University of Pittsburgh School of Public Health

Draft Self-Study

July, 2023

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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 University of Pittsburgh was founded in 1787. It is a nonsectarian, coeducational, state-related university. It is a part of Pennsylvania's Commonwealth System of Higher Education.

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 University of Pittsburgh consists of 16 colleges and schools on the Pittsburgh campus and four regional campuses. As of fall semester 2023, the University offers eight associate's degrees, 215 baccalaureate degrees, 163 master's degrees, and 106 doctoral degrees (82 research and 24 professional practice).

c. number of university faculty, staff, and students

The total student enrollment of the University of Pittsburgh for fall term 2022 was 24,382 undergraduate and 9,250 graduate and professional. As of the same date, the University employed 5,744 faculty and 8,224 total staff.

d. brief statement of distinguishing university facts and characteristics

As a state-related institution, the University is a public-private venture supported by the Commonwealth of Pennsylvania and private funds. As a result, educational services are made available at a lower tuition rate for commonwealth residents. In return, the University is eligible for state funding for its operating budget and may take advantage of state facility construction grants. However, administratively and academically, the University operates as a private institution and has sole authority over standards for admission, awarding of degrees, and faculty qualifications. The University of Pittsburgh has a Carnegie R1 classification, and is a member of the Association of American Universities. The University has an annual economic impact estimated at $5.2 billion (about $16 per person in the U.S.), and is a leader in research and innovation regionally, nationally, and internationally. Since 1998, the University has ranked among the top 10 educational institutions in grant support from the National Institutes of Health, ranking third for the most recent fiscal year (2021-22).

The University is currently undergoing important leadership transitions. Chancellor Patrick Gallagher announced in April 2022 that he would step down in summer 2023. His successor is Dr. Joan T.A. Gabel, who assumes the position in July 2023. Provost Ann Cudd announced in March 2023 that she would be leaving to assume the presidency of Portland State University. Dr. Joe McCarthy, who has served as vice provost for undergraduate studies since 2017, took on the role of interim provost on July 1, 2023.

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 University is accredited by the Middle States Association of Colleges and Schools, Commission of Higher Education. Please see https://www.ir.pitt.edu/interactive-fact-book/general-information/specialized-accreditations for a University-wide list of accrediting bodies. In addition to CEPH, accrediting bodies within the School of Public Health are the Commission on Accreditation of Healthcare Management Education (MHA program) and the Accreditation Council for Genetic Counseling (genetic counseling program).

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.)

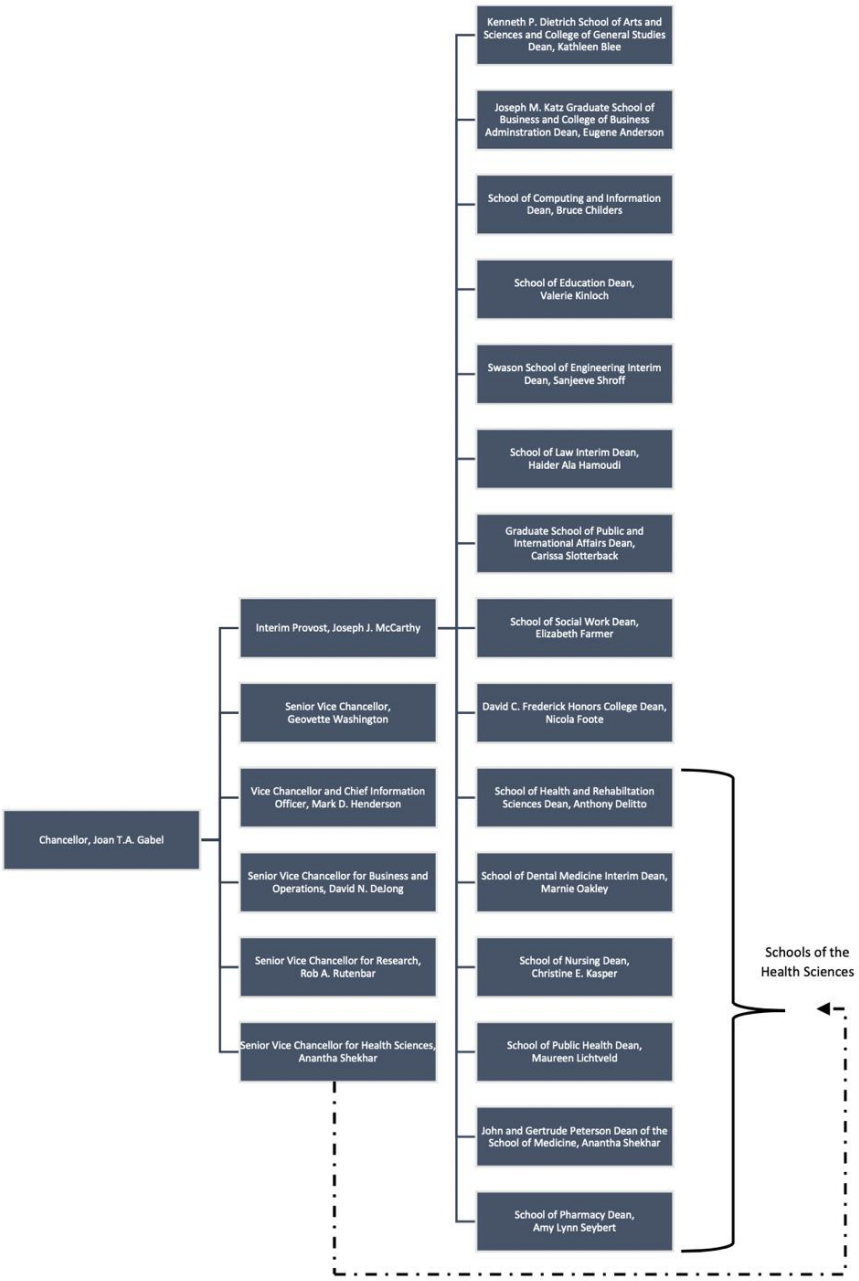
The School of Public Health (SPH) was founded in 1948 with a $13.6 million grant from the A. W. Mellon Educational and Charitable Trust. When the school opened its doors as the Graduate School of Public Health two years later, it was the 13th public health school in the nation and the first such school to be accredited in Pennsylvania. With an initial focus on occupational health and hygiene, the school played an important role in the highly industrial city of Pittsburgh. As the region changed, the school evolved and expanded as well. The "Graduate" appellation was dropped in 2022 when the school added an undergraduate degree program, the Bachelor of Science in Public Health (BSPH). In addition to public health programs, the school offers two small programs that are classified as non-public health programs: the master's degrees in health administration (MHA) and the MS in genetic counseling. Both of these programs are integral parts of the school's culture and curriculum and are only non-public health in the most technical sense. The SPH enjoys a global reputation as a research powerhouse while also producing community-engaged public health practice graduates ready to meet local, national, and global needs.

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


Mary Hawk, Chair, Behavioral and Community Health Sciences
Yan Ma, Chair, Biostatistics
Sally Wenzel, Chair, Environmental and Occupational Health
Jane Cauley, Interim Chair, Epidemiology
Julie Donohue, Chair, Health Policy and Management
Eleanor Feingold, Interim Chair, Human Genetics
Suresh Kuchipudi, Chair, Infectious Diseases and Microbiology
Maureen Lichtveld, Dean
Grace Drnach-Bonaventura, Chief of Staff
Jess Sikora, Executive Assistant to the Dean
Jen Palaski, Associate Dean for Finance and Adminstration
Mike Singer, IT Director
David Arndt, IT Manager
Ryan Evans, IT Manager
Joesph Shadwick, IT Manager
Adam Orbell, IT Manager
Anthony Snow, Data Manager
Cassie Mirt, Director of Research Adminstration
Edward Tomkowitz, Director of Budget and Finance
Karen Perkins, Administrator
Evan Massucci, Director of Personnel
Elana DiPietro, Personnel and Payroll Administrator
John DeSimone, Personnel Coordinator
Jill Ruempler, Events Coordinator
Kim Renziehausen, Facilities and Building Manager
Todd Collins, Facilities Coordinator
Jessica Burke, Vice Dean
Sloane Astorino, Director of Development (PAE)
Lourdes Cano, Alumni Coordinator (PAE)
Clare Collins, Director of Communications
Amber Curtaccio, Content Manager
Jackie Friedman, Social & Digital Media Specialist
Caitlin McCullough, Web Content Manager
Michele Baum, Senior Science Writer
Marcie Johnson, Director of Special Projects
Jeanine Buchanich, Associate Dean for Research
Catherine Haggerty, Associate Dean for Faculty Affairs
Tiffany Gary-Webb, Associate Dean for Diversity, Equity, and Inclusion
Eleanor Feingold, Associate Dean for Data Analytics & Special Projects
Tina Ndoh, Associate Dean for Public Health Practice
Ada Youk, Associate Dean for Academic Affairs
Mike Dolinger, Director of Student Services & Engagement
Allison Faett, Student Services Specialist
Aaron Parise, Educational Program Specialist
Jonette Suiter, Admninistrative Cooridnator
Renee Valenti, Director of Educational Programs & Accreditation
Michelle Ehrich, Educational Program Specialist
Adrianna Graisek, Experiential Learning Specialist
Mara Koperwas, Director of Undergraduate Currirculm
Adrian Gonzales, Director of Undergraduate Advising
Kristin Amos-Abanyie, Undergraduate Academic Advisor
Emily Snyder, Undergraduate Academic Advisor
Cindy Bryce, Associate Dean for Enrollment
Karrie Lukin, Director of Recruitment and Admissions
Kimberly Abraham, Admissions Manager
Susie Charie, Admissions Cooridnator
Renee Hill, Recruitment Events Coordinator
Christian Goetz, Undergraduate Recruitment Coordinator
Thistle Elias, Director of Community Engagement
Berthony Deslouches, Director of Educational Outreach

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



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)

See above.

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.

			Categorized as public health	Place-based	Distance-based
Bachelor's Degrees					
Public Health	BSPH		X	BSPH	
Master's Degrees	**Academic**	**Professional**			
Behavioral and Community Health Sciences		MPH	X	MPH	
Biostatistics	MS		X	MS	
Environmental and Occupational Health	MS	MPH	X	MS, MPH	
Epidemiology	MS (30-credit) MS (45-credit)	MPH	X	MS, MPH	
Genetic Counseling	MS			MS	
Genome Bioinformatics	MS		X	MS	
Health Data Science	MS		X	MS	
Health Policy and Management	MHA			MHA	
Health Policy and Management		MPH	X	MPH	
Health Services Research and Policy	MS		X	MS	
Human Genetics	MS		X	MS	
Infectious Diseases and Microbiology	MS		X	MS	
Infectious Disease Management, Intervention, and Community Practice		MPH	X	MPH	
Infectious Disease Pathogenesis, Eradication, and Laboratory Practice		MPH	X	MPH	
Multidisciplinary		MPH	X	MPH	
Public Health Genetics		MPH	X	MPH	
Statistical and Computational Genomics	MS		X	MS	
Doctoral Degrees	**Academic**	**Professional**			
Behavioral and Community Health Sciences	PhD	DrPH (discontinued)	X	PhD	
Biostatistics	PhD		X	PhD	
Environmental and Occupational Health	PhD	DrPH (discontinued)	X	PhD	
Environmental and Occupational Health, Public Health Practice	PhD		X	PhD	

Epidemiology		PhD	DrPH (discontinued)	X	PhD	
Health Services Research and Policy		PhD		X	PhD	
Human Genetics		PhD		X	PhD	
Infectious Diseases and Microbiology		PhD		X	PhD	
Joint Degrees (Dual, Combined, Concurrent, Accelerated Degrees)		**Academic**	**Professional**			
2nd Degree Area	**Public Health Concentration**					
Anthropology	Behavioral and Community Health Sciences		MPH-PhD	X	MPH	
Business	Health Policy and Management	MHA-MBA			MHA	
International Development	Behavioral and Community Health Sciences		MPH-MID	X	MPH	
Law	Heath Policy and Management		MPH-JD	X	MPH	
Medicine	Epidemiology, Health Services Research and Policy, Human Genetics	PhD-MD		X	PhD	
Public Administration	Behavioral and Community Health Sciences		MPH-MPA	X	MPH	
Public and International Affairs	Behavioral and Community Health Sciences		MPH-MPIA	X	MPH	
Social Work	Behavioral and Community Health Sciences		MPH-MSW	X	MPH	
Social Work	Behavioral and Community Health Sciences		MPH-PhD	X	MPH	
4+1 Accelerated (any undergrad at Pitt)	Most MPH concentrations		BA or BS-MPH	X	MPH	
4+1 Accelerated (any undergrad at Pitt)	Most MS concentrations	BA or BS-MS		X	MS	
Genetic Counseling	Public Health Genetics		MS-MPH	X	MPH	

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		Fall 2022 enrollment*
Master's		
	MPH	
	Behavioral and Community Health Sciences	61
	Environmental and Occupational Health	11
	Epidemiology	82
	Health Policy and Management	33
	Infectious Disease Management, Intervention, and Community Practice	25
	Infectious Disease Pathogenesis, Eradication, and Laboratory Practice	25
	Multidisciplinary	22
	Public Health Genetics	44
	Academic public health master's	
	Biostatistics	17
	Environmental and Occupational Health	1
	Epidemiology (45-credit)	9
	Epidemiology (30-credit)	2
	Genome Bioinformatics	12
	Health Data Science	10
	Health Services Research and Policy	1
	Human Genetics	19
	Infectious Diseases and Microbiology	33
	Statistical and Computational Genomics	3
	Joint degrees	
	MPH Public Health Genetics/MS Genetic Counseling	9
	MPH Health Policy and Management/JD	9
	MPH Behavioral and Community Health Sciences/MSW	12
	MPH Behavioral and Community Health Sciences/PhD Social Work	1
	MPH Behavioral and Community Health Sciences/PhD Anthropology	3
	MPH Behavioral and Community Health Sciences/Master's degrees from the Graduate School of Public and International Affairs	4
	Non-public-health master's degrees (SPH)	
	Genetic Counseling - MS	25
	Health Policy and Management - MHA	37

	Joint MHA/MBA	16
Doctoral		
	DrPH (admissions discontinued; programs will be discontinued when final students graduate)	
	Behavioral and Community Health Sciences	1
	Environmental and Occupational Health	0
	Epidemiology	1
	Academic public health doctoral (PhD)	
	Behavioral and Community Health Sciences	14
	Biostatistics	36
	Environmental and Occupational Health	21
	Environmental and Occupational Health Sciences Public Health Practice	1
	Epidemiology	59
	Health Services Research and Policy	15
	Human Genetics	45
	Infectious Diseases and Microbiology	19
	Joint degrees (MD/PhD)	
	Epidemiology	1
	Health Services Research and Policy	0
	Human Genetics	0
Bachelor's		
	BSPH	62**

*Fall 2023 enrollment will be substituted for the final self-study.

**The BSPH degree was developed during the 2021-22 academic year, and the first cohort of first-year students started the program in the fall of 2022. Enrollment is growing rapidly, with 62 students enrolled in the fall of 2022 (approximately 2/3 first-year and 1/3 internal transfer) and approximately 100 new first-year students expected in the fall of 2023.

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).

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.

   The school's bylaws (see ERF> Criterion A> A1> A1.3) dictate the composition and operations of the school's formal faculty governance structure, including several of the committees listed below. The bylaws are in the process of revision to formalize membership formula modifications that have already been implemented to reflect the enrollment of undergraduate students and changes in leadership roles and titles. In addition, the revised bylaws propose changing the name and mission of the Faculty Diversity Committee and include routine adjustments to election processes. This section will be updated for the final self-study to reflect the status of the bylaws in fall 2023; committee membership lists will also be updated at that time.

   SPH Council – The SPH Council is the school's lead governing body, consisting of the dean, associate deans (non-voting), department chairs, faculty governance leadership (FSEC – see below), senior staff (non-voting), and undergraduate and graduate student representatives. The SPH Council meets monthly to discuss important school issues and to vote (advisory to the dean) on policy changes, appointments and promotions, and other matters that are referred to the group by the faculty governance committees. Attendance is open to all. Recent discussions have included building security issues, plans for undergraduate curriculum growth, and ways to leverage faculty assets in data science.

   Current Members:
   Voting Members
   - Eleanor Feingold, Interim Chair, Human Genetics
   - Jane Cauley, Interim Chair, Epidemiology
   - Mary Hawk, Chair, Behavioral and Community Health Sciences
   - Yan Ma, Chair, Biostatistics
   - Sally Wenzel, Chair, Environmental and Occupational Health
   - Julie Donohue, Chair, Health Policy and Management
   - Jessica Burke, Interim Chair, Infectious Diseases and Microbiology
   - Patricia Documet, President, Faculty Senate Executive Committee
   - Tina Hershey, President Elect, Faculty Senate Executive Committee
   - Jeremy Martinson, Past President, Faculty Senate Executive Committee
   - Samar El Khoudary, Chair, Planning and Budget Policies Committee
   - Ryan Minster, Chair, Educational Policies and Curriculum Committee
   - Brenda Diergaarde, Chair, Faculty Diversity Committee
   - Linda Frank, Chair, Faculty Appointment Promotion and Tenure Committee
   - Allison Sanders, at-large member
   - Ada Youk, Associate Dean for Academic Affairs

   Non-Voting Members
   - Maureen Lichtveld, Dean
   - Jessica Burke, Vice Dean

- Catherine Haggerty, Associate Dean for Faculty Affairs
- Christina Ndoh, Associate Dean for Public Health Practice
- Jennifer Palaski, Associate Dean for Finance and Administration
- Jonathan Jung, BSPH student
- Nyasha Mafarachisi, BSPH student
- Connor McGaffick, BSPH student
- Kayra Shah, BSPH student

Non-Members With Regular Contributions to Council Proceedings

- Eleanor Feingold, Associate Dean for Data Analytics and Special Projects
- Cindy Bryce, Associate Dean for Enrollment
- Tiffany Gary-Webb, Associate Dean for Diversity, Equity, and Inclusion
- Jeanine Buchanich, Associate Dean for Research
- Clare Collins, Director of Marketing and Communications
- Sloane Astorino, Director of Development (Philanthropic and Alumni Engagement [PAE])
- Lourdes Cano, Alumni Coordinator (PAE)
- Allison Hydzik, Director, Science and Research, UPMC Media Relations
- Tom Songer, Faculty Assembly Representative
- David Arndt, Staff Committee Representative
- Nicole Leckenby, Staff Committee Representative

Faculty Senate Executive Committee (FSEC) – All individuals with a primary appointment in the SPH are voting members of the faculty senate. The FSEC is the leadership committee of the faculty senate. It consists of the president-elect, president, and past president of the faculty senate, and the chairs of the four standing committees of the faculty senate (EPCC, FAPTC, PBPC, FDC – described below). The FSEC meets as a part of the SPH Council, organizes faculty retreats in fall and spring, and meets on an *ad hoc* basis as other needs arise. Recent discussions have included faculty concerns brought up in the post fall retreat survey such as the need to create meaningful connections and promote emotional wellbeing post pandemic, the new University budget model, and increasing opportunities for faculty feedback.

Current Members:

Patricia Documet, President, Faculty Senate Executive Committee
Tina Hershey, President Elect, Faculty Senate Executive Committee
Jeremy Martinson, Past President, Faculty Senate Executive Committee
Samar El Khoudary, Chair, Planning and Budget Policies Committee
Ryan Minster, Chair, Educational Policies and Curriculum Committee
Brenda Diergaarde, Chair, Faculty Diversity Committee
Linda Frank, Chair, Faculty Appointment Promotion and Tenure Committee

Educational Policies and Curriculum Committee (EPCC) – The EPCC is one of the standing committees of the faculty senate. It consists of one faculty member elected from each department, student representatives, and *ex officio* staff and associate deans. It meets monthly and is responsible for informal discussion and formal approval of all academic policies, new courses, new programs, admissions policy, and other curricular and student affairs matters. Recent actions have included review and approval of all new BSPH courses, approval of changes to the genetic counseling program curriculum, review of core course evaluations and student performance issues each semester, and addition of diversity and inclusion questions to course evaluations.

Current Members:

Chair, Ryan Minster, Assistant Professor, Human Genetics
Elizabeth Felter, Assistant Professor, Behavioral and Community Health Sciences
Andriy Bandos, Associate Professor, Biostatistics
Nesta Bortey-Sam, Assistant Professor, Environmental and Occupational Health
Elsa Strotmeyer, Associate Professor, Epidemiology
Kevin Broom, Associate Professor, Health Policy and Management
Josh Mattila, Assistant Professor, Infectious Diseases and Microbiology

David Finegold, Professor, Human Genetics (non-voting, representing the MMPH program)
Tina Hershey, Associate Professor, Health Policy and Management (non-voting, representing the MMPH program)
Ada Youk, Associate Dean for Academic Affairs
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Mike Dolinger, Director of Student Services
Michelle Ehrich, Educational Programs Specialist
Sohaib Khan, doctoral student
Michael Clark, doctoral student
Samantha Runa, master's student
Aparna Ramani, master's student
Ava Polakowski, BSPH student
Brooke Shapiro, BSPH student
Ashley Wald, BPSH student

Master of Public Health (MPH) Committee – The MPH Committee is formally structured as a subcommittee of the EPCC, although MPH Committee members are not necessarily EPCC members. The MPH committee consists of all MPH program directors and core course instructors, as well as student representatives and *ex officio* staff and associate deans. It meets monthly and is responsible for development of MPH curriculum and policies, MPH admissions policies, and oversight of policies and procedures for the practicum (Applied Practice Experience - APE) and essay (Integrated Learning Experience - ILE). MPH Committee recommendations are subject to formal approval by the EPCC. Recent discussions have included issues around transition from COVID-19-era hybrid teaching back to fully in-person teaching, the need for a new e-portfolio system for APE products, and coordination of core course content when there are instructor changes.

Current Members:
Chair, Nancy Glynn, Associate Professor, Epidemiology
Steven Albert, Professor, Behavioral and Community Health Sciences
Aaron Barchowsky, Professor, Environmental and Occupational Health
Nesta Bortey-Sam, Assistant Professor, Environmental and Occupational Health
Cindy Bryce, Associate Professor, Health Policy and Management
Jeanine Buchanich, Associate Professor, Biostatistics
Jenna Carlson, Assistant Professor, Biostatistics
Emily Dauria, Assistant Professor, Behavioral and Community Health Sciences
Patricia Documet, Associate Professor, Behavioral and Community Health Sciences
Julie Donohue, Professor, Health Policy and Management
Andrea Durst, Assistant Professor, Human Genetics
Thistle Elias, Associate Professor, Behavioral and Community Health Sciences
Elizabeth Felter, Assistant Professor, Behavioral and Community Health Sciences
David Finegold, Professor, Human Genetics
Linda Frank, Professor, Infectious Diseases and Microbiology
Tina Hershey, Associate Professor, Health Policy and Management
Jennifer Jones Spratt, community engagement specialist
Jeremy Martinson, Assistant Professor, Infectious Diseases and Microbiology
James Peterson, Professor, Environmental and Occupational Health
Nilesh Shah, Assistant Professor, Dental Public Health, School of Dental Medicine
Jamie Sokol, Operations Manager, Housing and Community Environment, Allegheny County Health Department
Thomas Songer, Assistant Professor, Epidemiology
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Ada Youk, Associate Dean for Academic Affairs
Michele Ehrich, Educational Programs Specialist
Nathan Chen, MPH student
Kayla Ortiz, MPH student

BSPH Educational Committee (BEC) – The BEC is parallel to the MPH committee. It is formally structured as a subcommittee of the EPCC but consists of all BSPH core course instructors as well as student representatives and *ex officio* staff and the associate dean for academic affairs. It meets regularly and is responsible for the development of BSPH curriculum and policies. BEC recommendations are subject to formal approval by the EPCC. Recent discussions have included structure and content of the BSPH elective clusters, initial review of new BSPH course proposals, and detailed planning for the BSPH capstone curriculum.

Current Members:
Chair, Jeremy Martinson, Assistant Professor, Infectious Diseases and Microbiology
Thomas Songer, Assistant Professor, Epidemiology
Tina Hershey, Associate Professor, Health Policy and Management
James Egan, Assistant Professor, Behavioral and Community Health Sciences
Nesta Bortey-Sam, Assistant Professor, Environmental and Occupational Health
Sara Baumann, Assistant Professor, Behavioral and Community Health Sciences
Firoz Abdoel Wahid, Assistant Professor, Environmental and Occupational Health
Abimbola Omolola Fapohunda, evaluation specialist
John Shaffer, Assistant Professor, Human Genetics
Ada Youk, Associate Dean for Academic Affairs
Mara Leff Koperwas, Director of Public Health Innovation and Strategic Initiatives and Director of Undergraduate Curriculum
Adrian Gonzales, Director of Undergraduate Advising
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Karrie Lukin, Director of Recruitment and Admissions
Michele Ehrich, Educational Programs Specialist
Ray Harris, BSPH student
Jonathan Yasin, BSPH student
Ilana Kersh, BSPH student

Faculty Appointment Promotion and Tenure Committee (FAPTC) – The FAPTC is one of the standing committees of the Faculty Senate. It consists of two faculty members elected from each department and the associate dean for faculty affairs. It meets monthly and is the primary body responsible for recommendations on faculty appointments, promotion, and tenure decisions. The committee is also responsible for maintaining documentation of all policies and procedures that govern faculty appointments, promotions, and tenure decisions.

Current Members:
Chair, Linda Frank, Professor, Infectious Diseases and Microbiology
Steven Albert, Professor, Behavioral and Community Health Sciences
Christina Mair, Associate Professor, Behavioral and Community Health Sciences
Gong Tang, Professor, Biostatistics
George Tseng, Professor, Biostatistics
Rada Koldamova, Professor, Environmental and Occupational Health
Patricia Opresko, Professor, Environmental and Occupational Health
Lisa Bodnar, Professor, Epidemiology
Joseph Zmuda, Associate Professor, Epidemiology
Howard Degenholtz, Professor, Health Policy and Management
Marian Jarlenski, Associate Professor, Health Policy and Management
Quasar Padiath, Associate Professor, Human Genetics
Zsolt Urban, Associate Professor, Human Genetics
Ernesto Marques, Associate Professor, Infectious Diseases and Microbiology
Catherine Haggerty, Associate Dean for Faculty Affairs
John DeSimone, staff support

Planning and Budget Policies Committee (PBPC) – The PBPC is one of the standing committees of the Faculty Senate. It consists of one faculty member elected from each department (voting), graduate and undergraduate student representatives, *ex officio* staff and associate deans, and one department chair (non-voting). It meets monthly and is the primary body responsible for recommendations on policies related to research, practice, planning, and budget. Recent actions and discussions have included disposition of computing funds, policies for return of research incentive funds, and planning recommendations for a new undergraduate certificate in bioethics.

Current Members:
Chair, Samar El Khoudary, Professor, Epidemiology
Emily Dauria, Assistant Professor, Behavioral and Community Health Sciences
Coleman Drake, Assistant Professor, Health Policy and Management
Chaeryon Kang, Assistant Professor, Biostatistics
Jennifer Palaski, Associate Dean for Finance and Administration
Hyun Jung Park, Assistant Professor, Human Genetics
Wan-Yee Tang, Associate Professor, Environmental and Occupational Health
Danielle Tufts, Assistant Professor, Infectious Diseases and Microbiology
Karen Marie Perkins, staff support
Riya Patel, BSPH student
Drew Trate, graduate student

Faculty Diversity Committee (FDC) – The FDC is one of the standing committees of the Faculty Senate. It consists of one faculty member elected from each department, student representatives, and *ex officio* staff and associate deans. It meets monthly and is the primary body responsible for recommendations on policies and activities related to diversity and inclusion. Recent activities have included collaboration with the Social Justice Action Committee (see below), collaboration with the EPCC on new questions for course evaluations, and "Coffee and Conversation" events to provide a forum for informal discussion of difficult topics.

The **Social Justice Action Committee (SJAC)** was an *ad hoc* committee of faculty, staff, and students that was formed in the summer of 2020. It addressed racial justice issues within the school as well as the school's role in the external community. The SJAC created a list of concrete recommendations that were presented to a school-wide audience in August 2020. It was succeeded by the **Justice, Equity, Diversity, and Inclusion (JEDI)** committee, which has worked with other school staff, associate deans, and committees to implement recommendations. The proposed new FDC name (Inclusion and Diversity Committee) and bylaws will incorporate much of the SJAC/JEDI mission, including a broad focus on all faculty, staff, and students.

Current Members of the FDC:
Chair, Brenda Diergaarde, Associate Professor, Human Genetics
James Egan, Assistant Professor, Behavioral and Community Health Sciences
Jeanine Buchanich, Associate Professor, Biostatistics
Berthony Deslouches, Assistant Professor, Environmental and Occupational Health
Jean Nachega, Associate Professor, Epidemiology
Evan Cole, Associate Professor, Health Policy and Management
Toan Ha, Assistant Professor, Infectious Diseases and Microbiology
Chanita Russell, BSPH student
Sierra Barnes, BSPH student
Graduate student representatives

Dean and Chairs and Extended Leadership Committee – The dean and chairs meet weekly to discuss scientific and operational matters. One meeting per month includes all associate deans, and one meeting per month includes all department administrators. Among recent topics were planning for BSPH growth, strategies for increasing MPH/MS enrollment, and school data science assets.

Program Directors – The directors of all degree programs meet monthly to discuss policy and educational matters. Recent topics have included safety and emergency planning, and discussions on the development of pedagogically sound online sections of MPH core courses.

Current Members:
Chair, Ada Youk, Associate Dean for Academic Affairs
Steven Albert, Professor, Behavioral and Community Health Sciences
Velpandi Ayyavoo, Professor, Infectious Diseases and Microbiology
Andriy Bandos, Associate Professor, Biostatistics
Aaron Barchowsky, Professor, Environmental and Occupational Health
Nesta Bortey-Sam, Assistant Professor, Environmental and Occupational Health
Kevin Broom, Associate Professor, Health Policy and Management
Cindy Bryce, Associate Professor, Health Policy and Management
Tina Costacou, Associate Professor, Epidemiology
Ying Ding, Associate Professor, Biostatistics
Patricia Documet, Associate Professor, Behavioral and Community Health Sciences
Andrea Durst, Assistant Professor, Human Genetics
Elizabeth Felter, Assistant Professor, Behavioral and Community Health Sciences
David Finegold, Professor, Human Genetics
Linda Frank, Associate Professor, Infectious Diseases and Microbiology
Nancy Glynn, Associate Professor, Epidemiology
Amy Hartman, Associate Professor, Infectious Diseases and Microbiology
Tina Hershey, Associate Professor, Health Policy and Management
Jeremy Martinson, Assistant Professor, Infectious Diseases and Microbiology
Ryan Minster, Assistant Professor, Human Genetics
James Peterson, Professor, Environmental and Occupational Health
Lindsay Sabik, Associate Professor, Health Policy and Management
John Shaffer, Assistant Professor, Human Genetics
Jodie Vento, Assistant Professor, Human Genetics
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Michele Ehrich, Educational Programs Specialist

Vice Chairs for Research – Each department in the school has a vice chair for research. The vice chairs meet regularly with the associate dean for research to discuss successes and concerns, school-wide research activities, and University strategic priorities. Recent topics have included developing a school-wide research seminar series showcasing faculty from each department, integrating undergraduate researchers into faculty labs, and preparing for a large military-related funding opportunity with other university schools of the health sciences.

Current Members:
Robert Coulter, Assistant Professor, Behavioral and Community Health Sciences
Valerian Kagan, Professor, Environmental and Occupational Heath
Jeremy Martinson, Assistant Professor, Infectious Diseases and Microbiology
Beth Roman, Associate Professor, Human Genetics
Caterina Rosano, Professor, Epidemiology
Lindsay Sabik, Associate Professor, Health Policy and Management
George Tseng, Professor, Biostatistics

Vice Chairs for Education (VCE) – Each department in SPH has a vice chair for education. The vice chairs meet regularly as a part of the program directors' group (above) and for occasional *ad hoc* meetings. Most recently, VCEs were tasked as a search committee for the hiring of seven new BSPH teaching faculty.

Current Members:
Kar-Hai Chu, Associate Professor, Behavioral and Community Health Sciences

Ying Ding, Associate Professor, Biostatistics
James Peterson, Professor, Environmental and Occupational Health
Samar El Khoudary, Professor, Epidemiology
Kevin Broom, Associate Professor, Health Policy and Management
John Shaffer, Assistant Professor, Human Genetics
Velpandi Ayyavoo, Professor, Infectious Diseases and Microbiology

Vice Chairs for Practice – Each department in SPH has a vice chair for practice. The vice chairs meet regularly along with the associate dean for practice and the director for community engagement to discuss strategies for the promotion and recognition of practice. Recent topics have included the Center for Public Health Practice Translation award for excellence in student translation of research to practice, highlighting opportunities for faculty to engage with community partners, and clarifying the role of practice within the SPH appointment, tenure and promotion process.

Current Members:
James Egan, Assistant Professor, Behavioral and Community Health Sciences
Jeanine Buchanich, Associate Professor, Biostatistics
Jim Fabisiak, Associate Professor, Environmental and Occupational Health
Catherine Haggerty, Professor, Epidemiology
Marian Jarlenski, Associate Professor, Health Policy and Management
Andrea Durst, Assistant Professor, Human Genetics
Sarah Krier, Assistant Professor, Infectious Diseases and Microbiology

Staff Committee – The SPH Staff Committee meets monthly. A representative is a non-voting contributor to SPH Council. Recent topics have included organizing a staff recognition event, creating an anonymous concerns form for staff to safely report issues and comments, and updating official school documents to equitably address staff.

Current Members:
Kayleigh Adamson, Data Analyst, Biostatistics
David Arndt, IT Manager, Public Health IT
Caroline Deasy, Personnel Administrator, Human Genetics
John DeSimone, Faculty Affairs Coordinator, Office of the Dean
Stefanie Junker, Project Coordinator, Health Policy and Management
Nicole Leckenby, Grant Administrator, Epidemiology
Erin Schuetz, Student Services Specialist, Infectious Disease and Microbiology
Jonette Suiter, Administrative Coordinator, Student Affairs
Jean Zak, Director of Pre-Award Grants Administration, Environmental and Occupational Health

Student Services Staff – The student services staff at the school and departmental levels meet once a month to discuss policy, process, and student services and admissions issues. Recent discussions have included University policies and changes that affect traditional school processes, coordinating efforts for updating all databases that are used within the school, and student-related events and workshops.

Current Members:
Kim Abraham, Admission Manager
Kristin Amos-Abanyie, Undergraduate Academic Advisor
Cindy Bryce, Associate Dean for Enrollment
Jessica Burke, Vice Dean
Susie Charie, Admissions Coordinator
Helen Chen, Academic Administrator, Biostatistics
Amber Curtaccio, Content Manager
Mike Dolinger, Director of Student Services
Jessica Dornin, Recruitment and Academic Affairs Administrator, Health Policy and Management

Michelle Ehrich, Educational Programs Specialist
Allie Faett, Student Services Specialist
Eleanor Feingold, Associate Dean for Data Analytics and Special Projects
Jackie Friedman, Social and Digital Media Specialist
Christian Goetz, Undergraduate Recruitment Coordinator
Adrian Gonzales, Director of Undergraduate Advising
Adrianna Gradisek, Experiential Learning Specialist
Noel Harrie, Academic Administrator, Human Genetics
Renee Hill, Recruitment and Events Coordinator
Karrie Lukin, Director of Recruitment and Admissions
Paul Markgraf, Academic Administrator, Behavioral and Community Health Sciences
Aaron Parise, Educational Programs Specialist
Amy Rhodes, Student Services Specialist, Epidemiology
Erin Schuetz, Student Services Specialist, Infectious Diseases and Microbiology
Lori Smith, Student Affairs Manager & Program Administrator, Epidemiology
Emily Snyder, Undergraduate Academic Advisor
Bryanna Snyder, Student Affairs Liaison, Environmental and Occupational Health
Jonette Suiter, Administrative Coordinator
Gina Tagliaferri, Student Services Specialist, Epidemiology
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Ada Youk, Associate Dean for Academic Affairs

Operations Committee – The operations committee meets weekly to plan and coordinate school events and consists of members of the Dean's Office. Recent events have included orientation, graduation, and the Salk exhibit unveiling.

Current Members:
Sloane Astorino, Director of Development (PAE)
Jessica Burke, Vice Dean
Cindy Bryce, Associate Dean of Enrollment
Lourdes Cano, Alumni Coordinator (PAE)
Clare Collins, Director of Marketing and Communications
Mike Dolinger, Director of Student Services
Grace Drnach-Boneventura, Chief of Staff
Marcie Johnson, Director of Special Projects
Jen Palaski, Associate Dean of Finance and Administration
Jill Ruempler, Events and External Affairs Coordinator
Jess Sikora, Senior Administration Assistant
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Ada Youk, Associate Dean of Academic Affairs

Data and Accreditation Executive Committee – The Data and Accreditation Executive Committee consists of the vice dean, the associate dean for academic affairs, and the associate dean for data analytics and special projects. Weekly meetings are used to review school metrics and data reports and identify issues that need to be communicated to wider audiences. This group also plans data and accreditation-related activities and acts as an executive committee for the self-study process.

Self-Study Committee – The self-study has been written using a combination of committees as resources. The process has been guided by the Data and Accreditation Executive Committee (above) and has made use of many standing committees described above to discuss specific issues, strengths, and weaknesses. For example, issues in criterion D were discussed by the BEC, MPH Committee, EPCC, and student services staff. Sources for input from external stakeholders were discussed by the vice chairs for practice. Drafts of the self-study were reviewed by a specific self-study committee appointed in winter of 2023. That committee consists of the vice chairs for education, key associate deans and senior staff, and student members.

Current Members:
Kar-Hai Chu, Associate Professor, Behavioral and Community Health Sciences
Ying Ding, Associate Professor, Biostatistics
James Peterson, Professor, Environmental and Occupational Health
Samar El Khoudary, Professor, Epidemiology
Kevin Broom, Associate Professor, Health Policy and Management
John Shaffer, Assistant Professor, Human Genetics
Velpandi Ayyavoo, Professor, Infectious Diseases and Microbiology
Jessica Burke, Vice Dean
Michael Dolinger, Director of Student Services
Karrie Lukin, Director of Recruitment and Admissions
Renee Valenti, Director of Educational Programs and Accreditation Initiatives
Ada Youk, Associate Dean for Academic Affairs
Nyasha Mafarachisi, BSPH student
Jonathan Jung, BSPH student
Kayra Shah, BSPH student
Connor McGaffick, BSPH student
Sohaib Khan, graduate student
Michael Clark, graduate student

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

Undergraduate degree requirements are decided by the academic affairs team (associate dean for academic affairs, BSPH office) and the BEC, subject to approval by the EPCC and the SPH Council. For larger changes, approval may also be needed by the Provost's Advisory Committee on Undergraduate Programs (PACUP) and/or the provost's office.

MPH degree requirement changes at the disciplinary level are initiated by individual departments. Minor changes such as substitution of a course or two do not require further approval, but larger changes require approval by the EPCC and the SPH Council. They may be discussed by the MPH Committee and the academic affairs team prior to the EPCC if there are broader effects on other programs. Major changes, including any change to the total credits required for graduation, require approval by the provost's office and/or the University Council on Graduate Studies (UCGS). Global changes to all MPH concentrations, such as changes to core courses, are initiated by the MPH Committee and/or the academic affairs team and are approved by the EPCC and SPH Council.

Requirements for other graduate programs are primarily initiated by departmental curriculum committees and are subject to approval by the EPCC, SPH Council, and UCGS.

At all degree levels, the EPCC may work with the FDC or other committees as needed. For example, the EPCC and FDC have collaborated in recent years on syllabus diversity statements and on inclusion-related questions for course evaluations.

b. curriculum design

See (a) above.

c. student assessment policies and processes

Student assessment policies include course grading policies, program-level requirements such as minimum grade point average (GPA), and specific degree requirements such as preliminary

and comprehensive examinations. All of these are strongly driven by University-level policies. Within the school, policy changes may be driven and/or discussed by departments, by the Office of Student Affairs, BEC, MPH Committee, or EPCC. Major changes always require approval by the EPCC and the SPH Council. The Office of Student Affairs has oversight of the implementation of all student assessment policies and processes, in collaboration with departmental student services staff.

d. admissions policies and/or decisions

Undergraduate first-year admissions policies are set by the academic affairs team in collaboration with the BEC, EPCC, and the central University Office of Admissions and Financial Aid (OAFA). The recruiting and admissions process is then led by OAFA, which also makes the admissions decisions. External transfer admissions decisions are made by OAFA, and internal transfer decisions are made by the SPH Office of Admissions.

All graduate admissions decisions are made by departmental admissions committees, which also decide policies such as disciplinary prerequisite courses. School or program-wide graduate admissions policies and procedures are developed by the SPH Office of Admissions, the MPH Committee, and the EPCC as appropriate. Major policy changes may require approval of the SPH Council. For example, recent changes to graduate record examination (GRE) requirements were discussed at multiple meetings of the MPH Committee, the EPCC, and the SPH Council.

e. faculty recruitment and promotion

Faculty appointment and promotion policies are developed by the FAPTC, which includes the associate dean for faculty affairs as a non-voting member and are approved by the SPH Council. Individual appointments and promotions are initiated at the departmental level and are reviewed and voted on by the FAPTC and the SPH Council and sent to the dean for approval.

f. research and service activities

Schoolwide policy and infrastructure to support research and service is generally developed within the dean's office, and the departmental vice chairs for research and for practice are often used as the planning groups. For example, the faculty mentoring program is led by the associate dean for faculty affairs and includes mentoring related to research and service activities. Faculty input on policies related to research and service generally falls under the PBPC. For example, the PBPC developed policies on the distribution of faculty research incentive funds. In recent years there have been several pilot grants initiated by the dean to develop priority research in the areas of precision public health and climate and health, including joint programs with the School of Engineering and with the other Schools of the Health Sciences.

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.

Please see ERF> Criterion A> A1> A1.3.

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.

