publication, or major symposia." The 2020 strategic plan set the goal of propelling the school's interdisciplinary research portfolio to national prominence, ensuring that the research portfolio was relevant to public health policy, practice and management nationally and internationally.

   For tenured and tenure track faculty, the expectation is that faculty will have at least 50% research coverage, while non-tenure accruing faculty have a level of research expectation in balance with their other duties of teaching and service. For research faculty, that expectation may be as high as 100% research coverage. For specialized teaching faculty, there is no expectation of research coverage, but exceptions can be made for up to 20% effort (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

2) *Describe available university and school support for research and scholarly activities.*

   GW is home to approximately 70 research centers and institutes contributing to the university's missions of discovery, scholarship and service. These chartered research organizations span all ten of GW's schools, and many spur innovation through cross-disciplinary collaboration. Additionally, GW has several campus-wide research administration groups that represent and advocate on behalf of research endeavors at the university. In 2023, GWSPH updated a report detailing all of the school's facilities and other research resources (see ERF > Criterion E > Criterion E4 > E4.2: Faculty research support).

   Research Centers and Institutes Hosted by GWSPH
   GWSPH hosts over 25 research centers and institutes spanning the range from specific diseases like HIV/AIDS to climate change, and focusing on both domestic and global arenas. These include 13 research centers, five institutes and six programs or units,—all headed by GWSPH faculty and staff. Some, such as the Genomics Core, provide service beyond the school and are considered "cores" for the GW research systems.

GWSPH Office of Research Excellence (ORE)
Led by the Senior Associate Dean for Research and Innovation, the Office of Research Excellence (ORE) is dedicated to supporting the research efforts of faculty, staff and students within the school. ORE serves GWSPH and its departments in different ways by offering strategic research expertise and support for various research-related functions, procedures, systems and other business support functions that impact research and security while catalyzing research productivity. It is responsible for research coordination, compliance with applicable regulations and institutional policies, research integrity and training, research communication, contracting and enhancement, and providing excellent service to advance research and discovery by faculty, students, staff and individuals affiliated with GWSPH (see ERF > Criterion E > Criterion E4 > E4.2: Faculty research support).

GW Research POD 2
Research POD 2 is a hybrid shared service model with the purpose of propelling its stakeholders' interdisciplinary research portfolios to national and international prominence. The POD is structured to provide scalable capacity with the sponsored research administrators divided into working teams. Each team is designated a research portfolio assignment responsible for both pre- and post-award (cradle-to-grave), while others may focus on pre- or post-award (specialization). The result of this shared service structure enables POD 2 to be flexible with research administrative services when other teams are overburdened and to be scalable to provide high quality research administration support for its stakeholders.

POD 2 is comprised of a POD Head (GWSPH Senior Associate Dean for Research and Innovation), three managers and several experienced staff dedicated to enhancing research productivity and maintaining world-class quality in the research ecosystem at GW. Within the POD there is a management team and three levels of research administrative roles. As noted above, GWSPH shares Research POD 2 with GW Law, but the law school conducts very little research.

GWSPH Research Day
At this annual event, undergraduate, master's and doctoral students plus postdocs, research staff and alum from GWSPH present their outstanding research during an interdisciplinary poster session. Additional activities at GWSPH Research Day include oral presentations, workshops for student presenters, presentation feedback from a judging panel, an awards ceremony, and remarks from The Michael and Lori Milken Dean of Public Health and Senior Associate Dean for Research and Innovation (see ERF > Criterion E > Criterion E4 > E4.2: Faculty research support).

Office of the Vice Provost for Research (OVPR)
The GW Office of the Vice Provost for Research (OVPR) works with university faculty to support cutting-edge research and scholarship across all stages of the research lifecycle. OVPR leads several initiatives and programs with the strategic aim of growing research capacity and boosting the impact of GW-led discovery and innovation. OVPR sponsors various intramural funding competitions and incentive programs to support and encourage research and scholarship at the university. On a limited basis, GW provides institutional support for research, including start-up packages for new research faculty, cost-sharing on sponsored research projects and Research Enhancement Incentive Awards. OVPR's Research Enhancement Unit provides investigators at GW with services and guidance to successfully apply for federally sponsored research funding. The Office of Human Research (OHR) is the administrative support office for the university's IRB. OHR's mission is to support the GW research community in the conduct of innovative and ethical research by providing guidance, education and oversight for the protection of human subjects.

3) *Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities. This response should focus on instances in which students were employed or volunteered to assist faculty in faculty research projects and/or independent student projects that arose from or were related to a faculty member's existing research.*

Example No. 1: Two student workers in ORE assist in research communication and promotion. Under the supervision and guidance of the ORE team, they help host the biweekly Bioethics Webinars, produce the ORE biweekly Research Newsletter and help maintain the ORE website. Additionally, they participate in all ORE event planning, such as GW Research Day and more.

Example No. 2: Another student worker at ORE assists with research metrics and development. Under the supervision and guidance of the ORE team, he helps with the management system of lower-level research data related to GWSPH Intramural Awards, which includes monitoring critical indicators in proposal submission, principal investigator communication, data management, awards tracking and report development.

Example No. 3: Keith Crandall, PhD, MA, is Professor in the Department of Biostatistics and Bioinformatics, Director of the GW Computational Biology Institute and Director of the Genomics Core. Dr. Crandall teamed up with an undergraduate public health student and a doctoral student (from SMHS) on a project to examine the impact of transposable elements (namely, endogenous retroviruses [ERVs]) on gene expression at candidate genes associated with Alzheimer's Disease (AD). They partnered with world leaders in Alzheimer's genetics (Carlos Cruchaga at Washington University and John "Keoni" Kauwe at Brigham Young University) to access novel data collected by Washington University on a unique AD cohort and then combined these data with two other RNA-Seq datasets available from a different cohort on AD that were publicly available. They identified 698 statistically significantly differentially expressed ERVs across their three datasets and identified associations of ERV differential expression with differential expression of candidate genes associated with AD. They used novel methods and software developed in the Computational Biology Institute by a former PhD student. Their results were published in *Frontiers in Aging Neuroscience*[90] with both students as co-first authors on the publication.

Example No. 4: Kyle Levers, PhD, is Assistant Professor in the Department of Exercise and Nutrition Sciences and Director of the MET Lab Service Core. In the spring of 2023, he worked with an undergraduate student research team on the impact of an ultra-endurance backpacking event on markers of health, human performance and recovery. As a result of working with the project, these students demonstrated a thorough understanding of all the physical research protocols in addition to proper participant care and communication. The students also collaborated with all members of the research team to create data collection systems and electronic documentation in preparation for the research study. As members of the research team, the students worked together to obtain consent from, familiarize and collect data on the research participants through both in-person physiological testing and mobile app-based daily questionnaires. Between data collection sessions, the students collated, organized and analyzed research data collected from each physiological testing block in addition to the daily questionnaire information. Finally, the students worked together in a culminating experience, assembling a research abstract from the collected data and presenting it as a research poster during a schoolwide research event.

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[90] Dawson, T., Rentia, U., Sanford, J., Cruchaga, C., Kauwe, J. S. K., & Crandall, K. A. (2023). Locus specific endogenous retroviral expression associated with Alzheimer's disease. *Frontiers in aging neuroscience*, *15*, 1186470. https://doi.org/10.3389/fnagi.2023.1186470

Example No. 5: Jennifer Sacheck, PhD, MS, is Sanofi Professor of Prevention and Wellness and Chair of the Department of Exercise and Nutrition Sciences. Dr. Sacheck collaborated with an MPH student on a federally funded research project. The student worked on a systematic review that was needed to complement the main Creating Opportunities for Adolescents through Coaching, Healthy Eating, and Sports (COACHES) Study (a near peer intervention in low-income New Orleans public middle schools designed to improve physical activity and social-emotional learning; this was in partnership with the national nonprofit Up2Us Sports). The student developed a train-the-trainer model for the near peers in the intervention schools and conducted a corresponding systematic review that was published.[91] Further, in her desire to go on for a PhD, she analyzed and published[92] data on food security and diet quality in this population.

Example No. 6: Allison Sylvetsky, PhD, is Associate Professor in the Department of Exercise and Nutrition Sciences. Over the last few years, Dr. Sylvetsky has been working with a doctoral student on several research projects. The student has become well-versed in designing data collection instruments and creating study databases and workflows; recruiting and enrolling participants from diverse and underserved backgrounds; and collecting, managing and analyzing quantitative and qualitative data. The student has also written and presented several scientific abstracts and manuscripts.[93] In 2022, the student received an award for her presentation on the impacts of the COVID-19 pandemic on children's sugary drink consumption at the George Washington University Research Showcase.

4) *Describe and provide three to five examples of faculty research activities and how faculty integrate research and scholarly activities and experience into their instruction of students. This response should briefly summarize three to five faculty research projects and explain how the*

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[91] St Pierre, C., Guan, W., Barry, L., Dease, G., Gottlieb, S., Morris, A., Merrill, J., & Sacheck, J. M. (2021). Themes in Train-the-Trainer Nutrition Education Interventions Targeting Middle School Students: A Systematic Review. *Nutrients*, *13*(8), 2749. https://doi.org/10.3390/nu13082749

[92] St Pierre, C., Guan, W., Merrill, J., & Sacheck, J. M. (2022). Urban Youth Perspectives on Food Insecurity during the COVID-19 Pandemic: Evidence from the COACHES Study. *Nutrients*, *14*(3), 455. https://doi.org/10.3390/nu14030455

[93] Ferguson, K., Moore, H., Kaidbey, J. H., Khattak, S., Saeed, A., Cogen, F. R., Streisand, R., & Sylvetsky, A. C. (2022). Impacts of the COVID-19 Pandemic on Pediatric Type 1 Diabetes Management: A Qualitative Study. *The science of diabetes self-management and care*, *48*(6), 522–532. https://doi.org/10.1177/26350106221125701

Ferguson, K., Gunthert, K., Kaidbey, J. H., Parr, M., Visek, A. J., Sacheck, J. M., & Sylvetsky, A. C. (2023). Behavioral Patterns of Sugary Drink Consumption among African American Adolescents: A Pilot and Feasibility Study Using Ecological Momentary Assessment. *Nutrients*, *15*(9), 2171. https://doi.org/10.3390/nu15092171

Kaidbey, J. H., Ferguson, K., Halberg, S. E., Racke, C., Visek, A. J., Gearhardt, A. N., Juliano, L. M., Dietz, W. H., Sacheck, J., & Sylvetsky, A. C. (2022). Stop the Pop: A Mixed-Methods Study Examining Children's Physical and Emotional Responses during Three Days of Sugary Drink Cessation. *Nutrients*, *14*(7), 1328. https://doi.org/10.3390/nu14071328

Sylvetsky, A. C., Kaidbey, J. H., Ferguson, K., Visek, A. J., & Sacheck, J. (2022). Impacts of the COVID-19 Pandemic on Children's Sugary Drink Consumption: A Qualitative Study. *Frontiers in nutrition*, *9*, 860259. https://doi.org/10.3389/fnut.2022.860259

Sylvetsky, A. C., Moore, H. R., Kaidbey, J. H., Halberg, S. E., Cogen, F. R., DiPietro, L., Elmi, A., Goran, M. I., & Streisand, R. (2021). Rationale and design of DRINK-T1D: A randomized clinical trial of effects of low-calorie sweetener restriction in children with type 1 diabetes. *Contemporary clinical trials*, *106*, 106431. https://doi.org/10.1016/j.cct.2021.106431

faculty member leverages the research project or integrates examples or material from the research project into classroom instruction. Each example should be drawn from a different faculty member, if possible.

Example No. 1: Lorien Abroms, DSc, MA, is Professor of Prevention and Community Health, Associate Dean for PhD and MS Programs, and Co-Director of the GW BRIGHT Institute. Dr. Abroms' research focuses on the application of digital communication technologies for health promotion, including for smoking cessation and vaccine uptake. In PUBH 6570 Advanced Public Health Communication: Theory and Practice, Dr. Abroms uses her development and evaluation of smoking cessation programs, Text2Quit and Text4baby (the latter focuses on pregnant individuals), as case studies for discussion and examination. These same programs are also used as examples of successful health communication interventions in PUBH 6503 Introduction to Public Health Communication and Marketing. Dr. Abroms has worked with at least two MPH students on their CE projects using data from her vaccine uptake on social media research.

Example No. 2: Susan Anenberg, PhD, is Professor and Chair of the Department of Environmental and Occupational Health and Director of the GW Climate and Health Institute. Dr. Anenberg integrates her research into various aspects of PUBH 6140 Global Climate Change and Air Pollution. Students read and discuss a systematic review[94] on climate change and air pollution interactions, authored by Dr. Anenberg. The discussion also involves Dr. Anenberg describing her motivation for doing the research, how it was carried out, what she found, how the findings could affect science and action, and how the research integrates into the broader context and existing knowledge. In a later week, Dr. Anenberg integrates her qualitative and quantitative research approaches for evaluating co-benefits of reducing greenhouse gases. The unit also covers Dr. Anenberg's experience recruiting nonacademic stakeholders and formulating research questions that fill critical information gaps and interpret data appropriately.

Example No. 3: Deanna Kerrigan, PhD, MPH, is Professor and Chair of the Department of Prevention and Community Health and leads the Behavioral Sciences Core for the DC Center for AIDS Research. Her research focuses on the development, implementation and evaluation of community-driven multilevel interventions to prevent and treat HIV infection and promote the overall health and human rights of multiply marginalized women in lower- and middle-income settings. Dr. Kerrigan developed, in partnership with local research and community groups, particularly in Latin America and the Caribbean, a portfolio of both observational and intervention mixed methods research on the role of social-structural and individual factors driving these outcomes. In PUBH 6510 Community Oriented Primary Care Principles and Practice, Dr. Kerrigan provides students with a case study example of how formative mixed methods work in partnership with local research and community groups. The case study explores how such research can be leveraged to develop and implement interventions at multiple levels, including individual counseling, peer education and navigation, provider sensitivity training and community mobilization. Dr. Kerrigan engages students in conversations about the challenges and solutions to bringing these models to scale and sustaining funding for this work, particularly in low-resource settings. Ultimately, the goal of this case study is to bring to light the value of community-engaged research for program development and highlight unique and innovative intervention models that can be rigorously evaluated using multiple methods and approaches that support their continuity.

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[94] Anenberg, S. C., Haines, S., Wang, E., Nassikas, N., & Kinney, P. L. (2020). Synergistic health effects of air pollution, temperature, and pollen exposure: A systematic review of epidemiological evidence. *Environmental health*, *19*(1), 130. https://doi.org/10.1186/s12940-020-00681-z

Example No. 4: Amita Vyas, PhD, MHS, is Professor in the Department of Prevention and Community Health and Director of the GWSPH Center of Excellence in Maternal and Child Health. She has been working in India since 2015 and launched a national Girl Rising campaign to improve attitudes toward girls' education and increase gender equity. As part of the project, Dr. Vyas and her research team have conducted multiple quantitative and qualitative studies, including a quantitative survey across 11 cities in northern India with low rates of girls' secondary school completion. Dr. Vyas shares her research in PUBH 6551 Maternal and Child Health 2 (3 credits), which provides students an opportunity to gain a deeper understanding of issues facing adolescent girls in India. PUBH 6551 is a skills-based course that focuses on how survey research is designed, conducted and analyzed. Most important, the course focuses on how to interpret statistical analysis as part of guiding the development of interventions and policies for MCH populations. Dr. Vyas discusses her research in India, taking students through the survey research process, including framing research questions, selecting a study design, selecting survey administration modes, developing and formatting questionnaires, implementing and monitoring data collection, dataset creation/cleaning and statistical analysis. Students use her Girl Rising cross-sectional dataset with a diversity of variables (categorical and continuous) to conduct univariate, bivariate and multivariate statistics (using SPSS) and interpret the statistical findings.

5) *Describe the role of research and scholarly activity in decisions about faculty advancement.*

According to the APT guidelines, appointment or promotion in regular, tenure track or tenured positions are dependent on professional achievement and excellence in education, scholarship and service. For these faculty, scholarship is an essential component for promotion and cannot be demonstrated without evidence of peer-reviewed publications. In line with the requirement for excellence in scholarship, the overall quality of publications takes precedence over quantity, though both are expected to increase with increasing academic rank. The APT guidelines provide a list of acceptable evidence of scholarship achievement.

For regular, non-tenure track faculty positions, appointment or promotion is also dependent on professional achievement in education, scholarship and service, though the expectation of scholarly evidence is much lower than the tenure-accruing track.

For appointment or promotion, research faculty must provide evidence of excellence in scholarship, and the expectation is that they will also provide some evidence of activity in service and education, including teaching and mentoring. Teaching faculty must provide evidence of excellence in teaching, and the expectation is that they will also provide some evidence of activity in service (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

6) *Provide quantitative data on the unit's scholarly activities from the last three years in the format of Template E4-1, with the unit's self-defined target level on each measure for reference. In addition to at least three from the list in the criteria, the school may add measures that are significant to its own mission and context.*

Template E4-1

Outcome Measures for Faculty Research and Scholarly Activities				
Outcome Measure	**Target[95]**	**FY 2021**	**FY 2022**	**FY 2023**
Total research expenditures	$100 million	$96.65 million	$87.89 million	$81.06 million
Number of GW IRB submissions by GWSPH investigators (new studies)	100	92	75	78
Number of research proposals submitted to donors/funders	300	290	254	283
Number of PIF who act as principal investigators	125	114	117	132
Projects submitted by GWSPH students through the Oversight Portal	700	490	679	634

See ERF > Criterion E > Criterion E4 > E4.6: Temp 4-1.

7) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH provides a supportive research environment that enables faculty, staff and students to engage in research and scholarly activities. Under the leadership of Senior Associate Dean for Research and Innovation Adnan Hyder, ORE supports identifying funding opportunities, formulating research agendas, fine-tuning grantsmanship, ensuring research integrity, compliance and ethics and providing research administration and coordination. ORE strengthened institutional review and ethics systems for both faculty and student research. There are a growing number of postdoctoral researchers and PhD students in the school, and ORE hired additional support staff, such as a research finance manager, to assist with research. GWSPH experienced sustained growth over the past few years and increased indirect costs. GWSPH researchers are publishing in top-notch journals with greater frequency and participating in more national and international collaborative grants.
- Since 2019, GWSPH received increased grant funding (minus one large grant that was completed). Not only are the amounts increasing, but also the durations, the quality and the competitiveness of the grants. In 2022, GWSPH was awarded its first T32 grant and submitted its first U grant for consideration. Funding received from global health training grants have been used to support research capacity strengthening in various countries including Armenia (D43), Democratic Republic of Congo (G11), Mali (R25), Pakistan (R25) and Zambia (D43). Additionally, Research POD 2 reports that GWSPH has a success rate of 27–30% for grant funding, which is remarkable, considering the NIH average is 20.7%.
- In June 2023, GW was inducted into the prestigious Association of American Universities, a feat only accomplished by 70 other premier research universities working to address challenging problems through research while educating and training the next generation of leaders.