Many SPH faculty play important roles on University committees. For example, Tiffany Gary-Webb serves as special assistant to the provost for race and the social determinants of equity, health, and well-being. Eleanor Feingold has recently served on the Provost's Data Science Advisory Committee and on the executive committee for the University's recent re-accreditation. Sally

Wenzel, Anne Newman, and Mark Roberts all served on a committee that provided health guidance to University's pandemic response. Nancy Glynn co-chairs the Senate Student Admissions, Aid, and Affairs Committee and is also an appointed member of the Board of Trustees Student Affairs Committee. Jeanine Buchanich co-chaired the Campus Utilization Safety & Planning committee after serving for six years; she is also an appointed member of the University Budget and Planning Committee. Ada Youk serves on both Provost's Advisory Committee on University Programs (PACUP) and University Council of Graduate Studies (UCGS). Patricia Documet serves on the Provost's Committee on DEI and Community and the planning committee for the University Latinx cluster hire.

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.

There are many formal and informal venues for faculty interaction. Full faculty retreats are held twice a year (see ERF > Criterion A> A1> A1.5 for recent agendas). Faculty retreats typically include a report from the dean on school strategic planning metrics, workshops on diversity and/or pedagogical topics, and structured social time. All instructors of school courses are invited to faculty retreats, including part-time faculty, adjunct faculty and instructors, and secondary faculty and staff with instructional roles. The numerous standing and *ad hoc* committees listed above provide additional formal interaction opportunities. Schoolwide Grand Rounds seminars provide a more academic venue for regular interaction across departments (see ERF> Criterion A> A1> A1.5), as do regular departmental seminar series. Informal events are also frequent, including all-school receptions at various times (beginning of the semester, convocation). Events aimed at students also draw large faculty audiences and provide informal interaction opportunities—for example, therapy dog visits during exam week, Dean's Day, and coffee and discussion hours sponsored by the FDC.

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

Strengths, challenges, and solutions in progress: The school has a well-staffed highly functional dean's office that provides a strong infrastructure for administrative functions and school activities. This is complemented by an extremely active faculty governance system that includes many formal and *ad hoc* committees. There are specific faculty committees responsible for (and actively engaged in) all key areas. Faculty and student engagement in committees is robust, and decision-making generally involves many faculty, staff, and student voices.

A2. Multi-Partner Schools (applicable ONLY if functioning as a "collaborative unit" as defined in CEPH procedures)

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.

   Students are actively engaged in the school's governance, with student members on all formal governance committees and subcommittees except for the FAPTC. There are both graduate and undergraduate voting student representatives on the SPH Council, the EPCC, the PBPC, and the FDC. In addition, there are undergraduate representatives on the BEC and graduate student representatives on the MPH committee. A list of student committee members over the past three years is in ERF> Criterion A> A3. Students play a critical role in many committee discussions and decisions. For example, in recent years student members of the EPCC were extremely active participants in discussions of GRE requirements and of adding inclusion-related questions to course evaluations. The student members of the MPH committee provided valuable insight as we transitioned from hybrid to in-person instruction. PBPC student members enthusiastically engaged in discussion related to implications of the University's new budget model on student funding.

   Students are also engaged in policy and decision-making at the department level. For example, the Epidemiology and Human Genetics curriculum committees include student members. All departments have student recruitment ambassadors who are a part of the recruiting and admissions process. Departments actively engage students in faculty searches.

   There are also a number of student organizations at both the school and departmental levels that have varying degree levels of activity from year to year. These include the following.

   Doctoral Student Organization (DSO)
   Student Government Association (SGA)
   Black Public Health Association
   Street Medicine Group
   Leaders in Intersectional Public Health and Equity (LIPHE)
   Fostering Opportunities to Recognize, Welcome, and Advance Racially Diverse Students (FORWARDS)
   Global Health Student Association
   Health Policy and Management Association
   American Public Health Student Assembly
   American Cancer Society at Pitt
   Leukemia and Lymphoma Society at Pitt
   Global Public Health Brigades

   Recent events hosted by these student organizations have included a pumpkin carving event, coordinating with the "Plant 2 Plate" garden, which is a Pitt student-run garden near campus, working with the Student Office of Sustainability to compost our waste from a dinner event, a coordinated trip to see the Pitt Stages production "Seven Guitars" by August Wilson, and a panel on the current LGBTQIA+ policy landscape.

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

   Strengths, challenges, and solutions in progress: Students are actively engaged in all school committees, and graduate students have historically played a strong role in school policy issues.

Undergraduate students were added to committees for the first time in spring 2023 (spring of the first year of the BSPH program) and have been extremely enthusiastic – 22 out of 62 BSPH students responded to the initial call for volunteers to indicate an interest in committee membership. Because of the overwhelming response and not enough spots on standing committees, the school created a student advisory board on which 9 students agreed to participate. This group will provide key insight to the BSPH office including feedback to instructors on courses, suggestions for new courses, input on school policies, ideas for town halls as a way for fellow students to have voice, and ideas for social events for all BSPH students. A kick-off meeting for this group will be scheduled for fall 23.

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 chief executive officer of the University of Pittsburgh is the chancellor. The academic mission of the University falls under the provost, including curriculum and faculty affairs. In addition, the senior vice chancellor for the health sciences (SVCHS) has organizational oversight over the six schools of the health sciences, including the SPH. The SVCHS also serves a titular role as the dean of the medical school, but his two roles are separate. Thus, the deans of the SPH and the other health sciences schools have dual reporting relationships; they report directly to the provost on most matters, especially those related to curriculum and faculty, with responsibility for some level of coordination by the SVCHS.

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 dean of the SPH has the same reporting lines and levels of autonomy as the other schools of the health sciences. This differs slightly from the non-health sciences schools in that the SVCHS has some organizational responsibility for the health sciences schools.

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

   Strengths, challenges, and solutions in progress: The SPH has an independent status in the University identical to that of the other schools of the health sciences.

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.

   The SPH offers eight professional MPH degree concentrations: Behavioral and Community Health Sciences; Environmental and Occupational Health; Epidemiology; Health Policy and Management; Infectious Diseases and Microbiology – Management, Intervention, and Community Practice; Infectious Diseases and Microbiology – Pathogenesis, Eradication, and Laboratory Practice; Public Health Genetics; and Multidisciplinary.

   The school offers eight public health doctoral degree programs: Behavioral and Community Health Sciences; Biostatistics; Environmental and Occupational Health; Environmental and Occupational Health Public Health Practice; Epidemiology; Health Policy and Management; Human Genetics; and Infectious Diseases and Microbiology.

   The School of Public Health has historically offered the DrPH in three concentrations: Behavioral and Community Health Sciences; Environmental and Occupational Health; and Epidemiology. Admissions have been frozen for all three programs since 2019 and the programs will be formally discontinued when all currently enrolled students have graduated.

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

   Please see our undergraduate and graduate catalogs.

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.

   The school's current strategic plan was developed over the course of the 2022 calendar year, following Dean Lichtveld's arrival and completion of the Plan for Pitt in 2021. The strategic planning process was led by Vice Dean Burke and involved several rounds of visioning and input from a broad set of internal and external stakeholders.

   VISION: Informed, empowered, and healthy populations.

   MISSION: Through excellence in research, education, and practice, the University of Pittsburgh School of Public Health generates knowledge, trains public health professions, and partners with communities locally and globally to promote health, prevent disease, and achieve health equity.

   VALUES:
   Action: Improve the health and well-being of local, regional, national, and global populations.
   Curiosity: Nurture creativity, rigor, critical thinking, and scientific discovery.
   Integrity: Commit to the highest standards of ethics and fairness.
   Collaboration: Support partnerships within our school and with external stakeholder communities.
   Diversity: Embrace a diversity of experiences/identities and champion social justice.
   Empowerment: Dynamically engage in the field of public health and serve as allies to historically marginalized and undeserved individuals and communities.
   Transparency: Promote open dialogue and discussion.

   GOALS:
   - Conduct pioneering and high-quality research that addresses complex current and emerging public health issues.
   - Provide high-quality, inclusive, supportive, and progressive learning environments to prepare and inspire future public health leaders.
   - Promote action and equitable public health through practice, policy, advocacy, and professional engagement.
   - Create sustainable pathways and a school climate for diverse faculty, staff, and students to safely flourish and advance in public health.

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

   Please see https://www.sph.pitt.edu/about/history-mission/strategic-plan.

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

Strengths, challenges, and solutions in progress: The school has a recent strategic plan with actionable goals supported by measurable objectives. The plan was developed with significant discussion and input that involved both internal and external stakeholders. Implementation, evaluation, and continuous improvement are ongoing.

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., alumni 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)

    The table below includes all of the measures specified in Appendix 1 and a few of the additional specific measures regularly used by the school. Most of the specific data items in the table are part of much larger data reports that include a wide variety of metrics stratified by department, program, demographics, etc. Major comprehensive data reports regularly reviewed by school leadership include the following.
    • Weekly admissions
    • Annual exit survey
    • Annual survey of recent graduates
    • Faculty pedagogy survey
    • Financial and tuition data (each semester or year)
    • Course student evaluation scores (each semester)
    • Enrollment, tuition, and financial aid data (each semester)
    • University climate surveys
    • Annual departmental summary data for chair evaluations
    • ASPPH and CEPH annual data
    • Student performance report for the Educational Policies and Curriculum Committee (each semester)

Table B2-1

				Does it measure			
Measures	**Criteria or *Template***	**Data source & method of analysis**	**Who has review & decision-making responsibility?**	**Goal 1** research	**Goal 2** education	**Goal 3** practice	**Goal 4?** DEI

Student enrollment	*Intro-2*	Enrollment data are pulled from the Peoplesoft student database. Totals for each program and breakdowns by gender and race/ethnicity are included in several regular reports during the course of each year.	Dean, chairs, associate deans, program directors, Board of Visitors (BOV)		**x**		**x**
Total graduate tuition earned	*B2-1*	The CFO's office reports numbers to the associate dean for administration and finance, who prepares reports.	Dean, chairs, associate deans		x		
Total undergraduate tuition earned	*B2-1*	The CFO's office reports numbers to the associate dean for administration and finance, who prepares reports.	Dean, chairs, associate deans		x		
Annual school budget allocation (non-grant)	*B2-1*	The CFO's office reports numbers to the associate dean for administration and finance, who prepares reports.	Dean, chairs, associate deans	x	x	x	x
Annual total school non-grant expenditures	*B2-1*	SPH financial data systems and CFO reports	Dean, chairs, associate deans	x	x	x	x
Average overall student satisfaction on exit survey	*B2-1*	Exit survey	Dean, chairs, associate deans, program directors, BOV		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*		Dean, chairs, associate deans, program directors, BOV	x	x	x	x

Graduation rates	*B3-1*	Data are pulled from the Peoplesoft student database, with hand-curation of withdrawals and program transfers.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls any issues to the attention of the dean, associate deans, chairs, program directors, and student services staff.		x		
Doctoral student progression (e.g., # newly admitted, # completed coursework)	*B3-2*	Data are pulled from the Peoplesoft student database. The school uses the preliminary and comprehensive exams as the two indicative milestones in lieu of coursework completion and candidacy status.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls any issues to the attention of the dean, associate deans, chairs, program directors, and student services staff.		x		
Post-graduation outcomes (e.g., employment, enrollment in further education)	*B4-1*	Graduate students: Data are collected in the annual recent graduate survey, with a response rate of approximately 50%, supplemented with information from faculty, student affairs staff, and internet searches. Overall knowledge rate is around 98%. Undergraduate students: There are not yet graduates, but we the school is collaborating with the Office of the Provost to develop survey methods.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls any issues to the attention of the dean, associate deans, chairs, program directors, and student services staff.		x		

Actionable data (quantitative and/or qualitative) from recent alumni on their self-assessed preparation for post-graduation destinations	B5	Graduate students: Data are collected in the annual recent graduate survey, with a response rate of approximately 50%. Students are asked which competencies or skills from their education were most useful in their jobs. Some departments and programs also collect survey data of their own. Undergraduate students: There are not yet graduates, but the school is collaborating with the Office of the Provost to develop survey methods.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls any issues to the attention of program directors, BEC, MPH Committee, and EPCC.		x		
Budget table	*C1-1*	The associate dean for finance and administration and staff prepare these numbers from a variety of sources.	Reviewed by the dean's executive team and the department chairs. Reported annually to the BOV and the full faculty.	x	x	x	
Student perceptions of faculty availability	C2	Graduate students: The required exit survey (100% participation) asks several versions of this question. Undergraduate students: This is collected each spring through the Undergraduate Student Satisfaction Survey administered through the Provost's Office.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs brings issues to the attention of the program directors and chairs.		x		
Student perceptions of class size & relationship to learning	C2	Graduate students: The required exit survey (100% participation) asks this question. Undergraduate students: This is	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs		x		

		collected each spring through the Undergraduate Student Satisfaction Survey administered through the Provost's Office.	brings issues to the attention of the EPCC, MPH committee, BEC, program directors, and chairs.				
List of all faculty, which concentrations they support & their FTE allocation to the unit as a whole	*C2-1, E1-1, E1-2*	Prepared annually by the personnel director and the associate dean for data analytics and special projects.	Reviewed by the Data and Accreditation Executive Committee.		x		
Ratios for student academic advising (all degree levels)	*C2-2*	Graduate students: Data are pulled from the Peoplesoft student information system and analyzed by the director of student services. Undergraduate students: Advising is centralized so the number is directly calculated.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs brings issues to the attention of program directors and chairs.		x		
Ratios for supervision of MPH ILE	*C2-2*	Data are pulled from the Peoplesoft student information system and analyzed by the director of student services.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs brings issues to the attention of program directors and chairs.		x		
Ratios for supervision of bachelor's cumulative/experiential activity	*C2-2*	Numbers are calculated directly from enrollment in cumulative experience courses (all projects are supervised within a course context).	Reviewed by the associate dean for academic affairs and the director of the BSPH curriculum.		x		
Ratios for DrPH ILE advising	*C2-2*	N/A					

Ratios for PhD dissertation advising	*C2-2*	Data are pulled from the Peoplesoft student information system and analyzed by the director of student services.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs brings issues to the attention of program directors and chairs.		x		
Ratios for MS final project advising	*C2-2*	Data are pulled from the Peoplesoft student information system and analyzed by the director of student services.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs brings issues to the attention of program directors and chairs.		x		
Count, FTE (if applicable), and type/categories of staff resources	*C3-1*	Prepared annually by the personnel director and the associate dean for data analytics and special projects.	Reviewed by the Data and Accreditation Executive Committee, the dean's executive team, and department chairs.		x		
Faculty participation in activities/resources designed to improve instructional effectiveness (maintain ongoing list of exemplars)	E3	Data are collected on faculty annual evaluation forms, and on the faculty pedagogy survey.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs brings issues to the attention of chairs.		x		
Faculty currency & instructional technique measure 1 - *annual review of faculty*	E3	Faculty annual evaluation form reports research, educational, and practice/service activities.	Chairs review faculty performance annually including currency of research and relevance to instruction. Adjunct and secondary faculty are reviewed annually but less formally by chairs, vice chairs, or program directors		x		

Faculty currency & instructional technique measure 1a - *peer review of syllabi*	E3	Departmental curriculum committees review all syllabi each semester.	Associate dean for academic affairs and academic affairs staff review forms submitted by departmental committees.		x		
Faculty currency & instructional technique measure 2 - *student satisfaction with instructional quality*	E3	All courses are evaluated via student surveys (OMETs). Data on satisfaction with teaching are also collected on the mandatory exit survey. Mean OMET scores and percentage of scores above 3.5/5.0 are tracked.	Chairs review the OMETs as part of the annual faculty evaluation. The EPCC reviews the OMETs for all schoolwide courses, including MPH core courses. The BEC reviews BSPH foundational and core courses. Exit survey data are reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls issues to the attention of chairs and program directors as needed.		x		
Faculty currency & instructional technique measure 3 - *faculty use of high-impact instructional techniques*	E3	Faculty pedagogy survey tracks usage of a list of instructional techniques. Number of faculty using high-impact practices, one or more inclusive education practices, and reporting pedagogical professional development are tracked.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls issues to the attention of chairs and program directors as needed.		x		
Faculty research/scholarly activities with connections to instruction (maintain ongoing list of exemplars)	E4						

Faculty scholarship measure 1 - *research funding*	*E4-1*	The associate dean for finance and administration and staff prepare data on number of grant submissions and awards, total research expenditures (awards), and number of grants of different types (e.g., community-engaged, global content).	Reviewed annually by the BOV, the full faculty, and other stakeholders. Reviewed quarterly at budget meetings between dean and each chair.	x			
Faculty scholarship measure 2 *- number of grant submissions and awards*	*E4-1*	The associate dean for finance and administration and staff prepare data on number of grant submissions and awards, total research expenditures (awards), and numbers of grants of different types (e.g., community-engaged, global content).	Reviewed annually by the BOV, the full faculty, and other stakeholders.	x			
Faculty scholarship measure 3 – *% of faculty participating in research*	*E4-1*	Annual faculty evaluations	Reviewed by the Data and Accreditation Executive Committee. The vice dean calls issues to the attention of other leadership as needed.	x			
Faculty extramural service activities with connections to instruction (maintain ongoing list of exemplars)	E5						
Faculty service measure 1 - *% of faculty participating in extramural*	E5	Annual faculty evaluations	Reviewed by the Data and Accreditation Executive Committee. The vice dean calls issues to the			x	

service activities			attention of other leadership as needed.				
Faculty service measure 2 – *number of funded projects with state governments*	E5	The associate dean for finance and administration and staff prepare data.	Reviewed by the Data and Accreditation Executive Committee. The vice dean calls issues to the attention of other leadership as needed.			x	
Faculty service measure 3 - *number of funded projects with local governments and health departments*	E5	The associate dean for finance and administration and staff prepare data.	Reviewed by the Data and Accreditation Executive Committee. The vice dean calls issues to the attention of other leadership as needed.			x	
Faculty service measure 4 - *number of funded projects foundations*	E5	The associate dean for finance and administration and staff prepare data.	Reviewed by the Data and Accreditation Executive Committee. The vice dean calls issues to the attention of other leadership as needed.			x	x
Actionable data (quantitative and/or qualitative) from employers on graduates' preparation for post-graduation destinations	F1	Qualitative data are drawn from several sources including the BOV and employers/community partners who participate in the school's educational programs and curriculum committees. A Partner Advisory Board (PAB) is in the process of being formed to augment these sources.	Reviewed by the dean's executive team and the department chairs.		x		

Feedback from external stakeholders on changing practice & research needs that might impact unit priorities and/or curricula	F1	Qualitative data are drawn from several sources including the BOV and employers/community partners who participate in the school's educational programs and curriculum committees. A Partner Advisory Board (PAB) is in the process of being formed to augment these sources.	Reviewed by the dean's executive team and the department chairs.	x	x	x	x
Feedback from stakeholders on guiding statements and ongoing self-evaluation data	F1	Qualitative data are drawn from several sources including the BOV and employers/community partners who participate in the school's educational programs and curriculum committees. A Partner Advisory Board (PAB) is in the process of being formed to augment these sources.	Reviewed by the dean's executive team and the department chairs.	x	x	x	x
Professional AND community service activities that students participate in (maintain ongoing list of exemplars)	F2	The director of student affairs tracks formal group activities at the school level, and individual departments track departmental activities.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls issues to the attention of other leadership as needed.		x	x	
Current educational and professional development needs of self-defined communities of public health workers (individuals not currently	F3	Faculty who are engaged with these specific communities track their needs.	Reviewed by the dean and the relevant faculty and their chairs			x	x

enrolled in unit's degree programs)							
Continuing education events presented for the external community, with number of non-student, non-faculty attendees per event (maintain ongoing list)	*F3-1*	Almost all school activities and presentations are open to the community and are widely advertised. This is tracked by the director of communications. Participation in some specific activities is tracked by the alumni association. Events put on by the school's funded workforce development projects are tracked by those projects.	Reviewed by the Data and Accreditation Executive Committee. The vice dean calls issues to the attention of other leadership as needed.	x	x	x	x
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	The school defined priority populations in the 2014 diversity plan: African-American students, faculty, and staff, Latino students, faculty, and staff, and first-generation students. These numbers are drawn from standard staff and student data sources. The school has recently added undergraduate students as a separate category. In addition, the school prioritizes LGBTQIA+ students, faculty, and staff and diversity in international students, although these are not tracked. Qualitative information on diversity initiatives is	These numbers are summarized in numerous reports to all audiences, including school leadership, faculty, BOV, and others. Numbers for applicants and admitted students are reported weekly to a wide audience of chairs, program directors, and admissions staff.				x

		also tracked annually by the dean's office.					
Student AND faculty (staff, if applicable) perceptions of unit's climate regarding diversity & cultural competence	G1	Graduate students: Addressed in several different ways on the required exit survey for graduating students. Undergraduate students: Collected each spring through the Undergraduate Student Satisfaction Survey administered through the Provost's Office. For faculty, addressed on the COACHE survey conducted at the university level. All groups are surveyed in the University climate survey.	Faculty data are summarized and discussed in numerous leadership meetings, including the dean and chairs, the SPH council, and others. Student feedback is analyzed in detail by the Data and Accreditation Executive Committee.				x
Student satisfaction with academic advising	H1	Graduate students: Collected in the mandatory exit survey. Undergraduate students: Collected each spring through the Undergraduate Student Satisfaction Survey administered through the Provost's Office.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls issues to the attention of other leadership as needed.		x		

Student satisfaction with career advising	H2	Graduate students: Collected in the mandatory exit survey. Undergraduate students: Collected each spring through the Undergraduate Student Satisfaction Survey administered through the Provost's Office.	Reviewed by the Data and Accreditation Executive Committee. The associate dean for academic affairs calls issues to the attention of other leadership as needed.		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 examplars)	H2	Maintained by the director of student services.			x		
Number of student complaints filed (and info on disposition or progress)	H3	Maintained by the director of student services, who also serves as the school's ombudsperson.			x		
Recruitment & admissions measure – *% of underrepresented students applying, accepted, and matriculating*	H4	Graduate students: Detailed numbers are provided in a weekly admissions report to all school administration, student services staff, chairs, and program directors. Undergraduate students: Detailed numbers are provided weekly from an OAFA admissions report during the recruitment cycle. These numbers are shared with the dean's office weekly and more widely	The associate dean for enrollment reviews these numbers and discusses them monthly with the dean's executive team, program directors, student services staff, chairs, etc.		x		x

		with the school on a monthly basis					
Yield among underrepresented graduate students	H4	From the report above			x		x
Number of underrepresented students matriculating into the BSPH program	H4	From the report above			x		x
Number of underrepresented students matriculating into public health master's programs	H4	From the report above			x		x
Number of underrepresented students matriculating into PhD programs	H4	From the report above			x		x

Replace all ***bold italic text*** with the unit's chosen measures

* Add columns for additional goals, if applicable

+ Add rows for unit-specific measures, as needed (must include 5 at a minimum)

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.

   Please see ERF> Criterion B> B2> B2.2.

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.

	Measure (from Template B2-1)	Data that indicated improvement was needed	Improvement undertaken

	that informed the change		
Example 1	Student perceptions of unit's climate regarding diversity & cultural competence	Exit survey data indicated that a significant percentage of students wanted more attention paid to race/ethnicity, gender, and international issues in their courses, and the percentage satisfied or very satisfied with overall school climate was about 80%. (See criterion G1 data item #6.)	Questions were added to the student evaluations of teaching addressing representation in the curriculum and inclusive environment in the classroom. The faculty pedagogy survey was created to ask faculty about a number of different inclusion- and equity-related actions taken in the classroom. These data will inform next steps and spur changes in faculty practices.
Example 2	Detailed data from COACHE survey, which measures faculty perception of climate in numerous ways	Faculty indicated dissatisfaction with the information available to them about promotion expectations and processes.	Created a faculty mentoring program, and faculty resources section on the school's new website.
Example 3	Numbers of matriculated students and yield in total, and in underrepresented categories	Percentages and numbers of underrepresented students are growing, but slowly. (See criterion H4).	Numerous new marketing and recruitment initiatives were implemented in the past two years to reach underrepresented communities and individuals, including advertising initiatives and student ambassadors to connect with prospective and admitted students.
Example 4	Actionable data from employers on students' preparation	Exit survey data, recent graduate survey data, and employer data from the Board of Visitors and other employer sources described above all indicated a desire for more quantitative and analytical preparation for graduates.	Many departments and programs added analytical content to existing courses or created new elective courses. For example, BCHS added a series of new courses focused on analytical methods. Biostatistics added two new MS tracks. Human Genetics added substantial bioinformatics curriculum. Epidemiology increased the amount of SAS training available.

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

Strengths, challenges, and solutions in progress: The school has well established processes for producing qualitative and quantitative data to make data-driven quality improvements that support the strategic plan. Many school committees routinely discuss important data reports, such as the course evaluation data and student performance data that the Educational Policies and Curriculum

Committee (EPCC) review each semester. An overall school data report is presented to the full faculty and to the Board of Visitors each year. Other data reports, such as the exit survey results and the admissions data reports, are widely distributed to responsible staff and faculty. One challenge is that overall data summaries that report metrics at the school level are only modestly useful. Most metrics are far more meaningful and actionable when stratified by department, degree program, or other variables (Simpson's paradox). But reporting that level of detail stratified by every relevant variable leads to very large and complex reports that are not easy to interpret. For the past year the vice dean, associate dean for academic affairs, and associate dean for data analytics and special projects have met once a week as the Data and Accreditation Executive Committee to review the most detailed data reports and identify issues that should be brought to the attention of other audiences. The next logical step for this group is to develop regular data reports that are complex enough to be meaningful yet simple enough to be digestible with all stakeholders when shared routinely.

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.

Students in PHD Degree, by Cohorts Entering Between 2013-14 and 2022-23											
***Maximum Time to Graduate:**											
	Cohort of Students	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
2013-14	# Students entered	36									
	# Students withdrew, dropped, etc.	1									
	# Students graduated	0									
	Cumulative graduation rate	0%									
2014-15	# Students continuing at beginning of this school year (or # entering for newest cohort)	35	38								
	# Students withdrew, dropped, etc.	2	2								
	# Students graduated	0	0								
	Cumulative graduation rate	0%	0%								

2015-16	# Students continuing at beginning of this school year (or # entering for newest cohort)	33	36	49							
	# Students withdrew, dropped, etc.	1	1	0							
	# Students graduated	1	0	0							
	Cumulative graduation rate	3%	0%	0%							
2016-17	# Students continuing at beginning of this school year (or # entering for newest cohort)	31	35	49	36						
	# Students withdrew, dropped, etc.	1	1	4	0						
	# Students graduated	6	0	0	0						
	Cumulative graduation rate	19%	0%	0%	0%						
2017-18	# Students continuing at beginning of this school year (or # entering for newest cohort)	24	34	45	36	38					
	# Students withdrew, dropped, etc.	1	4	0	2	1					

	# Students graduated	11	7	2	0	0					
	Cumulative graduation rate	50%	18%	4%	0%	0%					
2018-19	# Students continuing at beginning of this school year (or # entering for newest cohort)	12	23	43	34	37	44				
	# Students withdrew, dropped, etc.	0	0	1	0	0	0				
	# Students graduated	3	7	10	3	0	0				
	Cumulative graduation rate	58%	37%	24%	8%	0%	0%				
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)	9	16	32	31	37	44	41			
	# Students withdrew, dropped, etc.	0	0	0	5	2	4	0			
	# Students graduated	4	10	15	5	1	0	0			
	Cumulative graduation rate	69%	63%	55%	22%	3%	0%	0%			
2020-21	# Students continuing at beginning of this school year (or # entering	5	6	17	21	34	40	41	55		

	for newest cohort)										
	# Students withdrew, dropped, etc.	0	0	0	0	2	0	1	2		
	# Students graduated	4	2	9	8	5	0	0	0		
	Cumulative graduation rate	81%	68%	73%	44%	16%	0%	0%	0%		
2021-22	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	4	8	13	27	40	40	53	49	
	# Students withdrew, dropped, etc.	0	0	0	0	2	1	1	0	0	
	# Students graduated	1	0	3	7	15	13	1	0	0	
	Cumulative graduation rate	83%	68%	80%	64%	55%	30%	2%	0%	0%	
2022-23	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	4	5	6	10	26	38	53	49	42
	# Students withdrew, dropped, etc.	0	0	1	1	0	0	1	1	1	0
	# Students graduated	0	1	1	2	4	7	4	1	0	0

	Cumulative graduation rate	83%	71%	82%	69%	66%	45%	12%	2%	0%	0%

Students in MPH Degree, by Cohorts Entering Between 2018-19 and 2022-23						
***Maximum Time to Graduate:**						
	Cohort of Students	2018-19	2019-20	2020-21	2021-22	2022-23
2018-19	# Students entered	101				
	# Students withdrew, dropped, etc.	0				
	# Students graduated	3				
	Cumulative graduation rate	3%				
2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)	98	78			
	# Students withdrew, dropped, etc.	3	0			
	# Students graduated	55	1			
	Cumulative graduation rate	57%	1%			
2020-21	# Students continuing at beginning of this school year (or # entering for newest cohort)	40	77	121		
	# Students withdrew, dropped, etc.	2	2	0		
	# Students graduated	16	48	2		

	Cumulative graduation rate	73%	63%	2%		
2021-22	# Students continuing at beginning of this school year (or # entering for newest cohort)	22	27	119	147	
	# Students withdrew, dropped, etc.	4	1	0	1	
	# Students graduated	11	13	84	7	
	Cumulative graduation rate	84%	79%	71%	5%	
2022-23	# Students continuing at beginning of this school year (or # entering for newest cohort)	7	13	35	139	140
	# Students withdrew, dropped, etc.	1	3	0	4	1
	# Students graduated	1	1	10	35	0
	Cumulative graduation rate	85%	81%	79%	29%	0%

Students in MPH Joint Degrees, by Cohorts Entering Between 2018-19 and 2022-23						
***Maximum Time to Graduate:**						
	Cohort of Students	2018-19	2019-20	2020-21	2021-22	2022-23
2018-19	# Students entered	22				
	# Students withdrew, dropped, etc.	0				
	# Students graduated	0				
	Cumulative graduation rate	0%				

2019-20	# Students continuing at beginning of this school year (or # entering for newest cohort)	22	10			
	# Students withdrew, dropped, etc.	1	0			
	# Students graduated	6	0			
	Cumulative graduation rate	27%	0%			
2020-21	# Students continuing at beginning of this school year (or # entering for newest cohort)	15	10	17		
	# Students withdrew, dropped, etc.	1	1	1		
	# Students graduated	7	2	0		
	Cumulative graduation rate	59%	20%	0%		
2021-22	# Students continuing at beginning of this school year (or # entering for newest cohort)	7	7	16	18	
	# Students withdrew, dropped, etc.	0	1	1	0	
	# Students graduated	4	4	5	0	
	Cumulative graduation rate	77%	60%	29%	0%	
2022-23	# Students continuing at beginning of this school year (or # entering for newest cohort)	3	2	10	18	8
	# Students withdrew, dropped, etc.	0	0	0	0	0
	# Students graduated	0	1	0	0	0
	Cumulative graduation rate	77%	70%	29%	0%	0%

Students in MS Degree, by Cohorts Entering Between 2019-20 and 2022-23					
***Maximum Time to Graduate:**					
	Cohort of Students	2019-20	2020-21	2021-22	2022-23

2019-20	# Students entered	24			
	# Students withdrew, dropped, etc.	0			
	# Students graduated	0			
	Cumulative graduation rate	0%			
2020-21	# Students continuing at beginning of this school year (or # entering for newest cohort)	24	44		
	# Students withdrew, dropped, etc.	0	2		
	# Students graduated	13	0		
	Cumulative graduation rate	54%	0%		
2021-22	# Students continuing at beginning of this school year (or # entering for newest cohort)	11	42	43	
	# Students withdrew, dropped, etc.	1	1	0	
	# Students graduated	7	25	0	
	Cumulative graduation rate	83%	57%	0%	

2022-23	# Students continuing at beginning of this school year (or # entering for newest cohort)	3	16	43	51
	# Students withdrew, dropped, etc.	1	0	2	3
	# Students graduated	0	4	3	0
	Cumulative graduation rate	83%	66%	7%	0%

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

Doctoral Student Data for Year 2022-23

	BCHS	**BIOS**	**EOH PHD**	**EOH PHD-PHP**	**EPI**	**HPM**	**HUGEN**	**IDM**
# newly admitted in 2022-23	5	6	2	1	20	3	10	3
# currently enrolled in 2022-23	15	36	21	1	66	15	48	20
# passed preliminary examination in 2021-22	5	15	7	0	18	12	5	4
# passed comprehensive examination in 2021-22	6	10	11	0	32	12	8	8
# graduated in 2021-22	4	4	5	0	11	1	5	3

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.

Both graduation rates and doctoral progression rates are strong, and consistently so across all programs.

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

Strengths, challenges, and solutions in progress: See above.

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.

Post-Graduation Outcomes – BSPH*	**2018-2019 Number and percentage**	**2019-2020 Number and percentage**	**2020-2021 Number and percentage**	**2021-2022 Number and percentage**
Employed	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Continuing education/training (not employed)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total graduates (known and unknown)	0	0	0	0

Post-Graduation Outcomes - MPH	**2018-2019 Number and percentage**	**2019-2020 Number and percentage**	**2020-2021 Number and percentage**	**2021-2022 Number and percentage***
Employed	91 (83%)	80 (78%)	71 (82%)	
Continuing education/training (not employed)	10 (9%)	9 (9%)	13 (15%)	
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)	
Actively seeking employment or enrollment in further education	6 (5%)	1 (1%)	2 (2%)	
Unknown	3 (3%)	13 (13%)	1 (1%)	
Total graduates (known and unknown)	110	103	87	

Post-Graduation Outcomes - MS	**2018-2019 Number and percentage**	**2019-2020 Number and percentage**	**2020-2021 Number and percentage**	**2021-2022 Number and percentage****
Employed	28 (78%)	22 (56%)	31 (79%)	
Continuing education/training (not employed)	4 (11%)	7 (18%)	5 (13%)	
Not seeking employment or not seeking additional education by choice	0 (0%)	0 (0%)	0 (0%)	
Actively seeking employment or enrollment in further education	2 (5%)	0 (0%)	0 (0%)	
Unknown	2 (5%)	10 (26%)	3 (8%)	

Total graduates (known and unknown)	36	39	39	

Post-Graduation Outcomes - PhD	**2018-2019 Number and percentage**	**2019-2020 Number and percentage**	**2020-2021 Number and percentage**	**2021-2022 Number and percentage****
Employed	33 (92%)	27 (93%)	35 (97%)	
Continuing education/training (not employed)	0 (0%)		0 (0%)	
Not seeking employment or not seeking additional education by choice	0 (0%)	1 (3%)	0 (0%)	
Actively seeking employment or enrollment in further education	0 (0%)	0 (0%)	0 (0%)	
Unknown	3 (8%)	1 (3%)	1 (3%)	
Total graduates (known and unknown)	36	29	36	

*The BSPH was created in 2022 and there are no graduates as of June 2023.
**2021-22 data will be added in fall 2023 after the annual survey is completed.

1) 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 school conducts a survey each fall of master's and doctoral level graduates. Graduates from two cohorts are surveyed: those graduating in the immediately previous year (December through August), and those graduating December through August of the year prior to that. Employment data reported to CEPH are those from the older cohort that has had a full year on the job market. The survey typically has a response rate of approximately 50%. Responses are then supplemented by information from faculty advisors and student services staff, and by information available on websites and LinkedIn. The total knowledge rate (percentage of graduates for whom we have information) based on all of these sources is generally more than 90%.

   There have not yet been any graduates of the BSPH program. The school is in the process of working with the Office of the Provost to implement a methodology for collecting their employment data.

   Employment rates are all well above the minimum of 80% and are typically very close to 100%.

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

   Strengths, challenges, and solutions in progress: Post-graduation outcomes are consistently strong in all programs. In the past, there have occasionally been issues with knowledge rates for master's level graduates, but that is steadily improving with increased usage of LinkedIn.

B5. Alumni Perceptions of Curricular Effectiveness

For each degree offered, the school collects information on alumni 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 alumni self-assessment of their preparation for post-graduation destinations.

   The school conducts a survey each fall of master's and doctoral level graduates. Graduates from two cohorts are surveyed: those graduating in the immediately previous year (December through August), and those graduating December through August of the year prior to that. The survey is used to collect data on employment, student debt, and perceptions of curricular effectiveness. Graduates are asked: "During your Pitt Public Health program, what skills or competencies did you develop that you believe have been or will be most beneficial to you as you enter or re-enter the field?" Over a number of years, answers to this question have been highly informative and actionable – far more so than questions about specific competencies or courses, many of which graduates do not clearly remember even one- or two-years post-graduation. The school's required exit survey (100% response rate) poses a similar question, and responses have been qualitatively similar to results in the alumni survey.

   Data from the survey of recent graduates and the exit survey are summarized each year by the relevant associate deans and shared with other school leadership and faculty. Recurring themes related to the curriculum are analytical methods and communication skills, which are typically cited as both strengths and areas for improvement, often by the same respondents. This is interpreted as meaning that while students get a solid foundation in both of these areas, there is always a demand for more, with analytical skills and communication skills as the two most important cross-cutting skills in the workplace. This is backed up by many other important sources of information, including input from the school's employers and practicum preceptors and published literature on the public health workforce.

   The school has responded to these data in several ways. In terms of data science and analytical methods, offerings have been added for students across all concentrations. Behavioral and Community Health Sciences has added a number of data science-focused courses. Human Genetics has incorporated bioinformatics training into all degree programs. And other departments have incorporated more sophisticated analysis methods directly into existing courses. In terms of communication skills, almost every department has added a scientific communication, grant writing, or other cohorted writing class to better prepare students for their theses or ILE projects, and for the workforce.

   In addition to the school-level survey, many individual departments and programs have surveyed graduates to solicit more detailed information on their curricula. For example, the Public Health Genetics MPH program completed an alumni survey in 2023.

   The school is in the process of planning survey methods for BSPH alumni, which will entail a combination of University-level surveying and school-based data collection.

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

   Please see ERF> Criterion B> B5> B5.2.

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

   Strengths, challenges, and solutions in progress: The response rate for the survey of recent graduates is high (on the order of 50%), and the responses regarding curriculum are very informative. Alumni have indicated a strong desire for more training in quantitative analysis and communication, but also indicated that what they received in these areas was a highlight of their educational experiences. It is probably not feasible to add much more required training in these areas, but the school's curriculum committees are continually looking for ways to add elective communication content to existing course objectives or elective courses.

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:

   Prior to fiscal year 2023 (July 2022 – June 2023) the University of Pittsburgh operated on a historical budgeting model, augmented by substantial incentive funds returned to each school for graduate tuition. The base allocation and graduate tuition incentive are intermingled in complex ways and represented in C1-1 as a single line. The school also has significant endowment income and significant return of research indirect costs, as well as an annual allocation from the senior vice chancellor for the health sciences (SVCHS), each indicated as a separate line in C1-1.

   For fiscal year 2023, allocations to schools were made under the system described above, but a responsibility center type model (RCM) was implemented for evaluating the financial performance of each school. The RCM model credits each school for the full value of tuition and indirect costs generated (shown at the top of C1-1), and then charges back a share of the cost of University central services as well as additional taxes. However, there are no immediate plans for the RCM to be used for ***allocation*** of funds to schools – only for *post-hoc* evaluation. For fiscal year 2024, the school's allocation will be based on the 2023 allocation. Specifically, research indirects in 2024 will be based on yearly earnings using the pre-RCM formula, and the graduate tuition incentive will reflect 2023 levels. If the school's tuition income rises significantly above 2023 levels, the dean may petition the provost for additional funds. With a new chancellor joining the University on July 1, 2023, we anticipate more changes to the current process.

   In addition to the funds described above, in fiscal year 2023 the school was provided with $1.5M related to initial tuition and startup costs for the BSPH program. It is not yet decided what the tuition return for the BSPH program will be in future years.

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

   All faculty salaries are covered by the school's operating budget. Faculty engaged in externally funded projects have a portion of their salaries charged to those projects. This averages approximately 50% of faculty salaries schoolwide. A small number of faculty who hold endowed professorships have a portion of their salary covered by special philanthropic gifts. A few faculty have a portion of their salary paid by an entity within the University but outside the SPH like the UPMC Hillman Cancer Center.

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 school has significant autonomy on both faculty and staff hiring, although new positions need to be approved by the senior vice chancellor for the health sciences (faculty and staff) and the University's Office of the Provost (faculty) or Human Resources (staff). There are no fixed faculty "lines" – it is generally possible to hire new faculty and staff whenever the school mission justifies the need.

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 expenses include faculty and staff salaries not covered by external funding sources, instructional and programmatic expenses for educational programs, and general supplies and expendable equipment. These are funded through the school’s general budget, which includes historically based allocations from the University and from the senior vice chancellor for the health sciences, tuition incentives, research indirects, and endowment (see C1-1).

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

Support for student activities is funded from general operating funds. Student conference travel is generally supported by research mentors, but some departmental funds are also available at the discretion of the chair. For example, Biostatistics funds a $2,000 travel allowance for doctoral students, and Health Policy and Management has a $1,000 travel allowance for doctoral students, with flexibility to cover additional costs. Behavioral and Community Health Sciences has several department-specific named scholarships to support student research, which are awarded twice yearly, and a BCHS Research Support Fund for which applications are reviewed on a rolling basis. There are also University-wide funds available for student travel.

Some graduate student scholarships are funded through a variety of mechanisms provided by donors. The total amount schoolwide is approximately $130,000 annually. In addition, a major source of scholarships is the “financial aid” allocation – an allocation from the central University that can only be used for student scholarships (see C1-1). This fund was $7.7M in FY2023. Note that the surplus or deficit from these funds is not meaningful – surpluses are not available for other uses, nor are deficits charged back to the school. The financial aid allocation also pays for tuition remission for doctoral students, the vast majority of whom are appointed as Graduate Student Researchers (GSRs) or Teaching Assistants (TAs).

Undergraduate student financial aid is determined by the central University Office of Admissions and Financial Aid (OAFA). OAFA uses the information from the required FAFSA to determine financial aid eligibility for each student. This could be in the form of grants, scholarships, federal loans, or work-study employment opportunities. Financial aid counselors are available to all students. In 2019, the University started a Pell Grant matching program, which matches federal Pell Grants dollar-for-dollar for undergraduate students. Currently, the average amount of this Pell Grant match award is $4,500.

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

Most faculty cover travel and other development expenses from external grants or indirect funds returned based on those grants. Faculty receive 9.5% of the indirect costs from grants that generate full indirect costs. These funds can be used for research-related expenses, including travel. Other faculty, especially education-focused faculty, are often provided with funds for development by departments. For example, Human Genetics typically provides $3,000 to $5,000 per year in travel and faculty development funds to each education-focused faculty member. Faculty are generally provided with start-up funds when initially hired, which are often sufficient to cover travel and professional and research development needs for up to four years.

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

The school is generally expected (and able) to meet its own needs through the allocated funds. There are mechanisms to request loans from the central administration for new initiatives such as the start-up of a major new degree or research program, but the school has not needed to use this mechanism. Under the new budget model, the school will need to request a return of additional tuition revenues to cover expenses of new degree programs, including the BSPH. This return was previously automatic for graduate degrees under the Tuition Incentive Program (TIP). In 2021, the school asked the provost for an increased allocation from the "financial aid" fund to provide more master's student scholarships and, thus, increase tuition revenue by increasing enrollment. This was granted, with the allocation increasing from $4.9M in fiscal year 2022 to $7.7M in fiscal year 2023. The SPH has also recently received matching University funds for four faculty hires under a cluster hire focused on race and the social determinants of equity, health, and well-being.

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.

Prior to fiscal year 2023, the school received an incentive payment based on graduate tuition income. The incentive was approximately 65% of the tuition above a base expectation of approximately $6M (with the base increasing over time). The net value of the tuition incentive ranged from approximately $1.5M to $3.6M in recent years. Undergraduate tuition was not returned to the school except for summer session. Under the new budget model, the graduate tuition return to the school is fixed at 2022 levels. In fiscal year 2023, the school was given $1.5M for undergraduate tuition as the BSPH program started. The dean will have the opportunity to ask the provost for the return of additional tuition funds, including for the BSPH, in future years.

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.

Historically, for grants that pay full indirects such as federal research grants, 38% of the indirect costs are returned to the school: 9.5% to the principal investigator (PI), 4.75% to the department, and 23.75% to the dean. In recent years, the dean has returned all of the dean's portion to the departments. Under the new budget model, the University returns the full 38% to the dean, and Dean Lichtveld has elected to continue the practice of returning 9.5% to PIs and 23.75% to departments, keeping 4.75% in the dean's office. The PI portion is often split among investigators involved on a project.

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.

Sources of Funds and Expenditures by Major Category, 2019 to 2024 **All amounts displayed in units of millions of dollars**						
	FY2019	FY2020	FY2021	FY2022	FY2023*	FY2024*

Total Earnings						
Graduate Tuition & Fees	10.7	8.4	9.3	12.1	12.6	
Undergraduate Tuition & Fees	0.2	0.3	0.4	1.0	2.3	
Indirect Cost Recovery	15.4	15.8	16.0	15.6	15.9	
Sources of Non-Grant Operating Funds Allocated to SPH						
University Appropriation, including Graduate Tuition Incentive	12.3	11.0	10.0	12.4	12.6	
Support from the Senior Vice Chancellor for the Health Sciences	1.7	1.7	1.7	1.7	1.7	
Additional Allocation for BSPH	0	0	0	0	1.5	
Indirect Cost Recovery Allocated to the School, including PI Portion	5.6	5.6	5.7	5.8	6.5	
Endowment	5.0	5.1	5.4	5.6	5.6	
Gifts	0.6	0.4	0.4	0.3	0.3	
Total	25.2	23.8	23.2	25.8	27.4	
Non-Grant Expenditures						
Faculty Salaries	10.3	9.9	9.1	9.3	9.2	
Staff Salaries	6.4	6.2	5.4	5.5	6.6	
Student Support	1.2	1.1	1.0	1.1	1.1	
Fringe Benefits	5.2	5.1	4.0	4.1	5.4	
Non-Grant Operations/Travel	4.2	3.8	2.6	3.3	3.4	
Total	27.3	26.1	22.1	23.3	25.7	
Grant and Contract Funds						
	45.3	48.2	59.8	85.0	79.8	
Grant and Contract Expenditures						
Faculty Salaries	9.2	9.7	10.1	10.1	11.1	
Staff Salaries	10.0	9.9	10.2	10.2	10.3	
Student Support	3.1	3.3	3.3	3.0	3.5	
Fringe Benefits	6.0	7.0	6.9	7.1	8.1	
Other Grant/Contract Expenditures, including Pass-Throughs	16.5	18.1	30.4	57.0	46.9	
Total	44.8	48.0	60.9	87.4	79.8	
Financial Aid Funds						
Allocation	4.6	4.8	4.8	4.9	7.7	
Expenditures	5.1	5.6	7.4	8.3	8.9	
Surplus/Deficit	(0.5)	(0.8)	(2.6)	(3.4)	(1.2)	

*Fiscal year 2023 final expenditures and fiscal year 2024 appropriation numbers will be added in the final self-study.

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.

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

Strengths, challenges, and solutions in progress: The school's budget is relatively balanced, with sufficient allocations and incentive funds to provide high quality educational programs and meet the school's research and practice/service goals. Grant/contract funding is consistently strong. Incentives for research and education have historically been strong and incentivized growth in both areas, as well as providing the funds needed to support that growth. There is substantial support for students, and the Office of the Provost has been supportive of continuing and even expanding that. Allocation of resources under the new budget model is still an active topic of discussion campus-wide, and Dean Lichtveld is an important voice in those discussions. We anticipate more change with the incoming chancellor, which makes it challenging to adequately plan for future years.

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.

	FIRST DEGREE LEVEL			**SECOND DEGREE LEVEL**	**ADDITIONAL FACULTY****
CONCENTRATION*	**PIF 1***	**PIF 2***	**FACULTY 3^**	**PIF 4***	
Public Health BSPH	Ada Youk 1.0	James Egan 1.0	Abdus Wahid 1.0		PIF: 9*** Non-PIF: 1.6
Behavioral and Community Health Sciences MPH PhD	Patricia Documet 1.0	Emily Dauria 1.0	Kar-Hai Chu 1.0	Robert Coulter 1.0	PIF: 11 Non-PIF: 0.7
Biostatistics MS PhD	Jiebao Wang 1.0	Andriy Bandos 1.0	Chae Ryon Kang 1.0	Ying Ding 1.0	PIF: 7 Non-PIF: 0.6
Environmental and Occupational Health MPH MS PhD	Aaron Barchowsky 1.0	Nesta Bortey-Sam 1.0	Peter Di 1.0	Nicholas Fitz 1.0	PIF: 4 Non-PIF: 0.5
Environmental and Occupational Health Public Health Practice PhD	James Peterson 1.0	James Fabiziak 1.0	Alison Sanders 1.0		PIF: 5 Non-PIF: 0.5
Epidemiology MPH MS PhD	Marnie Bertolet 1.0	Maria Brooks 1.0	Caterina Rosano 1.0	Elsa Strotmeyer 1.0	PIF: 23 Non-PIF: 0.9
Genome Bioinformatics	Ryan Minster	Jon Chernus	Hyun Jung Park		PIF: 5 Non-PIF: 0.8

MS	1.0	1.0	1.0		
Health Data Science MS	Gong Tang 1.0	Jeanine Buchanich 1.0	Yan Ma 1.0		PIF: 3 Non-PIF: 0.3
Health Policy and Management MPH	Julie Donohue 1.0	Coleman Drake 1.0	Brittany Brown-Podgorski 1.0		PIF: 9 Non-PIF: 2.0
Health Services Research and Policy MS PhD	Marian Jarlenski 1.0	Mark Roberts 1.0	Lindsay Sabik 1.0	Howard Degenholtz 1.0	PIF: 8 Non-PIF: 0.3
Human Genetics MS PhD	Ilyas Kamboh 1.0	Quasar Padiath 1.0	Beth Roman 1.0	Frank Fan 1.0	PIF: 12 Non-PIF: 1.1
Infectious Disease Management, Intervention, and Community Practice MPH	Linda Frank 1.0	Toan Ha 1.0	Sarah Krier 1.0		PIF: 3 Non-PIF: 0
Infectious Disease Pathogenesis, Eradication, and Laboratory Practice MPH	Jeremy Martinson 1.0	Joshua Mattila 1.0	Danielle Tufts 1.0		PIF: 4 Non-PIF: 0.2
Infectious Diseases and Microbiology MS PhD	Velpandi Ayyavoo 1.0	Simon Barratt-Boyes 1.0	Amy Hartman 1.0	Jeremy Martinson 1.0	PIF: 9 Non-PIF: 0.2
Multidisciplinary MPH	Tina Hershey 1.0	Michael Deem 1.0	Steve Albert 1.0		PIF: 1*** Non-PIF: 0
Public Health Genetics MPH	Andrea Durst 1.0	Wenndy Hernandez 1.0	John Shaffer 1.0		PIF: 5 Non-PIF: 0.4
Statistical and Computational Genomics MS	Yongseok Park 1.0	Lu Tang 1.0	George Tseng 1.0		PIF: 2 Non-PIF: 0.3

TOTALS:

Named PIF	58
Total PIF	106
Non-PIF	40 (7.3 FTE)

* Note that while our instructional matrix (and thus tables C2-1 and E1-1 and E1-2) reflect 17 instructional areas, our faculty, degrees, and courses are fundamentally organized into seven departments. Within each department, most courses and most faculty support multiple degrees and instructional areas. Thus, the association of faculty with individual concentrations as listed above is somewhat arbitrary.
**Table reflects 2022-23 instructional faculty and will be updated for the final self-study.
***Schoolwide programs (MMPH, BSPH) involve all faculty and all courses.

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.

   Faculty who teach part-time for the school generally have a percentage time indicated in their contract. If the percentage is not specified by contract, they are counted as 5% per credit hour taught.

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

   SPH faculty generally fall into the following categories:
   • Full-time faculty with primary appointments in SPH, who teach in public health programs (most of the school's faculty – approximately 100).
   • Part-time faculty with primary appointments in SPH, who teach in public health programs (a few people – generally those on transition to retirement).
   • Full- or part-time faculty with primary appointments in SPH who do not teach in the classroom during a given year but typically mentor students in research or practice (approximately 60).
   • Full- or part-time faculty with primary appointments in SPH who teach entirely in non-public-health programs (one or two).
   • Faculty who do not have primary appointments in SPH. These may be adjunct or guest instructors from local agencies or health care organizations who teach one or two courses (approximately 15), staff who teach in addition to their administrative duties (five or fewer), or instructors from other schools at the University who teach a course or two in SPH (approximately 15).

4) Data on the following for the most recent year in the format of Template C2-2. See Template C22 for additional definitions and parameters.

   The full advising dataset is included in ERF> Criterion C> C2> C2.4.

   BSPH

   As described in more detail in criterion H, BSPH students are primarily advised by professional staff. There is currently one lead advisor for 62 students, with two more advisors in training for approximately 100 new students expected in fall 2023. Upperclass students will also be assigned a faculty mentor who can help them with discipline-specific questions. In addition, students may have faculty supervisors for specific practice and research projects. All BSPH students will complete their culminating experience in a course-based context; the first BSPH student will take that capstone course in spring 2024. The data below will be updated for the final self-study.

BSPH Advising			
	Average	**Min**	**Max**
Staff Advising	62	62	62
Faculty Mentoring	-	-	-
Cumulative Activity (Capstone Course)	-	-	-

MPH

MPH students are assigned a faculty advisor upon matriculation. In some departments, the program director acts as an academic advisor to all students (for example, Epidemiology) and in others the advising is distributed among several faculty (for example, Behavioral and Community Health Sciences). When students reach the essay/thesis stage, they choose an advisor for that project. In most departments, they retain their academic advisor as well. This differs from some MS and PhD programs in which the thesis/dissertation advisor also becomes the academic advisor. In the MMPH program, one of the program directors is listed as the essay advisor for each student, but students typically have significant supervision from a mentor who shares their disciplinary interests as well.

MPH Advising			
	Average	**Min**	**Max**
Academic Advising	7.9	1	97
Essay/Thesis Advising by PIF	3.9	1	12
Essay/Thesis Advising by Non-PIF	1.8	1	5

Academic Public Health Master's

Academic public health master's students are assigned a faculty advisor upon matriculation. In some departments, the program director acts as academic advisor to all students (for example, Epidemiology) and in others the advising is distributed among several faculty (for example, Human Genetics). When students reach the thesis stage, they choose an advisor for that project. In some departments, they retain their academic advisor as well, but in most, the thesis advisor is the sole advisor of record once a student reaches the thesis stage.

MS Advising			
	Average	**Min**	**Max**
Academic Advising	3.2	1	27
Essay/Thesis Advising by PIF	1.6	1	12
Essay/Thesis Advising by Non-PIF	1.2	1	2

PhD

Advising for PhD students is very similar to that for MS students (above).

PhD Advising			
	Average	**Min**	**Max**
Academic Advising	4.3	1	18
Essay/Thesis Advising by PIF	2.9	1	8
Essay/Thesis Advising by Non-PIF	1.6	1	5

For each calculation, only include faculty who participate in the activity (i.e., zeroes should not be included in the calculation). If both primary instructional faculty and non-primary instructional faculty or staff are regularly involved in these activities, stratify the data.

Min is the lowest number of students that a faculty member advises, and Max is the highest number of students that a faculty member advises at defined point in time, chosen by the school or program. Point in time must be suitably representative (e.g., sixth week of fall semester).

Mentoring/primary advising on thesis, dissertation or DrPH integrative project counts first readers only.

Backup documentation used in calculations must be provided in the electronic resource file.

Schools should only present data on public health degrees and concentrations.

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.

   The school collects an enormous amount of data on perceptions during a graduate student exit survey. The survey is a required part of the graduation application process and, thus, has a 100% response rate. Since no undergraduates have yet completed the program, SPH collaborated with the Office of the Provost in spring 2023 to add questions to the University-wide survey of current undergraduates. These data (reported below) are the first quantitative snapshot of student opinion from the school's inaugural BSPH class. In the future, questions will also be added to the University-wide undergraduate exit survey.

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

      The school's graduate student exit survey asks students to rate their overall satisfaction with size of classes on a Likert scale: very satisfied, satisfied, neutral, dissatisfied, very dissatisfied. Results from the past four years are as follows. Year 2022-23 data will be added in fall 2023 when the survey is completed.

year	2019-20	2020-21	2021-22	2022-23
% very satisfied or satisfied	not asked	93%	93%	

      In spring 2023, 23 of 62 BSPH students responded to the University's survey of current students. Of the 23 respondents to this question, 91% (21/23) reported that their class sizes were just about right.

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

      The graduate exit survey similarly asks students to rate their overall satisfaction with availability of faculty.

year	2019-20	2020-21	2021-22	2022-23
% very satisfied or satisfied	not asked	87%	81%	

      In spring 2023, 23 of 62 BSPH students responded to the current-student survey. Of the respondents, 87% (20/23) reported being very satisfied or satisfied with the availability of faculty.

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

   The exit survey asks students about perceptions of class size and faculty availability. In addition to the quantitative data presented above, the surveys provide a rich dataset of comments on faculty availability, which generally indicate a high level of satisfaction. Comments on class sizes are extremely rare, which suggests that class size is not a pain point for students. The 2021-22 exit survey on faculty availability includes the following comments, which are fairly typical. Note that the cohort responding to this survey consisted of students who completed most of their education during the pandemic. Full exit survey reports for three years are in ERF> Criterion C> C2> C2.6.

• “Amazing faculty and staff. … Support from advisers was impeccable.”
• “Faculty and staff are often very difficult to reach.”
• “Even though my graduate school experience occurred throughout the pandemic, I really do not feel like I missed out on much. I felt extremely supported and encouraged while at Pitt Public Health by all of my peers, as well as the faculty and staff.”
• “I felt very supported by my advisor and other faculty.”
• “I found the faculty to be disorganized and lacking in communication with students a lot of the time.”
• “Great program, degrees, staff, faculty.”
• “I believe that my academic advisor, professors, students, and research mentor made my experience at Pitt Public Health phenomenal.”

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

Strengths, challenges, and solutions in progress: The school has more than adequate faculty to support all concentrations, including teaching, mentoring, and providing opportunities for student involvement in research and practice. Students cite faculty availability as one of the high points of their education. More detailed data at the program level as well as any individual negative comments are followed up by program directors or chairs. Slightly lower satisfaction levels in 2021-22 may reflect pandemic effects; we will be carefully watching these numbers in 2022-23.

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.

Role/function	Approximate FTE
Academic affairs (central)	2
Student affairs, including career services (central)	9
Enrollment (central)	4
Information technology (central)	8
Finance and administration (central)	11
Communications (central)	5
Student affairs and enrollment (departmental)	9
Administrative staff (departmental)	35
Research staff	180

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

The University of Pittsburgh has significant centralized infrastructure and resources in all areas. The list below highlights a few of those most often used directly by SPH faculty, staff, and students.

• The Office of Admissions and Financial Aid (OAFA) leads all undergraduate recruiting and admissions and collaborates with members of the school to host recruitment visits and associated activities.
• The Center for Teaching and Learning (CTL) provides faculty development and many other resources.
• Pitt information technology (IT) provides centralized support for data systems and computing hardware.
• The Center for Research Computing (CRC) provides high-throughput research computing resources.
• The Office of Student Affairs provides support for needs from housing and counseling to student organizations.
• The Office of International Services (OIS) provides support for international students and others.
• The Office of Philanthropic and Alumni Engagement (PAE) provides centralized support for many activities. The school's alumni and development officers are employed by PAE, with a dotted line to the dean.

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

The school has sufficient staff in all categories to support its mission. Centralized services provided by the University are also important contributors. Student comments on exit surveys about helpfulness and availability of staff are consistently positive. Staffing levels are constantly re-

evaluated as needs change, particularly for student services. For example, new staff were hired to support the addition of the BSPH undergraduate program.

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

Strengths, challenges, and solutions in progress: The University implemented a pandemic early retirement program for staff that resulted in understaffing across the school, including in the Office of Student Affairs. Due to the remaining outstanding staff, we were able to maintain our strong student support efforts and are now back to pre-pandemic staffing levels. Some data reporting (though not data collection) functions weakened during this time, but staffing for those functions has now improved. Over the past year, we have added a number of additional student services staff for the growing BSPH program, as well as an experiential learning coordinator to work with undergraduate and graduate students. The remaining current challenges are restoring all pre-pandemic data reporting activities and ensuring high-quality onboarding for new staff.

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.)

SPH physical space consists of three connected buildings: Public Health, Crabtree Hall, and the Public Health Laboratory Annex. The laboratory annex was built in 2014 and Public Health was completely renovated in the years following. The school also occupies rental space that is used for major research projects in three locations close to the main buildings. In addition, a few faculty are housed at the UPMC Hillman Cancer Center, 1.5 miles away.

- Faculty office space

The school has private offices for almost all full-time faculty in the Public Health/Crabtree complex. A few faculty whose primary research locations are elsewhere have offices at these other research locations. Many of those faculty also have secondary shared offices in Public Health/Crabtree. Within the buildings, departments are almost entirely housed as units; there is very little divided space since the building was fully rearranged after the renovation just a few years ago.

- Staff office space

All administrative staff have shared or private offices in Public Health/Crabtree. Departmental staff are housed within their departments, and the dean's office staff is split between two locations within the school. Dean's office student affairs (including BSPH office) staff are housed in a large suite on the first floor of the building to be easily accessible and welcoming to students.

- Classrooms

The building contains two large auditoria and eight other classrooms. There are also approximately 20 conference rooms. Conference room space is adequate, but classroom space is tight. The classrooms are scheduled through the registrar's office, which gives first preference to SPH classes but then fills the rooms with many other University classes. This can result in a lack of flexibility if needs change once rooms have been scheduled (for example if the incoming class is larger than expected). However, the SPH also has access to all other classrooms in the University.

- Shared student space

The school has a large first-floor commons area that includes a coffee shop and tables and chairs for eating, studying, and collaborating. The commons is open to the public and is popular with SPH students, faculty, and staff. SPH students also have access to many other common spaces on campus, including study and workspaces in the libraries. Each department has common student spaces for study and collaboration. These differ slightly from department to department but are quite large. For example, the Department of Biostatistics has two large rooms, one with carrels for work and study, and one with open tables for collaboration and relaxation. The Department of Human Genetics similarly has a small room with carrels and a large collaboration room, as well as a break room for students and others who work in the labs.

- Laboratories, if applicable to public health degree school offerings

The Public Health/Crabtree complex includes a number of dry and wet research spaces. The wet lab space is entirely contained within the laboratory annex built in 2014, which consists of approximately 30,000 square feet of lab space, plus freezer rooms and other infrastructure. Many public health students work in the laboratories. The school also has one lab classroom.

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

   The spaces noted above are adequate to support the teaching, research, and practice missions of the SPH. The school is currently growing, but there is adequate space for the planned new faculty and staff.

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

   Strengths, challenges, and solutions in progress: Office space is sufficient for faculty and staff, and there are sufficient conference rooms and spaces for students as well. With the growth of the BSPH undergraduate program, we are exploring options for designating a specific study space for those students. Most research was moved back to the main buildings when the most recent renovation was complete. Those units that are still in rental space have very specific needs that are served by those spaces, such as seeing clinical study participants. Classroom space is minimally adequate but frustrating. If a class size is unexpectedly large or there are other late changes, classrooms may already be booked, making adjustments difficult. The school's Office of Student Affairs is collaborating with faculty to improve processes and work within the classroom scheduling system to ensure that the school's needs are met. For example, the Educational Policies and Curriculum Committee recently revised its policies to allow courses to be scheduled before they are fully reviewed to eliminate an important bottleneck in the classroom scheduling process. (Full review and approval is required, however, before the course can be offered).

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:

- library resources and support available for students and faculty

  Students, staff, and faculty at the School of Public Health have access to the resources of the Health Sciences Library System (HSLS), the University Library System (ULS) and Barco Law Library. The comprehensive collections provided by the two library systems and the law library ensure that the research needs are fully met, regardless of topic or discipline. HSLS, which is physically located in Falk Library in Scaife Hall, provides access to key health sciences research databases, including via the Ovid interface: Medline, APA PsycInfo, and CABI Global Health; Embase (Elsevier); Web of Science (including Social Science Citation Index, Science Citation Index, SciELO Citation Index, KCI-Korean Journal Database, and Biosis Previews; Clarivate Analytics); McGraw Hill Medical databases; CINAHL (Ebsco); and Cochrane Library (Wiley), among others. Additionally, the ULS databases and Barco Law Library databases are used by SPH faculty and students for topics such as anthropology, economics, and health law and policy.

  The physical and online collections at the University of Pittsburgh have both depth and breadth. PittCat (built using the Alma cloud-based library system) is the discovery system for locating books, book chapters, journals and journal articles, theses and dissertations, and more, regardless of the format or medium. The confluence of the three libraries provides for a rich research environment that includes approximately 12,000 journal titles in the health and biological sciences (1,400 for public health, 244 for genetics, and 344 for microbiology and immunology), over 3,000 journals in the earth and environmental sciences, nearly 15,000 journal titles in the social sciences (including over 740 titles in psychology), and over 120 titles in statistics. Journals for health policy, law, and economics are readily accessible as well. Of course, the great majority of journals are available in electronic format. Over 264,000 monographs are available covering health, genetics, the environment, biostatistics, and epidemiology—of which over 159,000 are accessible online. University of Pittsburgh faculty and students have access to all library resources from off-campus through the University's Secure Remote Access service. For items not in one of the University of Pittsburgh collections, HSLS offers subsidized document delivery/interlibrary loan.

  HSLS has a staff of 22 faculty librarians, including an instructional designer. Each health sciences school has a designated liaison librarian; the public health liaison received an MPH from the University of Texas Health Science Center at Houston and has over 20 years of experience in academic public health librarianship. The public health liaison regularly teaches in-class sessions (18 in 2022-2023), each tailored to meet the needs of the specific class. She also meets with individual students to help locate research literature for class papers, master's essays and theses, comprehensive exams, and dissertations. The HSLS Ask-A-Librarian service connects students and faculty to a librarian via chat Monday through Friday from 9:00 a.m. to 5:00 p.m. Additionally, many of the HSLS librarians and staff teach sessions open to any member of the Pitt community on topics such as data science/management, finding funding, scholarly communication, instructional and visual design, citation management software, and more. HSLS also houses the Molecular Biology (MolBio) Information Service, a unique program that links genetics students and researchers with the software and expertise they need.

Falk Library is the physical home of HSLS. It is currently undergoing extensive renovations as part of a building-wide construction project. Highlights of the space to be completed in 2024 include new spaces for expanded learning, virtual reality, interprofessional collaboration and study, integrated technology, and a recording studio. Well-equipped computers with a variety of accessible technology, software packages, and circulating laptops are available for students.

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

  The University's centralized IT service (Pitt IT) provides physical and virtual computing laboratories for students' use as well as computer lab classrooms that are used for several SPH classes. Pitt IT provides heavily discounted computers for those students needing to purchase a new computer. There are also computers available for loan from both Pitt IT and SPH IT if needed. Students have access to a wide range of software free of charge, including professional software such as statistical packages that they use for classes and research. The Center for Research Computing provides free access to high-throughput research computing resources for students and others. Students also have access to a network of printers supported by Pitt IT, including in the SPH building, and have a free printing allocation each semester.

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

  Computing resources for faculty (and staff) include all of those described for students above. Faculty also have several items available for loan from Pitt IT, the Center for Teaching and Learning, and SPH IT for use in teaching. These items include laptops, conferencing equipment, and presentation equipment. On the research side, some faculty also store and analyze data on the HSRDC, which is a HIPAA and FISMA compliant computing environment. The Office of the Senior Vice Chancellor of the Health Sciences is currently developing additional shared resources for the health sciences schools, including providing easier access to UPMC electronic medical record data.

- technical assistance available for students and faculty

  SPH students, faculty, and staff rely heavily on support for desktop and research computing from the eight-person SPH IT group. Almost all help is available on a same-day basis. Pitt IT also provides a 24/7 help desk for computer support, which is available to all students, faculty, and staff. There are locations throughout the campus where students can stop and get support for any issues they may have with their computers, including help with installing the software needed for their classes or research.

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

   Computing resources for education, research, and daily activities are more than adequate and well-supported both at the school and University levels. Staff and faculty have consistently rated IT support from SPH IT at a 99% or higher positive rating.

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

   Strengths, challenges, and solutions in progress: Resources are adequate to support the school's mission and are available to faculty, staff, and students. Technical assistance provided by the

school's IT group is outstanding and involves essentially no wait time. Library resources are outstanding and so is the support provided by the Health Sciences Librarian affiliated with the school. No challenges noted.

D1. MPH & 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 foundational public health learning objectives listed above (1-12). The matrix must identify all options for MPH and DrPH students used by the school.

Table D1-1a. Content Coverage for MPH (excluding MPH in Behavioral and Community Health Sciences, MPH in Environmental and Occupational Health, and MPH in Infectious Disease Pathogenesis, Eradication, and Laboratory Practice Concentrations)

Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy, and values	PUBHLT 2033: Foundations of Public Health
2. Identify the core functions of public health and the 10 Essential Services	PUBHLT 2033: Foundations of Public Health
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2033: Foundations of Public Health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	EPIDEM 2110: Principles of Epidemiology
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBHLT 2033: Foundations of Public Health
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2033: Foundations of Public Health
7. Explain effects of environmental factors on a population's health	EOH 2013: Environmental Health and Disease
8. Explain biological and genetic factors that affect a population's health	PUBHLT 2015: Public Health Biology
9. Explain behavioral and psychological factors that affect a population's health	BCHS 2509: Social and Behavioral Sciences and Public Health
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	BCHS 2509: Social and Behavioral Sciences and Public Health
11. Explain how globalization affects global burdens of disease	PUBHLT 2033: Foundations of Public Health
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2033: Foundations of Public Health

MPH students in the Behavioral and Community Health Sciences concentration enroll in more advanced coursework in lieu of BCHS 2509 - Social and Behavioral Sciences and Public Health (learning objectives 9 and 10). Course substitutions can be found highlighted in red in the following table (D1-1b).

Table D1-1b. Content Coverage for MPH in Behavioral and Community Health Sciences Concentration

Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy, and values	PUBHLT 2033: Foundations of Public Health
2. Identify the core functions of public health and the 10 Essential Services	PUBHLT 2033: Foundations of Public Health
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2033: Foundations of Public Health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	EPIDEM 2110: Principles of Epidemiology
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBHLT 2033: Foundations of Public Health
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2033: Foundations of Public Health
7. Explain effects of environmental factors on a population's health	EOH 2013: Environmental Health and Disease
8. Explain biological and genetic factors that affect a population's health	PUBHLT 2015: Public Health Biology
9. Explain behavioral and psychological factors that affect a population's health	*BCHS 2520: Theories of Health Behavior and Health Education*
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	*BCHS 2554: Introduction to Community Health*
11. Explain how globalization affects global burdens of disease	PUBHLT 2033: Foundations of Public Health
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2033: Foundations of Public Health

MPH students in the Environmental and Occupational Health concentration enroll in more advanced coursework in lieu of EOH 2013: Environmental Health and Disease (learning objective 7). Course substitutions can be found highlighted in red in the following table (D1-1c).

Table D1-1c. Content Coverage for MPH in Environmental and Occupational Health Concentration

Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy, and values	PUBHLT 2033: Foundations of Public Health
2. Identify the core functions of public health and the 10 Essential Services	PUBHLT 2033: Foundations of Public Health
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2033: Foundations of Public Health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	EPIDEM 2110: Principles of Epidemiology
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBHLT 2033: Foundations of Public Health
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2033: Foundations of Public Health
7. Explain effects of environmental factors on a population's health	*EOH 2180: Introduction to Risk Sciences*
8. Explain biological and genetic factors that affect a population's health	PUBHLT 2015: Public Health Biology
9. Explain behavioral and psychological factors that affect a population's health	BCHS 2509: Social and Behavioral Sciences and Public Health
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	BCHS 2509: Social and Behavioral Sciences and Public Health
11. Explain how globalization affects global burdens of disease	PUBHLT 2033: Foundations of Public Health
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2033: Foundations of Public Health

MPH students in the Infectious Disease Pathogenesis, Eradication, and Laboratory Practice concentration enroll in more advanced coursework in lieu of PUBHLT 2015: Public Health Biology (learning objective 8). Course substitutions can be found highlighted in red in the following table (D1-1d).

Table D1-1d. Content Coverage for MPH in Infectious Disease Pathogenesis, Eradication, and Laboratory Practice Concentration

Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy, and values	PUBHLT 2033: Foundations of Public Health
2. Identify the core functions of public health and the 10 Essential Services	PUBHLT 2033: Foundations of Public Health
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2033: Foundations of Public Health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	EPIDEM 2110: Principles of Epidemiology
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBHLT 2033: Foundations of Public Health
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2033: Foundations of Public Health
7. Explain effects of environmental factors on a population's health	EOH 2013: Environmental Health and Disease
8. Explain biological and genetic factors that affect a population's health	*IDM 2010: Pathogen Biology*
9. Explain behavioral and psychological factors that affect a population's health	BCHS 2509: Social and Behavioral Sciences and Public Health
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	BCHS 2509: Social and Behavioral Sciences and Public Health
11. Explain how globalization affects global burdens of disease	PUBHLT 2033: Foundations of Public Health
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2033: Foundations of Public Health

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.

   Syllabi for all courses referenced above are provided in ERF> Criterion D> D1> D1.2.

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

Strengths, challenges, and solutions in progress: The foundational competency courses provide a solid basis for more advanced work in the remaining core and concentration courses. In particular, PUBHLT 2033: Foundations of Public Health is required in the first semester of enrollment. No major changes are planned at this time other than continued monitoring of and responsiveness to feedback from students and other stakeholders.

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 or program's MPH degrees, including the required curriculum for each concentration. Information may be provided in the format of Template D2-1 (single- and multi-concentration formats available) or in hyperlinks to student handbooks or webpages, but the documentation must present a clear depiction of the requirements for each MPH degree.

Part A: Foundational requirements for MPH degree		
Course number	**Course name**	**Credits (if applicable)**
Foundational courses for all MPH students regardless of concentration (exceptions listed below)		
BCHS 2509*	**Social and Behavioral Sciences and Public Health**	**3**
BIOST 2011	**Principles of Statistical Reasoning**	**3**
OR		
BIOST 2041	**Introduction to Statistical Methods**	
EOH 2013**	**Environmental Health and Disease**	**2**
EPIDEM 2110	**Principles of Epidemiology**	**3**
HPM 2001	**Health Policy and Management in Public Health**	**3**
PUBHLT 2022	**The Dean's Public Health Grand Rounds** *(two terms)*	**0**
PUBHLT 2015***	**Public Health Biology**	**2**
PUBHLT 2033	**Foundations in Public Health**	**1**
PUBHLT 2034	**Public Health Communications**	**2**
PUBHLT 2035	**Applications in Public Health**	**2**
	TOTAL FOUNDATIONAL CREDITS	**21**

*MPH students in the Behavioral and Community Health Sciences concentration enroll in more advanced coursework in lieu of BCHS 2509: Social and Behavioral Sciences in Public Health. Substitute courses are included in the concentration-specific course list in red italics.
**MPH students in the Environmental and Occupational Health concentration enroll in more advanced coursework in lieu of EOH 2013: Environmental Health and Disease. The substitute course is included in the concentration-specific course list in red italics.
***MPH students in the Infectious Disease Pathogenesis, Eradication, and Laboratory Practice concentration enroll in more advanced coursework in lieu of PUBHLT 2015: Public Health Biology. The substitute course is included in the concentration-specific course list in red italics.

Part B: Concentration requirements for MPH degree in Behavioral and Community Health Science		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
BCHS 2503	**Practicum**	**1-3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Behavioral and Community Health Science concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**12-16**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for MPH degree in Environmental and Occupational Health		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
EOH 2108	**Environmental and Occupational Health Practicum**	**2**
EOH 2021	**Special Studies**	**2**
Concentration courses for Environmental and Occupational Health concentration		
BIOST 2049	**Applied Regression Analysis**	**3**
EOH 2122	**Transport and Fate of Environmental Agents**	**3**
EOH 2175	**Principles of Toxicology**	**3**
EOH 2180	***Introduction to Risk Sciences***	***1***
EOH 2309	**Environmental Health Chemistry**	**3**
EOH 2504	**Principles of Environmental Exposure**	**3**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**8**
	TOTAL CONCENTRATION CREDITS	**28**

Part B: Concentration requirements for MPH degree in Epidemiology		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
EPIDEM 2210	**Special Studies - Essay**	**1-2**
EPIDEM 2214	**Public Health Internship**	**1-2**
Concentration courses for Epidemiology concentration		
BIOST 2049	**Applied Regression Analysis**	**3**
EPIDEM 2160	**Epidemiology of Infectious Diseases**	**2**
EPIDEM 2170	**Chronic Disease Epidemiology**	**2**
EPIDEM 2180	**Fundamentals of Epidemiological Methods**	**3**
EPIDEM 2181	**Design and Conduct of Clinic Trials**	**2**
EPIDEM 2250	**Seminar in Epidemiology**	**1**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**9-11**
Requirements for degree completion not associated with a course (if applicable)		
Academic Integrity Training		
IRB Training		
Presentation Training		
	TOTAL CONCENTRATION CREDITS	**24**

Part B: Concentration requirements for MPH degree in Health Policy and Management		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
HPM 2025	**HPM Practicum**	**1**
HPM 2037	**Essay-HA**	**1**
Concentration courses for Health Policy and Management concentration		
HPM 2012	**Financial Management Foundations Health Care and Public Health**	**3**
HPM 2020	**Professional Development Seminar 1**	**1**
HPM 2021	**Professional Development Seminar 2**	**1**
HPM 2028	**Microeconomics Applied to Health**	**3**
HPM 2055	**Managing Health Programs and Projects**	**2**
HPM 2063	**The Politics of Health Policy**	**2**
HPM 2064	**Health Policy Analysis**	**2**
HPM 2081	**Public Health Agency Management**	**3**
HPM 2105	**Introduction to the US Healthcare Delivery System**	**1**
HPM 2131	**Public Health Law and Ethics**	**2**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**2**
	TOTAL CONCENTRATION CREDITS	**24**

Part B: Concentration requirements for MPH degree in Infectious Disease Management, Intervention, and Community Practice		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
IDM 2007	**Public Health Communicable Disease Practicum**	**3**
OR		
IDM 2068	**Infection Prevention and Control Practicum/Internship**	
IDM 2021	**Special Studies in Microbiology**	**2-3**
Concentration courses for Infectious Disease Management, Intervention, and Community Practice concentration		
IDM 2025	**Microbiology Seminar**	**1**
IDM 2032	**Human Diversity and Public Health**	**2**
IDM 2034	**Control and Prevention of HIV/AIDS**	**2**
IDM 2038	**Prevention, Treatment, and Control of Global Infectious Diseases**	**3**
IDM 2069	**Infection Prevention and Control in Health Care Settings**	**2**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**5-6**
	TOTAL CONCENTRATION CREDITS	**21**

Part B: Concentration requirements for MPH degree in Infectious Disease Pathogenesis, Eradication, and Laboratory Practice		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
IDM 2007	**Public Health Communicable Disease Practicum**	**3**
IDM 2021	**Special Studies in Microbiology**	**2-3**
Concentration courses for Infectious Disease Pathogenesis, Eradication, and Laboratory Practice concentration		
IDM 2003	**Host Response to Microbial Infection**	**2**
IDM 2004	**Viral Pathogenesis**	**2**
IDM 2010	***Pathogen Biology***	***2***
IDM 2025	**Microbiology Seminar**	**1**
IDM 2161	**Methods of Infectious Disease Epidemiology**	**1**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**9-10**
	TOTAL CONCENTRATION CREDITS	**23**

Part B: Concentration requirements for MPH degree in Multidisciplinary		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
PUBHLT 2002		**1-2**
PUBHLT 2029		**1-3**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**16-19**
	TOTAL CONCENTRATION CREDITS	**21**

Part B: Concentration requirements for MPH degree in Public Health Genetics		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
HUGEN 2050	**Public Health Genetics Practicum**	**1**
HUGEN 2021	**Special Studies**	**1**
Concentration courses for Public Health Genetics concentration		
HUGEN 2010	**Bioinformatic Resources for Geneticists**	**1**
HUGEN 2011	**Scientific Writing in Human Genetics**	**1**
HUGEN 2020	**Introduction to Population Genetics and Genetic Epidemiology**	**3**
HUGEN 2025 *(two terms)*	**Human Genetics Seminar**	**1**
HUGEN 2040	**Molecular Basis of Human Inherited Disease**	**3**
HUGEN 2049	**Introduction Public Health Genetics**	**3**
HUGEN 2052	**Ethical Issues in Clinical and Public Health Genetics**	**1**
HUGEN 2054	**Applications in Public Health Genetics and Genomics**	**3**
Three Credits from the Following Courses:		
HUGEN 2029	Introduction to Gene Mapping	3
HUGEN 2056	Genetic Conditions and Public Health Programs	2
HUGEN 2060	Chromosomes - Structure and Function	2
HUGEN 2061	Cancer Genetic Counseling	1
HUGEN 2090	Genetics of Complex Diseases 1	2
HUGEN 2091	Genetics of Complex Diseases 2	1
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**6**
	TOTAL CONCENTRATION CREDITS	**26**

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.

The University of Pittsburgh requires joint degree programs to include all requirements for each individual degree. Thus, all SPH joint degree students complete the full normal core and concentration requirements for their respective MPH degrees. Two joint degree programs, MPH in Behavioral and Community Health Sciences/MS in Social Work (MPH-MSW) and MS in Genetic Counseling/MPH in Public Health Genetics, allow students to take alternate courses highlighted in green below for their APE. Those joint degree students taking alternate courses are required to complete and submit all SPH APE practicum requirements such as learning agreements and portfolio products. Curriculum requirements that differ from MPH students who are not completing a joint degree are highlighted in orange below.

Part A: Foundational requirements for MPH degree		
Course number	**Course name**	**Credits (if applicable)**
Foundational courses for all MPH students regardless of concentration (exceptions listed below)		
BCHS 2509*	**Social and Behavioral Sciences and Public Health**	**3**
BIOST 2011	**Principles of Statistical Reasoning**	**3**
OR		
BIOST 2041	**Introduction to Statistical Methods**	
EOH 2013	**Environmental Health and Disease**	**2**
EPIDEM 2110	**Principles of Epidemiology**	**3**
HPM 2001	**Health Policy and Management in Public Health**	**3**
PUBHLT 2022	**The Dean's Public Health Grand Rounds** *(two terms)*	**0**
PUBHLT 2015	**Public Health Biology**	**2**
PUBHLT 2033	**Foundations in Public Health**	**1**
PUBHLT 2034	**Public Health Communications**	**2**
PUBHLT 2035	**Applications in Public Health**	**2**
	TOTAL FOUNDATIONAL CREDITS	**21**

*MPH students in the Behavioral and Community Health Sciences joint degree concentrations enroll in more advanced coursework in lieu of BCHS 2509: Social and Behavioral Sciences in Public Health. Substitute courses are included in the concentration-specific course lists in red italics.