[95] Targets were developed by the Senior Associate Dean for Research and Innovation based on his aspirations for the school. As a result, they are higher than the actual counts.

- In 2023, Adnan Hyder, PhD, MD, MPH, received the 2023 GW Distinguished Research Career Award. He was selected because of his significant contributions in research and scholarship to the university and society. For more than 20 years, Dr. Hyder worked to improve global health in low- and middle-income countries and pioneered empirical work around health systems, ethics and injury prevention in the developing world.
- Emma K. Stapp, PhD, MHS, received a 2023 NARSAD Young Investigator Grant. Dr. Stapp submitted a proposal for a project to investigate mood disorder subtypes, with the goal of understanding the mechanisms that are directly actionable and inform recommendations about dose and timing of physical activity most beneficial to affective regulation.
- GWSPH is a member of the M8 Alliance of Academic Health Centers, Universities and National Academies. This network of 28 members in 20 countries sets the agenda for global health improvement and development of science-based solutions to global health challenges. The M8 Alliance is the academic backbone of the World Health Summit. GW hosted the World Health Summit Regional Meeting 2023, and Dr. Hyder served as World Health Summit International President 2023. The 2023 theme, *Bridging the Science to Policy Gap for Global Health,* highlighted the essential role of evidence-based science for the development of global health policy.
- GWSPH has several institutes and centers chartered by GW.
- According to President Granberg, GWSPH accounts for 45% of the research conducted at the university.
- In FY 2023, GWSPH received over $32 million in federal NIH funding, placing it among the top ten schools of public health to receive NIH funding.

Challenges

- While ORE hired additional support personnel in the last few years, research administration still needs additional staff to meet growing research needs as well as pathways for career advancement for these hires.
- ORE faces challenges managing and tracking global research across the school. This is particularly important for research conducted outside of the Department of Global Health. ORE is currently discussing processes to track this research and engage in more research collaborations across departments.
- Currently, the university and school use separate systems for managing research creating challenges in communication between university entities. With GW's induction into the Association of American Universities, it's vital that GW move to a centralized school and university system that rivals that of other premier research institutions.
- Overall, GWSPH has grown faster in research than other parts of GW and often leads the way in new research areas, new geographical research sites or new collaborations. This often requires new decisions, which often takes time and sometimes delays the start of projects.

Future Plans

- GWSPH is committed to further growth in its research enterprise over the next three to five years, including (1) increased number of large and consortia grants; (2) greater number of training grants both domestically and globally; and (3) diversification of the funding portfolio to both new federal and nonfederal donors.
- GWSPH will be reviewing the current research ecosystems at the school and supporting offices at GW to try and optimize them, and we hope to work closely with university leadership to develop in-house capacity for an "idea to delivery" system.
- GWSPH plans to build a robust research administration who can streamline and enhance the services offered. To assist in the hiring process and new vision for research, the GWSPH webpages dedicated to research were revised in 2023 to reflect open positions and planned services.
- One project currently under development is a bibliometric analysis of GWSPH faculty publications, in collaboration with our library support systems. This analysis will be used on future grant proposals and highlighted on our website.
- Currently, GWSPH 10 ten postdocs working on research, and to support the growth in research, we are hoping to increase this number in the next five years.

E5. Faculty Extramural Service

The school defines expectations regarding faculty extramural service activity. Participation in internal university committees is not within the definition of this section. Service as described here refers to contributions of professional expertise to the community, including professional practice. It is an explicit activity undertaken for the benefit of the greater society, over and beyond what is accomplished through instruction and research.

As many faculty as possible are actively engaged with the community through communication, collaboration, consultation, provision of technical assistance and other means of sharing the school's professional knowledge and skills. While these activities may generate revenue, the value of faculty service is not measured in financial terms.

1) *Describe the school's definition and expectations regarding faculty extramural service activity. Explain how these relate/compare to university definitions and expectations.*

GWSPH's expectations regarding faculty extramural service activity aligns with the university's expectations, which are that academic personnel have a responsibility to engage in service. Specifically, the Faculty Code states that "members of the faculty shall strive for the advancement of knowledge and to grow in professional competence by means of effective teaching, sound scholarship, and productive service (including by participation in the activities of professional societies) in accordance with the terms of their faculty appointment."

GWSPH encourages faculty to engage in health-related service activities. Full-time faculty are prohibited from holding a faculty position at another university except in rare instances (which must be approved by the provost). In addition to engaging in noncompetitive service, faculty are required to complete the annual Conflict of Interest to ensure that extramural service does not create a conflict or appearance of a conflict, commitment or professional judgment. All service activities engaged in by faculty are approved by supervisors.

Aside from expected service to the university, service may also include service to professional organizations or to local, national and global communities.

- Service to the university includes:
  - Providing broad public health education to the entire GW undergraduate student body
  - Offering various exercise classes to GW faculty and staff free of charge
  - Providing expert input on public health issues such as student suicide, Ebola, synthetic turf and others
  - Serving on university committees
- Service to professional organizations includes:
  - Directly advising government agencies and other policymaking bodies
  - Serving on various formal advisory boards
  - Providing convening space and leadership on critical public health issues such as gun violence, use of PREP for HIV, breast cancer and the environment
  - Serving in editorial positions on journals
  - Participating in national academies, boards, roundtables
- Service to communities includes:
  - Serving on study sections
  - Offering bone density and body scans to the local community
  - Working with the DC government on a myriad of initiatives
  - Working collaboratively with organizations such as EGPAF, APHL, USAID
  - Developing community-based centers such as AVANCE
  - Sending personnel to crisis areas such as Haiti and West Africa

- Supporting local AIDS walk and homeless shelters/food kitchens
- Serving on advisory groups for community organizations
- Providing in-kind organizational development and health education programming to DC clinics, hospitals, schools, community-based organizations, and public housing campuses

2) *Describe available university and school support for extramural service activities.*

Participating in service may account for a portion of an employee's faculty effort. The university designates up to 0.10 FTE for service coverage for participation in service to the university. Additional effort may be given if a faculty member's extramural service is to a recognized group aligned with the mission of the school and/or university. Typically, these types of extramural service ascribe a level of prominence and heightened notoriety to the school or university. Examples include when Joel Teitelbaum, JD, was elected to be on the HHS Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives (a.k.a. "Healthy People") or when Jeff Levi, PhD, chaired the Advisory Group on Prevention, Health Promotion, and Integrative and Public Health at HHS. Such activities and additional effort require approval from the program director or department chair and the Senior Associate Dean for Academic, Student and Faculty Affairs. Generally, the granting of effort greater than 10% requires the prior approval of the Dean and external funding (see ERF > Criterion A > Criterion A1 > A1.2: Committee Decisions).

Financial support for faculty extramural service activities is provided by GWSPH departments or external funds. Departments have their own processes for helping faculty to engage in extramural service (typically funding for attendance at conferences or professional organization membership). Extramural grant awards also provide funding for faculty who wish to engage in service.

The Honey W. Nashman Center for Civic Engagement and Public Service seeks to integrate civic engagement into the university's educational work. The center promotes equity and active citizenship in a diverse democracy, focuses GW's resources to address community needs through reciprocal partnerships beyond the campus and enhances teaching, learning and scholarship at GW. Faculty, staff and students accomplish these goals through community service, social innovation and community engaged scholarship.

Housed within GWSPH, the DC Metro Urban Health Program (UHP) offers faculty the ability to participate in community service efforts. UHP is a voluntary public health-focused service-learning initiative open to all residential GW public health students and faculty. Within the multidisciplinary learning community, students are charged with implementing a health education/promotion project developed around community-identified needs and latest best practices. Projects are implemented, analyzed and adapted for each partner site, such as community-based clinics, schools, government entities, nonprofit organizations and various living communities. UHP provides students with an opportunity to translate their public health knowledge learned in the classroom to practice in the larger DC community while gaining essential team and leadership skills.

3) *Describe and provide three to five examples of faculty extramural service activities and how faculty integrate service experiences into their instruction of students. This response should briefly summarize three to five faculty extramural service activities and explain how the faculty member leverages the activity or integrates examples or material from the activity into classroom instruction. Each example should be drawn from a different faculty member, if possible.*

Example No. 1: Lara Cartwright-Smith, JD, MPH, is Associate Professor in the Department of Health Policy and Management, and Program Director for the MPH in Health Policy. Professor Cartwright-Smith is currently a member on the Methods and Data Council for AcademyHealth. The council has five primary responsibilities including advising AcademyHealth leadership in "identifying trends, opportunities, challenges and needs related to existing and emerging methods used in health services research as well as in data collection, quality, security, storage, curation, availability, and accessibility for research."[96] Based on discussions in these council meetings, Professor Cartwright-Smith identified key skills for GWSPH MPH graduates. She created a clinic course in 2022–2023 to bring more practical skills development into the classroom.

Example No. 2: Uriyoan Colon-Ramos, ScD, MPA, is Associate Professor in the Department of Global Health. She won the GW Nashman Prize for Community Engagement Scholarship and the Faculty Research Excellence Award for her work identifying and understanding the dietary determinants of underserved and at-risk populations to better inform nutrition policies and programs. She incorporates her mixed methodology and learnings from this work in her classes.

Example No. 3: Leonard H. Friedman, PhD, MPH, FACHE, is Professor in the Department of Health Policy and Management, and Director of the MHA@GW. He is currently Editor of the *Journal of Health Administration Education*. Dr. Friedman utilizes his editor experience in the classroom not only in terms of implementing lessons learned from the journal but also guiding students in the development of their final research paper.

Example No. 4: Sandy Hoar, DMSc, is Faculty Emeritus at GWSPH. She provides hands-on advisory support to UHP and student teams. Dr. Hoar is an original founder of UHP (then known as Interdisciplinary Student Community-Oriented Prevention Enhancement Service [ISCOPES]) and continues to provide programmatic and partnership support to the program.

Example No. 5: Adnan Hyder, MD, MPH, PhD, is Senior Associate Dean for Research and Innovation and Professor of Global Health. In 2020–2021, Dr. Hyder led an 11-country evaluation of health policy and systems research for the WHO. Dr. Hyder brings his considerable expertise in research, policy work and global health to GWSPH through his efforts to align the PhD and MS curricula, develop and convert the GWSPH Summer Institute to an online course offered to over 100 participants and standardize the GW Postdoctoral program to effectively enhance postdocs' professional development and training experience. Dr. Hyder is also a regular co-teacher and mentor to students on ethics, injury prevention and non-communicable diseases.

Example No. 6: Patricia MacTaggart, MBA, engaged in a Veterans Health Administration (VHA)-Performance Effectiveness IPA between 2018 and 2022. Professor MacTaggart supported access to services for veterans' workflow validation, external and internal demand factors impacting timely access to services, supply and other influencers and impactors of care delivery, including development and implementation of parameters for metrics and evaluation. Professor MacTaggart participated in a second IPA in 2014 to 2017 at the HHS Office of National Coordinator for Health Information Technology (ONC). She provided leadership and technical assistance to the State Innovation Grant (SIM) design and test states to the ONC Office of Transformation. Professor MacTaggert teaches several health IT, information systems and informatics courses that include examples from her IPA work with the federal government.

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[96] *Methods and Data Council*. (n.d.). AcademyHealth. Retrieved February 28, 2024, from https://academyhealth.org/about/people/councils/methods-and-data-council/page/methods-and-data-council

4) *Provide quantitative and/or qualitative information that characterizes the unit's performance over the last three years on the self-selected indicators of extramural service, as specified below.*

Select at least three of the following indicators that are meaningful to the school. In addition to at least three from the list in the criteria, the school may add indicators that are significant to its own mission and context.

Percent of faculty participating in extramural service activities

A review of primary instructional faculty's CVs indicates that approximately 94% of faculty have participated in extramural service in the last three years (N=125/133). Examples of extramural service include participating on an advisory board, committee or council; as a volunteer for a governmental or community organization; and as a consultant. Almost 40% of PIF reported holding an editorial position for a journal in the last three years. One PIF, Juan Klopper, MD, Teaching Associate Professor of Biostatistics and Bioinformatics, has created a YouTube page where he creates, produces and edits videos on mathematical concepts and statistical software. He has amassed 12,600 subscribers who watch his free educational content.

Public/private or cross-sector partnerships for engagement and service

UHP partners with several private and public organizations in the DC metro area. In 2022–2023, community partners included District of Columbia Public Schools, Housing Up and Latin American Youth Center. UHP student teams work with their partners to identify community needs. Generally, needs fall into one of three categories: family and youth engagement, adult health literature and healthy teen scholars.[97] Over the course of the year, teams design and implement 10–11 educational activities, ranging from building career vision boards, visiting the GW campus, practicing exercise routines using household objects and training on how to administer naloxone (Narcan).

The Air Quality Initiative, now known as the Air Quality Partners Program, was a pilot project completed in partnership with the Honey W. Nashman Center Knapp Fellowship program at GW and the Latin American Youth Center River Corps program in Washington, DC, during the spring of 2022. UHP now stewards this partnership with the Latin American Youth Center through their DC River Corps and Montgomery County Conservation Corps programs to deliver technical and skills-based curriculum focused on air quality and pollution. Over the course of six weeks, GWSPH students conduct 12 interactive classroom sessions that cover various topics, such as background on what air pollution is, where it comes from, how it affects human health, ways to map it and how to effectively communicate data. GWSPH students also facilitate air-quality collection walks with the use of AirBeam 3 monitors throughout the DC area to analyze differences in air quality across the District's wards. In 2022, three MPH students participated in the Air Quality Initiative.

UHP also offers a summer opportunity for students through our partnership with the Latin American Youth Center's Summer Youth Employment Program. The Center's Community Wellness Department welcomes 20 to 30 youth, aged 14 to 15, living in DC to engage in community health on either the "Food and Nutrition'' track or "Prevention" track, learning about personal and community health, then taking that knowledge out into the community. Youth leaders participate in outreach events, lead healthy cooking demonstrations and get a sense of what work in community health can look like. Each Monday throughout the six-week program, the two tracks come together. Our UHP students are responsible for developing and facilitating these Monday sessions to align content planned for each track and discuss how it connects to larger principles of public health and health promotion. The mission is to empower a diverse

[97] Healthy teen scholars are high school youth interested in health careers.

population of youth to achieve a successful transition to adulthood, through multicultural, comprehensive and innovative programs that address youths' social, academic and career needs.

Number of community-based service projects
UHP offers students and faculty several opportunities throughout the year to engage in community-based service projects. While suspended in 2020–2021 due to the COVID-19 pandemic, the engagement of students, faculty and community partners is stronger than ever.

Engagement with Urban Health Program		
	2021-2022	**2022-2023**
Number of students who engaged	24	48
Number of community partners	4	3

See ERF > Criterion E > Criterion E5 > E5.4: Extramural Indicators.

5) *Describe the role of service in decisions about faculty advancement.*

Faculty service to the school, university, professional societies and the public is one of the elements considered in decisions regarding promotion and tenure. Service to the department is expected and, alone, is insufficient evidence for advancement. According to the APT guidelines, service "encompasses professional and public service to professional societies and associations, government agencies, and public and private bodies engaged in public health practice and policy. Service, as distinguished from public health practice, denotes activities involving no, or nominal, compensation and undertaken without significant extramural support." Faculty service activities are indicators rather than requirements for advancement. GWSPH APT guidelines align with university faculty code (see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

According to the APT guidelines, service activities may include:

- Membership on standing or ad hoc committees at the school or university levels
- Participation in formal school- or university-wide student activities such as orientation or career development programs
- Formal mentorship of junior faculty
- Contributions to the administrative management of GWSPH or the university
- Participation in events that develop and advance the school or university (e.g., public health grand rounds, faculty development activities, and similar events)
- Expert consultation to governmental bodies, health care organizations and institutions, professional organizations and societies, community organizations and similar bodies
- Membership on selection committees for awards or fellowships
- Participation in the planning of major professional society or organizational activities (e.g., membership on an annual conference planning committee)
- Participation without, or with nominal, compensation in health education and health promotion or public health preparedness activities for the general public or at-risk populations
- Congressional or agency testimony, briefings and formal presentations
- Identification and coordination of responses to health needs in the surrounding communities, the District and the nation, including increasing public awareness of disease prevention and health maintenance, organizing the provision of continuing education to practicing health care professionals and devising strategies to provide health care to underserved and underfinanced populations

- Leadership in national/international groups dealing with public health practice, public health and health care policy, and health care administration
- Leadership and active participation in continuing education to health professionals at the local, regional or national level

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH faculty are actively engaged in service to the school, university, professional societies and the public. Many faculty are working in the domestic and international community, generating connections and partnerships for student involvement.
- Tamara Taggart, PhD, MPH, Assistant Professor in the Department of Prevention and Community Health, is serving as the 2023–2024 Nashman Center Faculty Fellow. During the year, Dr. Taggert has been conducting community-engaged formative research to develop an Activist in Resident Program. This program is a practice model that provides opportunities for activists to engage with an academic community to develop and strengthen their capacity, network, resources and work.
- Two members of the GWSPH faculty (Lynn Goldman, PhD, MD, MS, and Bill Dietz, PhD, MD) are members of the National Academy of Medicine, and one faculty member (Gene Migliaccio, DrPH, MPH) is a member of the National Academy of Public Administration. James Tielsch, PhD, is a recent recipient of the Consortium of Universities for Global Health Distinguished Leadership Award. Wanda Nicholson, MD, MPH, MBA, is Vice Chair of the US Prevention Services Task Force and Vice-President-Elect of the Board of Directors of the American Board of Obstetrics and Gynecology. Scott Evans, PhD, MS, was recognized as a Founder of the American Statistical Association.

Challenges

- Neither the university nor the school offers financial support for faculty to engage in community service. Faculty must balance their teaching and research obligations with other GW commitments.
- While service is an important consideration in promotion and tenure, service outside of the university and school is not required. Regardless, most teaching faculty do engage in community service.

Future Plans

- GWSPH is reviewing results of a schoolwide faculty mentor and mentee experience survey conducted in the summer of 2023. Informed with this feedback, GWSPH plans to design a schoolwide mentoring model that will support faculty growth and development including an emphasis on balancing teaching, research and service engagements.

F1. Community Involvement in School Evaluation and Assessment

The school engages constituents, including community stakeholders, alums, employers and other relevant community partners. Stakeholders may include professionals in sectors other than health (e.g., attorneys, architects, parks and recreation personnel).

Specifically, the school ensures that constituents provide regular feedback on its student outcomes, curriculum and overall planning processes, including the self-study process.

1) *Describe any formal structures for constituent input (e.g., community advisory board, alum association, etc.). List members and/or officers as applicable, with their credentials and professional affiliations.*

Dean's Advisory Council
Dean Goldman has a select group of external advisors who provide feedback on the school's strategic plan, program curricula, assessment and evaluation activities, and other academic items.