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/PhD in Anthropology (MPH-PhD)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
BCHS 2503	**Practicum**	**1-3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Joint Degree MPH in Behavioral and Community Health Science/PhD in Anthropology (MPH-PhD) concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**
Electives (as applicable)		
Anthropology Electives	*Public health-relevant anthropology electives*	**6**
Public Health Electives	*Insert total number of credits in the last column*	**6-10**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/MS in International Development (MPH-MID)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
BCHS 2503	**Practicum**	**1-3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Joint Degree MPH in Behavioral and Community Health Science/MS in International Development (MPH-MID) concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/MS in International Development (MPH-MID)		
Course number	**Course name**	**Credits (if applicable)**
Electives (as applicable)		
GSPIA Electives	*Public health-relevant Graduate School of Public and International Affairs (GSPIA) electives*	**6**
Public Health Electives	*Insert total number of credits in the last column*	**6-10**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/MS in Public Affairs (MPH-MPA)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
BCHS 2503	**Practicum**	**1-3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Joint Degree MPH in Behavioral and Community Health Science/MS in Public Affairs (MPH-MPA) concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**
Electives (as applicable)		
GSPIA Electives	*Public health-relevant Graduate School of Public and International Affairs (GSPIA) electives*	**6**
Public Health Electives	*Insert total number of credits in the last column*	**6-10**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/MS in Public and International Affairs (MPH-MPIA)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
BCHS 2503	**Practicum**	**1-3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Joint Degree MPH in Behavioral and Community Health Science/MS in Public and International Affairs (MPH-MPIA) concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**
Electives (as applicable)		
GSPIA Electives	*Public health-relevant Graduate School of Public and International Affairs (GSPIA) electives*	**6**
Public Health Electives	*Insert total number of credits in the last column*	**6-10**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/MS in Social Work (MPH-MSW)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
SWINT 2099	**Field Work**	**3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Joint Degree MPH in Behavioral and Community Health Science/MS in Social Work (MPH-MSW) concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**
Electives (as applicable)		
Social Work Electives	*Public health-relevant social work electives*	**6**
Public Health Electives	*Insert total number of credits in the last column*	**6-11**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for Joint Degree MPH in Behavioral and Community Health Science/PhD in Social Work (MPH-PhD)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
BCHS 2503	**Practicum**	**1-3**
BCHS 2521	**Essay**	**1-3**
Concentration courses for Joint Degree MPH in Behavioral and Community Health Science/PhD in Social Work (MPH-PhD) concentration		
BCHS 2520	**Theories of Health Behavior and Health Education**	**1**
BCHS 2525	***Introduction to Applied Research***	***3***
BCHS 2554	***Introduction to Community Health***	***3***
BCHS 2990	**Social Dynamics in Public Health**	**1**
BCHS 2992	**Systems Theories and Approaches**	**1**
Electives (as applicable)		
Social Work Electives	*Public health-relevant social work electives*	**6**
Public Health Electives	*Insert total number of credits in the last column*	**6-10**
	TOTAL CONCENTRATION CREDITS	**27**

Part B: Concentration requirements for Joint Degree Juris Doctor/MPH in Health Policy and Management (JD-MPH)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
HPM 2025	**HPM Practicum**	**1**
LAW upper-level writing course	*Upper-level LAW legal writing course with appropriate revisions to meet MPH essay (HPM 2037 requirement)*	**1-3**
Concentration courses for Joint Degree Juris Doctor/MPH in Health Policy and Management (JD-MPH) concentration		
HPM 2012	**Financial Management Foundations Health Care and Public Health**	**3**
HPM 2020	**Professional Development Seminar 1**	**1**
HPM 2021	**Professional Development Seminar 2**	**1**

Part B: Concentration requirements for Joint Degree Juris Doctor/MPH in Health Policy and Management (JD-MPH)		
Course number	**Course name**	**Credits (if applicable)**
HPM 2028	**Microeconomics Applied to Health**	**3**
HPM 2055	**Managing Health Programs and Projects**	**2**
HPM 2063	**The Politics of Health Policy**	**2**
HPM 2064	**Health Policy Analysis**	**2**
HPM 2081	**Public Health Agency Management**	**3**
HPM 2105	**Introduction to the US Healthcare Delivery System**	**1**
HPM 2131	**Public Health Law and Ethics**	**2**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**0-2**
	TOTAL CONCENTRATION CREDITS	**24**

Part B: Concentration requirements for Joint Degree MS Genetic Counseling/MPH in Public Health Genetics (MS-MPH)		
Course number	**Course name**	**Credits (if applicable)**
APE & ILE courses (as applicable)		
HUGEN 2036	**Genetic Counseling Internship**	**8**
HUGEN 2021	**Special Studies**	**1**
Concentration courses for Joint Degree MS Genetic Counseling/MPH in Public Health Genetics (MS-MPH)		
HUGEN 2010	**Bioinformatic Resources for Geneticists**	**1**
HUGEN 2011	**Scientific Writing in Human Genetics**	**1**
HUGEN 2020	**Introduction to Population Genetics and Genetic Epidemiology**	**3**
HUGEN 2025 *(two terms)*	**Human Genetics Seminar**	**0**
HUGEN 2032	**Genetic Techniques**	**2**
HUGEN 2035	**Principles of Genetic Counseling**	**3**
HUGEN 2037	**Genetic Counseling Professional Development and Research Series**	**2**
HUGEN 2038	**Intervention Skills for Genetic Counseling**	**3**
HUGEN 2039	**Risk Calculation Genetic Counseling**	**1**
HUGEN 2040	**Molecular Basis of Human Inherited Disease**	**3**
HUGEN 2047	**Clinical Genetics Case Conference**	**1**
HUGEN 2049	**Introduction Public Health Genetics**	**3**
HUGEN 2052	**Ethical Issues in Clinical and Public Health Genetics**	**1**
HUGEN 2054	**Applications in Public Health Genetics and Genomics**	**3**
HUGEN 2060	**Chromosomes - Structure and Function**	**2**
HUGEN 2061	**Cancer Genetic Counseling**	**1**
Electives (as applicable)		
Electives	*Insert total number of credits in the last column*	**2**
	TOTAL CONCENTRATION CREDITS	**26**

3) Provide a matrix, in the format of Template D2-2, that indicates the assessment activity for each of the foundational competencies listed above (1-22). 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 program, 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.

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to settings and situations in public health practice	EPIDEM 2110: Principles of Epidemiology	**Exams** – The purpose of each of the exams will be to evaluate how well the student recognizes and expresses the concepts of epidemiology, why certain actions are done in epidemiology, and the appropriate application of epidemiologic approaches and methods. This means that, in many circumstances, you will be required to think and state how an epidemiologic principle applies to a given situation, or to identify which given example is the best representation of an epidemiologic principle. The exams are based on critical thinking and not on memorization.
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	BCHS 2509: Social and Behavioral Sciences and Public Health	**Methods/Qualitative Analysis Part 1** – assignment asks: Select appropriate data collection methods for your project. What methods do you anticipate using to collect data? And why those? Surveys? Concept mapping? Focus groups? Interviews? Photo voice? Mixed methods (and if so, which ones)? Think about what methods make the most sense for getting at what you want to. Students must additionally speak to recruitment, sampling, and analysis plan. **Final Project** requires students to: Propose methods of research (qualitative or mixed methods) used to inform your intervention - these should reflect the context that you are working within.
	BIOST 2011: Principles of Statistical Reasoning	Students complete **15 homework assignments and 15 quizzes** where they are asked to perform statistical analysis using Stata.
	BIOST 2041: Introduction to Statistical Method	**Module 1 (Intro to Data) Essentials Quiz** consists of multiple-choice questions asking students to identify and define key aspects of data collection methods (study design, sampling, bias, confounding, data types). **Module 1 (Intro to Data) Higher-level Quiz** consists of multiple-choice questions asking students to analyze scenarios for bias and confounding, compare and contrast study designs and sampling techniques.

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		Module 1 (Intro to Data) Research Article Dissection asks students to analyze a research study with respect to potential bias and confounding based on study design and data collection methods.
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate	BCHS 2509: Social and Behavioral Sciences and Public Health	**Methods/Qualitative Analysis Part 2** - This assignment requires students to complete line-by-line analysis and then coding of a given page of focus group data. Students are graded by "data bits" recorded for each line and codes ultimately assigned, as compared to master coders, with 80% agreement or above = 'A'.
	BIOST 2011: Principles of Statistical Reasoning	Students complete **15 homework assignments and 15 quizzes** where they are asked to perform statistical analysis using Stata.
	BIOST 2041: Introduction to Statistical Methods	**6 Lab assignments** which ask students to perform data analysis using R software and interpret the results. **Module 1 (Intro to Data) Lab** asks students to perform exploratory data analysis. **Module 2 (Probability) Lab** asks students to calculate probabilities with distributions and perform bootstrapping. **Module 3 (Quantitative Outcomes part 1) Lab** asks students to perform one- and two-sample inferential procedures for numerical outcomes. **Module 4 (Quantitative Outcomes part 2) Lab** asks students to perform one-way ANOVA and linear regression. **Module 5 (Categorical data) Lab** asks students to perform categorical data analysis. **Final Lab** asks students to select and apply appropriate procedures and visualizations to create a table of primary comparisons between 2+ groups.
4. Interpret results of data analysis for public health research, policy or practice	BCHS 2509: Social and Behavioral Sciences and Public Health	**Methods/Qualitative Analysis** - Students complete line-by-line analysis and coding of a focus group transcript excerpt. Students additionally may earn extra credit by describing and drawing a model of relationships between codes.

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
	BIOST 2011: Principles of Statistical Reasoning	Students complete **15 homework assignments** where they are asked to interpret results of data analysis.
	BIOST 2041: Introduction to Statistical Methods	**Module 3 (Quantitative Outcomes part 1) Research Article Dissection** asks students to interpret the results and evaluate the conclusions of a research study that used one- and/or two-sample inferential procedures for numerical outcomes. **Module 4 (Quantitative Outcomes part 1) Research Article Dissection** asks students to interpret the results and evaluate the conclusions of a research study that used ANOVA or linear regression. **Module 5 (Categorical data) Research Article Dissection** asks students to interpret the results and evaluate the conclusions of a research study that used categorical data analysis.
Public Health & Health Care Systems		
5. Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings	HPM 2001: Health Policy and Management in Public Health	**Mid-term and final exams** - The exams will require the students to be able to critically examine the public health policymaking process and to identify differences between the organization and structure of the US healthcare system and other countries around the world. In particular, students will be tested on the policy formulation, implementation, and modification processes through application of key concepts to real world examples. **Discussion boards** require students to participate over the course of term in discussions comparing organization, structure, and function of health care, public health, and regulatory systems across national and international settings.
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 systemic levels	BCHS 2509: Social and Behavioral Sciences and Public Health	These assessments require students to demonstrate knowledge of how structural bias, social inequities and racism undermine population health and create health inequities. **Quiz on Concepts and Terms** - Students are asked: 1 In class we learned that racial segregation... (multiple choice); 2) Which is NOT true about racial

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		segregation (multiple choice); 3) List three groups in the US that we have covered in class, who have significant health inequities and compared to whom (fill in the blank) and 4) provide one example of a social determinant and how it could impact the later health of a child in poverty as compared to a middle class child (fill in the blank). These determinants may be at the organizational, community, or systemic levels. **Quiz on Stakeholders and Methods** - Students are asked to identify the importance of the 2002 IOM report on racial inequities in health care. **Final Exam**
Planning & Management to Promote Health		
7. Assess population needs, assets, and capacities that affect communities' health	BCHS 2509: Social and Behavioral Sciences and Public Health	**Theory, Community Assessment and Approaches Quiz** - students are asked: 1) select concepts critical to community approach to health research and intervention (matching); 2) referencing a given example, identify which is not a community engaged approach (multiple choice); 3) identify which activities are not part of early steps in a community assessment (multiple choice); 4) why sharing findings is a critical phase of community assessment (multiple choice); 5) referencing a given community assessment example, identify which statement is not true about its specifics (multiple choice). **Final Presentation** requires students to: Propose methods of research (qualitative or mixed methods) used to inform your intervention - these should reflect the context that you are working within. Note where/how a needs assessment contributes to your knowledge.
8. Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs	BCHS 2509: Social and Behavioral Sciences and Public Health	**Evaluation Plan and Final Presentation** - Students are asked to: Indicate how you are applying cultural values and practices into the intervention implementation, so that it is appropriate and more likely to be effective.

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
9. Design a population-based policy, program, project, or intervention	PUBHLT 2035: Applications in Public Health	Students participate in an **interdisciplinary group project** through which they design a program or intervention that addresses a priority area of Allegheny County Health Department's Community Health Improvement Plan. There are four assignments that are part of this project: **Assignment 1: Mission Statement and Public Health Significance** **Assignment 2: Stakeholder Mapping and Analysis** **Assignment 3: Budget and Budget Justification** **Assignment 4: Objectives, Activities, and Evaluation**
10. Explain basic principles and tools of budget and resource management	PUBHLT 2035: Applications in Public Health	**Group Assignment 3** - **Budget and Budget Justification** requires students to draft a three-year, line item budget for their project. Students are then required to draft three budget justifications that support their resource allocations outlined in the budget. These justifications must be in three distinct areas of the budget proposal.
11. Select methods to evaluate public health programs	BCHS 2509: Social and Behavioral Sciences and Public Health	**Assignment 4 Evaluation Plan** - After creating SMART objectives, students are asked: 1) Choose one process objective and one outcome (ST or MT) objective and indicate what information you would collect to determine whether the objective was met (Referencing Steps 3 and 4 of the CDC framework); 2) Of these two objectives, where could you find that information? I.e., what could a source be? 3) From your proposed intervention, give an example of additional important program information that you would best get via qualitative methods and which method would work well to get that information.
Policy in Public Health		
12. Discuss the policy-making process, including the roles of ethics and evidence	HPM 2001: Health Policy and Management in Public Health	**Mid-term and final exams** require the students to be able to critically examine the public health policymaking process and to identify differences between the organization and structure of the US healthcare system and other countries around the world. In particular, students will be tested on the

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		policy formulation, implementation, and modification processes through application of key concepts to real world examples. **Policy brief and accompanying cover letter addressed to a specific policymaker** requires students to create a concise summary of an important health policy issue, analyzing potential policy options, and offering a recommendation on the best policy to address the issue, taking into account the roles of ethics and evidence.
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	BCHS 2509: Social and Behavioral Sciences and Public Health	**Quiz 3 - Methods and Stakeholders** - this quiz requires students to describe stakeholder engagement, traits of stakeholders, partnerships, and coalition building opportunities. **Assignment 4 Evaluation Plan** - Before describing an intervention outline, this assignment requires students to: describe how each of five diagnoses relates to your topic and why each diagnosis could matter for developing an intervention effort (1-2 sentences each). *(Note that this corresponds with Step 1 of the CDC six step evaluation framework).* We expect to see citations here indicating evidence, and strategies to identify your stakeholders and potential partnerships.
14. Advocate for political, social, or economic policies and programs that will improve health in diverse populations	HPM 2001: Health Policy and Management in Public Health	**Policy brief and accompanying cover letter addressed to a specific policymaker**. The letter should explain the importance/urgency of the policy issue and recommend a policy solution.
15. Evaluate policies for their impact on public health and health equity	HPM 2001: Health Policy and Management in Public Health	**Policy brief** - Create a concise summary of an important health policy issue, analyzing potential policy options, and offering a recommendation on the best policy to address the issue, taking into account the impact of public health and health equity.
Leadership		
16. Apply leadership and/or management principles to address a relevant issue	PUBHLT 2035: Applications in Public Health	**Individual Assignment 1** - Students draw upon current and existing coursework to write a leadership case study analysis. They are also asked to draw upon their practicum or prior work experience to

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		answer the questions. **Group Project -** Students are required to serve as a leader for one of the four group assignments. They are peer evaluated on the following elements: establishing a timeline for the assignment, completing a first draft, and soliciting and incorporating group feedback into the final submission.
17. Apply negotiation and mediation skills to address organizational or community challenges	PUBHLT 2035: Applications in Public Health	**Individual Assignment 2** - Students are asked to write a statement to organizational leadership supporting the reapplication for grant funding for their interdisciplinary group project. Students are asked to draw upon a class exercise in negotiation and mediation to draft their arguments and communicate them effectively in writing. Students also complete an in-class, verbal exercise in negotiation and mediation.
Communication		
18. Select communication strategies for different audiences and sectors	PUBHLT 2034: Public Health Communications	**Mid-term exam** - The exam consists of short-answer questions on audience analysis, cultural competence, and choosing a communication strategy based on the audience. For example, you may be asked to look at a health-related web page, identify the audience, describe how the page is targeted to that audience, and suggest changes to increase the cultural competence.
19. Communicate audience-appropriate (i.e., non-academic, non-peer audience) public health content, both in writing and through oral presentation	PUBHLT 2034: Public Health Communications	**Final exam** - Students will critique written communication examples and write or re-write several short examples. **Assignment #2** - Prepare a 60-second, semi-formal oral presentation for a first group meeting with the collaborator for your chosen case. You will deliver your presentation and it will be critiqued in class. Include a paragraph describing your assumptions about your audience and how you might do things differently under different assumptions or with a different audience.
20. Describe the importance of cultural competence in communicating public health content	PUBHLT 2034: Public Health Communications	**Mid-term exam** - The exam consists of short-answer questions on audience analysis, cultural competence, and choosing a communication strategy based on the audience. For example, you may be asked to look at

Table D2-2a. Assessment of Competencies for MPH (excluding MPH in Behavioral and Community Health Sciences concentration)		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		a health-related web page, identify the audience, describe how the page is targeted to that audience, and suggest changes to increase the cultural competence.
Interprofessional Practice		
21. Integrate perspectives from other sectors and/or professions to promote and advance population health	PUBHLT 2035: Applications in Public Health	The **group project** is completed in interdisciplinary teams, ensuring that different perspectives are incorporated into each of the four group assignments. In addition, students participate in a problem-solving workshop where professionals from outside the public health sector evaluate their approach to real world public health problems.
Systems Thinking		
22. Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative	PUBHLT 2035: Applications in Public Health	**Individual assignment 3** - Students are asked to choose a public health topic and identify key elements of concept mapping, as it would apply to this issue.

MPH students in the Behavioral and Community Health Sciences concentration enroll in more advanced coursework in lieu of BCHS 2509 - Social and Behavioral Sciences and Public Health (foundational competencies 2-4, 6-8, 11, and 13). Course substitutions can be found highlighted in red in the following table (D2-2b.).

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to settings and situations in public health practice	EPIDEM 2110: Principles of Epidemiology	**Exams** – The purpose of each of the exams will be to evaluate how well the student recognizes and expresses the concepts of epidemiology, why certain actions are done in epidemiology, and the appropriate application of epidemiologic approaches and methods. This means that, in many circumstances, you will be required to think and state how an epidemiologic principle applies to a given situation, or to identify which given example is the best representation of an epidemiologic principle. The exams are based on critical thinking and not on memorization.
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	*BCHS 2525: Introduction to Applied Research*	***Course project**: Students develop a research or evaluation project to address a topic of choice using mixed methods and must justify the selection of methods.*
	BIOST 2011: Principles of Statistical Reasoning	Students complete **15 homework assignments and 15 quizzes** where they are asked to perform statistical analysis using Stata.
	BIOST 2041: Introduction to Statistical Method	**Module 1 (Intro to Data) Essentials Quiz** consists of multiple-choice questions asking students to identify and define key aspects of data collection methods (study design, sampling, bias, confounding, data types). **Module 1 (Intro to Data) Higher-level Quiz** consists of multiple-choice questions asking students to analyze scenarios for bias and confounding, compare and contrast study designs and sampling techniques. **Module 1 (Intro to Data) Research Article Dissection** asks students to analyze a research study

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		with respect to potential bias and confounding based on study design and data collection methods.
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate	*BCHS 2525: Introduction to Applied Research*	***Homework 2:*** *Data analysis using cross-tabulations, Chi squares, and SPSS for computer outputs.*
	BIOST 2011: Principles of Statistical Reasoning	Students complete **15 homework assignments and 15 quizzes** where they are asked to perform statistical analysis using Stata.
	BIOST 2041: Introduction to Statistical Methods	6 Lab assignments which ask students to perform data analysis using R software and interpret the results. **Module 1 (Intro to Data) Lab** asks students to perform exploratory data analysis. **Module 2 (Probability) Lab** asks students to calculate probabilities with distributions and perform bootstrapping. **Module 3 (Quantitative Outcomes part 1) Lab** asks students to perform one- and two-sample inferential procedures for numerical outcomes. **Module 4 (Quantitative Outcomes part 2) Lab** asks students to perform one-way ANOVA and linear regression. **Module 5 (Categorical data) Lab** asks students to perform categorical data analysis. **Final Lab** asks students to select and apply appropriate procedures and visualizations to create a table of primary comparisons between 2+ groups.
4. Interpret results of data analysis for public health research, policy or practice	*BCHS 2525: Introduction to Applied Research*	***Homework 2:*** *students explain in their own words data cleaning, interpretation, and transformations utilized in this assignment.*
	BIOST 2011: Principles of Statistical Reasoning	Students complete **15 homework assignments** where they are asked to interpret results of data analysis.
	BIOST 2041: Introduction to Statistical Methods	**Module 3 (Quantitative Outcomes part 1) Research Article Dissection** asks students to interpret the results and evaluate the conclusions of a research study that used one- and/or two-sample inferential procedures for numerical outcomes.

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		Module 4 (Quantitative Outcomes part 1) Research Article Dissection asks students to interpret the results and evaluate the conclusions of a research study that used ANOVA or linear regression. **Module 5 (Categorical data) Research Article Dissection** asks students to interpret the results and evaluate the conclusions of a research study that used categorical data analysis.
Public Health & Health Care Systems		
5. Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings	HPM 2001: Health Policy and Management in Public Health	**Mid-term and final exams** require students to be able to critically examine the public health policymaking process and to identify differences between the organization and structure of the US healthcare system and other countries around the world. In particular, students are tested on the policy formulation, implementation, and modification processes through application of key concepts to real world examples. **Discussion boards** require students to participate over the course of term in discussions comparing organization, structure, and function of health care, public health, and regulatory systems across national and international settings.
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 systemic levels	*BCHS 2554: Introduction to Community Health*	***Community Assessment Paper:*** *Students design a community assessment using a strengths-based approach for a community of their choice. Students identify social determinants, structural biases and "isms" that impact this community, community partners, and plans for primary and secondary data collection—all in the context of the community's cultural values and practices.*
Planning & Management to Promote Health		
7. Assess population needs, assets, and capacities that affect communities' health	*BCHS 2554: Introduction to Community Health*	***Community Assessment Paper:*** *Students design a community assessment using a strengths-based approach for a community of their choice. Students identify strengths of this community as well as health and other challenges it faces, connecting those to overall community health.*

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
8. Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs	*BCHS 2554: Introduction to Community Health*	***Community Assessment Paper:*** *Students design a community assessment using a strengths-based approach for a community of their choice. Students identify cultural values and practices of the community that can contribute to the design and implementation of public health policies and programs designed to address issues specific to the community.*
9. Design a population-based policy, program, project, or intervention	PUBHLT 2035: Applications in Public Health	Students participate in an **interdisciplinary group project** through which they design a program or intervention that addresses a priority area of Allegheny County Health Department's Community Health Improvement Plan. There are four assignments that are part of this project: **Assignment 1: Mission Statement and Public Health Significance** **Assignment 2: Stakeholder Mapping and Analysis** **Assignment 3: Budget and Budget Justification** **Assignment 4: Objectives, Activities, and Evaluation**
10. Explain basic principles and tools of budget and resource management	PUBHLT 2035: Applications in Public Health	**Group Assignment 3** - **Budget and Budget Justification** requires students to draft a three-year, line item budget for their project. Students are then required to draft three budget justifications that support their resource allocations outlined in the budget. These justifications must be in three distinct areas of the budget proposal.
11. Select methods to evaluate public health programs	*BCHS 2525: Introduction to Applied Research*	***Course project:*** *Students develop a research or evaluation project to address a topic of choice using mixed methods and must justify the selection of methods.*
Policy in Public Health		
12. Discuss the policy-making process, including the roles of ethics and evidence	HPM 2001: Health Policy and Management in Public Health	**Mid-term and final exams** require the students to be able to critically examine the public health policymaking process and to identify differences between the organization and structure of the US healthcare system and other countries around the world. In particular, students will be tested on the policy formulation, implementation, and modification

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		processes through application of key concepts to real world examples. **Policy brief and accompanying cover letter addressed to a specific policymaker** requires students to create a concise summary of an important health policy issue, analyzing potential policy options, and offering a recommendation on the best policy to address the issue, taking into account the roles of ethics and evidence.
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	*BCHS 2554: Introduction to Community Health*	***Community Assessment Paper:*** *Students design a community assessment using a strengths-based approach for a community of their choice. Students identify stakeholders as well as entities with which to collaborate and partner in addressing health issues specific to the community.*
14. Advocate for political, social, or economic policies and programs that will improve health in diverse populations	HPM 2001: Health Policy and Management in Public Health	**Policy brief and accompanying cover letter addressed to a specific policymaker**. The letter should explain the importance/urgency of the policy issue and recommend a policy solution.
15. Evaluate policies for their impact on public health and health equity	HPM 2001: Health Policy and Management in Public Health	**Policy brief** - Create a concise summary of an important health policy issue, analyzing potential policy options, and offering a recommendation on the best policy to address the issue, taking into account the impact of public health and health equity.
Leadership		
16. Apply leadership and/or management principles to address a relevant issue	PUBHLT 2035: Applications in Public Health	**Individual Assignment 1** - Students draw upon current and existing coursework to write a leadership case study analysis. They are also asked to draw upon their practicum or prior work experience to answer the questions. **Group Project** - Students are required to serve as a leader for one of the four group assignments. They are peer evaluated on the following elements: establishing a timeline for the assignment, completing a first draft, and soliciting and incorporating group feedback into the final submission.
17. Apply negotiation and mediation skills to address organizational or community challenges	PUBHLT 2035: Applications in Public Health	**Individual Assignment 2** - Students are asked to write a statement to organizational leadership

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		supporting the reapplication for grant funding for their interdisciplinary group project. Students are asked to draw upon a class exercise in negotiation and mediation to draft their arguments and communicate them effectively in writing. Students also complete an in-class, verbal exercise in negotiation and mediation.
Communication		
18. Select communication strategies for different audiences and sectors	PUBHLT 2034: Public Health Communications	**Mid-term exam** - The exam consists of short-answer questions on audience analysis, cultural competence, and choosing a communication strategy based on the audience. For example, you may be asked to look at a health-related web page, identify the audience, describe how the page is targeted to that audience, and suggest changes to increase the cultural competence.
19. Communicate audience-appropriate (i.e., non-academic, non-peer audience) public health content, both in writing and through oral presentation	PUBHLT 2034: Public Health Communications	**Final exam** - Students will critique written communication examples and write or re-write several short examples. **Assignment #2** Prepare a 60-second, semi-formal oral presentation for a first group meeting with the collaborator for your chosen case. You will deliver your presentation and it will be critiqued in class. Include a paragraph describing your assumptions about your audience and how you might do things differently under different assumptions or with a different audience.
20. Describe the importance of cultural competence in communicating public health content	PUBHLT 2034: Public Health Communications	**Mid-term exam** - The exam consists of short-answer questions on audience analysis, cultural competence, and choosing a communication strategy based on the audience. For example, you may be asked to look at a health-related web page, identify the audience, describe how the page is targeted to that audience, and suggest changes to increase the cultural competence.
Interprofessional Practice		
21. Integrate perspectives from other sectors and/or professions to promote and advance population health	PUBHLT 2035: Applications in Public Health	The **group project** is completed in interdisciplinary teams, ensuring that different perspectives are incorporated into each of the four group assignments. In addition, students participate in a problem-solving

Table D2-2b. Assessment of Competencies for MPH in Behavioral and Community Health Sciences concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
		workshop where professionals from outside the public health sector evaluate their approach to real world public health problems.
Systems Thinking		
22. Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative	PUBHLT 2035: Applications in Public Health	**Individual assignment 3** - Students are asked to choose a public health topic and identify key elements of concept mapping, as it would apply to this issue.

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)

Assignments and/or assessment tools are provided in ERF> Criterion D> D2> D2.4.

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.

Syllabi and handbooks are provided in ERF> Criterion D> D2> D2.5. Updated handbooks for fall 2023 will be included in the final self-study.

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

Strengths, challenges, and solutions in progress: The core course structure was developed in response to the 2016 criteria, with foci on the competencies, a cross-cutting health equity focus, flexibility to incorporate changes to the disciplines, and innovation in pedagogical approaches. It has steadily evolved since that time in response to feedback from students and other stakeholders. For example, the introductory biostatistics content is now offered in three different courses aimed at different student populations, and the pedagogical format of some of those courses has been changed to incorporate flipped classroom approaches, in-class simulation experiments, and specifications grading. Another example is the school's environmental and occupational health core course, which is offered in a choice of modalities. Student satisfaction with the core courses is high. In the 2021-22 exit survey, 78% of students were either satisfied or very satisfied with the core curriculum. Detailed data on student satisfaction with core course work is collected on an ongoing basis through course evaluations and exit surveys. Data are reviewed annually by the EPCC and relevant associate deans. Surveys of recent graduates also provide information about which core competencies students feel were well-covered or need improvement in terms of their workplace preparation. In the course of doing the self-study, the need for better individual assessment of competencies within one or two core courses was identified and this is being addressed for the fall 2023 semester.

D3. DrPH Foundational Competencies

Not applicable

D4. MPH & 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.

Assessment of Competencies for MPH in Behavioral and Community Health Science		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Describe strategies for engaging communities and systems in advancing research and improving health through collaboration, partnerships and strengths-based approaches	BCHS 2554: Introduction to Community Health	**Final Paper:** Students design a community assessment using a strengths-based approach for a community of their choice. Students identify appropriate stakeholders and partners and describe suitable engagement strategies/strengths-based approaches for each.
2. Synthesize and apply established and novel social and behavioral science methods and tools to advance research and improve population health	BCHS 2525: Introduction to Applied Research	**Final project** requires students to develop a research or evaluation project to address a topic of their choice using mixed (quantitative and qualitative) methods and justify the choice of methods. It also requires framing the problem in a social ecological context (explaining how the individual, group, organization, community, and policy levels affect this issue).
3. Apply health education and health promotion theories to the development of programs that take into account the context in which they will be implemented	BCHS 2520: Theories of Health Behavior and Health Education	**Course projects** require students to identify factors influencing a health problem guided by one or more health behavior theories and develop a program with intervention components informed by the theoretical constructs of one or more of the health behavior theories discussed in class. In the **final project**, students are expected to present their proposed intervention/s using a logic model to guide thinking around program implementation and evaluation.
4. Develop a mechanism-based causal framework that applies a systems science approach and integrates relative theory	BCHS 2992: Systems Theories and Approaches	**Homework assignments** require students to identify and describe 2 or more theories from different levels of the social ecological model that link risk and protective factors to their selected health behavior. Subsequently, students draw a causal loop diagram (CLD) of the complex relationships (i.e., mechanisms) between factors contributing to their health behavior and provide a brief discussion of the model.
5. Apply modeling and simulation to social processes	BCHS 2990: Social Dynamics in Public Health	**Assignment 1** aligning model predictions using Excel, SD, and ABM: boarding school influenza. **Assignment 2** assessing social dynamics: neighborhood segregation. **Assignment 3** assessing social dynamics: alcohol.
6. Apply ethical principles to the collection of social and behavioral health data	BCHS 2525: Introduction to Applied Research	**Final project** requires students identify and discuss the ethical issues associated with the study and how the ethical issues are addressed in study design.

Assessment of Competencies for MPH in Environmental and Occupational Health Concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Describe the chemical processes involved in the interconversion and elimination of atmospheric pollutants, plus the details of water treatments necessary to remove contaminants from the public water supply	EOH 2309: Environmental Health Chemistry	After introducing the essential properties and chemistry of water, purification methods are covered by directed readings in conjunction with a **term paper**. The **final examination** contains questions covering atmospheric constituents and pollutants, stratospheric ozone, tropospheric smog, acid deposition
2. Choose and explain the reasoning behind selection of specific approaches to reliable sampling of environmental samples for pollutants	EOH 2504: Principles of Environmental Exposure	**3 graded problem sets:** #1 (quantifying environmental contamination/toxicity and toxicity equivalents); #2 (electronic spectrophotometry); #3 (fluorescence spectroscopy)
3. Describe how principles of toxicodynamics and toxicokinetics come together to define human and mammalian toxicity following exposure to environmental chemicals	EOH 2175: Principles of Toxicology	**Mid-term & final examinations** include questions covering absorption, distribution, metabolism, and elimination of toxicants; mechanisms of toxicity, gene-environment interactions, and the spectrum of adverse effects
4. Perform quantitative risk assessments of the hazards posed to human populations using recent modifications to the approaches originally developed by EPA and other regulatory agencies	EOH 2180: Introduction to Risk Sciences	**Midterm paper** asks students to prepare a 10–12-page paper describing the risky agent selected from the EPA IRIS database, its significant health and/or environmental effects, vulnerable subpopulation effected by risk, statistical analysis linking the risky agent to effect described, and potential solutions or alternatives to lower the risk to vulnerable subpopulations.
5. Explain the mechanisms by which chemical pollutants are transported throughout the environment and the natural processes by which they are ultimately eliminated (or not)	EOH 2122: Transport and Fate of Environmental Agents	**5 graded problem sets:** #1 (distribution between phases, typical environmental parameters, partition coefficients, Henry's law); #2 (equilibria, acid/base neutralizations, environmental buffering); #3 (chemical kinetics, transformation versus transport, ecotoxicity); #4 (biotransformation, enzyme kinetics, bacterial growth kinetics); #5 (advection in natural waters, Fickian transport, pollution sources and sinks, volatile fluxes, non-volatile spills)
6. Recommend methods for assessing chemical spills on-site for immediate intervention and management of clean-up operations	EOH 2122: Transport and Fate of Environmental Agents	**5 graded problem sets:** #6 (biotransformation modeling, bioreactors, waste streams); #7 (abiotic chemical transformations, oxidations, hydrolyses, waste ponds); #8 (oxygen demand, modeling natural waters); #9 (groundwater flow, wells, decontamination strategies); #10 (indoor air pollution, atmospheric properties and transport, modeling smokestack emissions)

Assessment of Competencies for MPH in Epidemiology		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Identify and apply advanced epidemiologic analyses using descriptive and inferential statistical approaches	EPIDEM 2180: Fundamentals of Epidemiological Methods	**Thirteen homework assignments** where students identify and apply advanced epidemiological analysis.
2. Interpret epidemiologic results in a causal framework	EPIDEM 2180: Fundamentals of Epidemiological Methods	**Homework assignments in Weeks 2, 7, and 9** where students identify causal components in epidemiologic research.
3. Evaluate the strengths and limitations of epidemiologic literature	EPIDEM 2180: Fundamentals of Epidemiological Methods	**Final homework assignment** requires students to read and evaluate strengths and limitations of an epidemiologic research article.
4. Identify major diseases, their descriptive epidemiology, and risk factors	EPIDEM 2170: Chronic Disease Epidemiology	**Homework assignments in weeks 2-5** require students to be able to identify major components of the disease and their risk factors.
	EPIDEM 2160: Epidemiology of Infectious Diseases	The **final exam** requires students to be able to identify key components of the epidemiology of infectious diseases.
5. Conduct analysis of epidemiologic data using linear, logistic, Cox, and Poisson regression models	BIOST 2049: Applied Regression Analysis	**Homework assignments and research article dissections in modules 1, 3, 4, and 6** identify key statistical components of these tests.
6. Describe the clinical trial study design and its application, strengths, and limitations	EPIDEM 2181: Design and Conduct of Clinical Trials	**Lecture quiz questions** ask students to describe clinical trial design components and their application as presented in the lecture slides for each lecture. **Written in-class exercise questions** ask students to complete a brief exercise individually which addresses a pertinent component of clinical trial design and application for each lecture.

Assessment of Competencies for MPH in Health Policy and Management Concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Evaluate facilitators and barriers that impact the financing and delivery of public health services or health care services	HPM 2064: Health Policy Analysis	**Midterm and final policy analysis**
2. Apply legal and ethical principles to health services practice	HPM 2131: Public Health Law and Ethics	**Midterm:** students identify key takeaways regarding public health and legal holdings from case law included in lectures and readings; students apply guiding principles from a foundational public health case on smallpox vaccination to a scenario of public health department enforcement of COVID-19 restrictions and business closures.
3. Develop legal and policy strategies to promote the health status of populations	HPM 2063: The Politics of Health Policy	**Final exam** assesses all course concepts.
4. Integrate the principles of program planning, management, budgeting, and finance, in the context of health care organizations, government, and/or community-based organizations	HPM 2055: Managing Health Programs and Projects	**Midterm exam** assesses early concepts in Week 6. An ongoing group assignment, with the final deliverable (**Program Communication Plan**) due in Week 16 assesses later concepts and application.
5. Apply the principles of strategic planning to health delivery initiatives	HPM 2055: Managing Health Programs and Projects	**Midterm exam** in Week 6, plus ongoing group assignment with intermediate deliverables in Week 11 (**Developing/Strategizing Your Program**) and Week 14 (**Planning Your Program**).
6. Measure and evaluate the impact of health policies on population health	HPM 2028: Microeconomics Applied to Health	Students complete an **issue paper** that uses economic theory to evaluate a health policy topic.

Assessment of Competencies for MPH in Infectious Disease Management, Intervention, and Community Practice Concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Develop knowledge related to domestic and global infectious disease pathogenesis, prevention, clinical diagnosis	IDM 2038: Prevention, Treatment, and Control of Global Infectious Diseases	**Final term paper or project and exams** require students to develop projects or papers that apply course content that impact individuals, communities, agencies, policies. Exams demonstrate mastery of course content.
2. Apply knowledge of human diversity in developing evidenced based intervention for prevention of infectious disease, stigma, and related social determinants of health	IDM 2032: Human Diversity and Public Health	**Assignment 3** requires students to select a public health problem and complete a critical analysis of an agency that does research about or provides services to meet the needs of those affected by that problem.
3. Demonstrate knowledge and approaches for clinical, behavioral, biomedical interventions, and advocacy to impact the prevention, control, and/or elimination of infectious diseases. and intersecting clinical conditions, populations, and environments	IDM 2034: Control and Prevention of HIV/AIDS	**Final term paper or project and exams** require students to develop projects or papers that apply course content that impact individuals, communities, agencies, and policies.
4. Develop, implement, or evaluate infection prevention in clinical settings, including surveillance, containment, and policies for prevention, control and intervention	IDM 2069: Infection Prevention and Control in Health Care Settings	**Course assignments and exams** require students to gather, examine data, make observations, and develop and/or participate in research projects or interventions for mitigation.
5. Synthesize skills and knowledge of infectious disease research, practice or policies as applied to infectious clinical conditions, outbreaks/clusters in clinical, and/or community healthcare settings	IDM 2069: Infection Prevention and Control in Health Care Settings	**Course assignments and exams** require students to apply course content that solve infection prevention problems in hospitals and institutional settings.
6. Develop, implement, and evaluate the intersecting syndemics that impact the spread of infectious diseases and their control and treatment in populations within both high and low resource environments	IDM 2034: Control and Prevention of HIV/AIDS	**Final term paper or project and exams** require students to develop projects or papers that apply course content that impact individuals, communities, agencies, and policies.

Assessment of Competencies for MPH in Infectious Disease Pathogenesis, Eradication, and Laboratory Practice Concentration		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Analyze the mechanisms used by successful infectious pathogens	IDM 2010: Pathogen Biology	**Final exam** requires students to discuss pathogen biology and public health relevance.
2. Suggest novel approaches to the prevention and control of infectious pathogens	IDM 2010: Pathogen Biology	**Final term paper** requires students to discuss pathogen-specific prevention and control measures.
3. Distinguish between the different types of host response mechanism and explain their relevance to various domestic and global infectious diseases	IDM 2003: Host Response Microbial Infection	**Cumulative exams** require students to explain the course material.
4. Differentiate between the various models of infectious disease spread in human populations	IDM 2161: Methods of Infectious Disease Epidemiology	**Final exam** aimed at synthesizing the full course material.
5. Discuss the pathogenesis mechanisms used by successful infectious viruses	IDM 2004: Viral Pathogenesis	**Cumulative exams** require students to discuss individual virus pathogenesis mechanisms.
6. Analyze and critique the current research literature on infectious disease pathogenesis	IDM 2025: Microbiology Seminar	**Instructor and peer evaluation** of student in-class presentations.

Assessment of Competencies for MPH in Public Health Genetics		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Apply knowledge of inheritance, including basic cellular and molecular mechanisms, and both genetic and non-genetic related risk factors for disease to understanding a variety of rare and common health conditions	HUGEN 2040: Molecular Basis of Human Inherited Disease	Students take **3 open-note, in-class exams** covering material in each of the 3 modules: Basics of Molecular Genetics, Mechanistic Basis of Mendelian Diseases, and Mendelian Diseases of Metabolism and Organ System Function. Exams require students to apply learned information and problem solve.
2. Assess and communicate the benefits, risks, and limitations of the integration of genetics and genomics principles and technologies into public health projects and initiatives	HUGEN 2054: Applications in Public Health Genetics and Genomics	Students complete a **public health genetics case study** that asks them to assess the implementation of a statewide initiative related to a CDC Office of Genomics and Precision Public Health condition. The case study write-up includes background information, a calculation of the positive and negative predictive value of the screening test being used, a simple cost analysis, and assessment of potential barriers, ethical/legal/social issues, and a final recommendation based on the information in their report.

Assessment of Competencies for MPH in Public Health Genetics		
Competency	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
3. Identify and assess the ethical, legal and social principles and issues important to public health genetics	HUGEN 2049: Introduction Public Health Genetics	**Ethics report and debate** - Students are assigned a case that involves a current ethical issue in public health genetics and are asked to write a report addressing the case from an ethical perspective, using the medical and public health ethical principles discussed in class. Students are then assigned groups and a position on the topic and prepare and hold an in-class debate on the issue with the opposing team for their assigned topic. Students are graded based on a rubric for both the report and the debate.
4. Effectively communicate genetic and genomic principles to the general public, public health professionals, and health care providers	HUGEN 2054: Applications in Public Health Genetics and Genomics	For the **health literacy project**, students are asked to revise an existing genetics resource developed for the public with specific consideration for readability, usability, and accessibility by the target audience. The **Preliminary Research Project Presentation** is a presentation given on their individual research project topics to their classmates. This provides students the opportunity to present to and answer questions from an audience of their future public health and health care colleagues.
5. Evaluate how genetic principles/technologies apply to precision public health: the targeting of diagnosis, screening, and interventions for disease prevention and health promotion programs	HUGEN 2049: Introduction Public Health Genetics	The **final exam** contains multiple questions testing student knowledge on the application of genetic principles and technologies to precision public health.
6. Promote integration of justice, health equity, diversity, and inclusion into genetics, public health genetics, and precision public health programs and initiatives	HUGEN 2049: Introduction Public Health Genetics	On the **diversity homework assignment**, students are asked to read an article about the Genomes in Africa project and a pharmacogenomics article on a common medication for HIV/AIDS and then to consider why the use of this medication was a public health disaster in Zimbabwe as well as examining what public health professionals should be considering when considering the implementation of public health genetics programs in Africa.

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.