Member	Affiliation
Fred Brown	Health Care Advisor, Chairman, Fred L. Brown & Associates, LLC
Peggy Hamburg	Foreign Secretary, National Academy of Medicine
Michael Klowden	Milken Institute, Executive Vice Chairman of the Board
Peter Kovler	Chairman, Blum-Kovler Foundation
Esther Krofah	Milken Institute, Executive Vice President, Health
Kenneth Moritsugu (Chair)	CEO, First Samurai Consulting, LLC
Norma Ramsey	Director, The Ramsey Foundation
Diane Rowland	Executive Vice President Emerita, Kaiser Family Foundation
Ellen Sigal	Chairperson and Founder, Friends of Cancer Research
Richard Southby	Executive Dean and Distinguished Professor of Global Health Emeritus, George Washington University
Ann Walker Marchant	CEO, The Walker Marchant Group

The GW Office of Development and Alumni Relations is responsible for officially communicating with the Dean's Council and coordinating meetings. During the COVID-19 pandemic, meetings were postponed. Official communications restarted in October 2022 regarding updates on the school's 25th anniversary and inviting members to attend the Health, Equity, and Law after Dobbs Conference in February 2023. Additionally, Esther Krofah was invited to be the school's commencement speaker in the spring of 2023.

Dean Goldman informally confers with, seeks advice from and has a two-way open-door relationship with members of the Council. While these communications do not occur through the official Dean's Council mechanism, they still provide significant feedback for the Dean and school.

Practice Partners and Employers

GWSPH Career Services and the Office of Applied Public Health actively engage employers and practicum preceptors throughout the year at fairs and panels. Event attendees are surveyed and asked to participate in focus groups to gain insights into the preparedness of our students for the public health workforce. For example, the December 2022 Community Partner Appreciation Event celebrated the historic and ongoing partnerships with 2,500+ practicum partners who have supported our students over the last 25 years. The event included keynote speakers, Wanda Nicholson, Amita Vyas and an alum, plus a student panel sharing their practicum experiences. Each department honored a practicum partner with an Outstanding Partnership Award. During the event, GWSPH staff engaged practice partners in a table focus group exercise. Topics discussed included students' professionalism, interprofessional communication skills and public health knowledge and skills.

MHA Advisory Boards

The principal advisory group for both the residential and online MHA programs is the Community Advisory Committee (CAC). The 10-member CAC is composed of industry leaders in hospitals and health systems, information technology, post-acute care, Veterans Administration health care and consultancy. CAC meets twice annually to advise on the MHA programs' strategic planning process, changes in the field and curricular updates. In addition to CAC, the MHA programs also rely on the GWU MHA Alumni Association and the Student Advisory Council, the latter of which was formed to encourage input from current students about their perceptions and interpretations of potential needs of the programs.

Research Community Advisory Boards

Many of the GWSPH chartered research centers and institutes have community advisory boards that provide feedback (see ERF > Criterion F > Criterion F1 > F1.1: Constituent Input). The Sumner M. Redstone Global Center for Prevention and Wellness is one such center. Not only does the Redstone Center accept requests from community organizations seeking research support, policy analysis and legislative development, they also have a community advisory board that contributes to the center's research foci.

Workforce Equity Advisory Board

The Mullan Institute Advisory Board contributes to the Fitzhugh Mullan Institute for Health Workforce Equity's vision of a diverse health workforce that has the competency, opportunity and courage to ensure that all people attain their full health potential. The Mullan Institute calls this Health Workforce Equity.

Member	**Affiliation**
Leana S. Wen, MD, MS (Chair)	Emergency Physician and Professor of Health Policy and Management, GWU; Nonresident Senior Fellow, Brookings Institution
Shannon Brownlee	Essayist, Writer, and Speaker; Former Senior Advisor, Lown Institute
Geoffrey Cowan, JD	Professor, School for Communications and Journalism, USC Annenberg
Irene Dankwa Mullan, MD, MPH	Strategic Advisor and Chief Health Officer, Marti Health; Affiliate Professor, GWSPH
Peter Darrow, JD	Senior Counsel, Clearly Gottlieb
Robert Graham, MD	Former national program director, Aligning Forces for Quality; Research Professor of Health Policy, GWSPH
Christopher Oeschli, JD	Former President and CEO, The Atlantic Philanthropies

Alum Engagement

Every two to three years, GWSPH reaches out to recent alums to complete a brief survey and participate in an interview. The survey link is shared in emails to alums, at organized alum events, via social media and by "word of mouth." At the end of the survey, alums sign up for an interview date with a member of the accreditation team to discuss program curricula, post-graduation activities and trends in the public health field that can be incorporated into the school's curricula.

The GW Office of Development and Alumni Relations engages with GWSPH alums encouraging them to participate in university and school events, read GW newsletters, attend networking events and career panels, and sign up to be a Giving Day advocate. Recent events where alums have been invited include:

- 950 Awards Ceremony
- Milken Institute School of Public Health Dean's Breakfast (as part of Alumni and Families Weekend)
- Annual Southby Lecture (as part of National Public Health Week)
- Gibbs Oration/Coile Lectureship
- APHA Alumni and Friends Reception

The Office of Development and Alumni Relations routinely meets with Dean Goldman to keep her updated on alums' engagement score, which is calculated based on some of the activities mentioned above. If alums are interested in volunteering or mentoring, their contact information is forwarded to the appropriate GWSPH staff or faculty.

GWSPH's local chapter of Delta Omega, the honorary society in public health, maintains connections between inducted students and alums. The society occasionally holds webinars and chapter leadership has expressed interest in organizing service activities for inductees.

MHA alums are one of the more active graduate groups at GWSPH. They respond to surveys, participate in school events, and often reach out with residency and/or fellowship opportunities for current students. The MHA program hosts a reception annually at the American College of Health care Executives (ACHE) meeting. While catching up with alums, faculty use the opportunity to talk of the latest trends and needs of the health care industry.

2) *Describe any other groups of external constituents (outside formal structures mentioned above) from whom the unit regularly gathers feedback.*

Academic Program Reviews

Every seven years, departments are required to undergo a performance review and write a report (see ERF > Criterion F > Criterion F1 > F1.5: External Contribution). As part of this report, departments rely on feedback from alums, practicum preceptors and employers to identify strengths, challenges and plans for improvement in each of their degree programs.

Distinguished Visitors

The Geiger Gibson Program in Community Health Policy selects a distinguished visitor every year to guest lecture and consult on ideas. These visitors are experts in the community health center field, often running health centers across the country. Distinguished visitors serve as informal advisors to the Geiger Gibson Program on issues related to their area of expertise. The Geiger Gibson Program collaborates with the National Association of Community Health Centers (NACHC) to recognize young leaders with Emerging Leader Awards. The awards celebrate young leaders whose specific work has helped further the health center mission of health care and better health for medically underserved patients, communities and special populations. A group of former distinguished visitors work together to develop criteria, review nominations and select awardees every year.

Public Health Experts

We invite guest lecturers and speakers, who talk about their public health work and the current (and future) state of the field. Such speakers have included Anthony Fauci, MD (former Director of the National Institute of Allergy and Infectious Diseases); Georges Benjamin, MD (APHA Executive Director), Kirsten Bibbins-Domingo, PhD, MD (JAMA editor); and Jerome Adams, MD, MPH (former US Surgeon General). In addition to schoolwide functions, departments also invite specific topic experts to speak. For example, the Department of Prevention and Community Health hosts PCHats throughout the academic year. Invited speakers for fall 2023 included Andrea Mantsios, PhD, MHS (Founder and Principal Consultant of Public Health Innovation and Action), and representatives from DC Education Research Collaborative and School-Friendly Health Systems (a partnership between Children's National Hospital and nonprofit RESOLVE). While these individuals don't provide direct feedback on our curricula, they do provide us with insights on the direction of the field and changes we may make.

3) *Describe how the school engages external constituents in regular assessment of the content and currency of public health curricula and their relevance to current practice and future directions.*

The school engages alums and employers regularly for feedback on the content and currency of the public health curricula and their relevance to current practice and future directions.

Alums

Through the Alum Survey and Interviews with graduates, GWSPH collects actionable data. Recent graduates (≤ 3 years) provide information on the strengths and weaknesses of the current curriculum and how it has impacted their post-graduation plans. Not-so-recent graduates (>3 years) act as public health experts and provide information on the future of the public health field and how GWSPH can incorporate such knowledge and skills into the curricula.

The most recent round of data collection began in September 2023 with an email to alum. Later that fall, QR codes linked to the survey were distributed at the GW's Alumni Weekend and the 2023 APHA Alumni and Friends event in Atlanta, Georgia. Results are discussed at GWSPH Curriculum and Executive Committees.

Employers and Practicum Preceptors

Attending employers are surveyed at every GWSPH Career Services career fair and recruiter informational session. They answer questions related to the curriculum such as qualitative and quantitative analysis skills, interpersonal communication skills, interprofessional teamwork and public health knowledge specific to the field.

APEx and DAPEx preceptors provide feedback after each practicum experience on the students' readiness to enter the public health workforce. Their responses are actionable data on what skills and knowledge to include in our curriculum.

4) *Describe how the school's external partners contribute to the ongoing operations of the school, including the development of the vision, mission, values, goals and evaluation plan and the development of the self-study document.*

External stakeholders contributed to the development of the 2020 strategic plan through both formal and informal mechanisms. The Dean's Council met formally once during the development of the strategic plan to provide feedback and the Dean consulted stakeholders in person and via phone and email to informally accept feedback. As part of this strategic planning process, the school's mission, vision and goals were discussed. When GWSPH embarks on a new strategic plan in 2024–2025, stakeholders will be engaged again.

The Dean's Council met on January 29, 2024, to update members about the state of the school and the reaccreditation process. Overall, Council members were impressed with the breadth and depth of information detailed in the preliminary self-study. They had no further comments or feedback regarding the school's mission, values, goals and vision, which was expected as they previously supplied feedback during their creation as part of the strategic plan. Several Council members felt strongly that GWSPH needed to do a better job of highlighting graduates and the amazing public health work they have accomplished. The Council recommended more storytelling efforts to boost the school's profile and potentially recruit more applicants. While not applicable to the self-study, we have taken this feedback under advisement and will be looking for additional ways to feature graduates on our website. At least one of the Council members hires GWSPH graduates and commended the school on their knowledge of public health skills and ability to jump right in, learning on the job. Last, there was a discussion on how best to continue to engage external stakeholders in the school's operations.

5) *Provide documentation (e.g., minutes, notes, committee reports, etc.) of external contribution in at least two of the areas noted in documentation requests 3 and 4.*

Documentation for the following external contributions is in the ERF:

- Academic Program Reviews (APR)
- Alum Surveys and Interviews
- Employers and Practicum Preceptors

See ERF > Criterion F > Criterion F1 > F1.5: External Contribution.

6) *Summarize the findings of the employers' assessment of program graduates' preparation for post-graduation destinations and explain how the information was gathered.*

Employers were surveyed in spring 2023 about their recent hires (either as employees or interns). As evidenced by the table below, most employers indicated that their hires were strongly skilled in a variety of public health skills. Interpersonal communication skills and being knowledgeable, professional and growth-oriented were listed as strengths of GWSPH hires. This was the first time these questions were asked. Additional data from spring 2024 is being

collected and will be available to site visitors. Based on preliminary self-study feedback, the spring 2024 survey was adjusted to allow for responses to be segregated by hires' degree level.

Skills	% rating strong or very strong (N)
Analytical skills, qualitative and quantitative	85% (11/13)
Communication	92% (12/13)
Culturally aware	75% (9/12)
Knowledgeable about the structure and function of the US public health system	67% (8/12)
Implementing and managing a project	67% (8/12)
Working successfully on an interprofessional team	85% (11/13)
Proposing strategies to resolve challenges	77% (10/13)

Focus groups of attending practice partners were held at the December 2022 Community Partner Appreciation Event to discuss student preparedness for the public health workforce. Overall, practice partners thought GWSPH students exhibited strong or very strong professionalism. They stated that students were ready to take on tasks, reliable, dedicated and enthusiastic. Of the students who were more hesitant to speak up if they had questions or experienced a barrier, most seemed to quickly learn how to speak up, problem-solve on their own and apply supervisor feedback. One focus group felt that students were able to connect work activities to lessons learned in the classroom and that GWSPH students were more "data ready" and thus able to dive in quicker compared to students from other area schools. Practice partners' feedback on students' interpersonal communication skills was mixed. Some felt that students had strong academic writing skills and worked well within teams, while others felt that professional communications (e.g., emails, presentations), interview skills, group organization and policy writing were lacking. Another Community Partner Appreciation Event is planned in 2023–2024.

Between September 23, 2023, and October 15, 2023, the accreditation team interviewed 19 not-so-recent alums (2019 and earlier) from the school's master's and doctoral programs with the majority (63%) having earned an MPH. Doctoral students are underrepresented, as only one DrPH graduate and no PhD graduates were interviewed. Not-so-recent alums were asked about the future of the field and what skills should be incorporated into the GWSPH curricula to better prepare graduates for the future workforce. Interestingly, several alums commented on how the COVID-19 pandemic has shaped the field and what future GWSPH graduates need to be prepared for. For example, future graduates will need to rebuild the public's trust, communicate complex scientific information to a general audience and provide clear action steps with a caveat that as the evidence continues to be examined, those steps may change. Alums noted that as a result of the pandemic, there was a shift in research and federal funding from chronic diseases to infectious diseases and outbreaks. Aligned with this shifted focus is the need for future public health practitioners to be able to write grants, manage finances and analyze data, specifically quantitatively with open-source software.

7) *Provide documentation of the method by which the school gathered employer feedback.*

See ERF > Criterion F > Criterion F1: F1.7: Employer Feedback_Method.

8) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- We have fantastic employer relations, supported by school and university engagement efforts. We engage employers for MPH and DrPH (D)APEx, MHA fellowships/residencies and employment opportunities. These relationships strengthen our connections in the community and benefit our students.
- GWSPH takes advantage of our DC location and works very closely with governmental, national and local organizations to create meaningful opportunities for students to engage and participate in public health work. Our central location means that institutions such as the WHO, White House and PAHO are all within walking distance or a short Metro ride.

Challenges

- During COVID-19, it was difficult to bring stakeholders to campus, but those activities are resuming positively.

Future Plans

- Stakeholder engagement will increase as we move into our strategic planning phase in 2023–2024.

F2. Student Involvement in Community and Professional Service

Community and professional service opportunities, in addition to those used to satisfy Criterion D4, are available to all students. Experiences should help students to gain an understanding of the contexts in which public health work is performed outside of an academic setting and the importance of learning and contributing to professional advancement in the field.

1) *Describe how students are introduced to service, community engagement and professional development activities and how they are encouraged to participate*.

As service and community engagement are core tenets of the school's strategic plan, they are highlighted on the school's website, on social media and during recruitment activities. During New Student Orientation, students are introduced to members of PHSA who discuss the organization's professional development activities. Weekly student newsletters publish upcoming service and community engagement opportunities. University broadcast emails encourage participation in service activities coordinated by the Honey W. Nashman Center for Civic Engagement and Public Service.

Students learn of opportunities through academic advising and required coursework. All GWSPH students are required to complete eight hours of professional enhancement (PE) activities. Students meet this requirement by attending webinars and workshops outside of the classroom. All MPH students are required to engage in one IPE activity and are encouraged to participate in more than one activity or a long-term activity to gain additional interprofessional skills. Students are introduced to UHP during interactions with the Office of Applied Public Health. UHP offers students the opportunity to apply skills learned in the classroom in the real world while engaging the community.

Undergraduate students are encouraged to join TEAM Milken, an initiative designed to help students succeed in classes and prepare for their future careers. TEAM Milken members engage in programming, receive academic resources, and are paired with faculty and staff mentors, who bolster academic, professional and personal success. This unique undergraduate experience is designed to truly support students as they enter college and the field of public health while setting them up for academic and professional success. Recent experiences have included:

- Milk n' Cookies (drop-in event to encourage peer-to-peer networking over a snack of milk and cookies)
- Lunches/meet and greets with undergraduate professors
- Self-care bingo at midterms/finals
- Various events surrounding the mentorship program such as mentor/mentee check-ins, structured programming and more
- Drop-in advising events with healthy snacks
- On-campus resource tabling to highlight resources available to undergraduate students (e.g., health center, writing center, Academic Commons)

2) *Provide examples of professional and community service opportunities in which public health students have participated in the last three years.*

Example No. 1: GWSPH has very active student-led organizations, the largest of which is the PHSA. Every year, these organizations coordinate numerous activities related to community engagement and professional development. These activities include résumé-building workshops, professional headshots (photographs) and salary-negotiation workshops.

Student Attendance at Student-Led Professional Development Activities	
2022–2023	*N*
Maternal and Child Health Résumé-Building Workshop	7
Professional Headshots	15
Salary-Negotiation Workshop	14
2023–2024 (YTD)	*N*
Professional Headshots	100
Winter Banquet (networking)	200

COVID-19 closed the Foggy Bottom campus from March 2020 to August 2021. While campus reopened in fall 2021 and programming increased, the uncertainty of planning in-person events and lack of experienced student leaders led to decreased activities and student engagement.

Example No. 2: In 2022–2023, students in UHP served six learning communities at three community partners. At Jackson-Reed High School, GWSPH students implemented a Healthy Teen Scholars program, which focused on having mental health discussions with high school students. Most topics discussed were chosen by the high school students. Another UHP team implemented a series of adult health literacy discussion at our Housing Up community partners. These sessions promoted health habits and discussed chronic disease prevention. Topics were participant-suggested and included sleep, hygiene, benefits of exercise, cancer awareness and diabetes (see ERF > Criterion F > Criterion F2 > F2.2: Community service_e.g).

Example No. 3: In March 2023, the Center of Excellence in Maternal and Child Health hosted Working Towards Birthing Justice in partnership with a Women in The Room Productions. At this PE-eligible event, over 70 attendees screened Women in The Room's film *Birthing Justice: Every Woman Deserves a Beautiful Birth Story* and heard from a panel moderated by a MCH student. The film focused on the experiences of Black women in the US during their pregnancy and postpartum periods and highlighted the need for community engagement. The panelists (some of whom were featured in the film) discussed the burden of maternal mortality on Black women and communities and how to advocate and address these issues.

Example No. 4: In July 2020, the Honey W. Nashman Center for Civic Engagement and Public Service partnered with Alice Deal Middle School to offer virtual programming. GWSPH student Nikki Vivekanandan participated in SummerTrek Changemakers Program, where she was able to facilitate DC middle schoolers' research and advocacy projects addressing community issues such as the COVID-19 pandemic, racism and climate change. Nikki's group of middle schoolers put together a presentation on myths versus facts around the COVID-19 virus. She taught them how to research credible sources and translate scientific information for the lay audience.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- All students participate in professional development opportunities to meet their PE requirements. This participation often leads students to seek out additional opportunities for community and professional service.
- Students have multiple opportunities to engage in community service through student organizations, GWSPH partnerships and connections or university-led activities. Plus, the DC metro area is ripe with opportunities for students to explore on their own.

- GWSPH offers field experiences for undergraduates in Exercise Science, connecting them to internships and connections for post-graduation work, especially for those planning to apply to medical school, physical therapy school, etc.
- The university-led Honey W. Nashman Center for Civic Engagement and Public Service is a wonderful partner to GWSPH and an incredible resource. It works closely with GWSPH students, faculty and staff, offering both service and learning opportunities. "The mission of the Honey W. Nashman Center for Civic Engagement and Public Service is to integrate civic engagement into George Washington University's educational work. [They] promote equity and active citizenship in a diverse democracy, focus GW's resources to address community needs through reciprocal partnerships beyond the campus, and enhance teaching, learning, and scholarship at GW."[98]

Challenges

- Resuming in-person opportunities with partners following COVID-19 has encountered various health and related issues depending on the needs and policies/protocols of partner organizations and institutions.

Future Plans

- GWSPH plans to continue to expand service-learning opportunities for undergraduate and graduate students as well as opportunities for cross-degree level student engagement.
- GWSPH plans to continue to grow and expand the number of students participating in UHP as well as with the community partners we work with through this program.
- GWSPH aims to support faculty training and engagement in service learning so that they may engage students in and outside of the classroom, bolstering student participation in community service.

[98] Honey W. Nashman Center for Civic Engagement and Public Service. (n.d.). About Our Office. *The George Washington University*. https://serve.gwu.edu/about-our-office

F3. Delivery of Professional Development Opportunities for the Workforce

The school advances public health by addressing the professional development needs of the current public health workforce, broadly defined, based on assessment activities. Professional development offerings can be for-credit or not-for-credit and can be one-time or sustained offerings.

1) *Provide two to three examples of education/training activities offered by the school in the last three years in response to community-identified needs. For each activity, include the number of external participants served (i.e., individuals who are not faculty or students at the institution that houses the school) and an indication of how the unit identified the educational needs. See Template F3-1.*

GWSPH is home to several centers and educational activities that deliver professional development opportunities for the workforce.

Fitzhugh Mullan Institute for Health Workforce Equity
Housed in the Department of Health Policy and Management, the Fitzhugh Mullan Institute for Health Workforce Equity is committed to addressing health inequities by building a diverse, skilled health workforce. The institute's interdisciplinary faculty and staff conduct research, provide professional development opportunities and advocate for health equity.

Healthcare Corporate Compliance Certificate
The Healthcare Corporate Compliance Certificate Program is offered by GWSPH, in partnership with Feldesman Tucker Leifer Fidel LLP, a leading health care law firm in Washington, DC. It is designed for current or aspiring corporate compliance officers and others working in compliance-related fields. The program is accredited by the Compliance Certification Board. The program is in the process of moving full-time into GWSPH to better meet the needs of its participants.

MicroMasters
In fall 2023, GWSPH announced the launch of a MicroMasters in Maternal and Child Health on edx.org. The five-course sequence is offered at two tier levels:—individuals may learn free of charge or pay a course fee to receive graded assignments and exams and a certificate of completion. Students who complete the latter tier may transfer the certificate to a GWSPH MPH degree as elective credits. The first course launched October 10, 2023, and the rest of the courses launched in December 2023.

Global Women's Institute
Global Women's Institute (GWI) collaborates with leaders from Washington, DC, across the country and around the world to build a network of people committed to improving the lives of women and girls. GWI offers a number of professional development opportunities including the GenderPro Initiative, which is hosted in partnership with UNICEF, the Elliott School of International Affairs and the College of Professional Studies. GenderPro consists of several components, including a resource library, a training center, and a rigorous, competency-based educational course and credentialing program for mid- to senior-level development and humanitarian professionals, which was created to prepare gender professionals to perform their work more effectively.

GWSPH Summer Institute
Under the direction of the Senior Associate Dean for Research and Innovation, GWSPH offers online Summer Institutes, which are open to the public. These graduate-level short courses are taught by leading public health researchers and practitioners and address the latest research

and innovation in specific topics. Students are also allowed to register for these courses and apply them toward their degrees.

Template F3-1

	Education/training activity offered	**How did the unit identify this educational need?**	**External participants served**
Example 1	*Residency Fellowship in Health Policy* This intensive three-week elective is open to multi-specialty resident and fellow physicians interested in US health policy and its implications for medical practice and health care delivery. This sought-after fellowship is held twice per year. During each session, participants attend daily classroom-based lectures and visit local health care and policy-related institutions.	This fellowship has been active for almost 20 years. The fellowship was developed in response to the Accrediting Council for Graduate Medical Education's endorsement of systems-based practice competencies for residents. Feedback from early sessions indicated a need for a broad foundational knowledge in US health care delivery and health policy. Current discussion topics and site visits are identified through a combination of student feedback, lecturer expertise and the current health policy environment.	Up to 25 physicians enroll in every session. Since 2005, the fellowship has served 763 participants.
Example 2	*Atlantic Fellows for Health Equity* This yearlong fellowship program is dedicated to training leaders who combat health inequities and disparities locally, nationally and internationally. Fellows participate in online trainings and self-directed learning and convene in person four times per year to network and engage in learning intensives. Throughout the experience, fellows receive personalized leadership coaching and mentorship.	The fellowship was developed in part due to a generous donation from the Atlantic Philanthropies in 2016. The need for local leaders who could tackle health disparities in their communities was a vision of the Fitzhugh Mullan Institute for Health Workforce Equity. Feedback from fellows and the impact they have had in addressing change in their communities further reinforced the need for this fellowship program.	Between 2017 and 2021, the program sponsored 89 fellows from more than 25 countries. In 2023, there were 19 participants.
Example 3	*Healthcare Corporate Compliance Certificate* Designed for working professionals, the 12-credit certificate provides students with a uniquely comprehensive education in health care corporate compliance. The hybrid program includes both asynchronous online content and two residential components. Credit may be applied to MHA or MPH.	Employers and practice partners identified a need for academic education and training in health care corporate compliance. This has continued to be true as the field has grown into a profession. This has led us to get this program accredited by the Compliance Certification Board.	Since 2005, there have been more than 380 graduates.

2) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- The Fitzhugh Mullan Institute for Health Workforce Equity has a powerful reputation for its interdisciplinary faculty, staff and participants from across the globe. The engagement of these leaders has led to continual quality improvement in content, strong evaluations from professional development initiatives and commitment from participants to continue to work with the institute.
- The Mullan Institute has received approximately $11.7 million in institutional funding since 2017, allowing the institute to continue preparing leaders and researching health disparities.
- More than 100 individuals have registered for the newly launched MicroMasters, indicating this model meets workforce needs and demands.
- Fellowships offered by the Mullan Institute, the Department of Health Policy and Management and courses offered by GWSPH such as the Summer Institute, continue to be highly sought after by public health working professionals.

Challenges

- Given the focus of the Mullan Institute, many of its employees and participants face prejudice, bias and injustices. The stress and trauma experienced are collectively shared. Effective mechanisms of self-care are insufficient, and burnout is possible.

Future Plans

- Much of the current work of the Mullan Institute is outward facing. Over the next several years, the institute would like to focus on workforce equity at GW targeting both employees and students.
- GWSPH is reviewing and updating the Healthcare Corporate Compliance Certificate and plans to offer classes to current students as well as pursue models to increase accessibility and affordability for working professionals.

G1. Diversity and Cultural Competence

The school or program defines systematic, coherent and long-term efforts to incorporate elements of diversity. Diversity considerations relate to faculty, staff, students, curriculum, scholarship and community engagement efforts.

The school or program also provides a learning environment that prepares students with broad competencies regarding diversity and cultural competence, recognizing that graduates may be employed anywhere in the world and will work with diverse populations.

Schools and programs advance diversity and cultural competency through a variety of practices, which may include the following:

- **incorporation of diversity and cultural competency considerations in the curriculum**
- **recruitment and retention of diverse faculty, staff and students**
- **development and/or implementation of policies that support a climate of equity and inclusion, free of harassment and discrimination**
- **reflection of diversity and cultural competence in the types of scholarship and/or community engagement conducted**

1) *List the school's self-defined, priority under-represented populations; explain why these groups are of particular interest and importance to the school; and describe the process used to define the priority population(s). These populations must include both faculty and students and may include staff, if appropriate. Populations may differ among these groups.*

   The school generally follows the NIH guidelines regarding underrepresented populations (URP), as well as those of the US Office of Management and Budget for students, staff and faculty. As such, the following racial/ethnic categories are considered URP at GWSPH: American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Hispanic/Latino origin, African American/Black and Asian. These designations were chosen to help support applications for external funding and for ease of comparing GWSPH to other schools of public health and other institutions within our geographic area. Additionally, GWSPH includes active and retired military personnel in our defined URP. GW wishes to be at the forefront of support for active and retired military and has made concerted efforts in the last decade toward increasing military representation at the university.

2) *List the school's specific goals for increasing the representation and supporting the persistence (if applicable) and ongoing success of the specific populations defined in documentation request 1.*

   Diversity and inclusion are core tenets of GWSPH. The school's 2020 strategic plan outlines goals to maximize diversity and inclusion with the priority being to complete and implement a Diversity and Inclusion Plan. To spearhead this effort, Wanda Nicholson, MD, MPH, MBA joined GWSPH as Senior Associate Dean for Diversity, Equity and Inclusion in November 2022. Under Dr. Nicholson's leadership, the Office of Inclusive Excellence, Diversity and Justice (OIE) is committed to creating a dynamic, diverse and inclusive school community and sustainable culture of belonging. To achieve this, OIE aims to:
   - Increase the number of URP applicants to graduate programs through exposure to GW through cross-collaborations with historically black universities and colleges (HBCUs), Hispanic-serving institutions (HSIs), majority institutions and community partners.
   - Promote diversity, equity and inclusion (DEI) training for students, faculty and staff including skill-building education to reduce microaggressions and ensure civility in classroom interactions.

- Design a schoolwide campaign to integrate a sense of belonging, diversity and inclusion.
- Implement assessments of intra- and inter-group interactions, within and between departments to create, cultivate and sustain a supportive culture of belonging.
- Develop new and improved infrastructure that promotes hiring, retaining, mentoring and promoting of entry-level URP faculty.

In 2018, the university released The George Washington University Response Action Plan for Diversity, Equity and Inclusion in response to an offensive and racially inflammatory social media posting. Students, staff and faculty collaborated to develop nine goals with detailed plans for implementation (see ERF > Criterion G > Criterion G1 > G1.2: Goals).

3) *List the actions and strategies identified to advance the goals defined in documentation request 2 and describe the process used to define the actions and strategies. The process may include collection and/or analysis of school-specific data; convening stakeholder discussions and documenting their results; and other appropriate tools and strategies.*

Dr. Nicholson led the development of OIE's strategic plan through discussions with students, staff and faculty via informal "listening" sessions (see ERF > Criterion G > Criterion G1 > G1.3: Goal Advancement). Aims were solidified following review and approval by GWSPH executive leadership, the GWSPH Diversity and Inclusion Action and the GW Office of Diversity, Equity, and Community Engagement (ODECE). Such collaboration engendered engagement from all levels of the university in promoting and implementing strategies to improve diversity and inclusion at GWSPH.

The GWSPH Diversity and Inclusion Action Committee, composed of elected faculty, staff members and students, advises and consults on all policies, programs and activities within the school that are relevant to achieving and strengthening the school's goals of DEI (see ERF > Criterion G > Criterion G1 > G1.3: Goal Advancement). This committee acts separately from OIE but provides meaningful feedback on OIE's goals and plans.

Starting in 2023, the GWSPH website team began updating the school's website to a new visual format. One of the changes is the creation of a landing page for diversity and inclusion, accessible from the GWSPH main page. This landing page will include more information about OIE, its goals and activities.

Results from the university's recent Climate Survey (as described in Criterion G1.6) will be used to inform and strengthen these efforts.

GWSPH has focused on the following initiatives to increase diversity and inclusion in the last few years:

Increase the number of URP applicants to graduate programs through exposure to GW through cross-collaborations with historically black universities and colleges (HBCUs), Hispanic-serving institutions (HSIs), majority institutions and community partners.
To improve access to GW and increase URP graduate applicants, GWSPH strategically collaborated with HBCUs, HSIs and other institutions with historically high populations of URPs. For example, GWSPH's innovative interprofessional experience has expanded in recent years to partner with institutions such as Howard University, allowing undergraduate and high school students to gain exposure to GW. These opportunities are available because of long-standing research relationships with these institutions from whom we recruit summer research assistants. GWSPH also organizes health professions fairs, where invited undergraduate students, mostly

from URP, can learn about careers in public health. The GWSPH Office of Admissions and Recruitment annually recruits at Spellman and Morehouse, both HBCUs.

GWSPH is also focused on increasing the number of URP graduate applicants and matriculants through scholarship and other funding opportunities and personalized support through the admissions process. In 2020, GWSPH waived all standardized test scores (e.g., GRE) for admission to graduate certificate, master's, and DrPH programs through the spring of 2024.[99] In 2020, GWSPH became test-optional, meaning undergraduate students applying for first-year or transfer admission are not required to submit standardized test scores (e.g., SAT, ACT). There are a few exceptions, but overall, this move reduces barriers, particularly for URP applicants. GWSPH participates in the McNair Scholars Program, which provides opportunities for low-income, first-generation undergraduate students and students from underrepresented, disadvantaged backgrounds to pursue post-baccalaureate education. In November 2022, GW launched the Third Century Scholarship Endowment Match in which the university committed to matching new gifts to needs-based undergraduate scholarship endowments dollar for dollar. GWSPH happily offers scholarships to first-generation applicants. Last, in 2023, the university awarded 11 DC high school students a Stephen Joel Trachtenberg scholarship, which covers the full cost of a four-year GW college education, including tuition, room, board, books and fees. One of these bright students enrolled at GWSPH in fall 2023.

To better track GWSPH's success in recruiting URP students, the GWSPH Diversity and Inclusion Action Committee and OIE are assisting in the development of an Inclusive Excellence Data Dashboard. This dashboard will expand on what the university currently provides regarding applicant and student demographics (i.e., beyond race and ethnicity).

In spring 2023, the Department of Environmental and Occupational Health proposed creating a joint program allowing students from any bachelor's degree at GW to enroll in any MPH program offered by the department. Undergraduate students from across the university can apply up to 12 MPH credits as crossover credits. The goal of this program is to increase the diversity of applicants to the MPH program.

The GW Military and Veteran Services (DVS), a division of Student Affairs, is committed to serving and supporting military-affiliated students across the university. Since 2013, GW has significantly expanded its veteran and military initiatives. As a result, DVS has experienced ongoing success in increasing the number of military-affiliated students enrolled at GW. These initiatives include:

- Yellow Ribbon Program provides a dollar-for-dollar match with the Department of Veterans Affairs (VA) contribution so active and retired military students can gain additional funds beyond those supplied in the Post-9/11 GI Bill.
- Military Community Center offers an on-campus home away from home for military-affiliated students to study and socialize.
- VetSuccess on Campus (VSOC) provides personalized support for students in the pursuit of their educational goals. Support may include, but is not limited to, assistance accessing VA services, career and academic counseling, expedited Chapter 31 services, and referral services, as needed.
- Student organizations, GW veterans and GW Naval Reserve Officer Training Corps (NROTC) students, provide networking opportunities, academic, professional and social support and military training experience.
- Tutoring assistance through VA benefit.

[99] The waiver is expected to be extended beyond spring of 2024.

- Military and Veteran Career Services Initiative guides military-affiliated students in their career goals through assistance with résumé writing, internship and employment opportunities and career-focused events.
- Specialized scholarships are available to military-affiliated students.

Promote DEI training for students, faculty and staff including skill-building education to reduce microaggressions and ensure civility in classroom interactions

In spring 2019, ODECE released an online DEI education module. The interactive module features video stories of students with discriminatory lived experiences, and addresses topics such as identity, power, privilege and oppression, and respectful and open communication. Built-in quizzes assess students' knowledge. The module is required of all undergraduate GW students at the time of enrollment. In the same semester, ODECE launched a website for reporting incidents of bias. Any member of the GW community can report incidents of bias or other forms of unwelcome conduct. Staff from the Bias Incident Response Team (BIRT) are alerted to submissions and respond with appropriate action.

All new faculty to GWSPH receive an official appointment letter that includes a statement about following the Code of Ethical Conduct and completing the university's *Preventing Harassment and Discrimination* online module. Likewise, new and reappointed part-time faculty members receive an official appointment letter with a similar statement.

The 9th Annual Diversity Summit is a two-part series open to all members of the GW community including faculty, staff and students. This year's summit, *Defining Revolutionary: A Call for Justice, Liberation and Empathy*, challenges the GW community to engage and reflect in the face of threats that are antithetical to DEI and justice, including the rise of book bans, anti-LGBTQIA+ policies, the erasure of black history from K-12 pedagogy and the elimination of DEI offices and race-conscious admissions in higher education. The October 2023 session includes a series of panel discussions and keynote sessions on topics such as the recent Supreme Court decision on race-based admissions, threats against DEI in the US, gender and sexuality bans, campus safety and policing, and the goals for inclusive excellence at GW. Part Two in February 2024 will allow GW community members to develop and implement their own educational sessions, research papers, panel discussions and poster presentations. GWSPH faculty have been presenters and participants at past summits.

Additional trainings are discussed in Criterion G1.4.

Design a schoolwide campaign to integrate a sense of belonging, diversity and inclusion

In 2021, the Office of Academic Affairs and the GWSPH Diversity and Inclusion Action Committee developed a DEI statement which was added to all GWSPH syllabi in the appendix. The university approved the following statement:

DIVERSITY, EQUITY AND INCLUSION (DEI)

DEI Resources and Bias Reporting

The Milken Institute School of Public Health (GWSPH) at the George Washington University (GW) is committed to support the highest standards and practices of diversity, equity, and inclusion in all of our processes, systems and interactions throughout our community. We embrace an intellectual community enriched and enhanced by diversity along a number of dimensions, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. We at the GWSPH will work in the promotion of diversity, equity and inclusion not only to drive innovation and excellence throughout all our programs but also in

honoring our commitment to social justice. Each of us is responsible for creating a safer, more inclusive environment. More information is available on our school website here.

Unfortunately, incidents of bias or discrimination do occur, whether intentional or unintentional. Resources available at the University to assist you include the following:

- GW maintains a website for reporting incidents of bias, https://diversity.gwu.edu/report-bias-incident-online. This site allows any university community member to report, including anonymously, incidents of bias and other forms of unwelcome conduct motivated by hatred based on race, color, religion, gender or gender identity, sexual orientation, national origin or any other factor.
- GW Office of Diversity Equity and Community Engagement: https://diversity.gwu.edu/

Religious Holidays

In accordance with university policy, students should notify faculty during the first week of the term, but no later than three weeks prior to the absence, of their intention to be absent from class on their day(s) of religious observance. If the holiday falls in the first three weeks of the term, the student must inform the faculty within the first week of the semester that they are enrolled in the class. For details and policy, see "Religious Holidays" at: https://provost.gwu.edu/policies-procedures-and-guidelines.