   The Multidisciplinary concentration is an individually tailored concentration aimed at students who already have advanced clinical training or other advanced professional degrees. Detailed policies and procedures related to the creation of individualized competencies, known as "advanced competencies," are found in the student handbook. Please see ERF> Criterion D> D4> D4.2 for the advanced competency form, handbook, and student example matrices. Updated handbooks for fall 2023 will be included in the final self-study.

   Multidisciplinary students work with their faculty advisor to create five advanced competencies tailored to their individual educational goals. Advanced competencies are at a higher level than the 22 foundational competencies, much like program-specific competencies. The faculty advisor provides guidance in course enrollment, helping identify courses that teach and assess the student's advanced competencies. Students complete an advanced competency form, identifying their advanced competencies, courses where they are taught, and how they are assessed. As with standard concentration competencies, students address up to two advanced competencies in their applied practice experience (see criterion D5) and must address one advanced competency in their integrated learning experience (see criterion D6).

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)

   Assessment instructions and assignments are provided in ERF> Criterion D> D4> D4.3.

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

   Strengths, challenges, and solutions in progress: Each concentration has specific competencies that reflect the higher-level content and skills relevant to practice of the discipline. These competencies are taught and assessed in the fundamental courses in each department. Competencies are provided to students on the website, in handbooks, and on relevant syllabi. Students also engage meaningfully with the competencies in the course of planning their APE and ILE experiences (see criteria D5 and D6). One challenge is that as disciplines evolve it is cumbersome to frequently update competencies and make certain all students and faculty aware of them. All programs reviewed and updated their competencies during the 2021-22 academic year, so new revisions should not be needed in the immediate future.

   The school is currently in the process of expanding the leadership of the Multidisciplinary MPH program with an additional set of faculty directors. The new directors will receive training in the advising challenges that are specific to the program – how to work with students to identify competencies and then identify where those competencies are taught and assessed. It can be challenging for Multidisciplinary MPH students and their advisors to identify competencies that are assessed in specific courses without detailed information on the course content. To address this issue, the program directors are developing lists of suggested courses and competencies that can help both advisors and students in making the process smoother.

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.

   All SPH MPH students are required to complete an approved, supervised applied practice experience of at least 200 hours. The applied practice experience generally occurs after two full-time terms of enrollment and allows for the application of classroom content in a practice-based setting. Each MPH concentration includes specific procedures and expectations for students' completion of the applied practice experience, which is commonly referred to as the "practicum." Each concentration has a set of relevant materials (e.g., concentration-specific practicum learning agreement forms and handbooks), but overall policies and tracking procedures are set at the school level and are consistent across all concentrations, including joint degrees.

   Students are supervised by a faculty advisor and the host organization preceptor. Students work with their faculty advisor to complete a practicum learning agreement prior to the start of their applied practice experience. The practicum learning agreement identifies the host organization and preceptor, five competencies (at least three foundational and up to two concentration-specific) to be addressed, a summary of the proposed activities, and two proposed practical, applied work products to be produced for the host organization's use and benefit. The student, faculty advisor, and preceptor sign the agreement before the student begins their practicum experience.

   Throughout the practicum experience, the preceptor orients the student to the host organization, oversees the work of the student, meets regularly with the student and, as necessary, the faculty advisor, and provides feedback on student performance via the preceptor evaluation form.

   On completion of their practicum experience, students submit an ePortfolio of work products produced for the host organization and describe how they attained the five competencies identified in their practicum learning agreement. The faculty advisor evaluates the ePortfolio for attainment of the identified competencies and deliverables and submits the final grade. Please see ERF> Criterion D> D5> D5.3 for examples of submitted work products. These include an interview guide for perinatal service array for people with opioid use disorder, a postpartum mothers mobile study (PMOMS) COVID-19 survey, a report to the PA Department of Health on assistive technology and home modification policy and program options to support vulnerable seniors, an infographic to

advocate for pharmacist prescribing of COVID antivirals for Pharmacy Legislative Day, and an overview of 2020 Allegheny County child death review report.

Student practicum experiences in recent years encompass a broad range of applied work in public health, including engagement with local, state, and federal health agencies, as well as many community organizations. Among the many excellent applied practice experiences in which students engage, two are highlighted below.

- Pitt Public Health organizes the Pittsburgh Summer Institute in Applied Public Health in conjunction with the Allegheny County Health Department (ACHD) to provide an enhanced and productive applied practice experience with the ACHD. Students address real public health problems in the county and experience the day-to-day operations of an active health department while working with experienced public health practitioners. In addition to their individual projects, students engage in a group project that exposes them to the multidisciplinary and cross-cutting nature of work done in a local health department.
- Students participate in Bridging the Gaps, which gives the opportunity to work directly with underserved populations to better understand their health needs for their applied practice experience. Bridging the Gaps provides invaluable community outreach to organizations that are on the front lines of public health. Students are paired with other health science students to provide the maximum benefits of interdisciplinary learning and have the opportunity to work with a range of different underserved populations in Pittsburgh, including people in recovery, children, homeless women, and many other marginalized communities. Past projects have included developing and delivering health education curricula, and developing resource guides, informational brochures, internal surveys, and needs assessments to improve program quality.

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

Please see ERF> Criterion D> D5> D5.2. Updated handbooks for fall 2023 will be included in the final self-study.

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 (ie, 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.

Please see ERF> Criterion D> D5> D5.3. Concentration folders include samples from joint degree students.

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

Strengths, challenges, and solutions in progress: All MPH students select an applied practice experience that is tailored to their individual interests. Students report high satisfaction with their practicum experiences and the contribution they make to their skills and career goals. In the 2021-22 exit survey, 83% of students said that their practice experience made good or excellent contributions to their public health training. Many students engage in applied practice experiences in the Pittsburgh area, which positively contributes to the school's impact on the community. The process of identifying competencies, defining work products, and establishing the scope of the applied practice experience via the practicum learning agreement form has been very effective. Students have informed conversations with their faculty advisor and preceptor early on to outline

expectations and ensure that work products are aligned with the competencies, student interests, and organizational needs.

In the course of doing the self-study the school identified some lapses in tracking of learning agreements and practicum products. The products are currently tracked using an ePortfolio system that is not particularly user-friendly, which appears to be contributing to the problem. The MPH committee and dean's office are evaluating alternative software products and hope to adopt a new system by 2024. In addition, the MPH committee will devote a meeting at the start of each semester to ensuring that all program directors are up to date on expectations for working with students to develop competencies and practicum products and that they are using the system correctly to track their evaluation of those products.

D6. DrPH Applied Practice Experience

Not applicable

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.

MPH Integrative Learning Experience (All Concentrations)	
Integrative learning experience (list all options)	**How competencies are synthesized**
Essay or thesis (required for all MPH students) The essay is an extended paper addressing a public health topic of the student's choice. It can be in the form of a research paper (primary or secondary), policy analysis, position paper, systematic review, program evaluation, case study, or other appropriate format. The essay is often based on the student's practicum (APE) experience.	The essay/thesis requirement is designed to provide students with an opportunity to integrate the major components of the public health learning experience. Students work with their faculty advisor to complete an ILE agreement form selecting a topic and identifying three competencies (two foundational and one concentration-specific) to be addressed in their final written essay/thesis. Faculty advisors review student essays to ensure synthesis of competencies and complete the ILE assessment form.

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

Each MPH student, regardless of concentration, completes a culminating experience that integrates their foundational public health and concentration-specific knowledge. Faculty within each MPH concentration supervise students' completion of the integrative learning experience, commonly referred to as the "essay." Each essay is read and assessed by two faculty. In some concentrations, students have the option of completing a thesis instead of an essay; the major distinction is that the thesis is defended orally before a committee of three faculty.

Students enroll in their concentration-specific essay course and work with their faculty advisor to complete an ILE agreement form in which they identify an essay topic and select three competencies (two foundational and one concentration-specific) to be attained. The essay provides evidence of the student's ability to synthesize and integrate knowledge acquired during their MPH degree program. Faculty advisors review student essays to ensure synthesis of competencies, complete and ILE assessment form attesting to the synthesis, and submit a final grade.

Each concentration has its own set of relevant materials (e.g., concentration-specific ILE agreement forms, ILE assessment forms, and handbooks) and specifies concentration-specific requirements.

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

Please see ERF> Criterion D> D7> D7.3. Updated handbooks for fall 2023 will be included in the final self-study.

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.

Each essay is evaluated using a school-level assessment form in which the advisors indicate and comment on attainment of each competency as well as synthesis. This form is provided in the ERF under criterion D7. In addition, most concentrations use a rubric that provides more detailed assessment and feedback to the student. These are also provided in ERF> Criterion D> D7> D7.4.

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.

See ERF> Criterion D> D7> D7.5. Concentration folders include samples from joint degree students.

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

Strengths, challenges, and solutions in progress: The essay is a long-standing requirement for all the school's MPH programs and provides a very substantial and rigorous culminating experience that guarantees integration of competencies. Many students choose the even more rigorous thesis experience and perform an oral defense of their work to a thesis committee or larger audience. The wide variety of acceptable formats for the essay allows students to tailor the experience to their career goals. Most concentrations guide students through the essay in a somewhat cohorted manner, with an essay preparation or writing course that helps students improve skills and stick to a timeline. The school-level competency selection and assessment forms were implemented in 2022-23 and are still in the process of being fully integrated into all concentrations. Currently, they are somewhat duplicative of the concentration-level forms. Once the school has a year of experience with the new forms the MPH committee will evaluate the experience and recommend further adjustments as needed.

D8. DrPH Integrative Learning Experience

Not applicable

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."

   The BSPH degree was developed during the 2021-22 academic year, and the first cohort of first-year students started the program in the fall of 2022. Enrollment is growing rapidly, with approximately 60 students enrolled in the fall of 2022 (2/3 first year and 1/3 internal transfer) and more than 100 new first-year students expected in the fall of 2023.

   The BSPH curriculum was initially developed according to the 2016 accreditation criteria, and then adjusted for the 2021 criteria as the program started. The core curriculum consists of four foundational "tier I" courses (100-level courses in Table D9-1) including a one credit First Year Seminar, and five discipline-specific introductory "tier II" courses (300-level courses in Table D9-1) for each of the fundamental public health disciplines (epidemiology, behavioral and community health, biostatistics, health policy and management, and environmental health). After the core is completed, students are required to take 18 credits of public health electives, often clustered in an area of interest, and can include six credits of pre-approved public health related courses from schools across the University of Pittsburgh. The final program requirement is a capstone experience (see D11). Also required is 120 hours of service-learning.

Key	I = Introduced: Students receive at least one lecture dedicated to topic, but it is not necessarily practiced.
	C = Covered: Students receive more than one lecture dedicated to topic, and it is practiced via homework, in class activities, quizzes and/or exams.

Public Health Domains	**Course Number & Name**								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Math/Quantitative Reasoning: Identify and apply the concepts and applications of basic statistics									
Concepts of basic statistics	I					C			
Applications of basic statistics	I					C			
Science: Address the foundations of biological and life sciences									
Foundations of biological & life sciences	I	C					C		

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
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		C		C	I		C	C
Public health philosophy	C		C		C			I	C
Core PH values	C		I						I
Core PH concepts	C	C							
Global functions of PH	C		I				C		
Societal functions of PH	C		C		C				

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
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		C	
Basic methods of data collection					I	I		C	

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Basic tools of data collection						I	I	C	
Data usage						C	I	C	
Data analysis						C	I	C	I
Evidence-based approaches		I				C		C	I
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									

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
and concerns of populations									
Population health concepts	I	I	C		C	I	C	C	
Introduction to processes & approaches to identify needs & concerns of populations					C				
Introduction to approaches & interventions to address needs & concerns of populations	C		C		C				C
Human Health: Address the underlying science of									

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
human health and disease including opportunities for promoting and protecting health across the life course									
Science of human health & disease	C	C							
Health promotion	C		C		C				I
Health protection	I	I	C						I
Determinants of Health: Address the socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to									

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
health disparities									
Socio-economic impacts on human health & health disparities	C		C		C				C
Behavioral factors impacts on human health & health disparities	C		C		C		C		C
Biological factors impacts on human health & health disparities	I	C					C		

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Environmental factors impacts on human health & health disparities	C		I				C		
Project Implementation: Address the fundamental concepts and features of project implementation, including planning, assessment, and evaluation									
Introduction to planning concepts & features	I				C				

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Introduction to assessment concepts & features					C				
Introduction to evaluation concepts & features					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									

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Characteristics & structures of the U.S. health system	I								C
Comparative health systems	I								C
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									

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
branches of government									
Legal dimensions of health care & public health policy							I		C
Ethical dimensions of health care & public health policy									C
Economical dimensions of health care & public health policy							I		C
Regulatory dimensions of health care & public health policy							I		C

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Governmental agency roles in health care & public health policy							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				C					C
Professional writing	C	C		C					C
Use of mass media	C		I		C				C

Public Health Domains	Course Number & Name								
	PUBHLT 0100: Fundamentals of Public Health	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	PUBHLT 0140: First-Year Public Health Seminar	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	PUBHLT 0310: Introduction to Public Health Biostatistics	PUBHLT 0320: Introduction to Environmental Health Sciences	PUBHLT 0330: Introduction to Epidemiology	PUBHLT 0340: Fundamentals of Health Policy and Management
Use of electronic technology	C	I		C					

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.

   Syllabi are provided in ERF> Criterion D> D9> D9.2.

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

   Strengths, challenges, and solutions in progress: The BSPH program enrolled its first freshman class in the fall of 2022. The curriculum is new, up to date, innovative, designed around the domains and competencies, and prioritizes service learning. Student feedback has been tremendously positive. Because the degree and the curriculum are new, the school is actively seeking both formal and informal feedback from students and other stakeholders and expecting that the courses will evolve in the near future. Early student feedback has identified minor overlap among some of the BSPH core courses and between BSPH and MPH courses. The associate dean for academic affairs is working with the BSPH Educational Committee and the MPH committee to resolve any overlap in curriculum.

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 activity for each foundational competency.

Competencies		**Course number(s) & name(s) or other educational requirements**	**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	PUBHLT 0100: Fundamentals of Public Health	Students work in teams to design a unique and innovative public health program and then concisely pitch their compelling idea to their classmates and faculty judges during a **Hackathon event**.
	Written communication	PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health	Students write **three one-page papers** during the semester to hone their ability to communicate about health disparities.
		PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	Students write a **reflection paper** on contextual factors to promote health and well-being in a community by incorporating and applying key concepts from the lecture and course discussions.

	Communicate with diverse audiences	PUBHLT 0340: Fundamentals of Health Policy and Management	Students write a **policy paper** to gain experience communicating with policymakers by creating a concise summary of a current pressing public health or health policy issue, analyzing potential policy options, and offering a recommendation on the best policy to address the issue.
		PUBHLT 0320: Introduction to Environmental Health Sciences	Students use information from several governmental and scientific sources to prepare a **case study** on a disease of their choosing. They are assessed on an in-class presentation and a written document that describes the environmental risk and Public Health impact of the disease. As part of this case study, students are also assessed via a written **risk communication plan** on how to communicate to various audiences about risk.
	Communicate through variety of media	PUBHLT 0120: Essentials of Health Equity	For the final project, students create a short visual presentation visual describing and advocating for a health equity topic using a **medium of their choice** (brochure, flyer, film, podcast, Facebook page, Tiktok, etc.)
		PUBHLT 0300: Introduction to Community-Based Approaches to Public Health	Students create a **podcast,** which is a reflection on community-based approaches in public health.

Information Literacy: Students should be able to locate, use, evaluate and synthesize public health information			
	Locate information	PUBHLT 0140: First-Year Public Health Seminar	**Health Data Quiz** assesses students' ability to use online resources to search and find evidence-based materials by means of a quiz using multiple choice and true and false questions.
	Use information	PUBHLT 0310: Introduction to Public Health Biostatistics	Students use data with statistical software and simulation applets to perform hypothesis testing in **homework assignments**.
		PUBHLT 0910: BSPH Capstone Project OR PUBHLT 0911: BSPH Capstone Seminar	In both capstone courses (PUBHLT0910 or PUBHLT0911), students use information from experiential learning to create a culminating **poster presentation** for the Senior BSPH Capstone Symposium event.
	Evaluate information	PUBHLT 0310: Introduction to Public Health Biostatistics	Students evaluate data using statistical software and simulation applets through **homework assignments.**
	Synthesize information	PUBHLT 0110: Genes, Cells, and Communities: Introduction to Public Health Biology	Students synthesize information from several governmental and scientific sources to prepare a **case study** on a disease of their choosing and develop produce an in-class **presentation** and **written document** that describes the biology and public health impact of the disease.
		PUBHLT 0330: Introduction to Epidemiology	In **homework assignments**, students evaluate health scenarios to identify evidence and assess the implications of the evidence.
		PUBHLT 0910: BSPH Capstone Project	In both capstone courses (PUBHLT0910 or PUBHLT0911), students use information from

		OR PUBHLT 0911: BSPH Capstone Seminar	experiential learning to create a culminating **poster presentation** for the Senior BSPH Capstone Symposium event.

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)

   Assessments are provided in ERF> Criterion D> D10> D10.2.

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.

   Syllabi are provided in ERF> Criterion D> D10> D10.2.

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

   Strengths, challenges, and solutions in progress: The BSPH program enrolled its first freshman class in the fall of 2022. The curriculum is new, up to date, innovative, designed around the domains and competencies, and prioritizes service learning. Because the BSPH curriculum is new, the school is actively seeking both formal and informal feedback from students and other stakeholders and expecting that the courses will evolve in the near future. One specific issue under discussion is whether the communication competencies would be better addressed in a separate public health communications course, parallel to what the school does at the MPH level. While preparing the self-study, the need for better individual assessment of competencies within one of the foundational courses was identified and is being addressed for the fall 2023 semester.

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.

Cumulative and Experiential Activity (internships, research papers, service-learning projects, etc.)	**Narrative describing how activity provides students the opportunity to integrate, synthesize and apply knowledge.**
PUBHLT 0910: BSPH Capstone Project - Students complete a culminating project in a course-based format. The course presents real case studies from a community organization on various public health topics. Students synthesize information gleaned from the case studies, knowledge learned from coursework and their service learning to propose a solution to the public health issue described in the case studies, and then create and present a poster describing their approach to addressing the issue from the case study. Students may complete this course-based capstone, or they may complete one of the alternatives listed below. Students who choose one of those alternatives enroll in PUBHLT 0911: Capstone Seminar, in which they also prepare a poster based on their project.	The cases require students to apply knowledge and skills obtained during their time in the program. Students further integrate and synthesize as they create the final poster project based on one of the cases.
Research Project + PUBHLT 0911: BSPH Capstone Seminar - Students complete a culminating research capstone with a faculty preceptor by registering for PUBHLT 1901: Undergraduate Research. Simultaneously or later, they enroll in PUBHLT 0911: BSPH Capstone Seminar in which they discuss their projects and create a poster. One version of the research capstone is for the student to complete an honors thesis through the University of Pittsburgh Honors College.	Using information obtained while completing the research project, students participate in PUBHLT 0911: BSPH Capstone Seminar to synthesize and incorporate public health competencies learned throughout their BSPH curricular experience. This synthesis occurs during class discussions and during the creation of their poster.
Study Abroad Experience + PUBHLT 0911: BSPH Capstone Seminar - Students complete a public-health related study abroad program. Simultaneously or later, they enroll in PUBHLT 0911: BSPH Capstone Seminar in which they discuss their projects and create a poster.	Using information and experiences from their study abroad, students participate in PUBHLT 0911: BSPH Capstone Seminar to synthesize and incorporate public health competencies learned throughout their BSPH curricular experience. This synthesis occurs during class discussions and during the creation of their poster.
Internship Project + PUBHLT 0911: BSPH Capstone Seminar - Students complete a public-health related internship. Simultaneously or later, they enroll in PUBHLT 0911: BSPH Capstone	Using information and experiences from their internship, students participate in PUBHLT 0911: BSPH Capstone Seminar to synthesize and incorporate public health competencies learned throughout their BSPH curricular

Cumulative and Experiential Activity (internships, research papers, service-learning projects, etc.)	**Narrative describing how activity provides students the opportunity to integrate, synthesize and apply knowledge.**
Seminar in which they discuss their projects and create a poster.	experience. This synthesis occurs during class discussions and during the creation of their poster.

2) Include examples of student work that relate to the cumulative and experiential activities.

   The first students are expected to complete the cumulative experience in spring 2024. Thus, no examples are provided at this time.

3) Briefly describe the means through which the school implements the cumulative experience and field exposure requirements.

   Each BSPH student is required to complete a capstone project in their final year of study. There are several ways to complete the requirement. One option is to enroll in the capstone course, PUBHLT 0910: BSPH Capstone Project. This course is anchored by a collaborative project that allows students to apply knowledge and skills obtained during their time in the program. Students work in project groups to address real case studies from a community organization. Organizations will vary in terms of type (non-profit, government, corporate, academic) and in terms of issue area. Each group will be presented with a real-world public health problem. Throughout the semester, students will participate in various activities to develop and hone an innovative solution to this challenge on their own. They can brainstorm together as a group; however, each student is required to create their own final poster. At the end of the semester, students will present their solution to the class in the form of a poster and at the Undergraduate Capstone Symposium. In addition to the capstone course, students have the option of completing a practicum in the form of an independent study with a faculty member, a research project with a faculty member, an internship with a local organization, or a public health related study abroad experience. Students who choose these options enroll in the one-credit BSPH Capstone Seminar, PUBHLT 0911, which gives them a forum to reflect and share experiences and discuss their projects with peers and faculty and reflect on how they synthesized their classroom knowledge into field work. Students in both the capstone course and the capstone seminar course present posters at the Undergraduate Capstone Symposium at the end of each semester. The poster preparation provides an additional opportunity for students to synthesize their knowledge and experience, and to improve their communication skills.

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.

   Please see ERF> Criterion D> D11> D11.4 and the undergraduate catalog. An updated handbook for fall 2023 will be included in the final self-study.

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.

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	Through the 120 hours of required service learning, students see advocacy in action. Student-run clubs and groups provide them with the opportunity to advocate for current public health issues.
Community dynamics	Service learning requirement exposes students to diverse communities and community-based organizations during all four years of the program. PUBHLT 0300: Introduction to Community-Based Approaches to Public Health (required core course) focuses on approaches to understand and address community health problems.
Critical thinking and creativity	PUBHLT 0100: Fundamentals of Public Health (required foundational course) hosts a hackathon which is a collaborative competition where student teams create a unique and innovative public health program team-based competition that can possibly be turned into a real-world initiative. Students in PUBHLT 0330: Introduction to Epidemiology (required core course) use critical thinking to examine patterns of disease in communities to identify and study risk factors for disease development or prognostic factors for disease control. PUBHLT 0340: Fundamentals of Health Policy and Management (required core course) includes a class debate on the topic of individual rights in health care and public health in which students must take sides of various issues and communicate their arguments orally.
Cultural contexts in which public health professionals work	PUBHLT 0300: Introduction to Community-Based Approaches to Public Health (required core course) provides a cultural context lecture for students. The required senior capstone (PUBHLT 0910: BSPH Capstone Project or PUBHLT 0911: BSPH Capstone Seminar) exposes students to various professions and workplaces in public health. PUBHLT 0120: Essentials of Health Equity: Exploring Social and Structural Determinants of Health (required foundational course) is rooted in the exploration of the intersectionality of health disparities by race, ethnicity, age, gender, religion, sexual identity, disability, and other social identities and conditions.

Concept	Manner in which the curriculum and co-curricular experiences expose students to the concepts
Ethical decision making as related to self and society	PUBHLT 0310: Introduction to Public Health Biostatistics (required core course) discusses data ethics in the context of statistical analyses as special additions to several lab assignments. PUBHLT 0340: Fundamentals of Health Policy and Management (required core course) covers the ethical dimensions of the policy process. A SPH undergraduate bioethics certificate is open to all students.
Independent work and a personal work ethic	PUBHLT 0140: First-Year Public Health Seminar (required foundational course) incorporates strategies and skills building activities to support healthy work/life balance, study skills, and other non-academic issues. Professional staff advisors are knowledgeable about University-level resources to support student success.
Networking	BSPH student and faculty mixer events and career and internship fairs offered.
Organizational dynamics	Required service learning opportunities place students in organizations where they actively observe the dynamics and functions in the workplace. of the organization. PUBHLT 0340: Fundamentals of Health Policy and Management (required core course) provides scaffolding knowledge about the organization and economics of the health care system in the U.S.
Professionalism	PUBHLT 0140: First-Year Public Health Seminar (required foundational course) provides tools and resources from the University's career center, as well as presentations on professionalism. Public health mentor program matches students with more experienced public health students to learn about the working environment. The required senior capstone (PUBHLT 0910: BSPH Capstone Project or PUBHLT 0911: BSPH Capstone Seminar) prepares students to present their work to a professional audience.
Research methods	PUBHLT 0140: First-Year Public Health Seminar (required foundational course) provides a lecture by the University’s health sciences librarian on research fundamentals. PUBHLT 0330: Introduction to Epidemiology (required core course) reviews fundamental epidemiologic research, introduces students to the essential skills used for the assessment of health in the community, and provides an overview of the fundamentals applied in epidemiologic research.
Systems thinking	PUBHLT 0300: Introduction to Community-Based Interventions in Public Health (required core course) provides students opportunities to learn how the dynamics of complex social and behavioral systems affect health. PUBHLT 0340: Fundamentals of Health Policy and Management (required core course) provides a framework for understanding the social, political, legal, and economic dimensions of the U.S. health and public health systems.
Teamwork and leadership	PUBHLT 0100: Fundamentals of Public Health (required foundational course) hosts a hackathon, which is a team-based competition. Most foundational and core courses incorporate group work and presentations.

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.

   Syllabi are provided in ERF> Criterion D> D12.

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

   Strengths, challenges, and solutions in progress: The BSPH curriculum and co-curriculum are rich and varied, and provide numerous opportunities for exposure to all of the cross-cutting concepts and experiences.

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.

   The minimum credit-hour requirement is 42 in the following MPH degree concentrations: Infectious Disease Management, Intervention, and Community Practice; Infectious Disease Management Pathogenesis, Eradication, and Laboratory Practice; and Multidisciplinary. The minimum credit-hour requirement is 45 in the following MPH concentrations: Behavioral and Community Health Sciences; Epidemiology; and Health Policy and Management. The minimum credit hour-requirement is 47 in the Environmental and Occupational Health and Public Health Genetics concentrations.

   Several of the school's MPH concentrations (Behavioral and Community Health Sciences, Health Policy and Management, and Public Health Genetics) offer joint degree programs. All joint degree students complete the credit-hour requirement for their MPH concentration as stated above. For each joint program, a few credits of approved courses with public health relevance in the other school can be used as electives toward the minimum number of MPH credits. Those courses are highlighted in the joint degree requirement tables in D2.2.

   All SPH MPH concentrations, with the exception of Multidisciplinary, offer an accelerated MPH degree program for exceptionally well-prepared undergraduate students from certain schools at the University. These programs allow students to begin taking coursework toward an MPH during their final year of undergraduate study. The credit-sharing paradigm for these programs entitles the undergraduate school to allow up to 20 credits of graduate coursework to count as undergraduate electives toward a BA or BS. From the MPH point of view, there is no credit sharing and students complete the standard MPH requirements in each concentration. Note that there is no accelerated MPH option for BSPH students at this time, though the SPH expects to develop such a program soon.

2) Define a credit with regard to classroom/contact hours.

   At the University of Pittsburgh, a semester credit hour is typically awarded for an activity that consists of 50 minutes of classroom instruction with an expectation of two hours of outside study for each hour of time in class per week for the semester.

   The University of Pittsburgh's academic year consists of fall and spring semesters with an optional summer semester. Fall and spring semesters are traditionally 14 weeks in length with an additional week for finals. During the summer term, an academic period may consist of four, six, 12, or 15 weeks, with class time divided proportionally to satisfy the definition of a credit hour.

D14. DrPH Program Length

Not applicable

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.

   SPH offers one public health bachelor's degree, which is a Bachelor of Science in Public Health. The degree requires a minimum of 120 total credit-hours. This is the same for all undergraduate programs at the University of Pittsburgh.

2) Define a credit with regard to classroom/contact hours.

   At the University of Pittsburgh, a semester credit hour is most typically awarded for an activity that consists of 50 minutes of classroom instruction with an expectation of two hours of outside study for each hour of time in class per week for the semester.

   The University of Pittsburgh's academic year consists of fall and spring semesters with an optional summer semester. Fall and spring semesters are traditionally 14 weeks in length with an additional week for finals. During the summer term, an academic period may consist of four, six, 12, or 15 weeks, with class time divided proportionally to satisfy the definition of a credit hour. Half-semester and 1/3-semester courses also exist at the University but are only occasionally used within SPH.

3) Describe policies and procedures for acceptance of coursework completed at other institutions, including community colleges.

   At the University of Pittsburgh, students must submit official transcripts from each accredited college or university attended whether it is intended for the course to be counted toward a degree. Grades for credits transferred are not used in computing a student's grade point average (GPA). All credits eligible for transfer are subject to the following regulations:

   - Only courses with a C or better will be considered for transfer.
   - Courses must correspond with those offered by the University in objective and content.
   - The number of credits granted for a given course cannot exceed the number on the transcript from the school where they were earned, nor can they exceed the number earned in the corresponding courses at the University of Pittsburgh.
   - A maximum of 90 credits may be transferred from a four-year institution and 60 credits from a two-year institution, however no more than 90 credits in total can be transferred.
   - All the credits required for a degree, whether earned in residence or transferred from another institution, must have been earned within 12 years prior to the date when the degree is awarded. However, when given evidence that the previous courses still provide adequate preparation for courses yet to be taken and represent a reasonable part of the academic program, the statute of limitations may be waived. In such cases, the waiver is for a specific period during which the program must be completed.
   - All transfer credits are subject to reevaluation if a student transfers from one school to another within the University of Pittsburgh or becomes inactive and is subsequently readmitted.
   - If a course for which advance standing is given is repeated at the University of Pittsburgh, the advance-standing credit is repealed.

- Students may submit syllabi for public health courses taken at other colleges or universities to be evaluated for equivalency to SPH major courses.
- No more than half the courses required for a public health major may be transferred from other colleges or universities.
- Students may use the Pitt Transfer Tool to determine how many of their courses may be transferred.

4) If applicable, provide articulation agreements with community colleges that address acceptance of coursework.

   The BSPH program does not currently have articulation agreements with community colleges. Coursework from community colleges is accepted through a transfer course database maintained by the Office of the Registrar. Coursework from a community college can also be accepted after being evaluated by the BPSH director of undergraduate curriculum.

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.

   The BSPH requires 44 – 46 credits of coursework for the major, in addition to the general education requirements. This is comparable to many arts and sciences disciplines at the University of Pittsburgh. For example, the psychology major requires 39 credits of major coursework, the anthropology major requires 33 credits, the biological sciences major requires 57 credits, and the statistics major requires 50 credits.

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.

Degree Requirements for MS in Biostatistics		
Course number	**Course name**	**Credits (if applicable)**
BIOST 2025	Biostatistics Seminar	1
BIOST 2037	Foundations of Statistical Theory	4
BIOST 2039	Biostatistical Methods	3
BIOST 2049	Applied Regression Analysis	3
BIOST 2050	Longitudinal and Clustered Data Analysis	2
BIOST 2066	Applied Survival Analysis: Methods and Practice	2
BIOST 2081	Mathematical Methods for Statistics	3
BIOST 2087	Biostatistics Consulting Practicum	1
BIOST 2093	SAS for Data Management and Analysis	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: 10 credits (alternate electives can be substituted with advisor permission)		
BIOST 2036	Introduction to Health Data Science	2
BIOST 2056	Statistical Evaluation of Biomarkers and Classification Tools	3
BIOST 2062	Clinical Trials: Methods and Practice	3
BIOST 2063	Bayesian Data Science	3
BIOST 2067	Applied Meta-analysis	1
BIOST 2068	Introduction to Causal Inference	3
BIOST 2069	Statistical Methods for Omics Data	2
BIOST 2079	Introductory Statistical Learning for Health Sciences	2
BIOST 2080	Advanced Statistical Learning	2
BIOST 2094	Advanced R Computing	2

Degree Requirements for MS in Environmental and Occupational Health		
Course number	**Course name**	**Credits (if applicable)**
EOH 2109 *(four terms)*	Environmental and Occupational Health Sciences Journal Club	1
EOH 2175	Principles of Toxicology	3
EOH 2310	Molecular Fundamentals	3
EOH 2504	Principles of Environmental Exposure	3
EOH 3210	Pathophysiology of Environmental Disease	3
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: 12 credits (alternate electives can be substituted with advisor permission)		
EOH 2004	Occupational Hygiene	3
EOH 2021	Special Studies	variable
EOH 2122	Transport and Fate of Environmental Agents	3
EOH 2180	Introduction to Risk Sciences	1
EOH 2181	Risk Assessment Practicum	2
EOH 2609	Chemical Toxicology in the Age of Green Chemistry	3
EOH 2805	Epigenetics and Epigenomics of Environmental Health	3
EPIDEM 2223	Introduction to Environmental Epidemiology	2

Degree Requirements for MS in Epidemiology (30 Credit)		
Course number	**Course name**	**Credits (if applicable)**
EPIDEM 2110	Principles of Epidemiology	3
EPIDEM 2180	Fundamentals of Epidemiological Methods	3
EPIDEM 2181	Design and Conduct of Clinical Trials	2
EPIDEM 2250	Seminar in Epidemiology	1
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Select One:		
EPIDEM 2160	Epidemiology of Infectious Diseases	2
EPIDEM 2170	Chronic Disease Epidemiology	2
EPIDEM 2260	Epidemiological Basis Disease Control	2
Select One:		
EPIDEM 2185	Introduction to SAS	2
EPIDEM 2186	Introduction to R	2
BIOST 2093	SAS for Data Management and Analysis	2
Electives: Approved by Advisor		3-5

Degree Requirements for MS in Epidemiology (45 Credit)		
Course number	**Course name**	**Credits (if applicable)**
EPIDEM 2110	Principles of Epidemiology	3
EPIDEM 2160	Epidemiology of Infectious Diseases	2
EPIDEM 2170	Chronic Disease Epidemiology	2
EPIDEM 2180	Fundamentals of Epidemiological Methods	3
EPIDEM 2181	Design and Conduct of Clinical Trials	2
EPIDEM 2250	Seminar in Epidemiology	1
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Select One:		
EPIDEM 2189	Epidemiological Methods of Longitudinal & Time-to-event Analyses	3
BIOST 2050	Longitudinal and Clustered Data Analysis	2
BIOST 2066	Applied Survival Analysis: Methods and Practice	2
Select One:		
EPIDEM 2185	Introduction to SAS	2
EPIDEM 2186	Introduction to R	2
BIOST 2093	SAS for Data Management and Analysis	2
Electives: Approved by Advisor		13-16

Degree Requirements for MS in Genome Bioinformatics		
Course number	**Course name**	**Credits (if applicable)**
HUGEN 2010	Bioinformatic Resources for Geneticists	1
HUGEN 2020	Introduction to Population Genetics and Genetic Epidemiology	3
HUGEN 2025 *(two terms)*	Human Genetics Seminar	0
HUGEN 2040	Molecular Basis of Human Inherited Disease	3
HUGEN 2071	Genomic Data Processing and Structure	3
HUGEN 2072	Genomic Data Pipelines and Tools	3
HUGEN 2073	Genomic Data Visualization and Integration	3
HUGEN 2075	Genome Bioinformatics Thesis and Writing	2
HUGEN 2076	Genome Bioinformatics Capstone	2
HUGEN 2077	Genome Bioinformatics Professional Skills	2
HUGEN 2078	Genomic Data Advanced Topics in Bioinformatics	2
BIOST 2041	Introduction to Statistical Methods	3
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
PUBHLT 2030	Research Ethics and the Responsible Conduct of Research	1
HUGEN Electives (select at least five credits):		
HUGEN 2029	Introduction to Gene Mapping	3
HUGEN 2060	Chromosomes - Structure and Function	2

Degree Requirements for MS in Genome Bioinformatics		
Course number	**Course name**	**Credits (if applicable)**
HUGEN 2090	Genetics of Complex Diseases 1	2
HUGEN 2091	Genetics of Complex Diseases 2	1
Electives: Approved by Advisor		3-6

Degree Requirements for MS in Health Data Science		
Course number	**Course name**	**Credits (if applicable)**
BIOST 2025	Biostatistics Seminar	1
BIOST 2036	Introduction to Health Data Science	2
BIOST 2037	Foundations of Statistical Theory	4
BIOST 2039	Biostatistical Methods	3
BIOST 2049	Applied Regression Analysis	3
BIOST 2079	Introductory Statistical Learning for Health Sciences	2
BIOST 2081	Mathematical Methods for Statistics	3
BIOST 2087	Biostatistics Consulting Practicum	1
BIOST 2094	Advanced R Computing	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: 10 credits (alternate electives can be substituted with advisor permission)		
BIOST 2063	Bayesian Data Science	3
BIOST 2080	Advanced Statistical Learning	2
BIOST 2093	SAS for Data Management and Analysis	2
BMIS 2542	Data Programming Essentials with Python	3
BMIS 2588	Data Base Management	3
INFSCI 2160	Data Mining	3
INFSCI 2410	Introduction to Neural Networks	3
INFSCI 2595	Machine Learning	3
INFSCI 2725	Data Analytics	3
PHARM 5834	Python for Data Management and Analytics	3
STAT 2270	Data Mining	3

Degree Requirements for MS in Health Services Research and Policy		
Course number	**Course name**	**Credits (if applicable)**
HPM 2001	Health Policy and Management in Public Health	3
HPM 2905	Quasi-experimental Design for Health Services Research	3
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
BIOST 2050	Longitudinal and Clustered Data Analysis	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Area of Focus Courses		11
Electives: Approved by Advisor		9-10

Degree Requirements for MS in Human Genetics		
Course number	**Course name**	**Credits (if applicable)**
HUGEN 2010	Bioinformatic Resources for Geneticists	1
HUGEN 2011	Scientific Writing in Human Genetics	1
HUGEN 2020	Introduction to Population Genetics and Genetic Epidemiology	3
HUGEN 2025 *(two terms)*	Human Genetics Seminar	0
HUGEN 2028	Human Genetics Journal Club and Peer Review	1
HUGEN 2040	Molecular Basis of Human Inherited Disease	3
BIOST 2041	Introduction to Statistical Methods	3
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
PUBHLT 2030	Research Ethics and the Responsible Conduct of Research	1
HUGEN Electives (select at least 5 credits):		
HUGEN 2029	Introduction to Gene Mapping	3
HUGEN 2060	Chromosomes - Structure and Function	2
HUGEN 2090	Genetics of Complex Diseases 1	2
HUGEN 2091	Genetics of Complex Diseases 2	1
Electives: Approved by Advisor		minimum 11

Degree Requirements for MS in Infectious Disease and Microbiology		
Course number	**Course name**	**Credits (if applicable)**
IDM 2003	Host Response to Microbial Infection	2
IDM 2021 *(every term)*	Special Studies in Microbiology	1-15
IDM 2022	Special Topics	3
IDM 2023	Microbiology Laboratory	2
IDM 2025 *(4 terms)*	Microbiology Seminar	1
IDM 2035	Advanced Vector-borne Infectious Diseases	2
IDM 2041	Research Ethics and Scientific Communication	1
IDM 3440	Vaccines and Immunity	2
BIOST 2041	Introduction to Statistical Methods	3
EPIDEM 2110	Principles of Epidemiology	3
EPIDEM 2161	Methods Infectious Disease Epidemiology	1
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: Approved by Advisor		2

Degree Requirements for MS in Statistical and Computational Genomics		
Course number	**Course name**	**Credits (if applicable)**
BIOST 2025	Biostatistics Seminar	1
BIOST 2037	Foundations of Statistical Theory	4
BIOST 2039	Biostatistical Methods	3
BIOST 2049	Applied Regression Analysis	3
BIOST 2069	Statistical Methods for Omics Data	2
BIOST 2079	Introductory Statistical Learning for Health Sciences	2
BIOST 2081	Mathematical Methods for Statistics	3
BIOST 2087	Biostatistics Consulting Practicum	1
BIOST 2094	Advanced R Computing	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: 10 credits (alternate electives can be substituted with advisor permission)		
BIOSC 2140	Genomics	2
BIOSC 2940	Molecular Biology	3
BIOST 2080	Advanced Statistical Learning	2
HUGEN 2020	Human Population Genetics	2
HUGEN 2029	Introduction to Gene Mapping	3
HUGEN 2071	Genomic Data Processing and Structure	3
HUGEN 2072	Genomic Data Pipelines and Tools	3
HUGEN 2073	Genomic Data Visualization and Integration	3
HUGEN 2080	Statistical Genetics	3

2) Provide a matrix, in the format of Template D16-1, that indicates the assessment activity for each of the foundational public health learning objectives listed above (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

Content Coverage for Academic Public Health Master's Degree (SPH and PHP, if applicable)		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Explain public health history, philosophy, and values	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
2. Identify the core functions of public health and the 10 Essential Services	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBHLT 2011: Public Health Essentials	Two midterms and final exam

Content Coverage for Academic Public Health Master's Degree (SPH and PHP, if applicable)		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
7. Explain effects of environmental factors on a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
8. Explain biological and genetic factors that affect a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
9. Explain behavioral and psychological factors that affect a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
11. Explain how globalization affects global burdens of disease	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2011: Public Health Essentials	Two midterms and final exam

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)

    Syllabus and assignments are provided in ERF> Criterion D> D16> D16.3.

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.