In 2022–2023, OIE updated the diversity and inclusion section of the GWSPH website to include resources for students, staff and faculty. Resources include links to university offices that support an inclusive campus, academic support, and university services that improve the experience of student, staff and faculty. Further updates to the OIE website are planned in 2023–2024, including a diversity statement, strategies to diversify an applicant pool, upcoming OIE events, resources for educational training (in collaboration with ODECE) and a section that highlights inclusive excellence among students and faculty. The goal of the highlights section is to recognize the work of students, staff and faculty and their commitment toward DEI and addressing the challenges of health disparities.

OIE has scheduled Inclusive Excellence Days in fall 2023 and spring 2024, which feature Assistant Professor Anushree Vichare, PhD, MD; and the editor of JAMA, Kirsten Bibbins-Domingo, PhD, MD, respectively. Additional seminars are being planned that focus on diversity and health equity, particularly the importance of diversity in research and community partnerships. The first proposed discussion topic is the impact and influence of DEI on achieving health equity. Invited speakers may include Joseph Wright, MD, MPH, FAAP,[100] and Deneen Richmond, MHA,[101] both distinguished GW alums. Dr. Wright was recently elected as the inaugural Chief Health Equity Officer at the American Academy of Pediatrics. Dr. Wright's work addresses race-based medical algorithms, and Ms. Richmond's work focuses on health care quality and compliance.

[100] GW has recognized Dr. Wright several times over the years. He won the 950 Alum Award, administered by GWSPH in recognition of a distinguished alum. Dr. Wright recently won the Distinguished GW Alumni Achievement Award, a university-wide award that highlights the impressive work of alums (see ERF > Criterion G > Criterion G1 > G1.3: Goal Advancement).

[101] Deneen Richmond has received several awards over the last several years. As a distinguished alum, she won the 950 Award in 2018. As a dedicated instructor in the school's online MHA@GW program, Ms. Richmond earned the Excellence in Teaching Master's Level Online Award.

Implement assessments of intra- and inter-group interactions, within and between departments to create, cultivate and sustain a supportive culture of belonging

An inclusive excellence retreat to improve communication, open discussion and respect among faculty is under development. During this retreat, an action plan and working group on assessments of intra- and inter-group interactions will be developed. The current landscape and data collection mechanisms need to be identified before any action can be taken.

Develop new and improved infrastructure that promotes hiring, retaining, mentoring and promoting of entry-level URP faculty

All faculty search committees are required to participate in annual bias training conducted by Caroline Laguerre-Brown, JD, at ODECE. Additionally, each committee has a designated diversity advocate who ensures the identification and recruitment of a diverse pool of faculty candidates are paramount at each stage of the process. During the recruitment phase, open faculty positions are posted to the *Chronicle of Higher Education* with a diversity boost. Faculty also complete a training on our internal Human Resources website (Talent@GW) regarding equal employment opportunity during the interviewing and hiring process. Progress in hiring and retaining URP faculty is tracked in OIE's Data Dashboard.

4) *List the actions and strategies identified that create and maintain a culturally competent environment and describe the process used to develop them. The description addresses curricular requirements; assurance that students are exposed to faculty, staff, preceptors, guest lecturers and community agencies reflective of the diversity in their communities; and faculty and student scholarship and/or community engagement activities.*

As previously stated, GWSPH is committed to accepting and employing a diverse student, faculty and staff body. Furthermore, through faculty practice experience, community partnerships and the school's location, GWSPH recruits a diverse group of guest lecturers and practicum preceptors. Additionally, ODECE offers trainings on inclusive classrooms, unconscious bias and other topics to promote a culturally competent environment upon request.

Inclusive Classroom Toolkit

MTA created the Inclusive Classroom Toolkit in 2021, updating it regularly as new resources become available. The toolkit assists faculty in understanding the concepts of inclusive teaching and incorporating these ideas into the classroom and addresses academics, research, practice and operations. MTA developed the toolkit in response to a call for GWSPH to integrate DEI into every sphere of our work (see ERF > Criterion G > Criterion G1 > G1.4: Actions and Strategies).

Inclusive Teaching Workshops

In collaboration with LAI and the GWSPH Office of Academic Affairs, MTA offered three workshops in 2022–2023 on creating an inclusive teaching environment. The fall sessions focused on implementation strategies using the Inclusive Classroom Toolkit and best practices for handling emotionally reactive and/or difficult conversations, whether spontaneous or planned, with a special focus on strategies for facilitating inclusive discussions. The spring session discussed how faculty can handle "hot moments" during class discussions utilizing real-life experiences from GWSPH faculty members, as well as case studies from similar academic settings.

Our partners, 2U, also host weekly workshops, some of which are on DEI topics (see ERF > Criterion G > Criterion G1 > G1.4: Actions and Strategies).

Accessible Online Courses

GWSPH administrators, including the current Assistant Dean for Academic Innovation, are directly involved in setting university standards regarding accessibility of online courses through appointments to the GW Accessibility Oversight Committee and its Education Subcommittee. In GWSPH online courses, all video lectures and multimedia are fully closed captioned by an outside vendor (2U and Caption First). Additionally, full text-based transcripts are provided for all course media.

Study Abroad Opportunities

All students at GWSPH may participate in study abroad experiences. The Department of Global Health offers students, staff and faculty the opportunity to practice their global public health skills in a number of international locations, such as Cambodia, Mexico, Rwanda, and Demark.

The GW Office of Study Abroad coordinates approved study abroad programs open to all undergraduate and graduate students. While temporarily halted during the COVID-19 pandemic, Study Abroad is currently operating 150 programs in more than 60 countries as well as at least one virtual experience. Out of all the programs, GWSPH has highlighted five programs as high priority for GWSPH students because they focus on global health and health policy.

- SIT Global Health and Development Policy in Switzerland
- DIS Copenhagen—Study Abroad in Scandinavia
- GW Exchange—University of New South Wales
- IES Abroad—Health Practice and Policy in London
- SIT Switzerland Program (Summer)

Center for Excellence in Maternal and Child Health

The Maternal and Child Health Leadership, Education and Advancement in Undergraduate Pathways (GW-LEAP) Training Program is a HRSA grant-funded program offered by the Center for Excellence in Maternal and Child Health. This innovative and integrative program is designed to develop undergraduate students' maternal and child health interest, knowledge, self-efficacy, and skills. Specifically, GW-LEAP provides students from underserved or underrepresented backgrounds with opportunities for training and engagement to ultimately improve levels of representation, reduce health disparities, foster health equity and increase the capacity of the maternal and child health workforce to meet the needs of a diverse US population. The center welcomed nine undergraduates in 2022 and ten undergraduates in 2023 into GW-LEAP.

The Center for Excellence in Maternal and Child Health also funds practice fellowships, which are awarded to students who intern with one of the center's community-based organizations. These students learn from and with experienced public health professionals from organizations such as Mamatoto Village, which offers safe, compassionate, inclusive and radial collective care in Washington, DC. Nine fellowships were awarded in spring 2023, and an additional eight fellowships were awarded in summer 2023.

Last, students who are enrolled in a Center of Excellence in Maternal and Child Health or GW-LEAP Training Programs are eligible to apply for the competitive Title V Fellowship. Awardees focus on improving the health of women, children or families in an assigned state or territorial Title V program. In 2023, five GW students received this fellowship and traveled to five different state health departments (Vermont, Wyoming, Utah, Minnesota and Massachusetts).

5) *Provide quantitative and qualitative data that document the school's approaches, successes and/or challenges in increasing representation and supporting persistence and ongoing success of the priority population(s) defined in documentation request 1.*

Data on faculty and student diversity was collected for a 10-year span, 2013–2023, to provide a baseline for future actions and approaches in increasing representation and supporting persistence and ongoing success of the priority population. Data were collected in the fall term of each academic year listed. Faculty data include part-time and full-time faculty. Student data are pulled from their application and represent the current study body in that academic year. The student population data include undergraduate and graduate student information. The term "nonresident aliens" is how the system codes international students.

Notably, our racial diversity among our faculty has increased materially since 2013, specifically among our Asian faculty members (12% in 2023) and Black or African American faculty members (16% in 2023). Our student body also continues to be increasingly diverse (16% Asian, 18% Black or African American and 11% Hispanic/Latinx in 2023). As noted in our strategic plan and our mission, diversity, equity and inclusion are core tenets of the school and GWSPH remains committed to sustaining dynamic and diverse faculty and student bodies.

Faculty Diversity by Gender, N (%)											
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female	146 (63%)	163 (64%)	181 (63%)	198 (67%)	223 (67%)	226 (65%)	194 (65%)	195 (63%)	225 (67%)	228 (66%)	214 (65%)
Male	84 (37%)	92 (36%	108 (37%)	99 (33%)	112 (33%)	124 (35%)	106 (35%)	115 (37%)	113 (33%)	116 (34%)	114 (35%)

Faculty Diversity by Race, N (%)											
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	183 (81%)	200 (78%)	213 (74%)	208 (70%)	235 (70%)	231 (66%)	196 (65%)	210 (68%)	213 (63%)	220 (64%)	213 (65%)
Asian	15 (7%)	17 (7%)	23 (8%)	27 (9%)	31 (9%)	37 (11%)	33 (11%)	38 (12%)	51 (15%)	44 (13%)	39 (12%)
Black or African American	20 (9%)	26 (10%)	34 (12%)	39 (13%)	46 (14%)	46 (13%)	45 (15%)	42 (14%)	54 (16%)	54 (16%)	52 (16%)
Hispanic / Latinx	7 (3%)	9 (4%)	12 (4%)	15 (5%)	14 (4%)	16 (5%)	15 (5%)	15 (5%)	16 (5%)	19 (6%)	18 (5%)
Two or More Races				5 (2%)	4 (1%)	2 (1%)	3 (1%)	2 (1%)	3 (1%)	5 (1%)	4 (1%)
Race Unknown	2 (1%)	2 (1%)	6 (2%)	3 (1%)	5 (1%)	18 (5%)	8 (3%)	3 (1%)	1 (0%)	2 (1%)	2 (1%)
American Indian / Alaskan Native		1 (0%)	1 (0%)								

Student Diversity by Gender, N (%)											
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female	1029 (81%)	1230 (77%)	1503 (76%)	1772 (76%)	1983 (77%)	2094 (78%)	2158 (79%)	2457 (81%)	2627 (81%)	2435 (79%)	2189 (80%)
Male	246 (19%)	360 (23%)	462 (24%)	556 (24%)	581 (23%)	586 (22%)	587 (21%)	644 (21%)	614 (19%)	608 (20%)	538 (20%)
Nonbinary				1 (0%)					2 (0%)	21 (1%)	19 (1%)

Student Diversity by Race, N (%)											
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	604 (47%)	702 (44%)	875 (45%)	1067 (46%)	1158 (45%)	1186 (44%)	1189 (43%)	1379 (44%)	1410 (43%)	1334 (44%)	1139 (41%)
American Indian / Alaskan Native	4 (0%)	4 (0%)	6 (0%)	9 (0%)	6 (0%)	9 (0%)	8 (0%)	6 (0%)	3 (0%)	2 (0%)	4 (0%)
Asian	139 (11%)	171 (11%)	266 (14%)	346 (15%)	416 (16%)	446 (17%)	450 (16%)	499 (16%)	493 (15%)	465 (15%)	448 (16%)
Black or African American	185 (15%)	225 (14%)	342 (17%)	437 (19%)	459 (18%)	469 (18%)	500 (18%)	545 (18%)	601 (19%)	542 (18%)	486 (18%)
Hispanic / Latinx	46 (4%)	78 (5%)	133 (7%)	169 (7%)	206 (8%)	246 (9%)	269 (10%)	315 (10%)	359 (11%)	320 (10%)	296 (11%)
Native Hawaiian or Other Pacific Islander	1 (0%)	3 (0%)	6 (0%)	9 (0%)	6 (0%)	6 (0%)	6 (0%)	6 (0%)	8 (0%)	7 (0%)	4 (0%)
Non-resident Alien	41 (3%)	51 (3%)	53 (3%)	52 (2%)	56 (2%)	64 (2%)	78 (3%)	79 (3%)	86 (3%)	115 (4%)	135 (5%)
Two or More Races	25 (2%)	51 (3%)	67 (3%)	81 (3%)	108 (4%)	92 (3%)	97 (4%)	125 (4%)	138 (4%)	139 (5%)	125 (5%)
Race Unknown	230 (18%)	305 (19%)	217 (11%)	159 (7%)	149 (6%)	162 (6%)	148 (5%)	145 (5%)	145 (4%)	140 (5%)	109 (4%)

Increase the number of URP applicants to graduate programs through exposure to GW through cross-collaborations with historically black universities and colleges (HBCUs), Hispanic-Serving Institutions (HSIs), majority institutions and community partners

Historical data on URP acceptances to GWSPH are available in Criterion H4. Under new guidance related to the Supreme Court decision on *Students for Fair Admissions, Inc v. Harvard College and University of North Carolina*, GWSPH is pivoting to focus on targeting recruitment efforts (getting students to apply) as well as matriculation efforts (moving from offer to acceptance) to increase representation and support of URPs. GWSPH aims to increase recruitment efforts at HBCUs and HSIs by 10% over the next three years. GWSPH also set a goal of creating three new partnerships with identified minority-serving institutions for special student/faculty engagements over the next three years. Additionally, GWSPH will focus on increasing enrollment of low/middle-income undergraduate students and low-income and first-generation graduate students by 5% over the next three years. To encourage matriculation, GWSPH will promote Pell Grant applications to all eligible undergraduate applicants. Last, GWSPH will assist both undergraduate and graduate students with locating scholarships, particularly ones that target URP applicants, to diminish the cost of attendance.

Promote DEI training for students, faculty and staff including skill-building education to reduce microaggressions and ensure civility in classroom interactions

Students are taught DEI topics in the classroom. A review of GWSPH courses has revealed that a vast majority address DEI topics. Departments have made a concerted efforts to address these topics in an appropriate manner. As noted above, MTA and the GWSPH Office of Academic Affairs hosted sessions in partnership with the University Instructional Core of LAI to address

course design and classroom techniques that are inclusive as well as strategies to address classroom interactions.

	Number of courses
Undergraduate courses • Public Health • Exercise and Nutrition Sciences	15 10 5
Graduate courses • Global Health • Prevention and Community Health • Health Policy and Management	27 6 8 12

DEI trainings for faculty are discussed in Criterion G1.4.

Design a schoolwide campaign to integrate a sense of belonging, diversity and inclusion; Implement assessments of intra- and inter-group interactions, within and between departments to create, cultivate and sustain a supportive culture of belonging
These new goals were developed by OIE leadership. Senior Associate Dean for Diversity, Equity and Inclusion Wanda Nicholson conducted several "listening sessions" with faculty and staff to identify barriers, challenges and opportunities to develop a schoolwide campaign and assessments related to a sense of belonging.

Develop new and improved infrastructure that promotes hiring, retaining, mentoring and promoting of entry-level URP faculty
Historical data on the diversity of GWSPH faculty and staff are in Criteria C2 and C3. Any new infrastructure is still in planning stages with OIE leadership. For example, a data dashboard of faculty demographics is being considered to provide information on current faculty and as a basis for improvement goals.

6) *Provide student and faculty (and staff, if applicable) perceptions of the school's climate regarding diversity and cultural competence.*

In 2022, GW conducted a university-wide Climate Survey whereby faculty, staff and students answered questions related to DEI. Survey results are still being analyzed and an embargo is in effect so there are no survey responses in the ERF and only preliminary results are discussed below.

In total, approximately 2,370 undergraduate students, 2,900 graduate students, 900 faculty and 1,475 staff members across the enterprise participated. Of these, approximately 125 undergraduate students, 450 graduate students, 65 faculty and 100 staff members identified as attending or being employed at GWSPH. There were six sections on the survey, listed below, containing both universal questions answered by all participants and role-specific questions assigned only to participants with that role. The questions were a mix of mostly Likert scale and check-all-that-apply (multiple selection).

- Campus climate and community
- Intentions to leave GW
- DEI practices and organizational support
- Experiences of negative treatment
- Observations of negative treatment
- Safety
- Reporting bias, discrimination or harassment

Preliminary results indicate that the majority of GWSPH employees and students feel that the current university climate either positively or neutrally impacts their experiences at GW. Students, at both the undergraduate and graduate levels, report feeling supported to engage in critical thinking, ask questions and bring forward new ideas. A majority also report being given access to opportunities to learn about different people. Almost all faculty report actively changing their pedagogy to include DEI content related to their field, and a majority report actively changing their pedagogy to be more inclusive and address the needs of a diverse student body.

While the results of the university climate survey are not publicly available, GWSPH does have access to school-specific data and is currently developing action steps based on these results. School-specific (confidential) climate survey results are available in the ERF for site visitors. Additional details will be available to the site visit team in April.

In March 2024, the DEI Committee plans to survey GWSPH faculty, staff and students. The aim is to identify issues and opportunities specific to GWSPH to help promote diversity, equity and inclusion. In the fall, the DEI Committee will host a series of focus groups and brown bag group model building sessions to co-design solutions identified through the survey.

7) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

<u>Strengths</u>

- GWSPH has a nationally recognized commitment to recruiting URP faculty and students. As a result, GWSPH has developed a national reputation for drawing a diverse pool of applicants. Contributing to this reputation are the close community-academic partnerships and the school's location in the nation's capital.
- In 2021, GWSPH launched a Diversity and Inclusion Action Committee that was approved and added to the School Rules following a vote in favor by the governing faculty. The committee members include faculty, staff and students who have been elected by their peers.
- In 2022, GWSPH successfully recruited a Senior Associate Dean for Diversity, Equity and Inclusion and launched OIE to lead and support DEI initiatives across the school.
- GWSPH recently hired a Co-Director for OIE.

<u>Challenges</u>

- The 2023 Supreme Court decision on affirmative action raises questions and potential challenges to GWSPH's commitment to a diverse student, staff and faculty body. We are still working to understand the practical and legal ramifications of the ruling. The overarching challenge for the school will be maintaining a diverse applicant pool and graduating practitioners who are representative of our communities.
- There is an ongoing competition with other schools for a diverse applicant pool, which could become steeper after the Supreme Court ruling.
- GWSPH has faced some challenges in retaining and mentoring diverse faculty along their career path.

<u>Future Plans</u>

- While GWSPH already has connections at some HBCUs and HSIs, we would like to expand our current partnerships to develop more robust interactions and develop new relationships, both with the goal of expanding the diversity of faculty and student applicant pool.

- GWSPH is interested in creating an online forum where interested students and faculty recruits can engage with GWSPH faculty and students to learn more about the institution and opportunities for enrollment/employment.
- GWSPH is addressing faculty mentorship, focusing on senior and tenured faculty supporting early career faculty members with their professional and academic goals.
- OIE is developing two specific workshops to fill training gaps. One training will address microaggressions and bystander intervention. A second training will focus on creating inclusive research teams, which could help to promote the recruitment, hiring and retention of diverse research staff.
- During the 2023–2024 academic year, OIE and the GWSPH Office of Academic Affairs will collaborate to develop a robust inclusive teaching and learning environment statement and resource page on the OIE website. Feedback from faculty, staff and students will contribute to the development of these plans.
- Unlike the NIH definition, women have not been included in our definition of URP because women are generally not underrepresented in our field. The NIH does identify individuals with disabilities as URP, and GWSPH aims to continue to build mechanisms to identify and meet the needs of these individuals.
- Recent world events have further emphasized our recognition of the importance of maintaining safe spaces for our students, staff and faculty to effectively learn and communicate their perspectives and opinions. To assist in creating a sustainable environment of meaningful exchange, we plan to expand the scope of our mitigating microaggressions training curriculum to include skill building in bilateral communication on crises and events, domestically and globally.

H1. Academic Advising

The school provides an accessible and supportive academic advising system for students. Each student has access, from the time of enrollment, to advisors who are actively engaged and knowledgeable about the school's curricula and about specific courses and programs of study. Qualified faculty and/or staff serve as advisors in monitoring student progress and identifying and supporting those who may experience difficulty in progressing through courses or completing other degree requirements. Orientation, including written guidance, is provided to all entering students.

1) *Describe the orientation processes. If these differ by degree and/or concentration, provide a brief overview of each.*

Undergraduate

Undergraduate New Student Orientation (for all BS degrees at GWSPH) occurs in August and January for fall and spring enrollees, respectively. New Student Orientation is in person and covers information relating to the major as well as opportunities to meet fellow majors. In-person drop-in hours are offered in the weeks surrounding the opening of registration to assist students with the process of course selection and registration. Students also are strongly encouraged to attend the virtual webinars and advising drop-in, which covers GWSPH-specific content, including registration. All GWSPH first-year undergraduate students enroll in PUBH 1010 First-Year Experience in Public Health, which requires students to map out their plans for degree completion. Students are encouraged to input their course selections in Plan Ahead, a course-management tool that generates proposed course schedules based on course availability and likelihood of successful registration.

MPH@GW and MHA@GW

Our online master's students receive communications about orientation and registration prepared by GWSPH directly from 2U. When students are accepted into one of our online master's programs, they are randomly assigned a student success specialist from 2U, who welcomes them into the program, assists them with navigating the platform and reminds them about registration. Students in the online programs are also assigned a GWSPH academic advisor, who is a member of the GWSPH staff advising team. Students complete a series of virtual trainings to orient themselves on the 2GW platform as well as their program. Finally, a synchronous orientation is held four times per year prior to the start of each online term featuring the Senior Associate Dean for Academic, Faculty and Student Affairs, Associate Dean for MPH Programs, Assistant Dean of Student Services and an online MPH@GW academic advisor. This live orientation addresses program curricula, academic advising, school and university policies and any questions incoming students may have.

Residential Graduate

New residential master's and doctoral students are invited to an in-person orientation a few days before classes start. Hosted by the GWSPH Office of Admissions and Recruitment, the orientation introduces incoming students to degree requirements (e.g., DegreeMAP) as well as school and university resources. A tour of the main GWSPH building is also given. Current students host an informal panel to discuss the student experience and the (D)APEx and culminating experience/dissertation processes. After the school orientation, students split into groups based on departments and receive a departmental-level orientation. This orientation covers information about the department such as departmental resources and contacts. Starting in Fall 2023, the DrPH program hosted an orientation for residential and online students during the PUBH 8730 DrPH Immersion in Washington, DC.

2) *Describe the school's academic advising services. If services differ by degree and/or concentration, a description should be provided for each public health degree offering.*

General information regarding academic advising, including contact information, is available on the GWSPH website, which includes a list of all advisors for each program.

All GWSPH students are expected to use DegreeMAP to monitor their progression toward graduation. DegreeMAP is an online advising and degree auditing system. It offers real-time mapping so when students add or drop courses in Banner, their progress toward degree completion is updated on DegreeMAP. GWSPH faculty and staff advisors guide students through their specific curricula and assist students with choosing electives, as applicable. GWSPH advisors also use DegreeMAP to ensure students have met the requirements for graduation.

Undergraduate

Undergraduate students at GWSPH are academically advised by three full-time staff in the school. Currently, students are assigned primary advisors alphabetically by last name, with one advisor being responsible for all BS-to-MPH joint-degree students. All advisors are cross-trained in all programs so students may reach out to another advisor if their primary advisor is not available. Students are informed of their primary advisor during Orientation, in an as-needed newsletter and on the advising Blackboard Community.

Advisors are available via email or by appointment (virtual or in person). Students are able to schedule and reschedule their own advising appointments using a Calendly link in advisors' email signatures. Students are expected to meet with their advisor during their first semester in the program. After each appointment, students are sent a survey where they can rate their satisfaction with the appointment and services offered.

MPH@GW and MHA@GW

Online master's students are academically advised by full-time GWSPH staff (six for MPH and one for MHA). Students are randomly assigned advisors upon matriculation into the program. Advisors provide students with individualized academic support and assistance in building their MPH@GW plans of study. At the start of the first term, academic advisors email their new advisees to introduce themselves and encourage students to reach out. Advisors are available via email or by virtual appointment. Students can schedule and reschedule their own advising appointments using a Calendly link in advisors' email signatures (https://calendly.com/).

MPH@GW students are expected to meet with their advisor during their first two terms in the program, and advisors provide students with a plan of study based on their expected time in the program (decided on by the student at time of enrollment). MPH@GW students are also required to meet with their advisors in preparation for the APEx (unlike in the residential MPH program, MPH@GW advisors guide students through the practicum aspect of the APEx; see Criterion D5). MPH@GW advisors also have access to a 2U-specific version of Salesforce, which acts as an advising bridge between 2U student success specialists and GWSPH academic advisors. The program allows specialists to record personal information about students, making it accessible to GWSPH advisors.

The MHA@GW program is much smaller, and the advising needs are slightly different. Students rely on one GWSPH academic advisor and one student success specialist, who collaborate via email to ensure continuity in support for students. Additionally, the MHA@GW does not have any elective options, so advising appointments are optional.

Residential MPH and MHA

Students in the residential MPH and MHA programs are academically advised by program directors and/or departmental faculty/staff. Assignment of an academic advisor varies by program. For example, the MPH in Epidemiology (about 100 students) splits primary academic advising duties alphabetically between two faculty members. Other programs, like the MPH in Health Policy (about 125 students) has nine primary faculty advisors evenly splitting the academic advising duties. In both cases, other departmental faculty may provide ancillary informal academic advice to students but receive no official recognition or FTE coverage. In larger programs like those in the Department of Global Health, the original assigned advisor (usually the program director) may assign students to another designated departmental faculty member based on students' interests. The Department of Prevention and Community Health provides an Academic Advising Guidance document for students and faculty (see ERF > Criterion H > Criterion H1 > H1.4: Advising materials_sample).

All MPH academic advisors provide guidance on selecting appropriate elective courses and identifying an APEx relevant to career goals. Students are also connected with a member of the departmental practice team, who oversees them on the APEx, and with a faculty member, who guides them through the culminating experience.

MS

Students in the MS programs are academically advised by program directors or departmental faculty. Students are automatically assigned an academic advisor upon matriculation. Advisors guide students on curriculum changes, elective selection, academic progress and preparation for graduation.

DrPH

Students in both the residential and online DrPH programs are academically advised by a DrPH faculty member assigned at matriculation. Generally, the academic advisor guides the student during the entirety of their DrPH program. The academic advisor is responsible for assisting the student in connecting with professionals in their career fields.

PhD

Students are assigned to a faculty advisor after admission to the program. Faculty advisors guide the student in the development of a coursework plan, identification of research opportunities, participation in professional/leadership development and implementation of the dissertation. Students are generally required to meet with their advisors at least once per semester in addition to an annual progress review. Students may change advisors during the program if the new advisor is also affiliated with the student's program. The faculty advisor typically becomes the dissertation chair committee member, though it's not required.

Advanced Support

An advisor who is concerned about a student may seek additional support from their program director, department (vice chair) or one of the assistant/associate deans at the school (appropriate to the student level). Escalated requests for advanced support are usually handled by the Assistant Dean for Student Services, who provides guidance on a variety of academic concerns relating to course withdrawals, financial aid, failing grades, graduation and more.

Any GW community member (faculty, staff, student, faculty, parent) may submit a CARE Referral as a safe and centralized way to express concerns about a student. All submissions are reviewed by a multidisciplinary CARE Team, which connects students to appropriate and personalized resources and services.

3) *Explain how advisors are selected and oriented to their roles and responsibilities.*

Undergraduate
Undergraduate advisors are full-time staff at GWSPH under the supervision of the Associate Dean of Undergraduate Education. While these are entry-level positions, most advisors have earned a master's degree or are working toward one.

The university mandates all new undergraduate advisors to complete a series of training modules on federal guidelines (e.g., FERPA), university policies and advising systems. Regular meetings with university advisors and GWSPH program directors and leadership keep GWSPH advisors up to date with the latest policy and curricular changes.

MHA@GW and MPH@GW
Online master's advisors are full-time staff at GWSPH under the supervision of the Associate Dean for MPH Programs (MPH@GW) and the Director of the Executive Master of Health Services Administration Program (MHA@GW). These advising positions are considered more senior-level advising roles, and hires are expected to have higher education experience and/or experience with customer service or student crises. 2U provides 2GW platform training to online advisors. Advisors receive guidance about elective options and latest policy and curricular changes from MHA@GW and MPH@GW leadership and MPH@GW concentration leads.

Residential MPH, MHA, MS, DrPH and PhD
Academic advisors are program directors or qualified primary instructional faculty and, in some cases, dedicated staff. These advisors are provided with an annual program guide with the latest curricula and are updated with any policy and curricular changes during departmental meetings. Additionally, advisors rely on their practice and research experience as well as support from GWSPH staff and peers when guiding students. Students in doctoral programs have an academic advisor in addition to their dissertation chair.

4) *Provide a sample of advising materials and resources, such as student handbooks and plans of study, that provide additional guidance to students.*

See ERF > Criterion H > Criterion H1 > H1.4: Advising materials_sample.

5) *Provide data reflecting the level of student satisfaction with academic advising during each of the last three years. Include survey response rates, if applicable. Schools should present data only on public health degree offerings.*

As previously stated, the Graduation Survey experienced extremely low response rates in 2020 and 2021 due to the COVID-19 pandemic. Students are normally incentivized to complete the survey to gain tickets to Commencement. In 2020 and 2021, in-person Commencement was canceled.

Undergraduate
Starting in Fall 2022, advisors emailed students a survey link through the Calendly system after each advising appointment. The link is to a Google Forms survey containing both quantitative and qualitative questions about students' perceptions of the advising appointment (see ERF > Criterion H > Criterion H1 > H1.5: Advising satisfaction for a copy of survey). The quantitative questions were on a five-point Likert scale with 5 representing high satisfaction and 1 representing low satisfaction with the statement.

	2022 Average (N)	2023 Average (N)
Was your advisor prepared for your meeting?	4.8 (40)	4.8 (38)
Was your advisor knowledgeable?	4.8 (40)	4.8 (38)
Was your advisor courteous and professional?	4.9 (40)	4.9 (38)
Was your advisor genuinely interested in you?	4.9 (38)	4.8 (38)
What overall rating would you give to your advisor?	4.8 (39)	4.8 (38)

Qualitative comments included:

- [The academic advisor] provided me with such good advice, thoroughly answered questions I asked him, and sent me a great email after our meeting to summarize what we talked about. I am very impressed by the guidance and support I received from him because I did not get that from my previous advisor. I look forward to working with him throughout my time here at GW Milken.
- You[r] follow-up email with notes, reminders, and resources was excellent and so helpful!! Thank you!
- [The academic advisor] assisted with all my needs and helped answer all my questions and was very helpful throughout the whole session! I feel very prepared for the upcoming registration process and next semester. The meeting notes he sent at the end of the session were also sooo [sic] helpful for me.
- The feedback after the meeting was extremely helpful and resourceful. [The academic advisor] made me feel like he was supportive and understanding.
- Super friendly and approachable, definitely helped my thought process.
- I always love my advising sessions because I feel that [the academic advisor] actually cares about my success and is able to provide specific feedback about courses since he also went through the same curriculum.
- Very thorough and thoughtful and gave helpful advice and feedback. Definitely my best experience meeting with advising during my time at GW.

In addition to data on specific meetings with advisors, all undergraduate students are surveyed at the time of graduation about their overall satisfaction with academic advising at GWSPH. Data from the last three years are highlighted below. All questions were on a five-point Likert scale with 5 representing high satisfaction and 1 representing low satisfaction with the statement. In contrast to the surveys collected directly after advising meetings, the Graduation Survey indicated much lower satisfaction with undergraduate academic advising.

	2021 Average (N)	2022 Average (N)	2023 Average (N)
A professional advisor encourages me to take advantage of opportunities that might enhance my GW experience.	3.7 (9)	2.8 (113)	2.6 (120)
A professional advisor is available when I need to meet with him or her.	4.5 (10)	3.5 (117)	3.5 (120)
A professional advisor is knowledgeable about degree requirements, prerequisites, elective options, and other things related to the academic experience.	3.9 (10)	3.3 (119)	3.2 (120)
A professional advisor provides guidance on how I can develop my personal, academic, and/or professional goals.	3.7 (10)	3.0 (117)	2.9 (120)

A professional advisor responds to my questions in a timely manner.	4.4 (10)	3.7 (118)	3.7 (120)
A professional advisor takes the time to get to know me.	3.2 (10)	2.4 (115)	2.3 (120)
How would you rate your overall advising experience with professional advising?	3.8 (10)	2.8 (119)	2.6 (120)

In the comments section, a number of undergraduate students reported having multiple academic advisors (as many as five advisors in four years), which contributed to their lower satisfaction with advising. Other students noted inconsistent advice from (multiple) advisors, being told the "wrong" thing and not being made aware of important deadlines as reasons for lower scores.

MPH (Residential and Online)

The MPH programs assess students' overall satisfaction with advising through the Graduation Survey distributed at the time of graduation. Data from the last three years are highlighted below. All questions were on a five-point Likert scale with 5 representing high satisfaction and 1 representing low satisfaction with the statement.

	2021 Average (N)	**2022 Average (N)**	**2023 Average (N)**
Quality of academic advising and guidance	3.5 (30)	3.4 (431)	3.6 (410)
Quality of academic advising and guidance by faculty advisor	3.8 (27)	3.5 (412)	3.7 (410)
Quality of academic advising and guidance by professional academic advisor	3.4 (27)	3.5 (422)	3.7 (410)

No qualitative comments on the Graduation Survey related to academic advising.

In 2023, an additional question asking students to reflect on their overall satisfaction with academic advising was added to the Graduation Survey. This question was on a four-point Likert scale with 4 representing high satisfaction and 1 representing low satisfaction with the statement.

	MPH (residential and online) Average (N)	**MS (public health only) Average (N)**	**PhD (public health only) Average (N)**	**DrPH Average (N)**
Satisfaction with academic advising	3.0 (410)	2.8 (15)	3.8 (6)	2.7 (9)

MS (Public Health Only)

The MS programs assess students' overall satisfaction with advising through the Graduation Survey distributed at the time of graduation. Data from the last three years are highlighted below. All questions were on a five-point Likert scale with 5 representing high satisfaction and 1 representing low satisfaction with the statement.

	2021[102] Average (N)	2022 Average (N)	2023 Average (N)
Quality of academic advising and guidance	N/A	4.5 (4)	3.1 (15)
Quality of academic advising and guidance by faculty advisor	N/A	4.8 (4)	3.5 (15)
Quality of academic advising and guidance by professional academic advisor	N/A	4.8 (4)	3.3 (15)

No qualitative comments on the Graduation Survey related to academic advising.

PhD (public health only)

The PhD programs assess students' overall satisfaction with advising through the Graduation Survey distributed at the time of graduation. Data from the last three years are highlighted below. All questions were on a five-point Likert scale with 5 representing high satisfaction and 1 representing low satisfaction with the statement.

	2021 Average (N)	2022 Average (N)	2023 Average (N)
Quality of academic advising and guidance	3.8 (4)	4.5 (6)	4.5 (6)
Quality of academic advising and guidance by faculty advisor	3.8 (4)	4.7 (6)	4.7 (6)
Quality of academic advising and guidance by professional academic advisor	3.8 (4)	4.8 (5)	4.7 (6)

No qualitative comments on the Graduation Survey related to academic advising.

The Office of PhD/MS Programs conducted a survey of current PhD students in May 2022. Within the survey, students answered questions related to academic advising (see ERF > Criterion H > Criterion H1 > H1.5: Advising satisfaction).

	Very Satisfied % (N)	Somewhat Satisfied % (N)	Neither % (N)	Somewhat Dissatisfied % (N)	Very Dissatisfied % (N)
How satisfied are you with the academic advising you have received in your PhD program from your academic advisor?	36.11% (13)	36.11% (13)	13.89% (5)	5.56% (2)	8.33% (3)
How satisfied are you with the mentorship you have received in your PhD program from your PhD research mentor(s)?	58.06% (18)	12.9% (4)	9.668% (3)	9.68% (3)	9.86% (3)

DrPH

The residential DrPH program assesses students' overall satisfaction with advising through the Graduation Survey distributed at the time of graduation. Data from the last three years are highlighted below. All questions were on a five-point Likert scale with 5 representing high satisfaction and 1 representing low satisfaction with the statement.

[102] There were no MS graduate respondents in 2021.

	2021 Average (N)	2022 Average (N)	2023 Average (N)
Quality of academic advising and guidance	4.2 (5)	4.6 (7)	2.9 (9)
Quality of academic advising and guidance by faculty advisor	4.4 (5)	4.7 (7)	3.0 (9)
Quality of academic advising and guidance by professional academic advisor	4.4 (5)	5.0 (6)	3.5 (9)

No qualitative comments on the Graduation Survey related to academic advising. No data are available for the DrPH@GW program as it started in fall 2023.

6) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- All residential and online students are assigned an advisor at the time of matriculation. Advising assignments are communicated to students in multiple ways including direct outreach from faculty and staff advisors, email communications, and on the school advising page on the website.
- With access to Insight, a data management system that provides dashboard highlights on course enrollment, class sizes, grades and more, academic advisors can meet student needs.
- The 2U student success specialists provide "white-glove service" to online students. They follow the student throughout their degree of study, proactively reaching out to students and encouraging them to finish the degree. Oftentimes, the student success specialist is the first point of contact for students who are struggling and need an empathic ear.
- Online students also complete 2U-implemented satisfaction surveys using the NetPromoter methodology. Students rate their satisfaction with the 2U student success specialists, GWSPH academic advisors, the LMS and technologies provided by 2U and overall satisfaction with the program. Results and trends are shared by 2U, as appropriate.
- Across programs and degrees, the advising framework is designed to support and meet the needs of our students. Students are also encouraged to reach out to any faculty or staff member who shares common academic and professional interests. At the doctoral level, students are intentionally assigned to faculty who can support their research (PhD) and/or practice-based (DrPH) interests.