Competencies for Academic Master's Degrees in Public Health (MS in Biostatistics)	
Competency	**Describe how this competency is covered**
1. Identify appropriate problem definitions, study designs, and data collection methods to address public health problems	BIOST 2039: Biostatistical Methods
2. Utilize fundamental theoretical concepts and relationships to effectively apply and interpret common statistical inference techniques	BIOST 2037: Foundations of Statistical Theory
3. Use common biostatistical inference techniques and regression models to analyze data and interpret the results for public health practice	BIOST 2039: Biostatistical Methods BIOST 2049: Applied Regression Analysis

Competencies for Academic Master's Degrees in Public Health (MS in Biostatistics)	
Competency	**Describe how this competency is covered**
4. Recognize strengths and weaknesses of approaches, including alternative designs, data sources, and analytic methods	BIOST 2037: Foundations of Statistical Theory BIOST 2039: Biostatistical Methods BIOST 2049: Applied Regression Analysis
5. Communicate the meaning, potential, and results of biostatistical analyses to potential collaborators with varying degrees of statistical knowledge	BIOST 2087: Biostatistics Consulting Practicum
6. Effectively use SAS software for advanced data management and in-depth statistical analysis	BIOST 2093: SAS for Data Management and Analysis
7. Appropriately utilize generalized linear models to analyze clustered and longitudinal data (binary/continuous/count) applicable to health sciences	BIOST 2050: Longitudinal and Clustered Data Analysis
8. Derive and interpret fundamental quantities and statistics from various survival analysis models; Perform the analysis and interpret the results from nonparametric, parametric, and semiparametric survival models	BIOST 2066: Applied Survival Analysis: Methods and Practice
9. Apply advanced methods or theories in at least three major areas of classical biostatistics	Students choose 10 credits from: BIOST 2036: Introduction to Health Data Science BIOST 2056: Statistical Evaluation of Biomarkers and Classification Tools BIOST 2062: Clinical Trials: Methods and Practice BIOST 2063: Bayesian Data Science BIOST 2067: Applied Meta-analysis BIOST 2068: Introduction to Causal Inference BIOST 2069: Statistical Methods for Omics Data BIOST 2079: Introductory Statistical Learning for Health Sciences BIOST 2080: Advanced Statistical Learning BIOST 2094: Advanced R Computing

Competencies for Academic Master's Degrees in Public Health (MS in Environmental and Occupational Health)	
Competency	**Describe how this competency is covered**
1. Discuss mechanisms for the direct and indirect human, ecological, and safety effects of major environmental and occupational hazards	EOH 2175: Principles of Toxicology
2. Describe the principles of pathogenic interactions of environmental toxicants at the molecular and physiologic levels of disease promotion	EOH 2310: Molecular Fundamentals EOH 3210: Pathophysiology of Environmental Disease
3. Discuss effective methodologies to evaluate environmental and human exposures to major environmental and occupational hazards	EOH 2504: Principles of Environmental Exposure
4. Critically evaluate environmental and occupational health sciences literature	EOH 2109: Environmental and Occupational Health Sciences Journal Club
5. Conduct a comprehensive literature review for a topic appropriate to environmental and occupational health sciences	MS Thesis

Competencies for Academic Master's Degrees in Public Health (MS in Epidemiology, 30 and 45 credit)	
Competency	**Describe how this competency is covered**
1. Calculate and interpret epidemiology measures	EPIDEM 2180: Fundamentals of Epidemiological Methods
2. Describe models of disease etiology and control	EPIDEM 2160: Epidemiology of Infectious Diseases and/or EPIDEM 2170: Chronic Disease Epidemiology and/or EPIDEM 2260: Epidemiological Basis Disease Control
3. Describe the clinical trial study design and understand its application, strengths, and limitations	EPIDEM 2181: Design and Conduct of Clinical Trials
4. Conduct epidemiologic analysis using statistical packages to evaluate linear, logistic, Cox, and Poisson regression models	BIOST 2049: Applied Regression Analysis

Competencies for Academic Master's Degrees in Public Health (MS in Genome Bioinformatics)	
Competency	**Describe how this competency is covered**
1. Process genetic and genomic data	HUGEN 2071: Genomic Data Processing and Structure
2. Construct pipelines for high-throughput analysis of data	HUGEN 2072: Genomic Data Pipelines and Tools
3. Annotate analysis results using contemporary bioinformatic resources	HUGEN 2073: Genomic Data Visualization and Integration
4. Communicate analysis methods and results to stakeholders	HUGEN 2075: Genome Bioinformatics Thesis and Writing HUGEN 2076: Genome Bioinformatics Capstone
5. Describe data structures for holding genetic and genomic data	HUGEN 2071: Genomic Data Processing and Structure
6. Describe the methods for generating genomic data	HUGEN 2072: Genomic Data Pipelines and Tools
7. Analyze genetic and genomic data to address research questions	HUGEN 2076: Genome Bioinformatics Capstone
8. Visualize quality metrics and analysis results	HUGEN 2073: Genomic Data Visualization and Integration

Competencies for Academic Master's Degrees in Public Health (MS in Health Data Science)	
Competency	**Describe how this competency is covered**
1. Identify appropriate problem definitions, study designs, and data collection methods to address public health problems	BIOST 2039: Biostatistical Methods
2. Utilize fundamental theoretical concepts and relationships to effectively apply and interpret common statistical inference techniques	BIOST 2037: Foundations of Statistical Theory
3. Use common biostatistical inference techniques and regression models to analyze data and interpret the results for public health practice	BIOST 2039: Biostatistical Methods BIOST 2049: Applied Regression Analysis

Competencies for Academic Master's Degrees in Public Health (MS in Health Data Science)	
Competency	**Describe how this competency is covered**
4. Recognize strengths and weaknesses of approaches, including alternative designs, data sources, and analytic methods	BIOST 2037: Foundations of Statistical Theory BIOST 2039: Biostatistical Methods BIOST 2049: Applied Regression Analysis
5. Communicate the meaning, potential, and results of biostatistical analyses to potential collaborators with varying degrees of statistical knowledge	BIOST 2087: Biostatistics Consulting Practicum
6. Effectively use R software for basic statistical analysis and advanced programming tasks	BIOST 2094: Advanced R Computing
7. Apply data curation, wrangling, and management techniques such as data munging, data scraping, sampling, and cleaning to construct informative, usable, and manageable data sets for meaningful analyses	BIOST 2036: Introduction to Health Data Science
8. Apply methods for big data, including supervised and unsupervised machine learning to reveal patterns, trends and associations including visualization	BIOST 2079: Introductory Statistical Learning for Health Sciences
9. Apply advanced methods in at least three major areas of data science	Students chose 10 credits from: BIOST 2063: Bayesian Data Science BIOST 2080: Advanced Statistical Learning BIOST 2093: SAS for Data Management and Analysis BMIS 2542: Data Programming Essentials with Python BMIS 2588: Database Management INFSCI 2160: Data Mining INFSCI 2410: Introduction to Neural Networks INFSCI 2595: Machine Learning INFSCI 2725: Data Analytics PHARM 5834: Python for Data Management and Analytics STAT 2270: Data Mining

Competencies for Academic Master's Degrees in Public Health (MS in Health Services Research and Policy)	
Competency	**Describe how this competency is covered**
1. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	HPM 2001: Health Policy and Management in Public Health
2. Design an applied health policy research project using appropriate research methods (e.g., quasi-experimental design)	HPM 2905: Quai-experimental Design for Health Services Research
3. Interpret results of data analysis for public health research, policy, or practice	BIOST 2041: Introduction to Statistical Methods
4. Apply knowledge of health services research relevant disciplines and quantitative methodology to synthesize and critique published research	Comprehensive exam

Competencies for Academic Master's Degrees in Public Health (MS in Human Genetics)	
Competency	**Describe how this competency is covered**
1. Describe the basic genetic principles and mechanisms through which they affect proteins, chromosomes, cells, individuals, and populations in states of health and disease	HUGEN 2040: Molecular Basis of Human Inherited Disease
2. Describe the mechanisms by which genes and the environment interact to affect the distribution of health and disease in human populations	HUGEN 2040: Molecular Basis of Human Inherited Disease
3. Use conceptual and methodological knowledge to interpret research results	HUGEN 2020: Introduction to Population Genetics and Genetic Epidemiology
4. Describe the importance of ethical principles, diversity, and inclusion in genetics research	PUBHLT 2030: Research Ethics and the Responsible Conduct of Research
5. Query biotechnology and bioinformatics resources to facilitate clinical decision-making and/or interpret research results	HUGEN 2010: Bioinformatic Resources for Geneticists

Competencies for Academic Master's Degrees in Public Health (MS in Infectious Disease and Microbiology)	
Competency	**Describe how this competency is covered**
1. Describe comprehensive knowledge of the process involved in the development, testing, and considerations for implementation of a successful vaccine	IDM 3440: Vaccines and Immunity
2. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health	IDM 2035: Advanced Vector-borne Infectious Diseases
3. Discuss the mechanisms of innate and acquired immunity and their roles in health and disease	IDM 2003: Host Response to Microbial Infection
4. Describe the experimental methodologies and analyses used in modern infectious disease research	IDM 2023: Microbiology Laboratory
5. Design, analyze, and interpret data from research experiments covering molecular biology, microbiology, immunology, and infectious diseases	IDM 2022: Special Topics
6. Communicate the results of their own independent laboratory-based research	IDM 2025: Microbiology Seminar

Competencies for Academic Master's Degrees in Public Health (MS in Statistical and Computational Genomics)	
Competency	**Describe how this competency is covered**
1. Identify appropriate problem definitions, study designs, and data collection methods to address public health problems	BIOST 2039: Biostatistical Methods
2. Utilize fundamental theoretical concepts and relationships to effectively apply and interpret common statistical inference techniques	BIOST 2037: Foundations of Statistical Theory
3. Use common biostatistical inference techniques and regression models to analyze	BIOST 2039: Biostatistical Methods BIOST 2049: Applied Regression Analysis

Competencies for Academic Master's Degrees in Public Health (MS in Statistical and Computational Genomics)	
Competency	**Describe how this competency is covered**
data and interpret the results for public health practice	
4. Recognize strengths and weaknesses of approaches, including alternative designs, data sources, and analytic methods	BIOST 2037: Foundations of Statistical Theory BIOST 2039: Biostatistical Methods BIOST 2049: Applied Regression Analysis
5. Communicate the meaning, potential, and results of biostatistical analyses to potential collaborators with varying degrees of statistical knowledge	BIOST 2087: Biostatistics Consulting Practicum
6. Effectively use R software for processing and analysis of 'omics-type data	BIOST 2094: Advanced R Computing
7. Apply specialized statistical, bioinformatics, and computational methods for analysis of 'omics data and interpret the results	BIOST 2069: Statistical Methods for Omics Data
8. Apply methods of statistical learning, including dimension reductions, clustering, and subgroup analysis to visualize and analyze 'omics-type data	BIOST 2079: Introductory Statistical Learning for Health Sciences
9. Apply advanced methods in at least three major areas of genomics	Students choose 10 credits from: BIOSC 2140: Genomics BIOSC 2940: Molecular Biology BIOST 2080: Advanced Statistical Learning HUGEN 2020: Population Genetics and Genetic Epidemiology HUGEN 2029: Introduction to Gene Mapping HUGEN 2071: Genomic Data Processing and Structure HUGEN 2072: Genomic Data Pipelines and Tools HUGEN 2073: Genomic Data Visualization and Integration HUGEN 2080: Statistical Genetics

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.)

   Syllabi are provided in ERF> Criterion D> D16> D16.5.

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.

   All academic degree students are required to take PUBHLT 2011: Public Health Essentials, which is a three-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 academic degree students are required to take EPIDEM 2110: Principles of Epidemiology – the same introductory three credit epidemiology course that is taken by MPH students. In addition, most take discipline-specific research methods courses as part of their concentrations.

8) Briefly summarize policies and procedures relating to production and assessment of the final research project or paper.

   All academic master's degree students are required to complete a thesis. This is a research-based project requiring substantial effort, guided by a primary thesis advisor, and assessed by a committee of at least three faculty. In most programs, the thesis takes the form of an academic research paper, although in a few it can be a more applied product such as a major data analysis report written for a professional audience or a policy brief. The thesis is presented in an 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.

   Please see ERF> Criterion D> D16> 16.9. Updated handbooks for fall 2023 will be included in the final self-study.

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.

    Please see ERF> Criterion D> D16> D16.10.

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

    Strengths, challenges, and solutions in progress: The school offers a wide variety of rigorous academic master's degrees in disciplines that span the breadth of the school. Students in all programs get a solid grounding in public health fundamentals with the very well-received PUBHLT 2011: Public Health Essentials course and EPIDEM 2110: Principles of Epidemiology. Each program is based on a set of appropriate advanced competencies that are taught and assessed in program courses and other experiences, and communicated to students in handbooks and web pages. Students in all programs complete a substantial inquiry-based thesis as the culminating experience of the degree program. All programs continue to evolve as the disciplines change and innovate, and as the school actively listens and incorporates feedback from students, alumni, employers, and other stakeholders.

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.

   Curricular elements that are designed expressly for doctoral, rather than master's students and are not typically associated with completion of a master's degree in the same area of study are highlighted green in the following tables.

Degree Requirements for PhD in Behavioral and Community Health Sciences		
Course number	**Course name**	**Credits (if applicable)**
BCHS 2525	Introduction to Applied Research	3
BCHS 2554	Introduction to Community Health	3
BCHS 2558	Health Program Evaluation	3
BCHS 3004	Integrative Research Seminar: Grant Writing	1
BCHS 3006	Integrative Research Seminar: Writing for Publication	1
BCHS 3007	Ethnographic and Qualitative Methods	3
BCHS 3030	Measurement in the Social and Behavioral Sciences	2

Degree Requirements for PhD in Behavioral and Community Health Sciences		
Course number	**Course name**	**Credits (if applicable)**
BCHS 3506	Implementation Science in Public Health	3
BCHS 3555	Doctoral Seminar in Behavioral and Community Health Sciences Theories and Models	3
BCHS 3707	Applied Multiple Regression Analysis and Causal Modeling for the Behavioral and Community Health Sciences	3
BCHS 3888	Preparation for Comprehensive Examination	1-3
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
EPIDEM 2110	Principles of Epidemiology	3
FACDEV 2200 OR BCHS 2511 & 6 UCTL Workshops	Practicum on University Teaching OR Independent Study	1-3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: Theory & Methods (choose 3)		
BCHS 2608/2609/2610	Introduction to Community Based Participatory Research/Translating Research for Policy and Practice/Concept Mapping: A Participatory Research Method	3
BCHS 3002	Health Survey Methods	3
BCHS 3003	Seminar in Advanced Evaluation Techniques	3
BCHS 3504	Doctoral Seminar on Health Communications	3
HPM 2010	Organization Studies: Theory and Applications to Health Care Systems	3
Electives		1-6
PhD Research Credits		variable

Degree Requirements for PhD in Biostatistics		
Course number	**Course name**	**Credits (if applicable)**
BIOST 2025 *(3 terms)*	Biostatistics Seminar	1
BIOST 2039	Biostatistical Methods	3
BIOST 2043	Introduction to Statistical Theory 1	3
BIOST 2044	Introduction to Statistical Theory 2	3
BIOST 2049	Applied Regression Analysis	3
BIOST 2050	Longitudinal and Clustered Data Analysis	2
BIOST 2051	Statistical Estimation Theory	3
BIOST 2054	Survival Analysis	3
BIOST 2061	Likelihood Theory and Application	2
BIOST 2083	Linear Models	3
BIOST 2086	Mixed Models	3
BIOST 2087	Biostatistics Consulting Practicum	1
BIOST 2093	SAS for Data Management and Analysis	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0

Degree Requirements for PhD in Biostatistics		
Course number	**Course name**	**Credits (if applicable)**
Outside Electives: 3 credits taken outside BIOST		
Electives: Choose 6 courses (alternate courses can be substituted with advisor permission)		
BIOST 2036	Introduction to Health Data Science	2
BIOST 2040	Elements of Stochastic Processes	3
BIOST 2056	Statistical Evaluation of Biomarkers and Classification Tools	3
BIOST 2062	Clinical Trials: Methods and Practice	3
BIOST 2063	Bayesian Data Science	3
BIOST 2065	Analysis of Incomplete Data	3
BIOST 2067	Applied Meta-analysis	1
BIOST 2068	Introduction to Causal Inference	3
BIOST 2069	Statistical Methods for Omics Data	2
BIOST 2079	Introductory Statistical Learning for Health Sciences	2
BIOST 2080	Advanced Statistical Learning	2
BIOST 2094	Advanced R Computing	2
PhD Research Credits		variable

Degree Requirements for PhD in Environmental and Occupational Health		
Course number	**Course name**	**Credits (if applicable)**
EOH 2109 *(four terms)*	Environmental and Occupational Health Sciences Journal Club	1
EOH 2110 *(two terms)*	Rotation/Practicum	2
EOH 2122	Transport and Fate of Environmental Agents	3
EOH 2175	Principles of Toxicology	3
EOH 2180	Introduction to Risk Sciences	1
EOH 2181	Risk Assessment Practicum	2
EOH 2310	Molecular Fundamentals	3
EOH 2504	Principles of Environmental Exposure	3
EOH 2805	Epigenetics and Epigenomics of Environmental Health	3
EOH 3210	Pathophysiology of Environmental Disease	3
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
Electives: Minimum 6 credits from list below (alternate courses can be substituted with advisor permission)		
EOH 2004	Occupational Hygiene	3
EOH 2609	Chemical Toxicology in the Age of Green Chemistry	3
EPIDEM 2223	Introduction to Environmental Epidemiology	2
PhD Research Credits		variable

Degree Requirements for PhD in Environmental and Occupational Health, Public Health Practice		
Course number	**Course name**	**Credits (if applicable)**
EOH 2004	Occupational Hygiene	3
EOH 2021	Special Studies	2
EOH 2108	Environmental and Occupational Health Practicum	2
EOH 2122	Transport and Fate of Environmental Agents	3
EOH 2175	Principles of Toxicology	3
EOH 2180	Introduction to Risk Sciences	1
EOH 2181	Risk Assessment Practicum	2
EOH 2309	Environmental Health Chemistry	3
EOH 2504	Principles of Environmental Exposure	3
EOH 2609	Chemical Toxicology in the Age of Green Chemistry	3
BCHS 2509	Social and Behavioral Sciences and Public Health	3
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
EPIDEM 2110	Principles of Epidemiology	3
HPM 2001	Health Policy and Management in Public Health	3
PUBHLT 2015	Public Health Biology	2
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
PUBHLT 2033	Foundations in Public Health	1
PUBHLT 2034	Public Health Communications	2
PUBHLT 2035	Applications in Public Health	2
PhD Research/Elective Credits		variable

Degree Requirements for PhD in Epidemiology		
Course number	**Course name**	**Credits (if applicable)**
EPIDEM 2110	Principles of Epidemiology	3
EPIDEM 2160	Epidemiology of Infectious Diseases	2
EPIDEM 2170	Chronic Disease Epidemiology	2
EPIDEM 2180	Fundamentals of Epidemiological Methods	3
EPIDEM 2181	Design and Conduct of Clinical Trials	2
EPIDEM 2189	Epidemiological Methods of Longitudinal & Time-to-event Analyses	3
EPIDEM 2192	Causal Inference in Epidemiologic Research	3
EPIDEM 2193	Machine Learning and Bayesian Analysis in Epidemiological Research	3
EPIDEM 2215	Teaching Practicum	2
EPIDEM 2230	Secondary Data Analysis: A Capstone Course	2
EPIDEM 2250	Seminar in Epidemiology	1
EPIDEM 2260	Epidemiological Basis Disease Control	2
EPIDEM 2600	Introduction to Molecular Epidemiology	3
EPIDEM 2921	Grant Writing	3
EPIDEM 3183	Reading, Analyzing, and Interpreting the Public Health and Medical Literature	3
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0

Degree Requirements for PhD in Epidemiology		
Course number	**Course name**	**Credits (if applicable)**
PUBHLT 2030	Research Ethics and the Responsible Conduct of Research	1
Select One:		
EPIDEM 2004	Pathophysiology Across the Life Span	4
EOH 3210	Pathophysiology of Environmental Disease	3
Select One:		
EPIDEM 2185	Introduction to SAS	2
EPIDEM 2186	Introduction to R	2
BIOST 2093	SAS for Data Management and Analysis	2
Select One:		
BCHS 2991	Multilevel Analysis in Public Health	1
BCHS 3002	Health Survey Methods	3
BCHS 3015	Community Mapping and Introductory Spatial Analysis	3
BIOST 2016	Sampling Design and Analysis	2
BIOST 2050	Longitudinal and Clustered Data Analysis	2
BIOST 2066	Applied Survival Analysis: Methods and Practice	2
EFOP 3408	Hierarchical Linear Modeling	3
HPM 3505	Advanced Empirical Microeconomics Methods with Applications for Healthcare Research	3
HUGEN 2080	Statistical Genetics	3
PhD Research/Elective Credits		variable

Degree Requirements for PhD in Health Services Research and Policy		
Course number	**Course name**	**Credits (if applicable)**
HPM 2905	Quasi-experimental Design for Health Services Research	3
HPM 3000	Doctoral Research and Professional Development Seminar Part 1	1.5
HPM 3001	Doctoral Research and Professional Development Seminar Part 2	1.5
HPM 3010	Seminar of Organizational Studies: Healthcare Organizations and Environments	3
HPM 3064	Health Policy Analysis	3
HPM 3065	Advanced Health Policy Analysis: Implementation, Evaluation, and Translation	2
HPM 3125	Intermediate Health Economics	3
HPM 3501	Seminar in Health Services Research Methods 1	3
HPM 3502	Seminar in Health Services Research Methods 2	3
HPM 3505	Advanced Empirical Microeconomics Methods with Applications for Health Research	3
HPM 3506	Dissertation Grant Writing Capstone	1.5
FACDEV 2200 OR HPM 2275 & 6 UCTL Workshops	Practicum on University Teaching OR Independent Study	1
BIOST 2041	Introduction to Statistical Methods	3
BIOST 2049	Applied Regression Analysis	3

Degree Requirements for PhD in Health Services Research and Policy		
Course number	**Course name**	**Credits (if applicable)**
BIOST 2050	Longitudinal and Clustered Data Analysis	2
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
PUBHLT 2030	Research Ethics and the Responsible Conduct of Research	1
Students without previous health care experience:		
HPM 2105	Introduction to the US Healthcare Delivery System 1	1
Students who have not recently taken a course in microeconomics:		
HPM 2028	Microeconomics Applied to Health	3
Electives		minimum 12
PhD Research Credits		variable

Degree Requirements for PhD in Human Genetics		
Course number	**Course name**	**Credits (if applicable)**
HUGEN 2010	Bioinformatic Resources for Geneticists	1
HUGEN 2011	Scientific Writing in Human Genetics	1
HUGEN 2020	Introduction to Population Genetics and Genetic Epidemiology	3
HUGEN 2025 *(four terms)*	Human Genetics Seminar	0
HUGEN 2028 *(two terms)*	Human Genetics Journal Club and Peer Review	1
HUGEN 2029	Introduction to Gene Mapping	3
HUGEN 2040	Molecular Basis of Human Inherited Disease	3
HUGEN 2060	Chromosomes - Structure and Function	2
HUGEN 2090	Genetics of Complex Diseases 1	2
HUGEN 2091	Genetics of Complex Diseases 2	1
HUGEN 3020	Doctoral Research and Professional Skills Development	1
BIOST 2041	Introduction to Statistical Methods	3
EPIDEM 2110	Principles of Epidemiology	3
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
PUBHLT 2030	Research Ethics and the Responsible Conduct of Research	1
HUGEN Electives: Choose 1 course (alternate courses can be substituted with advisor permission)		
HUGEN 2051	Inborn Errors of Development	2
HUGEN 2071	Genomic Data Processing and Structure	3
HUGEN 2072	Genomic Data Pipelines and Tools	3
HUGEN 2073	Genomic Data Visualization and Integration	3
HUGEN 2080	Statistical Genetics	3
PhD Research/Elective Credits		variable

Degree Requirements for PhD in Infectious Disease and Microbiology		
Course number	**Course name**	**Credits (if applicable)**
IDM 2001	Molecular Biology of Microbial Pathogens	3
IDM 2002	Molecular Virology	3
IDM 2003	Host Response to Microbial Infection	2
IDM 2004	Viral Pathogenesis	2
IDM 2014	Functional Genomics of Microbial Pathogens	3
IDM 2021 *(6 terms)*	Special Studies in Microbiology	1-15
IDM 2023	Microbiology Laboratory	2
IDM 2025 *(4 terms)*	Microbiology Seminar	1
IDM 2038	Prevention, Treatment, and Control of Global Infectious Diseases	3
IDM 2041	Research Ethics and Scientific Communication	1
IDM 3440	Vaccines and Immunity	2
BIOST 2041	Introduction to Statistical Methods	3
EPIDEM 2110	Principles of Epidemiology	3
EPIDEM 2161	Methods Infectious Disease Epidemiology	1
PUBHLT 2011	Essentials of Public Health	3
PUBHLT 2022 *(two terms)*	The Dean's Public Health Grand Rounds	0
PhD Research/Elective Credits		variable

2) Provide a matrix, in the format of Template D17-1, that indicates the assessment activity for each of the foundational public health learning objectives listed above (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

   Students in all PhD programs except for the Environmental and Occupational Health Public Health Practice PhD program fulfill this requirement by enrolling in the three-credit Public Health Essentials course (see table below). Students in the EOH PHP PhD program take the full MPH core (Table D1-1c).

Content Coverage for Academic Doctoral Degree in a Public Health Field (SPH and PHP, if applicable)		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
1. Explain public health history, philosophy, and values	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
2. Identify the core functions of public health and the 10 Essential Services	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
5. Discuss the science of primary, secondary, and tertiary prevention in	PUBHLT 2011: Public Health Essentials	Two midterms and final exam

Content Coverage for Academic Doctoral Degree in a Public Health Field (SPH and PHP, if applicable)		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity**
population health, including health promotion, screening, etc.		
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
7. Explain effects of environmental factors on a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
8. Explain biological and genetic factors that affect a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
9. Explain behavioral and psychological factors that affect a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
11. Explain how globalization affects global burdens of disease	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2011: Public Health Essentials	Two midterms and final exam

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)

   Syllabus and assignments are provided in ERF> Criterion D> D17> D17.3.

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.

Competencies for Academic Doctoral Degrees in Public Health (PhD in Behavioral and Community Health Sciences)	
Competency	**Describe how this competency is covered**
1. Apply critical thinking and problem-solving skills using various models and conceptual frameworks from the social and behavioral sciences	BCHS 3555: Doctoral Seminar in Behavioral and Community Health Sciences Theories and Models
2. Employ a social ecological perspective to the design and implementation of public health research programs	BCHS 2525: Introduction to Applied Research BCHS 2554: Introduction to Community Health
3. Apply qualitative and quantitative methodologies to design and conduct rigorous and scientifically valid research at various levels of human activity including the intrapersonal, interpersonal, organizational, community, and public policy domains	BCHS 2525: Introduction to Applied Research BCHS 2558: Health Program Evaluation BCHS 3007: Ethnographic and Qualitative Methods
4. Apply a social justice perspective in the consideration of and sensitivity to ethical issues that influence public health, health policy, and the delivery of health care	BCHS 2525: Introduction to Applied Research BCHS 2554: Introduction to Community Health BCHS 3555: Doctoral Seminar in Behavioral and Community Health Sciences Theories and Models
5. Apply data management and analysis skills	BCHS 2558: Health Program Evaluation BCHS 3004: Integrative Research Seminar: Grant Writing BCHS 3006: Integrative Research Seminar: Writing for Publication BCHS 3007: Ethnographic and Qualitative Methods BCHS 3707: Applied Multiple Regression Analysis and Causal Modeling for the Behavioral and Community Health Sciences
6. Demonstrate effective oral and written communication skills in the dissemination of research findings	BCHS 3006: Integrative Research Seminar: Writing for Publication BCHS 3007: Ethnographic and Qualitative Methods BCHS 3030: Measurement in the Social and Behavioral Sciences

Competencies for Academic Doctoral Degrees in Public Health (PhD in Biostatistics)	
Competency	**Describe how this competency is covered**
1. Develop and implement advanced parametric and nonparametric methods, and the corresponding inference procedures	BIOST 2051: Statistical Estimation Theory BIOST 2061: Likelihood Theory and Application
2. Formulate various linear and mixed models and master the statistical inference on these models	BIOST 2083: Linear Models BIOST 2086: Mixed Models
3. Apply linear, generalized linear and non-linear regression models to analyze cross-sectional, or clustered, or longitudinal data with applications to health sciences	BIOST 2049: Applied Regression Analysis BIOST 2050: Longitudinal and Clustered Data Analysis BIOST 2086: Mixed Models
4. Derive quantities and inference statistics for time-to-event data, and apply nonparametric, parametric, and semiparametric survival models to such data	BIOST 2054: Survival Analysis
5. Contribute to the body of knowledge in the field of biostatistics by submitting article(s) for	FTDR 3999: Full-time Dissertation Study

Competencies for Academic Doctoral Degrees in Public Health (PhD in Biostatistics)	
Competency	**Describe how this competency is covered**
publication in peer-reviewed journal(s), or preparing book chapter(s) for publication	

Competencies for Academic Doctoral Degrees in Public Health (PhD in Environmental and Occupational Health)	
Competency	**Describe how this competency is covered**
1. Acquire a basic theoretical background in cellular, molecular, and genetic etiology and pathophysiology of environmental disease and disease susceptibility	EOH 2310: Molecular Fundamentals EOH 2805: Epigenetics and Epigenomics of Environmental Health EOH 3210: Pathophysiology of Environmental Disease
2. Identify and explain effective methodologies to evaluate the direct and indirect human, ecological, and safety effects of major environmental and occupational hazards	EOH 2175: Principles of Toxicology EOH 2180: Introduction to Risk Sciences EOH 2181: Risk Assessment Practicum
3. Identify and apply methodologies for assessing environmental exposure pathways	EOH 2122: Transportation and Fate of Environmental Agents EOH 2504: Principles of Environmental Exposure
4. Integrate critical reading of scientific literature to develop and communicate testable hypotheses and ethical hypothesis-driven experimental research designs	EOH 2109: Environmental and Occupational Health Sciences Journal Club
5. Integrate and apply basic understanding of exposure pathways and molecular mechanisms of action to investigate hypotheses that address the environmental basis of human disease, as well as interventions that reduce disease burden	EOH 3010: Research and Dissertation PhD FTDR 3999: Full-time Dissertation Study

Competencies for Academic Doctoral Degrees in Public Health (PhD in Environmental and Occupational Health, Public Health Practice)	
Competency	**Describe how this competency is covered**
1. Propose approaches to mitigating and monitoring exposures of individuals to toxic organisms and chemical substances in enclosed spaces	EOH 2004: Occupational Hygiene
2. Propose approaches to the design and use of modern personal devices to monitor individual exposures to chemical and physical hazards, including noise, electromagnetic and ionizing radiation	EOH 2004: Occupational Hygiene
3. Explain to experts and non-specialists the relevance of “green" lifestyles and sustainability to environmental health	EOH 2609: Chemical Toxicology in the Age of Green Chemistry
4. Propose approaches to moving toward "green" lifestyles and sustainability while remaining necessarily dependent on mining and industrial processes	EOH 2609: Chemical Toxicology in the Age of Green Chemistry
5. Conduct a research project, that may include developing testable hypotheses, overseeing the environmental risk assessment of a site, selecting the measurements to be employed,	EOH 3010: Research and Dissertation PhD

Competencies for Academic Doctoral Degrees in Public Health (PhD in Environmental and Occupational Health, Public Health Practice)	
Competency	**Describe how this competency is covered**
designing data acquisition/experimental procedures, conducting the research, and presenting the findings to both general and specialized audiences	

Competencies for Academic Doctoral Degrees in Public Health (PhD in Epidemiology)	
Competency	**Describe how this competency is covered**
1. Identify, evaluate, and synthesize key studies in the scientific literature for a given topic area	EPIDEM 3183: Reading, Analyzing and Interpreting Public Health Medical Literature
2. Develop a research proposal suitable for funding	EPIDEM 2921: Grant Writing
3. Apply quantitative and critical thinking skills to analyze longitudinal data in epidemiologic studies	EPIDEM 2189: Epidemiological Methods of Longitudinal & Time-to-event Analysis EPIDEM 2192: Causal Inference in Epidemiological Research
4. Conduct epidemiological data analysis in a relevant topic area	EPIDEM 2230: Secondary Data Analysis: A Capstone Course

Competencies for Academic Doctoral Degrees in Public Health (PhD in Health Services Research and Policy)	
Competency	**Describe how this competency is covered**
1. Describe salient institutional features of the US health care system and theoretical frameworks for studying health care delivery and policy	HPM 3125: Intermediate Health Economics
2. Formulate policy-relevant research questions and design original research based on foundational knowledge of the US health care system and theory	HPM 3506: Dissertation Grant Writing Capstone
3. Design original empirical research, applying methods from econometrics and quasi-experimental design to address an applied problem in the delivery, financing, or quality of health care	HPM 3505: Advanced Empirical Microeconomics Methods with Applications for Health Research
4. Communicate research findings both verbally and in writing to inform policy	HPM 3501: Seminar in Health Services Research Methods 1
5. Lead applied health services and policy research studies that draw on multidisciplinary expertise to expand the field of knowledge	Dissertation proposal and defense

Competencies for Academic Doctoral Degrees in Public Health (PhD in Human Genetics)	
Competency	**Describe how this competency is covered**
1. Apply theoretical knowledge of the principles of multifactorial inheritance to interpret and evaluate genetic studies of complex human phenotypes	HUGEN 2090: Genetics of Complex Diseases 1
2. Apply knowledge of the mathematical and genetic underpinnings of methodologies for	HUGEN 2029: Introduction to Gene Mapping

Competencies for Academic Doctoral Degrees in Public Health (PhD in Human Genetics)	
Competency	**Describe how this competency is covered**
disease gene identification to interpret and evaluate gene mapping studies	
3. Apply theoretical knowledge of the dynamic relationship between chromosome structure and function to interpret the impact of chromosome organization on health and disease	HUGEN 2060: Chromosomes-Structure and Function
4. Analyze, synthesize, and communicate research in human genetics at the level needed for effective research and teaching	HUGEN 3020: Doctoral Research and Professional Skills Development
5. Apply a broad range of molecular, clinical, and/or analytical methodologies to design and carry out genetic studies	Dissertation

Competencies for Academic Doctoral Degrees in Public Health (PhD in Infectious Disease and Microbiology)	
Competency	**Describe how this competency is covered**
1. Conduct bioinformatic analysis of pathogen genome data, explaining the relevance to infectious disease pathogenesis and host response	IDM 2014: Functional Genomics of Microbial Pathogens
2. Demonstrate knowledge of the molecular biology of hosts and pathogens and how pathogenesis of infectious diseases evolves from the interactions of organisms on a molecular level	IDM 2001: Molecular Biology of Microbial Pathogens
3. Explain all aspects of the lifecycle of a variety of infectious viruses and further evaluate current control and prevention measures	IDM 2002: Molecular Virology
4. Communicate audience appropriate public health content in writing and through oral presentation	IDM 2041: Research Ethics and Scientific Communication
5. Conduct independent hypothesis driven research and publish peer-reviewed manuscript based on their research project	Dissertation

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.)

   Syllabi are provided in ERF> Criterion D> D17> D17.5.

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.

   All academic degree students are required to take PUBHLT 2011: Public Health Essentials, which is a three-credit course. The exception is students in the EOH Public Health Practice PhD program, who take the full MPH core.

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.

   All academic degree students are required to take EPIDEM 2110: Principles of Epidemiology – the same introductory three-credit epidemiology course that is taken by MPH students. In addition, most students take discipline-specific research methods courses as part of their concentrations.

8) Briefly summarize policies and procedures relating to production and assessment of the final research project or paper.

   All doctoral students complete a dissertation. This is a research-based project requiring substantial effort, guided by a primary thesis advisor, and assessed by a committee of at least four faculty. Students in all programs present and defend a dissertation proposal before admission to candidacy. The final dissertation is defended in a public presentation and assessed by the committee.

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.

   Please see ERF> Criterion D> D17> D17.9. Updated handbooks for fall 2023 will be included in the final self-study.

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.

    Please see ERF> Criterion D> D17> D17.10.

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

    Strengths, challenges, and solutions in progress: The school offers a wide variety of rigorous academic doctoral degrees in disciplines that span the breadth of the school. Students in all programs get a solid grounding in public health fundamentals. Each program is based on a set of appropriate advanced competencies that are taught and assessed in program courses and other experiences, and communicated to students in handbooks and syllabi. A wide variety of disciplinary and interdisciplinary courses are available at the doctoral level both as required courses and electives. Students in all programs complete a substantial inquiry-based dissertation as the culminating experience of the degree program.

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 assessment activity for each of the foundational public health learning objectives listed above (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical.

   The school offers two other degrees: the MHA, and MS in Genetic Counseling. The matrix below applies to both as well as to all academic degrees referenced in D16 and D17.

Content Coverage for MS, MHA, PhD degrees (All remaining degrees^)		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity[n]**
1. Explain public health history, philosophy, and values	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
2. Identify the core functions of public health and the 10 Essential Services*	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
6. Explain the critical importance of evidence in advancing public health knowledge	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
7. Explain effects of environmental factors on a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
8. Explain biological and genetic factors that affect a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
9. Explain behavioral and psychological factors that affect a population's health	PUBHLT 2011: Public Health Essentials	Two midterms and final exam

Content Coverage for MS, MHA, PhD degrees (All remaining degrees^)		
Content	**Course number(s) and name(s)**	**Describe specific assessment opportunity[n]**
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
11. Explain how globalization affects global burdens of disease	PUBHLT 2011: Public Health Essentials	Two midterms and final exam
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)	PUBHLT 2011: Public Health Essentials	Two midterms and final exam

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.

   All students are required to take PUBHLT 2011: Public Health Essentials, which is a three-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)

   Assignments are provided in ERF> Criterion D> D18.

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

   Strengths: Students in both programs get a solid grounding in public health fundamentals with the very well-received Public Health Essentials course. More generally, students in both programs are extremely well-integrated into the public health culture of the school. Their education is very similar to that of the students in the school's academic public health degree programs. Essentially all faculty in these two programs also teach in the school's public health programs. and students in these programs typically have no idea that they are enrolled in a program that is classified as "non-public health."

D19. Distance Education

Not applicable

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.