Challenges

- Advising models vary by program type. For example, the MPH@GW program exclusively has staff academic advisors, while the Department of Epidemiology has two faculty members who act as primary academic advisors for students for MPH in Epidemiology students. Therefore, solutions to challenges may need to be program specific.
- GWSPH, like many schools across the country, has had significant turnover in our advising staff as well as staff who have needed to take extended personal leave, particularly in our MPH@GW and undergrad programs. Such vacancies and absences likely impair continuity in advisors and advising communications. Furthermore, GWSPH is bound by the salary bands set by the university for staff positions, which also contribute to a difficult hiring and retention environment for staff advisor positions.

Future Plans

- As programs continue to grow at GWSPH, additional advisors are needed. We are adjusting the undergraduate advising team structure to ensure better continuity for students. Specifically, GWSPH plans to hire a lead advisor for the undergraduate program, who should provide more stability than we have had in recent years.
- In 2023, academic advising satisfaction rates dipped among MS and DrPH students. The DrPH program is building a team of faculty to better support the student growth in this program, which will likely lead to higher satisfaction rates. The MS program will be closely monitored over the next two years to determine what adjustments may be needed.
- President Granberg has identified undergraduate academic advising as a key area of concern across the university. As a result, undergraduate academic advising will likely undergo improvements in the next few years. GWSPH hopes to see a new compensation policy that will assure more stability in staffing advisors.

H2. Career Advising

The school provides accessible and supportive career advising services for students. All students, including those who may be currently employed, have access to qualified faculty and/or staff who are actively engaged, knowledgeable about the workforce and sensitive to their professional development needs; these faculty and/or staff provide appropriate career placement advice, including advice about enrollment in additional education or training programs, when applicable. Career advising services may take a variety of forms, including but not limited to individualized consultations, résumé workshops, mock interviews, career fairs, professional panels, networking events, employer presentations and online job databases.

The school provides such resources for both currently enrolled students and alums. The school may accomplish this through a variety of formal or informal mechanisms including connecting graduates with professional associations, making faculty and other alums available for networking and advice, etc.

1) *Describe the school's career advising and services. If services differ by degree and/or concentration, a brief description should be provided for each. Include an explanation of efforts to tailor services to meet students' specific needs.*

GWSPH students and alums receive formal career advising and services from two main sources at GW: (1) Career Services within GWSPH and (2) GW Center for Career Services. These organizations collaborate regularly to provide programming for students and alums of GWSPH. Informally, students may also receive career advice from faculty and advisors.

Career Services (GWSPH)
The career advising offered at Career Services is geared toward graduate students and alums of GWSPH, though undergraduate students are welcome to participate in schoolwide events. Career Services offers several services including:

- Individualized career counseling to identify career interests, career-focused SMART goals and job search strategies
- Résumé and cover-letter writing, tailoring and proofing
- Mock interviews with students who seek employment or additional education
- Myers-Briggs Type Indicator (MBTI) testing to navigate behavioral and psychological types and better understand potential career paths
- Annual public health career and practicum fairs that invite all GWSPH students to explore potential career and practicum (APEx and DAPEx) opportunities
- Employer panels and information sessions that promote interest in a specific industry or company
- Networking opportunities for students and alums to connect and form professional networking relationships
- Job posting board on Handshake
- Weekly newsletter highlighting upcoming events and new practicum and job opportunities
- Written resources such as sample résumés, sample cover letters, salary negotiation, job search strategies and federal application tips
- Luncheons with practicum preceptors and employers to learn about organizational needs and how desired skills may be incorporated in the GWSPH curricula

GW Center for Career Services
The university's Center for Career Services primarily serves GWSPH undergraduate students. Services offered by the GW Center for Career Services include:

- Individualized career coaching and assessment

- Virtual résumé and cover-letter development
- Coaching on networking and interviewing skills
- Workshops and events geared toward the needs of students with disabilities, students with current and former military experience, international students and alums
- Career and internship fairs, industry career expos, skills workshops, panels, employer informational sessions, company site visits and employer consultations
- Job and internship posting board on Handshake
- Campus interviewing for employers

Office of Alumni Relations
The Office of Alumni Relations engages GWSPH alums through organized networking opportunities, both in person and virtually. The Alumni Industry Networks provide in-person and online networking events by industry sector. GW Career Connect is an online community for both current GW students and alums to network and seek career guidance and professional development advice.

PhD/MS Programs
The Office of PhD/MS Programs at GWSPH coordinates a few career workshops and panels throughout the year, geared specifically toward PhD and MS students and research careers.

2) *Explain how individuals providing career advising are selected and oriented to their roles and responsibilities.*

The majority of public health career advising occurs at the school level, coordinated by two full-time staff members who have master's degrees and extensive experience in higher education and student-centered programming. The Director of Career Services obtained an EdS in Clinical Mental Health Counseling and a Graduate Certificate in Counseling and Life Transitions with a concentration in Career and Workforce Development from GW and is completing an MPH in Health Promotion. This training has provided a unique view into the skills and strengths that the public health students gain through their curriculum, including core competencies to articulate to employers during their internship, practicum, fellowship and job search process. In addition, counseling staff have each obtained master's degrees in Higher Education and Education Counseling as well as multiple certifications including the MBTI Call to Service Network: Federal Advisor Certificate Program, which trains counselors on how to guide students and recent graduates through the federal government application process on USAJOBS. Counselors are oriented to their role by shadowing current counselors, reading books and articles about public health careers, and having discussions with faculty about curricula and skills learned in each program. Counselors are strongly encouraged to regularly research career opportunities for public health students and interview faculty, community stakeholders, employers and alums to learn about new trends, opportunities and desired skills.

Faculty who informally career advise students rely on their lived public health experiences and the expertise and resources of GWSPH Career Services.

At the university level, career advising staff hold, at minimum, a bachelor's degree in an appropriate area of specialization. For more senior-level positions, career coaching experience and/or a master's degree is preferred. Communication, teamwork and customer service skills are required, regardless of level. Staff are trained on FERPA and other relevant policies as well as working with a diverse student population.

3) *Provide three examples from the last three years of career advising services provided to students and one example of career advising provided to an alums. For each category, indicate the number of individuals participating.*

Most alums seek one-on-one appointments and assistance, personalized to their situation and needs. GWSPH Career Services sees an uptick in alum appointments (three or more per week) in May through August just after graduation, when many recent graduates are searching for positions. For the remainder of the year, alum appointments drop to about one per week. GWSPH offers lifetime career services, so alums may return at any point, post-graduation, for assistance. Most often, alums seek support in résumé/CV writing and job search strategies, followed by networking connections.

In addition to individual appointments, GWSPH Career Services offers numerous informational sessions, panels, workshops and fairs throughout the year. Depending on the topic, these events are open to all or a select group of students and alums. Attendance varies by event depending on topic, timing and format (virtual versus in person).

Event	Description	Attendees
Public Health Career Fair (2023)	Regional, national and international employers engage with students and alums virtually at this annual spring event. Employers at the 2023 event included US Food and Drug Administration (FDA), American Diabetes Association, Maryland Department of Health, The Children's Guild, Inc, Peace Corps and Acumen, LLC. During the event, employers discuss their organizational needs and accept résumés from interested candidates. This event is open to all GWSPH students and alums.	175
CDC/ORISE Information Session (2023)	Recruiters from the Centers for Disease Control and Prevention's (CDC) ORISE Research Participation Program held an information session to promote and recruit for the ORISE program. This event was open to all graduate GWSPH students.	38
Crafting a Résumé for Your Practicum and Other Career Opportunities (2022)	Led by Career Services counselors, this workshop focused on building a résumé. Counselors provided tips on wording, formatting and organization. This event was open to all graduate GWSPH students.	33
Fireside Chat: Behind the Scenes of a Consulting Interview (2021)	Alums who work in the consulting industry had informal conversations about their experiences interviewing for such positions. This event was open to all graduate GWSPH students and alums.	31

For a complete list of events hosted by Career Services between 2020–2023, see ERF > Criterion H > Criterion H2 > H2.1: Career services.

The Office of PhD/MS Programs coordinated several events over the last year or so, focused on career opportunities post-graduation. For example, in April 2023, the Office hosted an event for 25 attendees on careers in the pharmaceutical industry. Another event was hosted in April 2023 on career in government. Approximately 25 students attended this session. Additionally, career opportunities are discussed during PhD information sessions, which are held at least once per year and usually attract 50 to 70 attendees.

4) *Provide data reflecting the level of student satisfaction with career advising during each of the last three years. Include survey response rates, if applicable.*

After every one-on-one meeting between students and GWSPH counselors, Handshake emails a satisfaction survey to the student. This question was on a four-point Likert scale with 4 representing high satisfaction and 1 representing low satisfaction with the statement.

	2020-2021 Average (N)	**2021-2022 Average (N)**	**2022-2023 Average (N)**
The goals I set for my career counseling appointment were met.	3.87 (62)	3.88 (42)	3.82 (39)

Qualitative data from this post-appointment survey over the three years indicate that the vast majority of students were happy with the services offered and could not identify anything else the career counselor could have done to improve the meeting. Several students noted that counseling staff were late for their appointments or missed them entirely, which could be indicative of the need to hire additional staff to meet student needs.

The Office of PhD/MS Programs surveyed PhD students in 2022 and one of the questions asked was "How satisfied are you with the career development guidance you have received from your program?" Of the 29 respondents, 11 students (37.93%) said they were extremely or somewhat satisfied with their program's career development guidance. A plurality students (N=12, 41.38%) were neither satisfied nor dissatisfied (see ERF > Criterion H > Criterion H2 > H2.4: Career Satisfaction).

5) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

<u>Strengths</u>

- Career counselors collaborate regularly with GWSPH departments and instructors. This engagement has resulted in counselors' guest lecturing in classes and better coordination of support for students.
- The transition to Handshake in 2017 as the technology platform for career services streamlined and simplified many processes. Students create lifetime accounts and can view and apply to job and practicum postings and book appointments with a counselor. The job board in Handshake is very well-organized and current.
- Counselors offer flexible appointment times from 8:00 a.m. to 8:00 p.m. ET by phone, Zoom (or similar program), in person and email. This is appreciated by students and alums in separate time zones and with busy schedules.
- Many students develop close relationships with faculty who support them through their career search. During Alum Interviews, several graduates highlighted specific faculty with whom they regularly talk with, even post-graduation and who helped them either find positions or choose between job offers. This is particularly appreciated by doctoral level students who benefit from faculty network connections and discipline specific career advice.
- The GWSPH Career Services personnel are continuously attending trainings and workshops to learn about the latest trends in the industry. For example, the team recently participated in a training on the use of artificial intelligence (AI) in résumé writing. The team also continues to build relationships with employers, expanding our employment network, and engage in collaborative opportunities specific to the public and private sectors.

Challenges

- GWSPH Career Services is limited in what opportunities they may offer and demands they can feasibly meet given they only have two staff members that serve the entire graduate student and alum population.
- Alum relations and development support is provided centrally by the university with a small team supporting the medical and health sciences and nursing schools in addition to GWSPH. They have faced staff challenges, and there is a lack of strategy and cohesion specifically for alum engagement. This negatively impacts career opportunities and networking between current students and alum as well as giving, retention and ongoing alum engagement.
- Through GWSPH admissions and various departmental efforts, there are attempts to connect alums and prospective and current students. However, with the possible exception of the MHA program, these are underresourced and episodic, without a long-term consistent strategy.

Future Plans

- GWSPH Career Services is planning to hire a graduate assistant who can help with data collection and analysis, advertising for upcoming events and general office assistance.
- GWSPH plans to continue offering employer engagement opportunities in person and virtually to best meet the needs of employers and students and maximize interactions.
- GWSPH plans to partner with University Career services to strengthen our approach.

H3. Student Complaint Procedures

The school enforces a set of policies and procedures that govern formal student complaints/grievances. Such procedures are clearly articulated and communicated to students. Depending on the nature and level of each complaint, students are encouraged to voice their concerns to school officials or other appropriate personnel. Designated administrators are charged with reviewing and resolving formal complaints. All complaints are processed through appropriate channels.

1) *Describe the procedures by which students may communicate complaints and/or grievances to school officials, addressing both informal complaint resolution and formal complaints or grievances. Explain how these procedures are publicized.*

   Below are the two school-level procedures for complaints and/or grievances. All others are managed at the university level.

   Grade Appeal
   Before students file a formal grievance, they are asked to approach the instructor for an acceptable resolution on an informal basis within 30 days of the start of the next term. If a satisfactory resolution is not reached with the course instructor, the student may consult the Program Director, the appropriate undergraduate or graduate dean and the Senior Associate Dean for Academic, Student and Faculty Affairs, in sequential order. Should the student feel that their concern was not appropriately addressed at any level, they may file a formal appeal letter with the Senior Associate Dean for Academic, Student and Faculty Affairs. The Senior Associate Dean will convene a group of three impartial faculty members from GWSPH, who will review the appeal and communicate a final decision. The process is explained in greater details in the GWSPH student handbooks (undergraduate, master's, DrPH and PhD; see ERF > Criterion A > Criterion A1 > A1.3: Bylaws-Policy Documents).

   Open-Door Policy
   The Senior Associate Dean for Academic, Student and Faculty Affairs and the Assistant Dean for Student Services have an open-door policy. This policy is promoted at New Student Orientation and Welcome events and encourages students to provide informal feedback, complaints and/or grievances. Faculty, academic advisors, program directors and department chairs and vice chairs are also available should students wish to informally address concerns.

2) *Briefly summarize the steps for how a formal complaint or grievance is filed through official university processes and progresses. Include information on all levels of review/appeal.*

   The university process of filing a complaint or grievance varies by type of grievance. The Office of Advocacy and Support and Counseling and Psychological Services are available to offer emotional, administrative and mental health support to students as needed. The Division of Student Affairs' website for Student Rights and Responsibilities outlines what types of incidents students may submit and how to do so.

   Student Discrimination
   Effective January 1, 2022, the reporting procedure for students changed based on the source of the discrimination (e.g., by faculty, staff or students).
   - To report discrimination by a faculty member, the Office of the Provost manages the Student Discrimination Report Procedures. Questions about this process can be directed to gwprovost@gwu.edu.

- To report discrimination by a staff member, please refer to the Equal Employment Opportunity Complaint Process. Questions about this process can be directed to eeo@gwu.edu.
- To report discrimination by a student or student organization, please submit a Student Conduct Incident Reporting Form. Questions about this process can be directed to rights@gwu.edu.

Academic Integrity and Student Conduct
Students wishing to file a violation of academic integrity or concern about a student's conduct may do so through the GW website.

Title IX
Students who would like to report a Title IX complaint (e.g., sexual harassment, sexual assault, dating or domestic violence, stalking) may do so on the Title IX Office website or by calling the Title IX Office during normal business hours. In the case of immediate or emergency need, students are directed to call 911 and the GW Emergency Services hotline.

Ethical Conduct
The Code of Ethical Conduct guides all individuals acting on behalf of the university. Violations of the code of noncompliance with laws, regulations and university policies may be reported to the EthicsPoint system 24/7.

Care Referral
Students who feel that another student may need additional nonemergency support may submit a care referral to the GW CARE Team.

GW offers several other mechanisms for filing a complaint or grievance:

- Crime
- Research Misconduct
- Data Privacy and Integrity
- Privacy
- Equal Employment Opportunity and Access
- Bias-Related Act
- Accessibility

3) *List any formal complaints and/or student grievances submitted in the last three years. Briefly describe the general nature or content of each complaint and the current status or progress toward resolution.*

The Title IX Office reviewed all cases in which a formal complaint was filed between August 1, 2020, and June 30, 2023. Two formal complaints involving GWSPH students and employees were identified.

- The first is a formal complaint involving two GWSPH students. The allegations included sexual harassment, stalking and sexual assault (unwanted touching). Per the Complainant's request, with the consent of both parties, and with the Title IX Office's approval, this case was resolved via the Alternative Resolution process, which did not include any disciplinary terms.
- The second formal complaint involved allegations of sexual harassment and sexual assault (unwanted touching) made against a part-time GWSPH faculty member by a GWSPH student. The formal complaint was dismissed by the Title IX Coordinator for Title IX purposes due to a lack of jurisdiction over the Respondent at the time of the formal complaint. In addition, two of the allegations did not occur within the university's programs or activities. However, the matter was referred to Faculty Affairs for further

review of non-Title IX related issues. Please note that the alleged incidents in this case occurred and were reported to the university before August 1, 2020, but the date the formal complaint was filed was after August 1, 2020. Therefore, we included it here.

To the best of our knowledge, no additional formal complaints or student grievances were submitted in the last three years.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- Policies and procedures for student complaints and grievances are easily accessible and understandable. The university personnel monitoring submissions are responsive to questions and concerns.
- GWSPH has very strong relationships with university partners, who readily provide guidance and support to school leadership and faculty when issues arise. These include the GW Office of Diversity, Equity and Community Engagement, the Office of Student Rights and Responsibilities, and the Office of Student Life.

Challenges

- It is difficult to navigate the impact of new technologies on in-person and virtual classroom engagement and etiquette and dynamics both in and outside of the classroom while balancing teaching and learning needs.
- It is a challenge to navigate the prevalent use of social media to communicate everything (good or bad) without resources to address concerns and/or praises shared in this manner in real time.
- Because of their remote status, online students do not have access to on-campus health and wellness facilities.

Future Plans

- On an annual basis, GWSPH reviews and revises the undergraduate, graduate, PhD and DrPH Student Handbooks to ensure information is current, accurate and consistent. For example, GWSPH continues to review and adapt guidance related to appropriate online etiquette and the use of AI in the classroom.
- GWSPH plans to expand its grievances and appeals written policies for matters other than a grade appeal such as probation and/or suspension.
- GWSPH plans to reestablish a student concerns committee.

H4. Student Recruitment and Admissions

The school implements student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the school's various learning activities, which will enable each of them to develop competence for a career in public health.

1) *Describe the school's recruitment activities. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each.*

The university, including GWSPH, seeks to recruit and enroll a diverse student body with the ability to succeed in its undergraduate and graduate academic programs. A special emphasis is placed on recruiting applicants who are URP (as defined in Criterion G1). Additionally, GWSPH aims to accept academically qualified students with a demonstrated passion for public health who can contribute to public health research, practice and service. The recruitment activities at GWSPH are wide-ranging and designed to attract talented applicants and raise awareness of the school's program offerings. The employed strategies vary slightly based on the type of program.

Undergraduate
Recruitment at the undergraduate level is managed by the University Office of Undergraduate Admissions. They are responsible for promoting undergraduate academic programs across the university, and most recruitment is focused on the student experience and usually is not specific to public health or GWSPH. The Associate Dean of Undergraduate Education and the undergraduate academic advisors connect with accepted students during the university's "Inside GW" days, both in person and virtually. GWSPH also emails accepted students, welcoming them to the school and encouraging them to deposit and cement their status.

Residential Graduate
The GWSPH Office of Admissions and Recruitment is responsible for recruiting for all residential graduate degrees (MHA, MPH, MS, PhD and DrPH) and often redirects prospective students, if interested in undergraduate or online graduate academic programs, to their respective admissions managers. Most of the recruitment and advertising is focused on public health, as the MPH programs are the most populous at GWSPH. Recruitment initiatives include but are not limited to:

- Retargeting ads that display for students after they find GW on the SOPHAS website
- GWSPH website, which is easy to navigate and available 24/7
- Virtual viewbook, available on the GWSPH
- Graduate fairs, including the This is Public Health Graduate School Fair
- Professional conferences, including the American Public Health Association (APHA) and the National Association of Advisors for the Health Professions (NAAHP) annual conferences
- Alum gatherings, hosted by the GW Development and Alumni Relations Office, annually at the APHA conference
- Virtual and in-person open houses
- Informational webinars
- Panels with alums or current students speak about their experiences
- Panels with faculty, current students and community partnership speak about service or research opportunities
- Class visits where applicants can sit in on a residential lecture
- Drip campaign of targeted emails to prospective students at each stage of interest, application, admittance and matriculation

- Targeted emails to a database of names purchased from the GRE Search Service
- Social media posts on Instagram, X, Facebook, LinkedIn and YouTube. While the posts across these media platforms are generally not directly related to marketing and recruitment, they do highlight student and faculty achievements, bringing recognition to the school and its programs. GWSPH does have an admitted student Facebook group that allows new students to network.

See ERF > Criterion H > Criterion H4 > H4.1: Recruitment activities.

Online Graduate (@GW)
Our third-party vendor, 2U, is responsible for all marketing of the online programs (MPH@GW, MHA@GW and DrPH@GW). Given the virtual nature of the programs, all marketing and recruitment is also virtual. 2U employs web-based marketing strategies, including retargeting ads, Google analytics, organic leads and subscriptions to Facebook, LinkedIn and Google for posting ads. As 2U also markets for other universities, they have a database of individuals interested in public health and can also target these prospective applicants for GW admission. Last, 2U hosts several informational webinars on financial aid, the student experience, degree requirements and open houses.

A dedicated team of 2U admissions personnel contact prospective applicants via email and phone. They provide assistants through the entire application process and matriculation. Early priority and priority deadlines, set by 2U, further encourage applicants to commit to the online programs. 2U hosts virtual touring of classes and webinars for admitted students. As a result of these strategies, the meld rates are considerably lower in the online programs compared to the residential programs.

2) *Provide a brief summary of admissions policies and procedures. If these differ by degree (e.g., bachelor's vs. graduate degrees), a description should be provided for each. Schools should discuss only public health degrees. Detailed admissions policies, if relevant, may be provided in the electronic resource file and referenced here.*

Undergraduate
The BS in Public Health admissions process is coordinated by the University Office of Undergraduate Admissions. Prospective students apply to the degree via the Common Application and select public health as their intended major. This application is open to first-year applicants, transfer students, international applicants and undocumented applicants. Generally, the university is test-optional, though there are some exceptions (BS in Public Health is test-optional). Admissions policies and decisions are determined at the university level. Internal transfer students are required to meet eligibility criteria and submit a transfer request form to declare public health as their major.

Residential Graduate
The admissions process for residential graduate academic programs is managed by the GWSPH Office of Admissions and Recruitment. All residential MPH and DrPH applications are submitted through SOPHAS, the Schools of Public Health Application Service. Applicants must identify an MPH program at the time of application submission. Required application components include:

MPH	DrPH
Online SOPHAS application + fee Official transcripts from all colleges and universities attended (international transcripts must be evaluated by World Education Services (WES) At least three letters of recommendation Personal statement Résumé or curriculum vitae (CV) English language proficiency	Online SOPHAS application + fee Official transcripts from all colleges and universities attended (international transcripts must be evaluated by World Education Services (WES) At least three letters of recommendation Personal statement Résumé or curriculum vitae (CV) English language proficiency Interview

Once applications are complete and verified, the GWSPH Office of Admissions and Recruitment transfers applications to designated faculty reviewers in each program. The number of application reviewers varies by program size, ranging from one to five. Each program has its own set of criteria by which it judges applicants, but each generally looks for candidates who have a documented interest in public health and have the qualities needed to be successful in the program. In the case of the DrPH, selected candidates are interviewed by Zoom or phone. MPH applicant interviews are not mandatory, though applicants may request an informational interview with the GWSPH Office of Admissions and Recruitment. These interviews are not evaluative and have no impact on reviewers' admittance decisions. The reviewers documents their decisions regarding admittance in SOPHAS, and the GWSPH Office of Admissions and Recruitment emails the applicant a letter of admission via Salesforce. Included in this letter is a deadline for acceptance and information on depositing.

MPH students matriculate in all three terms (fall, spring and summer), but DrPH students matriculate only in the fall term. Admittance decisions occur on a rolling basis, though there are deadlines for term matriculation, and students may defer up to one year if accepted. Test scores are optional for residential MPH and DrPH students.

Academic and needs-based scholarships are available to residential MPH applicants. Residential and online DrPH applicants are eligible for academic scholarships only. As part of the application review process, faculty members provide a scholarship rating based on academic preparedness, relevant experience and departmental priority (defined by each department). Based on an applicant's rating and overall GPA, the GWSPH Office of Admissions and Recruitment determines a scholarship amount. Scholarship ranges from $12,000 total to the entire cost of a master's degree. Not every student receives an academic scholarship. Need-based grants are based on the College Scholarship Service profile (College Board).

Online Graduate (@GW)

DrPH@GW and MPH@GW applicants apply through a 2U-hosted application system. The application criteria are the same as the criteria for the residential programs.

MPH@GW	DrPH@GW
Online application + fee Official transcripts from all colleges and universities attended (international transcripts must be evaluated by World Education Services (WES) At least two letters of recommendation Statement of purpose Résumé or curriculum vitae (CV) English language proficiency	Online application + fee Official transcripts from all colleges and universities attended (international transcripts must be evaluated by World Education Services (WES) At least three letters of recommendation Personal statement Résumé or curriculum vitae (CV) English language proficiency Interview

Completed applications are uploaded by the 2U admissions team to Salesforce and assigned to a GW faculty member. A rotating roster of MPH faculty are responsible for reviewing MPH@GW applications, while the DrPH program leadership reviews all DrPH@GW applications. The criteria by which reviewers judge applications is generally broad because the majority of students in these online programs are generalist. Virtual interviews are required for the DrPH@GW but not the MPH@GW.

Decisions are made on a strict timeline, a benefit of GW admissions marketed to applicants. 2U is responsible for notifying applicants of their application decision. Like the residential programs, admissions decisions are made on a rolling basis with deadlines for matriculation each term, albeit four times per year for the MPH@GW. The online programs differ in that they have early priority and priority deadlines in addition to the final application deadline to incentivize students to commit to the program.

All accepted MPH@GW students in 2023–2024 receive a $10,000 scholarship, the funding of which is split 50/50 between 2U and GWSPH. No additional academic or needs-based scholarships are available for MPH@GW students. DrPH@GW students receive an academic-based scholarship.

3) *Provide quantitative data on the unit's student body from the last three years in the format of Template H4-1, with the unit's self-defined target level on each measure for reference. In addition to at least one from the list that follows, the school may add measures that are significant to its own mission and context. Schools should focus data and descriptions on students associated with the school's public health degree programs.*

Template H4-1

Outcome Measures for Recruitment and Admissions of GWSPH Students					
	Target[103]	**2020**	**2021**	**2022**	**2023[104]**
Undergraduate					
Percentage of priority underrepresented students by race/ethnicity accepting offers of admission	50%	53% (171/324)	57% (208/367)	62% (219/352)	56% (10/18)
Percentage of priority underrepresented students by military status accepting offers of admission	7%	0.01% (2/324)	0.01% (3/364)	0.003% (1/351)	0%
Residential Graduate					
Percentage of priority underrepresented students by race/ethnicity accepting offers of admission	50%	46% (210/457)	52% (279/539)	54% (251/467)	58% (43/74)
Percentage of priority underrepresented students by military status accepting offers of admission	7%	5% (2/431)	4% (20/539)	3% (16/467)	4% (3/74)
Online Graduate					
Percentage of priority underrepresented students by race/ethnicity accepting offers of admission	50%	52% (209/399)	57% (412/727)	60% (253/424)	63% (134/213)
Percentage of priority underrepresented students by military status accepting offers of admission	7%	7% (33/452)	7% (53/803)	8% (36/461)	11% (26/231)

The percentage of URP applicants with current or former military experience is below target levels for every group except online graduate applicants. An online education may be more conducive to earning a degree, given the transient nature of military work. An additional factor affecting lower than target percentages of URP military applicants is the portion of tuition covered by the GI bill, which is less than half of undergraduate tuition. According to the US Department of Veterans Affairs, just under 2,000 GW students are using the GI Bill (all chapters)

[103] Targets are aligned with approximate percentages of URPs in the general US population. GWSPH strives to accept applicants representative of the demographics of the US population.
[104] Spring and summer 2023 only

at the university, which amounts to 4.6% of the student population, which is in line with residential graduate applicants.

4) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- The GWSPH Office of Admissions and Recruitment is staffed by a hardworking team of seven members split between admissions and financial aid. This team is responsible for admitting 1,350 to 1,650 residential graduate students each year.
- The GWSPH Office of Admissions and Recruitment financial aid staff assist residential and online students who receive institutional aid. Federal and private loan aid are administered by the GW Office of Student Financial Assistance.
- The recruitment and admissions process for the online graduate degrees is streamlined, and applicants get personalized service. 2U strives to remove as many barriers to application as possible, such as waiving the application fee, and we have a smooth handoff between 2U and our admissions team.
- GW staff and faculty make all admission and financial aid decisions, including for online students.
- The DrPH@GW program soft launched in 2023. Only GWSPH alums were allowed to apply for the fall 2023 start. The number of applications received far exceeded expectations (i.e., 49 versus less than 20), reinforcing the decision to offer an online doctoral program.
- GWSPH hired a new Director of Admissions in fall 2023. She has experience working at GW and with the 2U platform.
- GWSPH is steadily increasing international student enrollments at both the master's and doctoral degree level in alignment with our strategic plan.
- GWSPH is steadily increasing enrollment in our doctoral programs (PhD and DrPH).
- At GW, undergraduates are free to transfer across schools once they are admitted to university. GWSPH reduced barriers for transfers, and the undergraduate program consistently maintains a net positive student transfer ratio.

Challenges

- GWSPH faces a high melt rate between admittance and matriculation, particularly among international students. This increased significantly during the COVID-19 pandemic for obvious reasons. Students who melt often cite finances and/or the ability to obtain a visa as major factors in their decision to not matriculate. Scholarships offered by GWSPH apply only to the cost of tuition, and some admitted students do not have the financial resources for living in the expensive DC metro area. GWSPH materially increased the number of matriculating international students (24 in 2019 and 55 in 2023). These students require additional support navigating visa requirements and financial matters. This puts an additional strain on our already small admissions team.
- In recent years, the competition among online graduate programs has increased considerably, offering applicants more choices. The COVID-19 pandemic temporarily boosted enrollment in these online programs.
- Marketing is another centralized service at GW, and GWSPH does not have consistent access to meaningful marketing support.
- The challenges and opportunities for the undergraduate program are best understood in the larger context of how GWSPH interacts with the university. For example, GW Admissions controls undergraduate admissions numbers. They have consistently admitted fewer students than our desired program size.

- GWSPH is moving forward with admissions based on preliminary university guidance about the recent SCOTUS ruling. We are analyzing how the guidance will impact current admissions processes as well as admissions in general. GWSPH is committed to ensuring a diverse community of students within the parameters of the law.

Future Plans

- GWSPH is reviewing admissions team staffing and needs for greater support for international and doctoral student recruitment in particular as well as for our growing residential programs to determine how best to meet the needs with available resources. Additional personnel may be needed.
- Based on anecdotal feedback from applicants, the GWSPH admissions website could be improved to be more user-friendly and easier to navigate. The GWSPH Office of Admissions and Recruitment is currently discussing how to achieve this goal.
- GWSPH is developing marketing tools to highlight the benefits of our online degrees and what makes us unique in the graduate education market. For example, online students may still benefit from our location in DC as many of our distinguished online instructors are from the area and have valuable real-world experience. GWSPH also offers immersions for our online students, which allow students to interact and network in person and actively participate in activities such as attending congressional hearings in DC or touring National Health Services in the United Kingdom.
- Applications for the fall 2024 DrPH@GW cohort opened in August 2023 to the public. The goal is to recruit and accept an even more diverse cohort of students with varied backgrounds and interests in public health. Looking ahead, GWSPH aims to find additional opportunities for more scholarships and funding packages so that the DrPH can continue to be a top tier competitive program, attracting the strongest students possible.
- Based on the immersion success in our MHA@GW program, the MPH@GW launched an immersion experience in spring 2023 that was very well received by students. Additional immersion opportunities are being discussed as a strategy to increase connectivity and engagement among students and as a marketing strategy to differentiate ourselves from similarly priced competitors. Concentration- or topic-specific immersions are of particular interest among students. All MPH@GW immersions are optional.
- Even though the new MPH@GW concentrations launched relatively recently, additional concentrations may be considered based on student and stakeholder feedback.
- The university recently acquired Slate, a customer communications software specifically used for marketing, recruitment and admissions in a single unified interface. Undergraduate Admissions intends to implement Slate in 2024, with graduate program admissions implementation starting in 2025.

H5. Publication of Educational Offerings

Catalogs and bulletins used by the school to describe its educational offerings must be publicly available and must accurately describe its academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements. Advertising, promotional materials, recruitment literature and other supporting material, in whatever medium it is presented, must contain accurate information.

1) *Provide direct links to information and descriptions of all degree schools and concentrations in the unit of accreditation. The information must describe all of the following: academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements.*

- Academic calendar
- Admissions policies
- Grading policies (grading scale is available in each syllabus)
- Academic integrity standards
- Degree completion requirements:
    - GW Academic Programs
    - Public Health Undergraduate Programs
        - Public Health, BS
        - Dual Degrees, BS/MPH
        - Dual Degrees, BA or BS/MPH
        - Undergraduate Minors
    - Public Health Master's Programs
        - Biostatistics, MPH
        - Climate and Health (online), MPH@GW
        - Community Oriented Primary Care, MPH
        - Environmental Health Science and Policy, MPH
        - Epidemiology, MPH
        - Global Environmental Health, MPH
        - Global Health (online), MPH@GW
        - Global Health Epidemiology and Disease Control, MPH
        - Global Health Policy, MPH
        - Global Health Program Design, Monitoring and Evaluation, MPH
        - Health Administration, MHA
        - Health Administration (online), MHA@GW
        - Health Informatics and Analytics (online), MPH@GW
        - Health Data Science, MS (both concentrations)
        - Health Policy, MPH
        - Health Promotion, MPH
        - Humanitarian Health, MPH
        - Joint Degree, JD/LLM with MPH or Certificate
        - Joint Degree, PA/MPH
        - Joint Degree, MD/MPH or PH Certificate
        - Joint Degree, MSN/MPH
        - Maternal and Child Health, MPH
        - Physical Activity in Public Health, MPH
        - Public Health Communication and Marketing MPH
        - Public Health Generalist (online), MPH@GW
        - Public Health Microbiology and Emerging Infectious Diseases, MS
        - Public Health Nutrition, MPH

        - Women, Youth and Child Health (online), MPH@GW
    - Public Health, Certificate
    - Public Health Doctoral Programs
        - Public Health Generalist, DrPH
        - Public Health Generalist (online), DrPH@GW
        - Environmental Health, PhD
        - Epidemiology, PhD
        - Exercise Physiology and Applied Nutrition, PhD
        - Global Public Health Sciences, PhD
        - Health Data Science, PhD (both concentrations)
        - Health Policy, PhD
        - Social and Behavioral Sciences, PhD
    - Public Health Joint Degree Programs
        - Undergraduate
        - Graduate
    - Non-Public Health Programs
        - Exercise Science, BS
        - Health Data Science, BS
        - Nutrition, BS
        - Health Administration, MHA
        - Health Administration Online, MHA@GW
        - Strength and Conditioning, MS
        - Exercise Physiology and Applied Nutrition, PhD

Electronic Resource File Directory

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        ii. A1.3: Bylaws-Policy Documents
        iii. A1.5: Faculty interaction
    b. Criterion A3
        i. A3.1: Student Organizations
3. Criterion B
    a. Criterion B1
        i. B1.2: Strategic plan
    b. Criterion B2
        i. B2.2: Eval plan_implement
            1. Academic Advising and Supervision (C2, H1)
            2. Climate and URP Representation (G1)
            3. Doctoral Progression (B3)
            4. Extramural Service (E5)
            5. Graduation Rates (B3)
            6. Instructional Effectiveness (E3)
            7. Post-Graduation (B4, B5, H2)
            8. Professional and Community Service Activities (F2)
            9. Professional Development (F3)
            10. Research (E4)
            11. Stakeholder Feedback (F1)
            12. Student Enrollment and Admissions (Intro, H4)
            13. Student Perceptions (C2)
            14. Unit Defined Measures (B2)
        ii. Academic Affairs Meeting
        iii. Admissions Committee
        iv. ASPPH and CEPH Annual Reports
        v. Career Services Council
        vi. Community of Course Directors
        vii. Dean's Council
        viii. DEI Committee
        ix. Departmental Curriculum Committee
            1. DBB
            2. EXNS
            3. HPM
        x. DrPH Committee
        xi. Executive Committee
        xii. Faculty and Staff Assemblies
        xiii. Fitzhugh Mullan Institute
        xiv. GWSPH APT Committee
        xv. GWSPH Curriculum Committee
        xvi. HPM Faculty Meeting
        xvii. MPH Advisory Committee
        xviii. MPH@GW Faculty Forum
        xix. MS Committee
        xx. PhD Committee
        xxi. Practice Committee
        xxii. Research Committee

xxiii. Surveys and Interviews
xxiv. Undergraduate Program Meeting
xxv. Urban Health Program

c. Criterion B4
    i. B4.2: Factors
d. Criterion B5
    i. B5.2: Alum percep_methods
        1. Graduation Survey
        2. GWSPH Alum Surveys and Interviews
        3. MHA Alums

4. Criterion C
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        i. C2.2: Faculty FTE
        ii. C2.4: Temp C2–2 Advising
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    b. Criterion C3
        i. C3.1: Staff FTE
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        i. C5.1: IT resources
5. Criterion D
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        i. D2.4: Temp D2-2_assessments
        ii. D2.5: Temp D2-1_syllabi
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    i. Criterion D9
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        i. D16.3: Temp D16-1_doc
        ii. D16.5: Competencies_doc
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        iv. D16.9: MS final rsrch_policies
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10. Program Guides

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