Table E1-1

Primary Instructional Faculty Alignment with Degrees Offered						
Name*	**Title/ Academic Rank**	**Tenure Status or Classification^**	**Graduate Degrees Earned**	**Institution(s) from which degree(s) were earned**	**Discipline in which degrees were earned**	**Concentration affiliated with in Template C2-1**
Abdoel Wahid, Firoz	Assistant Professor		MD, MPH	Anton de Kom University	Medicine, Public Health	EOH, BSPH
Albert, Steven	Professor		MA, MSc, PhD	University of Chicago, Columbia University, University of Chicago	Committee on Social Thought, Epidemiology, Anthropology	BCHS
Ayyavoo, Velpandi	Professor		MNSc, PhD	Thiagarajar College, Madurai-Kamaraj University	Biology	IDM, IDM-PEL
Bandos, Hanna	Assistant Professor		MS, PhD	Kharkiv National University, University of Pittsburgh	Mathematics, Biostatistics	Biostatistics, Health Data Science
Barchowsky, Aaron	Professor		PhD	Duke University	Pharmacology	EOH, EOH-PHP
Barinas-Mitchell, Emma	Associate Professor		PhD	University of Pittsburgh	Epidemiology	Epidemiology
Barratt-Boyes, Simon	Professor		PhD	UC Davis	Comparative Pathology	IDM, IDM-PEL

Baumann, Sara	Assistant Professor		MPH, PhD	GRAC University, University of Pittsburgh	Global Health, Behavioral and Community Health Sciences	BCHS, BSPH
Belle, Steven	Professor		MSc, PhD	University of Pittsburgh, University of Michigan	Biostatistics	Epidemiology
Bertolet, Marianne	Assistant Professor		MS, PhD	Carnegie Mellon University	Statistics	Epidemiology
Bility, Moses	Assistant Professor		PhD	Penn State University	Integrative Biosciences	IDM, IDM-PEL
Bodnar, Lisa	Professor		MPH, PhD	UNC Chapel Hill	Nutrition	Epidemiology
Bortey-Sam Nesta	Assistant Professor		MS, PhD	Kwame Nkrumah University of Science and Technology, Hokkaido University	Environmental Chemistry, Toxicology	EOH, EOH-PHP
Brooks, Maria	Professor		AM, PhD	Harvard University, UNC Chapel Hill	Statistics	Epidemiology
Broom, Kevin	Associate Professor		MBA, PhD	Syracuse University, University of Mississippi	Organization and Management, Finance	HPM
Brown-Podgorski, Brittany	Assistant Professor		MPH, PhD	Indiana University	Social and Behavioral Sciences, Health Policy and Management	HPM
Bryce, Cindy	Associate Professor		MPhil, PhD	Carnegie Mellon University	Policy Analysis	HPM
Buchanich, Jeanine	Associate Professor		MPH, Med, PhD	University of Pittsburgh	Epidemiology, School Counseling, Epidemiology	Biostatistics, Health Data Science
Burke, Donald	Professor		MD	Harvard University	Medicine	Epidemiology
Burke, Jessica	Professor		MHS, PhD	Johns Hopkins University	International Health, Social and Behavioral Sciences	BCHS

Carlson, Jenna	Assistant Professor		PhD	University of Pittsburgh	Biostatistics	Biostatistics, Statistical and Computational Genomics
Cauley, Jane	Professor		MPH, DrPH	University of Pittsburgh	Epidemiology	Epidemiology
Chu, Kar-Hai	Associate Professor		MS, PhD	University of Pittsburgh, University of Hawaii at Manoa	Clinical Research, Communication and Information Sciences	BCHS
Cole, Evan	Associate Professor		MPH, PhD	University of Minnesota, Tulane University	Public Health Administration and Policy, Health Systems Management	HPM
Costacou, Tina	Associate Professor Associate Professor		MSc, PhD	University of Massachusetts, Amherst, University of South Carolina	Epidemiology	Epidemiology
Coulter, Robert	Assistant Professor		MPH, PhD	Boston University, University of Pittsburgh	Social and Behavioral Sciences, Behavioral and Community Health Sciences	BCHS
Dauria, Emily	Assistant Professor		MPH, PhD	Emory University	Behavioral Science and Health Education	BCHS
Deem, Michael	Associate Professor		MA, MA, PhD	Saint Louis University, Texas A&M University, University of Notre Dame	Historical Theology, Philosophy, Philosophy	Human Genetics
Degenholtz, Howard	Professor		PhD	University of Minnesota	Health Services Research, Policy and Administration	HPM

Demirci, F. Yesim	Associate Professor		MD	Istanbul University	Medicine	Human Genetics, Public Health Genetics
Di, Peter	Assistant Professor		MBA, PhD	University of California at Davis, State University of New York at Buffalo	Innovation and Technology Management, Molecular and Cell Biophysics	EOH, EOH-PHP
Diergaarde, Brenda	Associate Professor		MSc, PhD	Leiden University, Wageningen University	Biochemistry, Molecular Epidemiology	Human Genetics, Public Health Genetics
Ding, Ying	Associate Professor		MA, PhD	Indiana University Bloomington, University of Michigan	Mathematics, Biostatistics	Biostatistics, Statistical and Computational Genomics
Documet, Patricia	Associate Professor		MD, MPH, DrPH	Universidad Peruana Cayetano, University of Pittsburgh	Medicine, Behavioral and Community Health Sciences	BCHS
Donohue, Julie	Professor		PhD	Harvard University	Health Policy	HPM
Drake, Coleman	Assistant Professor		PhD	University of Minnesota	Health Services Research, Policy and Administration	HPM
Durst, Andrea	Assistant Professor		MS, DrPH	University of North Carolina at Greensboro, University of Kentucky	Genetic Counseling, Health Management and Policy	Human Genetics, Public Health Genetics
Egan, James	Assistant Professor		MPH, PhD	Boston University, University of Pittsburgh	Social and Behavioral Sciences, Behavioral and Community Health Sciences	BCHS

El Khoudary Abushaban, Samar	Associate Professor		MPH, PhD	Al-Quds University, University of Pittsburgh	Epidemiology and Biostatistics, Epidemiology	Epidemiology
Elias, Thistle	Associate Professor		MPA, DrPH	University of Pittsburgh	Public Administration, Behavioral and Community Health Sciences	BCHS
Fabio, Anthony	Associate Professor		MPH, PhD	University of Pittsburgh	Epidemiology	Epidemiology
Fabisiak, James	Associate Professor		MS, PhD	New York State College of Veterinary Medicine, Penn State University	Veterinary Science, Pharmacology	EOH, EOH-PHP
Fan, Kang-Hsien	Assistant Professor		MS, MS, PhD	University of Louisville, Georgetown University, University of Georgia	Biostatistics, Bioinformatics, Bioinformatics	Human Genetics, Genome Bioinformatics
Feingold, Eleanor	Professor		PhD	Stanford University	Statistics	Human Genetics, Public Health Genetics
Felter, Elizabeth	Assistant Professor		MA, DrPH	University of Georgia, University of Pittsburgh	Health Promotion and Behavior, Behavioral and Community Health Sciences	BCHS
Fitz, Nicholas	Assistant Professor		PhD	Duquesne University	Pharmacology and Toxicology	EOH, EOH-PHP
Frank, Linda	Professor		MSN, PhD	University of Pittsburgh	Psychiatric Mental Health, Higher Education Administration	IDM, IDM-MIC
Garland Richard	Assistant Professor		MSW	University of Pittsburgh	Community Organization	BCHS

Givens, David	Assistant Professor		MHS, PhD	University of Pittsburgh	Religious Studies	IDM, IDM-MIC
Glynn, Nancy	Associate Professor		MEd, PhD	University of Virginia, University of Pittsburgh	Exercise Physiology, Epidemiology	Epidemiology
Ha, Toan	Assistant Professor		MD, DrPH	Tay Nguyen University, University of Texas	Medicine, Public Health	IDM, IDM-MIC
Haggerty, Catherine	Professor		MPH, PhD	University of Pittsburgh	Epidemiology	Epidemiology
Hartman, Amy	Professor		PhD	University of Pittsburgh	Molecular Virology and Microbiology	IDM, IDM-PEL
Hawk, Mary	Associate Professor		MSW, DrPH	University of Pittsburgh	Health and Mental Health, Behavioral and Community Health Sciences	BCHS
Hawkins, Marquis	Assistant Professor		PhD	University of Pittsburgh	Epidemiology	Epidemiology
Hershey, Tina	Associate Professor		JD, MPH	The George Washington University	Law, Health Policy	HPM
Jarlenski, Marian	Associate Professor		MPH, PhD	Yale University, Johns Hopkins University	Public Health	HPM
Kamboh, Mohammad	Professor		MSc, PhD	University of Punjab, The Australian National University	Human and Population Genetics, Human Genetics	Human Genetics
Kang, Chae Ryon	Assistant Professor		MS, PhD	EWHA Womans University, University of North Carolina at Chapel Hill	Statistics,	Biostatistics, Health Data Science
Krier, Sarah	Assistant Professor		MPH, PhD	University of Pittsburgh	Behavioral and Community Health Sciences, Anthropology	BCHS
Kuipers, Allison	Associate Professor		PhD	University of Pittsburgh	Epidemiology	Epidemiology

Mair, Christina	Associate Professor		MPH, PhD	University of Washington, University of Michigan	Epidemiology	BCHS
Martinson, Jeremy	Assistant Professor		DPhil	Oxford University	Molecular Genetics	IDM-PEL, BCHS
Mattila, Joshua	Assistant Professor		PhD	University of Minnesota	Entomology	IDM, IDM-PEL
Mendez, Dara	Associate Professor		MPH, PhD	University of North Carolina at Chapel Hill	Maternal and Child Health	Epidemiology
Miljkovic, Iva	Associate Professor		MD, PhD	University of Novi Sad, University of Pittsburgh	General Medicine, Epidemiology	Epidemiology
Minster, Ryan	Assistant Professor		MSIS, PhD	University of Pittsburgh	Information Science, Human Genetics	Human Genetics, Genome Bioinformatics
Nachega, Jean	Associate Professor		MD, PhD	University of Louvain, University of Cape Town	Medicine, Pharmaco-Epidemiology	Epidemiology
Newman, Anne	Professor		MD, MPH	University of Pittsburgh	Medicine, Public Health	Epidemiology
Normolle, Daniel	Associate Professor		MA, PhD	State University of New York at Binghamton	Mathematics	Biostatistics, Health Data Science
Padiath, Quasar	Associate Professor		PhD	Indian Institute of Science	Human Genetics	Human Genetics, Public Health Genetics
Park, HJ	Assistant Professor		MS. PhD	Texas A&M University, Rice University	Computer Science, Computer Science	Human Genetics, Genome Bioinformatics
Park, Yongseok	Assistant Professor		ME, MS, PhD	Tsinghua University of Michigan, University of Michigan	Mechanical Engineering, Biostatistics, Biostatistics	Biostatistics, Statistical and Computational Genomics
Pearce, Linda	Assistant Professor		PhD	Iowa State University	Inorganic Chemistry	EOH, EOH-PHP
Peterson, James	Professor		PhD	University of Essex	Chemistry	EOH, EOH-PHP

Roberts, Mark	Professor		MD, MPP	Tufts University, Harvard University	Medicine, Public Policy and Health Policy	HPM
Rockette-Wagner, Bonny	Assistant Professor		PhD	University of Pittsburgh	Epidemiology	Epidemiology
Roman, Beth	Associate Professor		PhD	University of Wisconsin	Environmental Toxicology	Human Genetics, Public Health Genetics
Rosano, Caterina	Professor		MD	University of Palermo	Medicine and General Surgery	Epidemiology
Rosso, Andrea	Associate Professor		MPH, PhD	Drexel University	Epidemiology	Epidemiology
Ruppert, Kristine	Assistant Professor		MSN, DrPH	Duquesne University, University of Pittsburgh	Nursing Education, Biostatistics	Epidemiology
Sabik, Lindsay	Associate Professor		PhD	Harvard University	Health Policy	HPM
Salter, Cynthia	Assistant Professor		MPH, PhD	Johns Hopkins University, University of Pittsburgh	International Health, Behavioral and Community Health Sciences	BCHS
Sanders, Alison	Assistant Professor		MS, PhD	University of Wisconsin, University of North Carolina at Chapel Hill	Civil and Environmental Engineering, Environmental Sciences and Engineering	EOH
Santanasto, Adam	Assistant Professor		MPH, PhD	University of Pittsburgh	Epidemiology	Epidemiology
Sekikawa, Akira	Professor		MD, PhD, PhD, MPH	Tohoku University, Yamagata University, University of Pittsburgh, University of Pittsburgh	Medicine, Internal Medicine, Epidemiology, Epidemiology	Epidemiology
Shaffer, John	Assistant Professor		PhD	University of Pittsburgh	Human Genetics	Human Genetics, Public Health Genetics

Sidani, Jamie	Assistant Professor		MPH, PhD	Northwest Ohio Consortium for Public Health, University of Toledo	Health Education & Behavior, Health Education	BCHS
Songer, Thomas	Assistant Professor		MSc, PhD	London School of Economics, University of Pittsburgh	Health Planning and Financing, Epidemiology	Epidemiology, BSPH
Strotmeyer, Elsa	Associate Professor		MPH, PhD	University of Pittsburgh	Epidemiology	Epidemiology
Tang, Lu	Assistant Professor		MS, PhD	University of Virginia, University of Michigan	Statistics, Biostatistics	Biostatistics, Health Data Science
Tseng, Chien-Cheng	Professor		MS, ScD	National Taiwan University, Harvard University	Mathematics, Biostatistics	Biostatistics, Statistical and Computational Genomics
Tufts, Danielle	Assistant Professor		MS, PhD	University of Texas-Tyler, University of Nebraska-Lincoln	Biology, Biological Sciences	IDM, IDM-MIC
Urban, Zsolt	Associate Professor		MS, PhD	University of Szeged, Semmelweis University	Molecular Biology and Biotechnology, Biology	Human Genetics, Public Health Genetics
Vento, Jodie	Assistant Professor		MGC	University of Maryland	Genetic Counseling	Human Genetics, BSPH
Wang, Jiebiao	Assistant Professor		MA, PhD	Renmin University of China,	Statistics, Biostatistics	Biostatistics, Statistical and Computational Genomics
Weeks, Daniel	Professor		MS, PhD	University of California, Los Angeles	Biomathematics	Biostatistics, Statistical and Computational Genomics
Youk, Ada	Associate Professor		MA, PhD	University of Pittsburgh	Applied Statistics, Biostatistics	Biostatistics, BSPH

Yu, Guan	Assistant Professor		MS, PhD	Nankai University, University of North Carolina at Chapel Hill	Statistics	Biostatistics, Health Data Science
Yuan, Jian-Min	Professor		MD, PhD	Fudan University, University of Southern California	Medicine, Epidemiology	Epidemiology
Zmuda, Joseph	Associate Professor		MS, MPH, PhD	University of Rhode Island, University of Pittsburgh	Exercise Physiology, Epidemiology, Epidemiology	Epidemiology

* List faculty alphabetically.

^ Classification of faculty may differ by institution, but may refer to teaching, research, service faculty or tenured, tenure-track, non-tenure-track faculty or alternative appointment categories used by the school or program.
The faculty shown are a mix of tenured, tenure-track, and "appointment stream" (non-tenure track), but that distinction is almost entirely unrelated to instructional roles and thus we have omitted this column.
Provide data for the year during which the site visit takes place. If the site visit takes place in fall 2016, the template must present data for fall 2016. If the site visit takes place in spring 2017, the template must present data for spring 2017.

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.

Template
E1-2

Non-Primary Instructional Faculty Regularly Involved in Instruction							
Name*	**Academic Rank^**	**Title and Current Employment**	**FTE or % Time Allocated**	**Graduate Degrees Earned**	**Institution(s) from which degree(s) were earned**	**Discipline in which degrees were earned**	**Concentration affiliated with in Template C2-1**
Catov, Janet	Secondary Associate Professor	University of Pittsburgh	15%	PhD	University of Pittsburgh	Epidemiology	Epidemiology

Chang, Chung-Chou	Secondary Professor	University of Pittsburgh	15%	MA, PhD	University of Pittsburgh	Mathematical Sciences, Biostatistics	Biostatistics
Chernus, Jonathan	Instructor	University of Pittsburgh	85%	MA, PhD	University of Pittsburgh	Mathematics, Human Genetics	Human Genetics, Genome Bioinformatics
Fapohunda, Abimbola	Secondary Instructor	University of Pittsburgh	15%	DrPH	University of Pittsburgh	Epidemiology	BSPH
Finegold, David	Professor	University of Pittsburgh	80%	MD	University of Pittsburgh	Medicine	Human Genetics
Frank, Robert	Lecturer	University of Pittsburgh	15%	MBA, MPA	University of Pittsburgh	Business Administration, Public Administration	HPM
Gradisek, Adrianna	Staff	University of Pittsburgh	10% instructional	MPH	University of Pittsburgh	BCHS	BSPH
Grubs, Robin	Associate Professor	University of Pittsburgh	50%	MS, PhD	University of Pittsburgh	Genetic Counseling, Human Genetics	Human Genetics, Public Health Genetics
Hughes, Meredith	Assistant Professor	University of Pittsburgh	15%	JD	University of Pittsburgh	Law	HPM
Jenkins, Frank	Secondary Associate Professor	University of Pittsburgh	15%	PhD	Penn State University	Medical Microbiology	IDM
Jones, Jennifer	Lecturer	University of Pittsburgh	10%	MPH	University of Pittsburgh	BCHS	MPH core
Koperwas, Mara	Staff	University of Pittsburgh	50% instructional	MPH	University of Pittsburgh	BCHS	BSPH
Lucente-Prokop, Angela	Lecturer	University of Pittsburgh	15%	PhD	University of Pittsburgh	BCHS	BCHS
Marques, Ernesto	Associate Professor	University of Pittsburgh	50%	MD, PhD	Universidade Federal de Pernambuco, Johns Hopkins University	Medicine, Pharmacology and Molecular Sciences	IDM

Miller, Elizabeth	Secondary Professor	University of Pittsburgh	15%	MD, PhD	Harvard University	Medicine, Anthropology	BCHS
Nelson, Tommy	Lecturer	University of Pittsburgh	15%	PhD	University of Wisconsin	Astronomy	HPM
Olaniyan, Abisola	Lecturer	University of Pittsburgh	15%	PhD	University of Pittsburgh	BCHS	BCHS
Perri, Angela	Lecturer	University of Pittsburgh	15%	MBA	Mary Baldwin University	Business Administration	HPM
Raniowski, Martin	Lecturer	University of Pittsburgh	15%	MA	Indiana University of Pennsylvania	Public Policy	HPM
Rosenthal, Samantha	Secondary Assistant Professor	University of Pittsburgh	10%	PhD	University of Pittsburgh	Human Genetics	Public Health Genetics
Shah, Nilesh	Secondary Assistant Professor	University of Pittsburgh	15%	PhD	University of Pittsburgh	Biostatistics	Biostatistics
Sokol, Jamie	Lecturer	University of Pittsburgh	40%	MPH	University of Pittsburgh	BCHS	MPH core
Sullivan, John	Lecturer	University of Pittsburgh	15%	MD, MBA	University of Michigan, Northwestern University	Medicine, Business administration	HPM
Swearingen, Justin	Lecturer	University of Pittsburgh	15%	DrPH, MHA	City University of New York, University of Memphis	Public Health, Health Administration	HPM
Talbott, Evelyn	Professor	University of Pittsburgh	75%	PhD	University of Pittsburgh	Epidemiology	Epidemiology
Thompson, Debra	Lecturer	University of Pittsburgh	15%	MBA	Gannon University	Business Administration	HPM
Yabes, Jonathan	Secondary Assistant Professor	University of Pittsburgh	15%	PhD	University of Pittsburgh	Biostatistics	Biostatistics
Yassin, Mohamed	Secondary Assistant Professor	University of Pittsburgh	15%	MD, PhD	Cairo University	Medicine, Statistics	Biostatistics

* List faculty alphabetically.

^ Classification of faculty may differ by institution, but may refer to teaching, research, service faculty or tenured, tenure-track, non-tenure-track faculty or alternative appointment categories used by the school or program.
Provide data for the year during which the site visit takes place. If the site visit takes place in fall 2016, the template must present data for fall 2016. If the site visit takes place in spring 2017, the template must present data for spring 2017.

3) Include CVs for all individuals listed in the templates above.

   CVs are located in ERF> Criterion E> E1> E1.3.

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

   SPH faculty generally fall into the following categories.
   • Full-time faculty with primary appointments in SPH, who teach in public health programs (the majority of our faculty – approximately 100).
   • Part-time faculty with primary appointments in SPH, who teach in public health programs (the minority of our faculty – generally those on transition to retirement).
   • Full-time or part-time faculty with primary appointments in SPH who primarily conduct research and do not participate in classroom teaching in a given year but typically mentor students in research or practice (approximately 60).
   • Full-time or part-time faculty with primary appointments in SPH who teach entirely in non-public-health programs (one or two).
   • Faculty who do not have primary appointments in SPH. These may be adjunct or guest instructors from local agencies or healthcare organizations who teach one or two courses (approximately 15), staff who teach in addition to their administrative duties (five or fewer), or instructors from other schools at the University who teach a course or two for the school (approximately 15).

   Note that while the school's instructional matrix (and thus tables C2-1 and E1-1 and E1-2) reflect 17 instructional areas, faculty, degrees, and courses are fundamentally organized into seven departments. Within each department, most courses and faculty support multiple degrees and instructional areas. Thus, the association of faculty with the individual instructional areas above is somewhat arbitrary.

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

   Strengths, challenges, and solutions in progress: The school has a large and well-qualified faculty for all concentrations. Almost all faculty have doctoral degrees, except for a few who were chosen because of very specialized expertise at other degree levels. Many faculty have interdisciplinary training or research and are able to contribute in important ways to more than one concentration.

   It is challenging to fully engage all part-time and adjunct faculty, since those individuals tend to have other obligations. However, those other obligations, such as full-time jobs at public health agencies, are also a strength and a reason to involve such individuals in the school's programs. Prior to 2020, communication with part-time and adjunct faculty was primarily through the departments in which they were teaching. Since 2020, steps have been taken to ensure that these individuals are also engaged at the school level and have every opportunity to participate in all activities such as faculty retreats, teaching workshops, etc. For example, the dean's office creates an email list each semester of all individuals who are teaching and uses the list to communicate about issues and events during the semester. The list was recently used to communicate with faculty about resources to support student well-being related to anti-transgender speakers on

campus, as well as to invite feedback on the self-study. The lists have also been used to reach out to part-time faculty and specifically encourage them to attend events. The school continues to look for opportunities to draw part-time and adjunct faculty more fully into the school community.

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.

   The regular faculty (PIF and non-PIF) includes many individuals who have full-time public health practice experience. The table below provides a snapshot.

Name	Department	Previous (or current) full-time practice role
Andrea Durst	Human Genetics	Cancer Genetic Counselor (2005-2013)
Abdoel Wahid Firoz	EOH	Coordinator National AIDS Program (2010 - 2012) Portfolio Manager Treatment at the National AIDS Program, Ministry of Health in Suriname (2005 - 2010)
Moses Bility	IDM	2006 - Present Major Field Grade Military Officer United States Army Reserve
Kevin Broom	HPM	1992 - 2011 Commissioned Officer, Medical Service Corps, U.S. Army Chief Financial Officer, Bayne-Jones Army Community Hospital Health Care Administrator, Department of Surgery, Blanchfield Army Community Hospital Chief Executive Officer, Main Support Medical Company 1984 - 1987 Paramedic, U.S. Army
Janet Catov	Epidemiology	1999 - 2005 Gateway Health Plan, Director, Preventive Health and Disease Management
Jane Cauley	Epidemiology	1977 - 1978 Home Health Services, Inc, Visiting Nurse 1975 - 1977 Georgetown University Hospital, Staff Nurse
Alicia Colvin	HPM	2007 - 2009 Lead Analyst, Division of Health Economics, UPMC
Robert Coulter	BCHS	2008 - 2012 Research Assistant and Financial Manager, Center for Research on High Risk Behaviors, Health and Human Development Division, Education Development Center, Inc.
Hannah Covert	EOH	1994 - 1996 Refugee Resettlement Coordinator, Catholic Social Services
Yesim Demirci	Human Genetics	1997 - 1998 Ophthalmologist, ERMED Ophthalmic Center

Ying Ding	Biostatistics	2008 - 2013 Eli Lilly and Company, Research Scientist
Patricia Documet	BCHS	2000 - 2004 Senior Research Associate, Family Health Council, Inc (now Adagio) 1988 - 1991 Attending Physician, Department of Pediatrics and Hospital Materno Infantil San Bartolome, Peru
Julie Donohue	HPM	1996 Staff, Colorado Governor's Commission on National and Community Service 1997 - 1998 Public Policy Director, Mental Health Association of Colorado
Coleman Drake	HPM	2010 - 2013 Project Manager, Epic Systems
Thistle Elias	BCHS	1994 - 1996 Program Coordinator, Community Enrichment Program, Office of Special Programs
Anthony Fabio	Epidemiology	1990 - 1992 Clinical Nutritionist, Divine Providence Hospital
Linda Frank	IDM	1972 - 1973 Community Mental Health, Saint Vincent Hospital 1973 - 1987 Western Psychiatric Institute and Clinic
Toan Ha	IDM	1998 - 1999 Health and Hygiene Education Specialist, DANIDA Water and Sanitation Project 2001 - 2004 Program Officer, UNICEF 2010 - 2015 Program Officer, UNFPA
Amy Hartman	IDM	2007 - 2016 Research Manager, Center for Vaccine Research 2007 Microbiologist, Special Pathogens Branch, CDC
Mary Hawk	BCHS	1994 - 2007 Allies for Health + Wellbeing
Thomas Heatherington	HPM	1992, Managing Director, Accenture 2016, Senior Advisor, ADVI
Meredith Hughes	HPM	2009 - 2010, Health Policy Program Associate, New America Foundation 2011 - 2013 Health Project Policy Analyst, Bipartisan Policy Center
James Alton Everette	HPM	2008 - 2010 Secretary of Health, Commonwealth of Pennsylvania
Wendy King	Epidemiology	1999 - 2000 Research Study Coordinator, Study Interventionist, Center for Behavioral Epidemiology and Community Health
Radosveta Koldamova	EOH	1980 - 1982 General Practitioner, Regional Hospital Strazhitca
Iiiya Lefterov	EOH	1979 - 1982 General Practitioner, Strazhitca, Bulgaria
Hung Luu	Epidemiology	2007 - Epidemiologist, AIDS DataHub, UNICEF
Christina Mair	BCHS	2010 - 2015 Research Scientist & Associate Research Scientist, Prevention Research Center, Pacific Institute for Research and Evaluation
Ernesto Marques		1993 - 1994 Pernambuco State Health Secretary Catende, General Medical Practicioner
Tina Ndoh	EOH	Environmental Engineer (1999-2001, 2008-2017) Environmental Protection Specialist (2019) Air Program Manager (2019-2021)

Yongseok Park	Biostatistics	1996 - 2000 LG Information and Communication, Institute of Optical Transmission 2000 - 2005, Intelligent Telecommunications Inc. Senior Software Engineer
Angela Park	HPM	1997 - 2005 ValueOptions, Magellan Health Services 2005 - 2010 Amerigroup Corporation, Corporate Vice President 2010 - 2014, Cenpatico & Centene Corporation, Corporate Vice President
Martin Raniowski	HPM	2001 - 2015 PA Department of Health 2016 - Present, PA Medical Society
B. Rockette-Wagner	Epidemiology	2000 - 2006 Laboratory Director, Gila River Indian Communication, Cultural Resource Management Department
B. Rosario	Epidemiology	2000 - 2001 Eli Lilly del Caribe, Biostatistician 2019 - 2022 IBM Watson Health, Senior Biostatistician
Kristine Ruppert	Epidemiology	1987 - 2001 - Staff Nurse (West Penn, UPMC)
Cynthia Salter	BCHS	2008 - 2013 The Birth Circle Community Doula Program 2017 - present UPMC Shadyside Family Medicine Residency
Max Slater	HPM	2016 - present Allegheny County Health Department
Jamie Sokol	BCHS	2011 - present Allegheny County Health Department
John Sullivan	HPM	1999 - Field Hospital Anesthesiologist 1987 - 2020 Medical Corps, United States Naval Reserve
Evelyn Talbott	Epidemiology	1978 - 1982 Allegheny County Coroner's Office, Deputy Coroner
Vladimir Tyurin	EOH	1984 - 1992 Visiting Scientist, Institute of Physiology and Department of Biochemistry, Pharmaceutical Co. Sigma Tau
Yulia Tyurin	EOH	1991 - 1992 Visiting Researcher, Pharmaceutical Company Sigma-Tau
Jodie Vento	Human Genetics	2008 - 2012, Genetic Counselor and Neurogenetics Program Coordinator, Children's National Medical Center
Sally Wenzel	EOH	1998 - 2006 Co-Director/Director National Jewish Medical and Research Center
Greg Yothers	Biostatistics	1986 - 1991 Engineer for Robertshaw Controls Company 1991 - 1999 Senior Biostatistician for Respirionics Incorporated

In addition to the instructors listed above, many undergraduate and graduate courses incorporate regional, national, and international guest speakers from the practice world. For example, guest speakers from various backgrounds in public health and public health genetics are integrated into the MPH Public Health Genetics courses including: HUGEN 2049 - guest speakers from advocacy organizations and the All of Us Research Program, HUGEN 2054 - guest speakers with a focus on those with MPH degrees including individuals involved with the National Coordinating Center for the Regional Genetics Networks, and a Research Project Manager at Color Health working on the All of Us Research Program participant return of genetic results. Behavioral and Community

Health Sciences MPH courses include guest speakers from JBS International, Projet Jeune Leader (a nonprofit based in Madagascar), PA Health and Wellness, and the Pittsburgh Foundation. The Health Policy and Management department makes extensive use of adjunct instructors (listed above) and guest speakers from regional health care and health insurance organizations as well as public health agencies. And numerous staff from the Allegheny County Health Department are involved as adjunct instructors (see table) or as guest speakers across the school.

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

Strengths, challenges, and solutions in progress: Many PIF and non-PIF faculty have significant practice experience, and many other practitioners are involved in courses as guest lecturers or project leaders.

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.

   All courses in the school are evaluated by students using a tool administered by the Office of Measurement and Evaluation of Teaching (OMET) within the University Center for Teaching and Learning (CTL). The OMET surveys have a standardized set of course and instructor questions and can additionally be customized by the instructor, school, or both. For example, in 2021, the SPH Educational Policies and Curriculum Committee and Faculty Diversity Committee collaborated to develop a set of questions related to diversity and inclusion in the classroom. This was rolled out in the same year as a recommendation for faculty, and, in 2022, was revised and applied at the school level to all SPH course evaluations.

   OMET evaluations solicit both numerical and open-ended feedback and are returned to faculty almost immediately after the end of the semester so that they can be maximally useful for formative assessment. Faculty are also encouraged to use mid-semester evaluation tools for the immediately actionable formative assessment and feedback. The end-of-semester OMET evaluations are also used for summative assessment in that they are part of each faculty member's annual evaluation materials and are considered as one aspect of instructional success in the promotion process.

   Each faculty member undergoes a formal evaluation process annually. Faculty prepare materials that include an updated CV, OMET evaluations, a summary of activities for the previous year, and a summary of plans for the coming year. Each faculty member then meets with their chair to discuss the package. This again allows for both formative and summative processes – both mentoring the faculty for areas of growth and evaluating their performance.

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.

   The CTL provides numerous resources for instructors, from workshops to classroom observations to individual consultations to technology help. The CTL collaborates directly with the school to provide a workshop at the bi-annual SPH faculty retreat. Recent topics have included decolonizing the curriculum and online teaching. These retreats are attended by both PIF and non-PIF instructors.

   Many faculty attend CTL workshops or work with the CTL individually. For example, in the 2023 faculty pedagogy survey, 38 of 95 instructional faculty respondents reported consulting with the CTL about a particular course in the past or during the current academic year, including two such responses from adjunct faculty. (Full survey results are in ERF> Criterion E> E3.)

   One important CTL activity is the annual Provost's Diversity Institute for Faculty Development, which provides an intensive set of workshops each May related to diversity issues in the classroom.

For example, the 2023 events consisted of a series of seven workshops on queer issues in the classroom featuring a wide variety of outside speakers on both pedagogy and queer studies. SPH attendees this year included Eleanor Feingold, Andrea Durst, and Patricia Documet, among many others. Previous years have focused on race and ethnicity, or on a broader set of diversity issues, and have been widely attended by SPH faculty.

The CTL also puts on "faculty seminars" – extended cohorted experiences devoted to particular aspects of teaching practice. Faculty meet once a month with their cohort over the course of a semester or year and develop materials that can be used toward their own teaching. SPH faculty who have participated include Jenna Carlson, Ada Youk, and Jeanine Buchanich.

The vice-provost for faculty development supports an annual Race@ Work Summer Intensive designed to support newer faculty from underrepresented populations with research, teaching, and networking. As part of this intensive, faculty are exposed to teaching resources for syllabus development, current classroom management practices, and other resources available at the University of Pittsburgh. Faculty who have participated include Brittany Brown-Podgorski, Marquis Hawkins, and Tina Ndoh.

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.

Faculty currency in instructional areas is evaluated by chairs at the annual review, described above. Instructors who are not primary faculty (adjuncts, secondary faculty, etc.) are evaluated somewhat less formally by the associate dean for academic affairs, or by chairs, vice chairs, or program directors, but these evaluations also occur annually, at a minimum. For example, the vice chair for education of Health Policy and Management regularly evaluates the classroom needs in terms of which domain knowledge and skills are needed and then selects adjunct instructors from public health agencies and the healthcare industry who are experts in those areas. The associate dean for academic affairs similarly evaluates both needs and individual instructors who teach schoolwide core courses for the BSPH and MPH.

4) Describe the role of evaluations of instructional effectiveness in decisions about faculty advancement.

The SPH Faculty Appointment, Promotion, and Tenure Committee (FAPTC) manual appendix D (see ERF> Criterion E> E3) explicitly cites teaching and mentoring expectations for each category of faculty. The school has four promotion tracks: 1) research faculty; 2) practice-focused faculty; 3) education-focused faculty; and 4) general faculty. Some of these tracks are more formal than others within the context of university-level faculty affairs, but operationally provide four separate sets of criteria and paths for promotion for SPH faculty. Evaluations of educational activities and instructional effectiveness play a key role in all advancement paths except for research faculty. All faculty going up for promotion in tracks other than research must submit a teaching portfolio that includes, at a minimum, information on courses taught, syllabi, teaching evaluations, and mentoring record.

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.

The school uses many detailed indicators of instructional effectiveness drawn from sources that include OMET surveys, faculty evaluations, faculty surveys, and student exit surveys. These are analyzed regularly by the associate dean for academic affairs, the associate dean for data analytics and special projects, student affairs staff, the Educational Policies and Curriculum Committee, and

others. Below are summary statistics included in the highest-level data reports that are provided to internal and external stakeholders.

Metric	Target	2019-20	2020-21	2021-22	2022-23****
Annual reviews of PIF (completion %)	100%	100%	100%	100%	
Annual departmental reviews of syllabi (% of departments completing)	100%	100%	100%	*	100%
% of instructional faculty reporting participation in professional development related to instruction during the current year**	50%	-	-	-	41/95 = 42%
Mean OMET score for "overall instructional effectiveness" (scale is 1-5)	4.00	4.22***	4.24	4.25	
Percentage of OMET scores for "overall instructional effectiveness" above 3.5	90%	94%***	92%	93%	
Courses using one or more of the high-impact practices listed in the pedagogy survey (see ERF)**	90%	-	-	-	93/95 = 98%
Courses using one or more of the inclusive education practices listed in the pedagogy survey**	90%	-	-	-	86/95 = 91%

*Some normal evaluation processes were temporarily suspended when COVID required major instructional changes and simultaneously reduced staffing.
** Prior to 2022, data were collected from annual evaluations and reporting percentages were very low – the question got lost in the enormous list of information faculty were asked to report. In 2023, a switch was made to collecting data via a faculty pedagogy survey, which will now be conducted annually.
***Spring 2020 scores were not reported to the school by the University due to the pandemic effects on teaching.
****2022-23 data will be updated for the final self-study.

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

Strengths, challenges, and solutions in progress: All faculty are evaluated annually, including attention to OMET student course evaluations and participation in professional development. OMET data show a high level of satisfaction with teaching effectiveness.

Collecting data on faculty participation in professional development activities is challenging. Most faculty consider it an integral part of their job and, as a result, often fail to document it. For example, there is teaching-focused professional development included in every faculty retreat (two per year), but faculty do not tend to include that in their annual evaluation materials. Similarly, when the University recently changed learning management systems, every faculty member attended training to learn to use the new system effectively, but that was rarely reported. It is anticipated that the faculty pedagogy survey, implemented for the first time in 2023, will be a better data collection tool since it is focused exclusively on pedagogical practices.

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.

   The SPH Faculty Appointment, Promotion, and Tenure Committee (FAPTC) manual appendix D (see ERF> Criterion E> E4) explicitly cites research expectations for each category of faculty. The school has four promotion tracks: 1) research faculty; 2) practice-focused faculty; 3) education-focused faculty;4) and general faculty (tenure track and non-tenure track/appointment stream). Some of these tracks are more formal than others within the context of university-level faculty affairs, but operationally they provide four separate sets of criteria and paths for promotion for SPH faculty. All faculty, including those in the education-focused and practice-focused promotion paths, are expected to have some level of engagement in research. The vast majority of faculty in the school are in the "generalist" path and have extensive research portfolios. Research can include basic, applied, and translational activities that result in publications either for academic journals or for organizations or agencies. Tenure-stream faculty are expected to exhibit leadership in the field and on scholarly publications.

2) Describe available university and school support for research and scholarly activities.

   Pitt Research, led by the Senior Vice Chancellor for Research, is the core unit providing research infrastructure at the University of Pittsburgh. Four aligned Pitt Research offices give researchers, scholars, staff, students, and outside partners access to tools and services intended, and in some cases required, to support their research across the University: Office of Research Computing, Office of Research Protections, Office of Sponsored Projects, and Office of Innovation and Entrepreneurship. The Pitt Research Navigator is a new service of the Office of the Senior Vice Chancellor for Research (Pitt Research) designed to reduce administrative burden and promote ease of research across the University. The Pitt Research Navigator is available to connect faculty and research-related staff to the resources necessary to initiate and continue research projects, improve the communication between researchers and the offices that support them, ensure compliance and best practices, and to help resolve research-related problems across campus.

   Clinical and Translational Science Institute (CTSI): The CTSI (www.ctsi.pitt.edu) serves as the integrative academic home for clinical and translational scientists throughout the University and UPMC in collaboration with Carnegie Mellon University, RAND Corporation, Intel, and the region overall. Under the leadership of Dr. Steven Reis, the primary focus of the CTSI is to develop, nurture, and support a large group of clinical and translational scientists as they navigate the increasingly complex research system. The Institute seeks to integrate investigators across the full spectrum of translational research from bench to bedside to health practice, so they are able to collaborate and leverage each other's knowledge, experiences, and perspectives. In total, the CTSI has 13 cores through which participants from the University of Pittsburgh, as well as academic, community, and industry partners, engage in the clinical and translational research mission:

Biomedical Modeling; Biostatistics, Epidemiology, and Research Design; Community PARTners; Clinical Research Facilities; Biomedical Informatics; Innovation; Pilot Funding; Trial Implementation and Enrollment; Regulatory Knowledge & Support; Research Inclusivity; Team Science & Workforce Development; IMPACT; and Implementation.

• The Research Facilitator program at CTSI offers a single point of contact through which investigators can customize their request for services. CTSI research facilitators match up the request with available resources (within and outside the Institute) and make appropriate referrals as needed, thus reducing barriers to conducting research. Additionally, the facilitators offer direct, hands-on support, and guidance through all phases of the research process.

• CTSI maintains a Research Data Warehouse comprising electronic health record (EHR) data dating back to 2004 on >4.7 million UPMC patients that can be used for phenotyping, EHR-based research, and cohort discovery. Additional types of data integrated at the patient-level include (or will include) images, insurance claims, clinical text, environmental exposures (data from NOAA and EPA), and investigator-collected research data. Investigators can also use the web-based Accrual to Clinical Trials (ACT) program, which CTSI leads, to quickly and efficiently conduct real-time cohort discovery in >160M patients across 57 CTSA hubs throughout the US.

• The Biostatistics, Epidemiology, and Research Design (BERD) Core provides Pitt investigators with statistical support, and services to researchers at all stages of the research spectrum. Services include grant application development, data analysis, and data management consultation. Some BERD services are available to all researchers at the University, though the work is prioritized to junior investigators. Consultation and up to ten hours of support per project is provided at no cost to the researcher.

• The Institute for Clinical Research Education (ICRE) is the home for the University of Pittsburgh's premier clinical and translational research training programs as well as the home for the Research Education and Career Development Core of the Clinical and Translational Science Institute (CTSI). The ICRE's primary objectives are to develop, nurture, and support a collection of clinical and translational scientists by building on the University of Pittsburgh's existing clinical research training programs to establish a comprehensive program of activities ranging from early research exposure for high school students to programs for faculty. The ICRE offers customized training opportunities at every stage of the career pipeline for clinician-educators and researchers in clinical and translational science. Since 2005, the ICRE has become one of the premier clinical and translational research training programs in the nation.

• Data Management Resources: Research Electronic Data Capture (REDCap) is a secure, web-based application designed to optimize clinical trial data collection. It is provided at no cost for use with any Pitt IRB-approved research project. The IMPLICIT Network currently uses REDCap for data management.

Health Sciences Research Facility Cores (HSCRF): The HSCRFs were established through the Office of the Senior Vice Chancellor, Health Sciences, in recognition of the vital role that centralized research resources play in the academic research enterprise. The technology required to perform innovative biomedical research changes rapidly and centralized research resources provide access to expertise, technology applications, and state-of-the-art instruments that are otherwise unavailable to most investigators. The HSCRFs include scientists and technicians who provide expert advice for study design, standard and custom applications, and assist investigators in taking their project aims from conception to data production. The scientific leadership is available to work with investigators to adapt and apply methods appropriate to their scientific goals and ensure rigorous interpretation of results is supported by the data.

Health Services Research Data Center: Pitt investigators may also utilize the University's Health Services Research Data Center (HSRDC), a state-of-the-art computing facility administered jointly by the School of Medicine's Clinical Research, Investigation and Systems Modeling of Acute Illness (CRISMA) Center and the University's Health Policy Institute. The HSRDC is specifically designed to provide a high-throughput computing platform for analysis of large public health data sets directly within a secure environment. The HSRDC uses Dell PowerEdge multi-processor blade servers with 1.7 terabytes of memory, 208 cores, and a 17-terabyte Storage Area Network configured with multiple levels of a redundant array of independent disks for high throughput and maximal data

integrity. The user interface utilizes VMware-based “virtual desktops” running Microsoft Windows, which allows users to work directly on the secure server while still providing for a familiar computing experience. Users access their virtual desktops by way of a two-factor authentication process (passwords and tokens) via a secure socket layer (SSL) 128-bit VPN connection around an encrypted virtual desktop. Upon logoff, the virtual desktop is deleted to ensure no malware can persist in the environment. Virtual desktops are isolated from the internet via enterprise firewalls further mitigating risk of data loss or viruses. A variety of statistical software packages are maintained on the virtual desktops such as SAS, Stata, SPSS, and R, permitting a wide array of data manipulation and statistical analyses directly on the secure server, therefore obviating the need to download data onto local desktops. The entire system is housed within the University’s Network Operations Center, a secure facility with redundant power feeds, fire protection, electronic access controls, and 24/7 in-person monitoring. This innovative computing system allows users to collaborate on cutting edge health services research using data containing personal health information in a highly secure environment in accordance with the Health Insurance Portability and Accountability Act (HIPAA) and other governmental security standards.

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.

• Dr. Alison Sanders, from the Department of Environmental and Occupational Health, works on the molecular epidemiology and toxicology of kidney disease. She recently won an award from the Society of Toxicology to support the research of a BSPH student in her lab on climate change-related kidney toxicology.

• Dr. Jaime Sidani, from the Department of Behavioral and Community Health Sciences, is a health educator who conducts research on youth tobacco prevention, youth participatory action research, and social media and health. Her work involves collaborations with multiple SPH and medical school faculty. In a typical year, three to five undergraduates, four to seven MPH students, and one PhD student are involved in the research. Student involvement is varied depending on role; research opportunities include recruiting youth, collecting data in schools, implementing trials, facilitating youth collaborative groups, coding qualitative and social media data, and assisting with analyzing and publishing data.

• Dr. Sara Baumann, from the Department of Behavioral and Community Health Sciences, is a visual, community-engaged methodologist who conducts research on global women’s reproductive and mental health in collaboration with multiple SPH and medical school faculty at Pitt, and several global health organizations. In a typical year, four to five undergraduates, three to five MPH students, two to three PhD students, and one to two medical students are involved in the research. Student involvement varies depending on role and the project; student opportunities include contributing to recruitment plans and study enrollment, data collection, co-facilitating training workshops, coding data, supporting data analysis, contributing as co-authors on manuscripts, and disseminating study findings at various national and international conferences (three to five students annually).

• Dr. Ryan Minster, from the Department of Human Genetics, is a genetic epidemiologist who studies the genetics of complex traits such as body composition, obesity, and healthy aging. For more than a decade, he has been a member of an interdisciplinary team engaged in understanding the role genetics plays in phenotypes among the people of Samoa. His large research group typically involves a mix of doctoral and master’s students.

• Dr. Robert Coulter, from the Department of Behavioral and Community Health Sciences, conducts research on the epidemiology and prevention of substance use and violence exposure among youth and young adults who identify as sexual and gender minorities (i.e., lesbian, gay, bisexual, transgender, nonbinary, queer, and questioning). He conducts clinical trials as well as mixed-

methods observational studies and collaborates with multiple SPH and medical school faculty. In his lab, Dr. Coulter currently has six undergraduate student workers, seven master's level student workers, and three doctoral student mentees. Students are involved in his research in myriad ways, including assisting with study design and conceptualization, IRB protocol submissions and modifications, participant recruitment, data collection, data analysis, and manuscript writing. In collaboration with Dr. Coulter, his mentees have presented at international conferences and secured fellowships for their own independent research, including from the University of Pittsburgh as well as National Research Service Award (F31 and TL1) fellowships from the National Institutes of Health (NIH). His student mentees have been coauthors with Dr. Coulter on more than 25 peer-reviewed publications, 12 of which were first-authored by his mentees from all levels, including undergraduates.

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 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.

• Dr. Mary Hawk, from the Department of Behavioral and Community Health Sciences, conducts NIH-funded research exploring ways that structural and relational harm reduction care mitigates stigma experienced in healthcare settings and contributes to improved health outcomes for people with HIV who use drugs. She uses findings from this work and guest speakers working in this field to inform her graduate class titled Harm Reduction Approaches in Health and Public Health.

• Dean Maureen Lichtveld, also a professor in the Department of Environmental and Occupational Health, has active research projects in the area of environmental public health, studying the effects of chemical and non-chemical stressors on communities facing environmental health threats. She leads an annual study-abroad course that examines the effects of those issues in Suriname. To date, 15 students have participated in the course.

• Dr. Marnie Bertolet, from the Department of Epidemiology, is an expert on the use of statistics in public health, particularly analyses methods in clinical trials and observational epidemiology studies. She uses her research projects on cardiovascular disease, myocardial infarction, and others as examples in her course on the design of clinical trials.

• Dr. Eleanor Feingold, from the Department of Human Genetics, focuses her research on the genetic epidemiology of female reproductive traits, Alzheimer's disease, and dental and craniofacial traits. She conducts genome-wide studies to identify genes related to these traits and their interaction with environmental factors. She uses datasets from her research as examples throughout her course titled Introduction to Gene Mapping.

• Dr. Jeremy Martinson, from the Department of Infectious Diseases and Microbiology, studies the molecular processes behind susceptibility to HIV infection and cardiovascular complications of HIV therapy. He regularly integrates insights and examples from his research into the school's MPH core course in Public Health Biology, as well as into advanced courses in Infectious Diseases and Microbiology.

5) Describe the role of research and scholarly activity in decisions about faculty advancement.

See information request #1 above.

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.

Metric	Target	2019-20	2020-21	2021-22	2022-23*
% of full-time faculty participating in research	100%	100%	100%	100%	100%
Total research expenditures	increase	$48M	$60.9M	$85.0M	
Number of new grants awarded	increase	**	105	107	106
Number of grant submissions	increase	**	275	272	266
Number of publications	increase	889	927	939	

*2022-23 data will be added or updated for the final self-study.
**Grant tracking systems changed between fiscal year 2020 and fiscal year 2021, so 2019-20 numbers are not consistent with later years.

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

Strengths, challenges, and solutions in progress: The school's research portfolio is both broad and deep. All full-time faculty are engaged in research, spanning an enormous range of disciplines and methodologies, and including the full spectrum from basic research to translation. A majority of graduate students and many undergraduate students are engaged in research, both as individuals and within the context of classroom activities.

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.

   All faculty are expected to engage in service, which may include service within the University or beyond. Faculty are strongly encouraged to engage in service and practice that goes beyond the walls of the University. Types of service that are described in the school's appointment, promotion, and tenure criteria (see appendix D of the FAPTC operating manual ERF> Criterion E> E5) include the following examples:
   • Service as a peer-reviewer for leading professional publications, scientific conferences, and grant review panels.
   • Involvement in public health at local, state, and national levels, which includes participation in the planning, design, implementation, or evaluation of public health programs.
   • Participation in scientific or policy committees that serve as advisors to the government or foundations.
   • Service as an editorial board member.
   • Participation in planning, design, implementation, or evaluation of public health programs at the local, state, national, and international levels.

2) Describe available university and school support for extramural service activities.

   School leadership: SPH has an associate dean for public health practice and a director of community engagement, and each department has a vice chair for practice. This group meets regularly to discuss strategies for the promotion and recognition of practice. Recent topics have included the Center for Public Health Practice Translation award for excellence in student translation of research to practice, highlighting opportunities for faculty to engage with community partners, and clarifying the role of practice within the appointment, tenure and promotion process.

   School centers: At the school level, several centers provide focal points for practice activities, most prominently the Center for Public Health Practice (CPHP) and the Center for Health Equity (CHE). The CPHP's mission is "to drive excellence in public health practice, research, law, and policy to improve population health," and it pursues that mission by stimulating practice opportunities for both faculty and students, and particularly faculty-student partnerships. The Center for Health Equity is actively involved in local communities and connecting students to community-engaged practice and research. It runs the Community Research Advisory Board (CRAB), which provides community consultation for researchers engaged in community-based research.

   University Community Engagement Centers: Beginning in 2017, The University of Pittsburgh started creating a set of Community Engagement Centers (CECs) to build stronger relationships with neighboring communities within the city. The CECs are focal points for faculty across the University to collaborate with local communities. SPH work with the CECs is spearheaded by Dr. Thistle Elias, the SPH director for community engagement and recipient of the 2019 Chancellors Award for Distinguished Service, and Dr. Christina Ndoh, associate dean for public health practice.

Examples of CEC-SPH collaborations include the Summer Evaluation Institute, run by faculty from the Department of Behavioral and Community Health Sciences. Local community organizations participate in an intensive two-day mini residency on health program evaluation. The CEC physical space is also used for SPH -related meetings, including a recent Board of Visitor's meeting and the regular meetings of the vice chairs for practice within the school. The CECs fall under the University's Office of Engagement and Community Affairs (ECA), which facilitates a number of additional strategic community and outreach initiatives. The ECA also maintains a community engagement map – an interactive resource highlighting key community initiatives including many involving SPH.

Faculty evaluation and promotion criteria: Service and practice expectations are a part of all faculty evaluation and promotion criteria in the school, and the University Senate recently proposed DEI and community-engaged scholarship guidelines for promotion and tenure.

PittServes: PittServes is a clearinghouse of community volunteer opportunities. It is run by the University Office of Student Affairs and offers opportunities and coordinates projects for faculty, staff, and students.

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.

• Dr. Linda Frank, from the Department of Infectious Diseases and Microbiology, has extensive experience in HIV/AIDS education, and currently serves as director of the MidAtlantic AIDS Education and Training Center (MAAETC). Dr. Frank is also the director of one of the two MPH programs in Infectious Diseases and Microbiology and teaches multiple courses in that program. Her practice work informs her teaching at every level, from design of curriculum to specific examples used in courses.

• Dr. Patricia Documet, from the Department of Behavioral and Community Health Sciences, has been associated for many years with the Latino Engagement Group for Salud (LEGS), a coalition comprised of community members and organizations working with Latinos, focused on community-based participatory initiatives. In partnership with this group, she has been involved in numerous service/practice activities over the years, including evaluation projects, needs assessments, and participatory research projects. She regularly brings examples from these projects into the classroom as she trains students in research design and community-engaged research methods.

• Dr. Andrea Durst, from the Department of Human Genetics, is the director of the Public Health Genetics MPH program. She currently serves as chair of the advisory committee for the NYMAC Regional Genetics Network and co-chair of the genetics/genomics workgroup of the Pennsylvania Cancer Coalition. Her service work provides numerous class examples, as well as student practicum opportunities, as she teaches both elementary and advanced courses for the Public Health Genetics MPH students.

• Dr. Jessica Burke, from the Department of Behavioral and Community Health Sciences, regularly publishes in and conducts article reviews for Health Promotion Practice, a peer-reviewed journal that publishes research, commentary, practical tools, and promising practices to advance the art and science of health promotion and disease prevention. She draws illustrative examples from that work when teaching at the undergraduate and graduate level.

• Dr. Catherine Haggerty, from the Department of Epidemiology, is a reproductive, perinatal, and pediatric epidemiologist with cross-cutting expertise in infectious disease epidemiology and global health. During the 2020-21 academic year, she worked with the Allegheny County Health

Department on the response to COVID-19, work that she has been able to bring into the classroom in her infectious disease epidemiology course.

• Dr. Thistle Elias, from the Department of Behavioral and Community Health Sciences, uses qualitative and mixed methods to conduct community-engaged evaluation and research. She works with numerous governmental and non-governmental organizations as an evaluator and as part of her directorship of the Bridging the Gaps summer program. These contacts and projects provide a deep reservoir of examples and case studies as she teaches the MPH Behavioral and Community Health Sciences core course.

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.

Metric	Target	2019-20	2020-21	2021-22	2022-23*
% of full-time faculty participating external service activities	100%	100%	100%	100%	100%
Number of funded projects with state governments	increase	**	14	16	18
Number of funded projects with local governments and health departments	increase	**	5	8	5
Number of foundation-funded projects	Increase	**	36	29	39

*2022-23 data will be added or updated for the final self-study.
**Grant tracking systems changed between fiscal year 2020 and fiscal year 2021, so 2019-20 numbers are not consistent with later years.

5) Describe the role of service in decisions about faculty advancement.

See information request #1 above.

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

Strengths, challenges, and solutions in progress: Faculty are engaged in many different types of service/practice activities. Alll full-time faculty are engaged in externally-focused service in addition to internal service. There are many examples of these activities being brought into the classroom either as examples or as active community-engaged projects for students. Tracking faculty service and ensuring that it is appropriately rewarded in promotion processes are ongoing challenges. Committees at both the school and University level are actively engaged in discussions on how to develop and implement more robust approaches.

F1. Community Involvement in School Evaluation and Assessment

The school engages constituents, including community stakeholders, alumni, 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, alumni association, etc.). List members and/or officers as applicable, with their credentials and professional affiliations.

   The school's Board of Visitors (BOV) advises the school leadership on all aspects of vision, goals, and operations, including student outcomes and curriculum. The board typically meets at least twice a year in-person with a remote hybrid option for those members who request that format. Board meetings include a state-of-the-school update including metrics on all aspects of operations, research presentations by faculty and students, and discussions with leadership on important issues in the school's direction. For example, the June 2023 BOV meeting included breakout sessions for subcommittees to discuss the implications of school metrics for curriculum and student practice experiences, research and practice, student recruitment, and diversity and equity. Other recent topics have included the action plan for the school's 75th anniversary, the status of precision public health efforts, and community engagement initiatives. Board members (listed below) include alumni, employers, and representatives of local, national, and international organizations who are engaged with the school. The board has been actively engaged in the accreditation and self-study process for the past two years, receiving updates at each meeting and providing input on issues that are discussed in the self-study. Three BOV subcommittees were established by Dean Lichtveld: 1) Education & Research, 2) Public Health Practice and 3) Governance. The subcommittee structure allows for greater engagement of board members with the details of the school's operations.

   Members of the school's BOV include:

   David Acosta, MD
   Chief Diversity and Inclusion Officer, Association of American Medical Colleges
   Subcommittee(s): Education & Research

   Kevin Altomari
   Owner, The Redan Group
   Subcommittee(s): Governance

   Edward Benz, Jr, MD
   President & CEO Emeritus, Dana-Farber Cancer Institute
   Subcommittee(s): Education & Research

   Eva Tansky Blum, Esquire
   Former Senior Vice President and Director of Community Affairs, PNC Bank // Chairwoman and President, The PNC Foundation
   Subcommittee(s): Public Health Practice

   Debra Cen, Sc.D.Hyg.
   Founder and former president, LEAP Biosciences
   Subcommittee(s): Education and Research; Public Health Practice

Karen Feinstein, PhD
President, Jewish Healthcare Foundation
Subcommittee(s): Education and Research; Public Health Practice

Lee Foster II
Chairman of the Board, L.B. Foster Company
Subcommittee(s): Governance

William Green
Professor Emeritus, Orthopedic Surgery, Harvard School of Medicine
Subcommittee(s): N/A

Diane P. Holder
Executive Vice President at UPMC, President of the UPMC Insurance Services Division, and President and CEO of UPMC Health Plan
Subcommittee(s): Governance

Robert G. Lovett
Partner
Subcommittee(s): Governance; Education and Research

Patricia Maryland, DrPH
Retired Healthcare CEO, Ascension Health
Subcommittee(s): Public Health Practice

Patricia Matthews-Juarez, PhD
Vice President, Office of Faculty Affairs and Development Professor, Department of Family and Community Medicine
Subcommittee(s): Public Health Practice; Governance

Jeffrey Morby
Chairman/Managing Director, Amarna Corporation
Subcommittee(s): N/A

Diane Peterson
Retired President, D. Peterson and Associates
Subcommittee(s): Governance

Thomas M. Priselac
President and CEO, Cedars-Sinai Health System
Subcommittee(s): N/A

David Savitz, MD
Professor of Epidemiology, Professor of Pediatrics, Professor of Obstetrics and Gynecology, Brown University
Subcommittee(s): Education & Research

James Roddey
Senior Consultant, McCrory & McDowell LLC; Former Chief Executive, Allegheny County
Subcommittee(s): Public Health Practice; Governance

Janet Stout, PhD
Executive Vice President and Founder of Special Pathogens Laboratory
Subcommittee(s): TBD (new appointee)

The school is in the process of forming a Partner Advisory Board (PAB) to augment the practice committee of the BOV. The goal in forming the PAB is to get a broader range of input from employers and community stakeholders, particularly those who work directly with students and alumni.

Graduates from the school are part of the University of Pittsburgh's active alumni association. Public health alumni are regularly asked to provide input into school initiatives and programs. For example, prior to ending the school's DrPH programs, DrPH alumni were surveyed to seek their guidance. More recently, all alumni were invited to provide input into the school's strategic plan and into this self-study. In addition, individual departments regularly solicit feedback from their program alumni and discipline-specific stakeholders. For example, the Department of Health Policy and Management has a National Advisory Council that meets regularly and provides detailed feedback to the department, and the MPH program in Public Health Genetics recently conducted a survey of all alumni on a variety of topics.

2) Describe any other groups of external constituents (outside formal structures mentioned above) from whom the unit regularly gathers feedback.

The school has numerous mechanisms for feedback from community stakeholders, employers, alumni, and practicum supervisors. In general, two of the most important sources of external feedback are preceptors of student practica and the practice partners who teach and give guest lectures in school courses. These individuals are in constant conversation with the school and are very familiar with students and alumni. As a result, they are able to provide deep insights into student needs, workforce needs, school planning, and other topics. Included below are more formal mechanisms by which input is gathered from these individuals and others, but informal mechanisms, such as conversations at school events, also play a key role.

• Over the past few years, the school has deliberately increased the number of public health practitioners who serve as adjunct instructors in the core MPH and BSPH curricula. These individuals then serve on the MPH committee and BSPH education committee (BEC), and contribute their expertise and perspectives directly when the committees develop curricula for their respective programs. This full integration of the school's most important external voices into curriculum development is invaluable. Several of these individuals have been hired by the school into full-time positions.

• Each year, the school hosts a practicum and internship symposium, during which employers and practicum supervisors give presentations not only on practicum opportunities, but how students should prepare for these opportunities. This guidance is also useful for the faculty and staff who are creating the curriculum and co-curriculum for these students.

• Each year, one to two dozen MPH students complete summer internships at the Allegheny County Health Department (ACHD), a collaboration between the school and the ACHD known as the Pittsburgh Summer Institute. At the end of the summer, the school hosts a thank you and discussion lunch for all ACHD preceptors (many who are also employers and/or alumni) and gathers feedback on student performance, the structure of the program, and what can be improved to better prepare students.

• The Bridging the Gaps summer program provides community-focused internships for several students every year, and integrates public health students with students from other the health sciences and related areas such as social work. The director of the program works closely with a large number of community organizations as a part of the program, and regularly solicits their feedback on the strengths and areas of improvement for students and programs.

• The school surveys alumni one- and two-years post-graduation to gather employment information and alumni perspectives on curricula. Alumni are asked what was most valuable in their academic training.

• The school's social media accounts, particularly LinkedIn, are also useful for external feedback. These accounts are followed by many alumni, and posts frequently receive comments, not only on the news being posted, but on the school itself.

• The school's strategic communications team and alumni coordinator produce a monthly alumni newsletter, which is used on occasion to solicit feedback, for example, on the self-study and on ideas for what the school should emphasize in its anniversary celebrations.

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.

Below are some examples of how we engage with each of the groups described above.

• Discussions with the Board of Visitors include presentation of school data and conversations about current practice and future directions. For example, a number of board members have suggested that all students need more extensive data science training, which was also reflected in the recent graduate survey data. In response, the school has increased the exposure to data science in every concentration, for example, creating the Health Data Science track in Biostatistics, adding systems science training courses to the Behavioral and Community Health Sciences curriculum, and adding bioinformatics training to the curricula for all programs in the Department of Human Genetics.

• As noted above, the role of adjunct instructor/practitioners in the MPH and BEC committees is perhaps the school's most valuable tool for gathering feedback from external constituents, providing input into the minutiae of curriculum decisions on a monthly basis. Recent discussion topics have included how to design the BSPH capstone experience, whether to adapt curriculum to hybrid instruction, and the role of systems thinking in the curriculum.

• The in-depth conversations with practicum supervisors and employers at major partners such as the Allegheny County Health Department (ACHD) often have a significant effect on the curriculum. For example, when preceptors at the ACHD provided feedback on the professional writing skills (as opposed to academic writing skills) of students, the school addressed those issues within the Public Health Communications MPH core course.

• The feedback from recent alumni surveys consistently highlights analytical and communications skills, and sometimes points out emerging areas that should be incorporated into coursework.

• In the distant past, employer surveys were conducted but found not to provide actionable data because of low response and experience rates – any given employer only had information on one graduate, and many programs were not represented among respondents. In more recent years, much more actionable data has been gathered from direct qualitative engagement with the groups described above. The BOV includes several individuals whose organizations employ multiple graduates, and the practice partners who teach courses and supervise practica also have information on numerous alumni.

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.

Most of the external partners described above also provide valuable feedback on overall mission, goals, and operations. As above, this feedback is both formal and informal. A few examples are given below.

• Dr. Lichtveld has engaged the BOV very actively in all aspects of school operations, including increased school visibility, fundraising, community and global engagement. The BOV now includes subcommittees to work on issues related to the education, research, and practice missions of the school. The board was actively engaged in the school's strategic planning process during 2021 and 2022, providing feedback on several drafts of the plan and goals. The board was similarly involved in the self-study, discussing issues of interest for the self-study at several meetings during 2021, 2022, and 2023, and reviewing the entire draft self-study in 2023. Several board members are actively engaged in advising the school on expansion in the dean's priority areas including climate and health and precision public health.

• A broad set of external partners was involved in the school's strategic planning process in 2022. The Strategic Planning Committee included representatives from each of the school's seven departments, alumni and members of the BOV. The committee drafted the components of the plan and then sought additional input from the vice chairs for research, education and practice. After revisions were made based on that input, an updated version was shared via Jamboard, Google's digital whiteboard, for public comment and input. Information encouraging participation was shared broadly via email and social media posts.

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.

The BOV minutes in the ERF include discussions of all of the areas named in documentation requests 3 and 4, including current and future directions for curriculum, strategic planning, and the self-study. See ERF> Criterion F> F1> F1.5.

6) Summarize the findings of the employers' assessment of program graduates' preparation for post-graduation destinations and explain how the information was gathered.

Results of the data-gathering activities described above have been fairly consistent over a several-year period. Feedback on students' substantive skills is always very positive, although (as noted above), the need for more data science has been an increasing theme in recent years. There is also consistent feedback on the need for more professionalism among recent graduates. This reflects larger societal trends around generational differences in workplace expectations, and the school has had many discussions on how to address it. Some of these approaches have been incorporated into the Public Health Communications course, career services and practicum preparation workshops, and into the BSPH first-year curriculum.

The school has also relied heavily on national data and resources related to public health education and employment, as these go far beyond the data any one school is able to gather. For example, the journal Health Affairs recently published a paper on post-COVID trends in the public health workforce, which has been discussed among school leadership and with the BOV as part of a conversation on changes in training students for governmental public health practice.

7) Provide documentation of the method by which the school gathered employer feedback.

Please see ERF> Criterion F> F1> F1.7.

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

Strengths, challenges, and solutions in progress: The school has a number of different groups of stakeholders that are relied on for critical feedback on the school's vision, operations, and student outcomes. These mechanisms have provided important actionable information over a number of years particularly in the areas of research directions, curriculum, and student training. The direct inclusion of practice partners into the school's curriculum committees has been a particular strength, as has the high level of engagement among Board of Visitors members. The information described above, however, comes from a somewhat limited number of individuals and does not necessarily represent all departments, programs, or disciplines relevant to the school. To address this, the school is expanding the sources of input with the development of the Partner Advisory Board.

F2. Student Involvement in Community and Professional Service

Community and professional service opportunities, in addition to those used to satisfy Criterion D5, 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.

   Both undergraduate and graduate students are encouraged to participate in service, community engagement, and professional development activities throughout their time at the school. For example, during new student orientation, students are encouraged to participate in "plunge" events that are designed to immerse students into the practice of public health as soon as they arrive on campus. Recent graduate student orientation plunge events include making "safe sex" kits for distribution through the Allegheny County Health Department and creating blankets for distribution by the local non-profit Homelost Project to individuals living in housing transitions. The new cohort of undergraduate students work together during the undergraduate student orientation plunge event to make blankets for Project Linus, which provides handmade blankets to children 0-18 in Pittsburgh who are seriously ill, traumatized, or otherwise in need.

   Undergraduate students also learn more deeply about the importance of service learning and community-engaged work in their first-year seminar course, and about opportunities throughout Pittsburgh to participate in during the school year as well as during the summer. During mixer events for the undergraduate students, service-learning projects are worked on as a group. For example, during the spring 2023 mixer event, students and faculty made washcloth kits for Days for Girls, an international non-profit organization that increases access to menstrual care and education to shatter stigma and limitations for women and girls.

   In addition to schoolwide activities, departments also engage students in service and community activities. For example, the Department of Epidemiology supports a student-run organization focused on volunteer activities at local community organizations across the region. In the Department of Health Policy and Management, the professional development seminar course exposes students to professional organizations and practice opportunities.

2) Provide examples of professional and community service opportunities in which public health students have participated in the last three years.

   Opportunities for students, faculty, and staff to engage in community service are advertised in the school's Connections newsletter. These activities were challenging during the peak of the COVID-19 pandemic, and the level of activity slowed significantly. With more opportunities available during the past year, students have enthusiastically returned to community engagement. Recent examples include a toy drive during the holiday season , service boxes at BSPH mixers, and work with street medicine providers. A growing number of these opportunities involve collaboration with the University's Community Engagement Centers. As mentioned previously, in partnership with local communities, the University made a 15-year commitment of investment, infrastructure, programming, and dedicated staff in Pittsburgh-area neighborhoods. This commitment has been operationalized by the creation of the Community Engagement Centers, which are welcoming spaces that create a front door to Pitt in several neighborhood communities. In collaboration with University leadership involved in community engagement, the school is working to coordinate student engagement in these spaces.

BSPH students are required to participate in a community-engaged service activity throughout the duration of their Fundamentals of Public Health course. They seek out an opportunity and complete 10 hours of community-engaged service that is then discussed during the course. Additionally, students have the opportunity to partake in school hosted service-learning activities such as worry dolls for the Homeless Children's Education Fund, blankets for Project Linus, encouragement journals for the Sojourner House, washcloth kits for Days for Girls, friendship bracelets for the Ronald McDonald House, no-sew fleece hats, scarves and chemo beanies for the Ronald McDonald House, Every Child inc., and the Allegheny Health Network, and plate toys for Hello Neighbor. These events happen monthly in the school throughout the entirety of the school year.

Many professional and community service opportunities also arise as small individual projects, often through faculty contacts. For example, in 2022, Dr. Patricia Documet was approached by Casa San Jose, a local nonprofit organization working with the Latino population in the region, to assist in an assessment of the needs of Latinos in Lawrence County, PA. She recruited a Spanish-speaking student to participate. The student collaborated with Dr. Documet in creating and delivering a focus group for lay staff of Casa San Jose, retrieving extant data (census, vital statistics), analyzing data, and writing a report.

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

Strengths, challenges, and solutions in progress: Students are actively engaged in a wide variety of community-focused public health activities and professional development opportunities and are enthusiastic about expanding those opportunities. It is important to ensure that students are providing a welcomed service and not straining the resources of community partners. As such, the school has recently held proactive discussions about this issue in several venues. One approach the school has implemented is to provide strong course-based community-engagement training for undergraduate and graduate students. Another approach is holding meetings at the Pitt Community Engagement Centers and encouraging faculty, staff, and students to become familiar with their efforts and opportunities. For example, one of the BOV meetings in 2022 was held at the Homewood neighborhood Community Engagement Center, providing an opportunity to showcase community collaboration to all attendees. Faculty participating in the meeting were able to share this information with students, creating more opportunities for continued engagement.

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.

   All school speakers, workshops, and other co-curricular activities are open to everyone, and most are actively advertised to our community partners, alumni, etc. For example, throughout the spring and summer of 2020, the school put on a virtual "Conversations about COVID" seminar series focused on the emerging pandemic that was widely viewed by internal audiences, community partners, and alumni. Other recent well-attended educational/training activities have included panel sessions with national and international experts on important public health topics, including climate and health and emerging infectious diseases. With hybrid participation in events more common, many departmental seminar series have recently gathered significant external audiences.

   In addition to the activities described above, the school has two major units that formally provide workforce professional development.

   • The MidAtlantic AIDS Education and Training Center (MAAETC) provides HIV/AIDS education, consultation, technical assistance, and resource materials to public health and healthcare professionals throughout Pennsylvania, Maryland, Virginia, West Virginia, Delaware, and Washington, DC.

   • The Mid-Atlantic Regional Public Health Training Center (MAR-PHTC) is a HRSA-funded educational and training collaboration serving HHS Region 3 (Pennsylvania, Maryland, Virginia, West Virginia, Delaware, and Washington, DC). MAR-PHTC is a partnership among the University of Pittsburgh School of Public Health, Washington, DC Department of Health, Delaware Health and Social Services Division of Public Health, Institute for Public Health Innovation (VA), PA Association of Community Health Centers, WV Local Health Inc., and the schools of public health at Drexel, Johns Hopkins, and West Virginia Universities. MAR-PHTC seeks to expand and diversify the current and future public health workforce.

	Education/training activity offered	**How did the unit identify this educational need?**	**External participants served**
Example 1	IAAETC Substance use disorder and HIV trainings	The MAAETC conducts ongoing needs assessment of health professionals throughout the USPHS Region 3 and this topic is consistently identified as needed. In addition, the recent HIV outbreak in West Virginia related to injection drug use resulted in increased need.	Over 15,000

Example 2	MAAETC Mental illness and HIV trainings	The MAAETC conducts ongoing needs assessment of health professionals throughout the USPHS Region 3 and this topic is consistently identified as needed. The COVID-19 pandemic has exacerbated the issues of mental illness across the spectrum of the HIV Care Continuum.	Over 15,000
Example 3	MAR-PHTC workshops including "Beginning the Journey Toward Cultural Humility" and "Project Management for Public Health Professionals"	MAR-PHTC identified this need based on its survey of regional partners, needs assessment for specific health department or other organizations, and the Region 3 results of the national PH-WINS survey.	Over 2300
Example 4	MAR-PHTC Field placements and collaborative projects	MAR-PHTC identified this need based on its survey of regional partners, needs assessment for specific health department or other organizations, and the Region 3 results of the national PH-WINS survey.	27

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

Strengths, challenges, and solutions in progress: The school provides many opportunities for workforce professional development. The formal activities described above are dependent on external funding. At this time, these groups are well funded, however.

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.

   In 2014, the school completed a comprehensive diversity plan (see committee report in ERF>Criterion G), which laid out priority populations, targets, and strategies. The plan was developed over the course of more than a year by an ad hoc committee of internal and external stakeholders. The plan has since been revisited and updated a number of times as a part of various strategic planning exercises and ad hoc reviews by committees and associate deans focused on equity and justice. As expected, the strategies and tactics outlined in 2014 have evolved significantly, yet the priority populations have stayed very similar to what was outlined in 2014 and are listed below.

   Blacks or African Americans are subject to significant direct and structural racism locally, nationally, and internationally. They are underrepresented among faculty, staff, and students at SPH. The tracked priority groups (see below) include Black/African American students, staff, and faculty.

   Hispanics or Latinos are an ethnic subpopulation of the U.S. that is one of the fastest growing. The Hispanic/Latino population of Allegheny County increased 80% between the 2010 and 2020 census counts. However, the representation among SPH faculty and students remains low. The tracked priority groups (see below) include Hispanic/Latino students and faculty.

   Disadvantaged socioeconomic status (SES) students are facing the Commonwealth's recent cuts to institutions of higher education as well as other important challenges. A useful measure of this cohort is students who are the first in their family to attend college, which is a tracked priority group.

   International origin students are well represented at SPH; however, the largest groups are from a few specific countries. The school aspires to attract a more globally proportionate representation of international students. International students are distinguished by their visa status, regardless of race or ethnicity. In the 2014 diversity plan, the school introduced a specific metric for tracking international student diversity. More recently, the school has found that it is not useful to track

international diversity numerically due to unpredictable shifts in international student populations in response to national and international events.

Sexual and gender minority (LGBTQIA+) populations suffer from a substantial set of dangerous health disparities. A large group of students interested in sexual and gender minority health research have enrolled at SPH because of the school's strong programs focusing on methods to conduct research and design interventions to address these inequities. Not all students interested in this work self-identify as LGBTQIA+, nor does the school propose to count or to monitor the sexual and gender identities of our students. Instead, the school continues to monitor growth of interest in the discipline of LGBTQIA+ health. The LGBT Certificate Program and the success of the Center for LGBT Health Research are sources of information for that purpose.

Students with disabilities have substantial barriers to access in every way, including in health and higher education. The current means of quantifying this category is limited to self-identification when a student request some form of support or accommodation. Over the past five years, the school has had only 38 applicants and seven matriculated students who self-reported a disability at the time of application, which is presumed a significant underrepresentation. SPH plans to revisit its strategic approach to monitoring students with disabilities in the future.

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.

The school's 2023 strategic plan goals and aims are listed below. While the school views equity, justice, and specific support for priority populations as intertwined with all aims and goals, Goal 4 explicitly addresses diversity issues.

GOAL 1: Conduct pioneering and high-quality research that addresses complex current and emerging public health issues.

A. Expand interprofessional public health research efforts.
B. Conduct innovative and action-oriented research.
C. Translate research findings into practical programs and policies.
D. Disseminate research findings to regional and global stakeholders.
E. Prepare the next generation of leaders in public health research.

GOAL 2: Provide high-quality, inclusive, supportive, and progressive learning environments to prepare and inspire future public health leaders.

A. Enhance financial resources to recruit, admit and graduate a talented and diverse student community.
B. Invest in and encourage faculty development to promote and recognize teaching excellence.
C. Provide high quality educational infrastructure and pedagogical instruction.
D. Nurture student professional development through experiential learning.

GOAL 3: Promote action and promote equitable public health through practice, policy, advocacy, and professional engagement.

A. Maintain and expand strong partnerships with health systems, public health agencies, community organizations and professional organizations.
B. Support participation of faculty, staff and students in practice-based scholarly research and service.
C. Promote data-driven practice and policy to improve population health and health equity.
D. Increase general public's awareness of public health issues.

GOAL 4: Create sustainable pathways and a school climate for diverse faculty, staff and students to safely flourish and advance in public health

A. Create sustainable pathways and a school climate for diverse faculty, staff, and students to safely flourish and advance in public health.

B. Advance diversity in course instruction and co-curricular offerings addressing social, structural, and systemic determinants of health, health equity and cultural competency.
C. Enhance translational and intersectional research collaborations to reduce health disparities and advance health equity.
D. Increase faculty, staff, and student representation from priority populations.

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.

Actions and strategies to advance the institution's diversity, equity, inclusion, and justice goals are reinforced at every level of the University. Below, key examples of these efforts at each level are described. Initiatives specifically related to curriculum and co-curriculum are listed separately below under documentation request 4.

University initiatives

• The University of Pittsburgh Office for Equity, Diversity and Inclusion, provides vision, leadership and resources. Disability access, civil rights and title IX, programs for veterans, and resources for specific historically marginalized communities all fall under this office. For example, the listing of Asian American and Pacific Islander resources includes academic and community resources as well as links to national organizations that are taking on anti-Asian racism. Events sponsored by the office in the month of April 2023 alone include bystander intervention training, a HerStory Story Slam for Women's History Month, an Eid celebration, and a day-long teach-in on transgender history and current issues. The office also leads the University's digital accessibility initiatives, offering resources for students, instructors, and schools, as well as a "report a barrier" web form.
• The Office of the Vice Provost for Faculty Diversity and Development leads academic-area initiatives including cluster hires, faculty awards related to diversity and equity, and faculty development opportunities such as Provost's Diversity Institute for Faculty Development described under item 4 below.
• The Office of Human Resources offers numerous faculty and staff development workshops, including a series related to diversity. Participants in the diversity-related workshops can be awarded a Diversity and Inclusion Certificate. Dean Lichtveld has mandated that all SPH faculty and staff earn this certificate.
• The University Office of Student Affairs also leads numerous diversity initiatives, including an Allies Network Training, an annual Social Justice Symposium, and "Brave Space"-an opportunity for critical dialogue on difficult issues.
• The senior vice chancellor for the health sciences has an Office of Health Sciences Diversity, Equity and Inclusion that is a strong partner with the SPH in many initiatives. The office runs a social justice faculty fellowship program, various training and enrichment workshops, initiatives to promote use of NIH diversity supplements, and post-baccalaureate programs. It also plays an important role in leading and mentoring health sciences faculty under the cluster hire described below.
• In 2019, the university committed to a Latino cluster hire initiative, although this did not include the health sciences schools.
• In 2022, the university initiated a cluster hire in the area of race and social determinants of equity, health, and well-being. Matching funding was provided for up to 50 hires university-wide. The SPH has thus far hired four faculty under this program.
• The University offers the K. Leroy Irvis Fellowship to recruit underrepresented minority students into doctoral programs. The SPH has strongly participated in this program, matriculating a new student through the fellowship nearly every year.

SPH initiatives

• Many of the school's initiatives are led by the associate dean for diversity, equity, and inclusion, in collaboration with numerous faculty, staff, and the entities described below.

• The Center for Health Equity is actively involved in local communities and in connecting students to community-engaged practice and research. It runs the Community Research Advisory Board (CRAB) which provides community consultation for researchers engaged in community-based research. It also runs the Maternal and Child Health Equity Scholars group and the Violence Prevention Initiative, a multi-part effort dedicated to addressing community violence. The center also offers Focused Writing, a three-hour hybrid group to promote social and peer support for faculty, students, staff, and community members. In 2021-2022, 40 sessions were held, with 40 currently underway in 2022-2023. Attendance is 9 to10 writers on average from SPH, the larger University, Carnegie Mellon University and other locations across the US, with a majority of participants identifying as Black or Latino.
• The Center for LGBT Health Research was established by SPH in 2002 and serves as a hub and generator for research on the health of gender and sexual minorities. The center is also involved in a number of community partnerships with organizations including Project Silk, The Open Door, and the Persad Center.
• The Center for Global Health supports global research and practice with a particular focus on providing opportunities for students who are interested in global health.
• The Faculty Diversity Committee (FDC) is one of the formal school governance committees, and has engaged in a number of important initiatives, including a “Coffee and Conversations” series to provide a community forum to discuss difficult topics, and partnering with the Educational Policies and Curriculum Committee (EPCC) on curricular innovation.
• The Social Justice Action Committee (SJAC) was an ad hoc committee of faculty, staff, and students formed in the summer of 2020. It addressed racial justice issues within the school as well as the school’s role in the external community. The SJAC created a list of concrete recommendations that were presented to a school-wide audience in August of 2020. It was succeeded by the Justice, Equity, Diversity, and Inclusion (JEDI) committee, which has worked with other school staff, associate deans, and committees to implement recommendations.
• After starting her leadership role at the school, Dean Lichtveld requested all faculty and staff to complete the University’s Diversity and Inclusion Certificate program (series of trainings). Diversity and Inclusion Certificate Program | Office for Equity, Diversity, and Inclusion | University of Pittsburgh.
• The twice-yearly SPH faculty retreats almost always include a diversity-focused workshop or activity.
• Both faculty and staff hiring are guided by central University processes that promote diversity and inclusion. These, include advertising positions in a variety of places, and search committee procedures designed to improve diversity. The school additionally requires that at least one member of each faculty search committee be trained in inclusive hiring strategies.
• Student recruiting activities: School-wide recruitment efforts are led by the recruitment and admissions unit within the Office of Student Affairs. The undergraduate program recruits underrepresented students through a variety of in-person visit days, including the Multicultural Visit Program, an annual program for admitted students and families. The school’s graduate programs provide scholarships to recruit a diverse student body, including partial school-wide and departmental awards, in addition to several 75% tuition scholarships, to attract students from underrepresented groups. The school also recently dropped GRE requirements for almost all programs. See Criterion H for additional detail on recruiting activities aimed at historically marginalized students.
• The Public Health Science Academy is a summer program for students in Pittsburgh-area public high schools. Students spend a month at the SPH taking classes and working with a research or practice mentor to introduce them to the field of public health. Most students are members of historically marginalized racial and ethnic groups.
• The Pitt Public Health Undergraduate Scholars Program is a CDC-funded initiative that brings a national cohort of undergraduates to SPH for the summer to learn about public health by participating in classroom activities and experiential learning activities. Participants receive housing, meals, and a stipend, and at the end of the summer they participate in a 2.5-day research poster showcase at the CDC in Atlanta. The summer 2023 cohort of students is 79% first-generation college students, 34% African American, and 13% Latino.

Department and program initiatives

In addition to the University and school initiatives, many important diversity initiatives occur at the department and program level. For example, in June 2020, Infectious Diseases and Microbiology (IDM) created a committee to increase diversity and address disparities and issues in curriculum development, admissions, and recruitment. IDM faculty members, graduate students and staff are members of the IDM Plan for Action Against Racial Disparities (IDM PAARD) committee. Epidemiology created the EPEAR (Epidemiologists Promoting Equity and Anti-Racism) committee to better understand equity status within the department and help identify resources for faculty development. EPEAR is leading an equity audit assessment that will identify strengths and weaknesses across the department regarding equity. An external organization is conducting this evaluation. As part of identifying resources for faculty development, EPEAR has been summarizing useful articles on health equity issues as part of Epidemiology faculty meetings and highlighting available workshops on equity.

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.

University initiatives

• All undergraduate first-year students are automatically enrolled in a one-credit anti-racism course. The course addresses three key areas of inquiry: the roots, ideology, and resistance to anti-Black racism. First, it explores the roots of anti-Black racism in the United States, drawing connections to African history, the history of slavery, and the Transatlantic Slave trade. Second, the course focuses on the ideology of anti-Black racism—the ideas that undergird the creation of racial hierarchies, often shaped by pseudo-science and eugenics. Third, the course highlights the theme of resistance, paying close attention to the range of political strategies and tactics Black activists and their allies have employed in the effort to obtain a more just and equal society nationally and internationally. SPH faculty were involved in the development of the course and serve as co-instructors for the course content.

• The Center for Teaching and Learning has a wide variety of workshops, training, and supports, many of them focused on support for diverse learners and universal design for learning. For example, several SPH faculty have attended workshops/trainings on “Inclusive Teaching and Why It Matters,” “Anti-Blackness, Anti-Racism and Pedagogy,” and “Encouraging Student Participation.” In addition, faculty have participated in semester-long faculty seminar trainings on “Hybrid Online Teaching & Learning” which stressed inclusiveness and accessibility for diverse learning styles and abilities. Numerous school faculty participate each year in the Provost’s Diversity Institute for Faculty Development, which holds an intensive series of workshops each summer on diversity issues in the classroom. The 2023 Institute consisted of seven workshops on the theme of “Queering the Classroom.”

• The Office of Health Sciences Diversity has an annual health equity poster competition. SPH students consistently actively participate and typically win awards each year.

• In 2018, a grassroots group of University faculty, students, and staff started a celebration for Hispanic heritage month, including both academic and social events. Since 2021, it also includes a remote three-day conference entitled Latinx Connect. SPH faculty and students have been an integral part of planning these events.

SPH initiatives

• All proposals for new courses in the school must discuss how the course addresses diverse populations. This requirement from the Educational Policies and Curriculum Committee (EPCC) has been in place for approximately 20 years and was recently updated to require more complete documentation.

• All syllabi are required to have statements discussing sexual misconduct, diversity, disability accommodation, and class expectations for respectful dialog.
• In 2022, the EPCC added questions to the school's default course evaluation question set addressing diversity and inclusivity in the classroom.
• The BSPH curriculum was designed to center on a required foundational health equity course. This course emphasizes understanding and addressing health disparities and achieving health equity for historically marginalized groups. The course is designed to help students learn to identify and critically discuss health disparities - historical, political, economic, social, cultural, and environmental determinants of an identified health equity issue - and evaluate the impact or potential impact of interventions to reduce inequities.
• When the MPH curriculum was overhauled in response to the 2016 CEPH criteria, there was a deliberate and comprehensive integration of diversity and health equity issues into all courses. For example, the Department of Environmental and Occupational Health core course was updated to ensure coverage of environmental justice and of specific contaminants, such as lead, that often affect historically marginalized communities. The communications MPH core course was designed entirely around cultural competence, with discussion in-session and assignments on how to speak to a diversity of audiences.
• The school offers several certificates in areas related to diversity, equity, and inclusion: Community-Based Participatory Research and Practice, Global Health, Health Equity, and LGBT Health.
• The school's orientation activities give students an immediate window into the school's equity focus. For example, each year, partnerships with organizations and departments (such as the SPH Center for Health Equity and the Allegheny County Health Department) are instituted to offer sessions specific to health equity, allowing graduate students to develop materials for community members. Undergraduate orientation also includes a service activity as well as a presentation from the University's service coordination team, PittServes.
• The school has two student organizations focused on support of historically marginalized students. The purpose of the Fostering Opportunities to Recognize, Welcome, and Advance Racially Diverse Students (FORWARD) is to promote and enhance the development of the academic, professional, and social aims and interests of racial and ethnic historically marginalized populations at the school, and to promote student, alumni, and community interest in and interaction with the school. The focus of Leaders in Intersectional Public Health and Equity (LIPHE) is to encourage individuals to approach public health and navigate life with an intersectional and equity-informed stance. LIPHE seeks to adopt a more contextual understanding of how health impacts people according to the intersections of social identity, including gender, race, ethnicity, socioeconomic status, nationality, religion, age and ability.
• The SPH One Book One Community program selects one book each year to focus on through special programming and across courses. Selections often highlight health equity issues. For example, recent selections include Reproductive Injustice: Racism, Pregnancy, and Premature Birth by Dána-Ain Davis, Evicted – Poverty ad Profit in The American City by Matthew Desmond, and Our Kids – The American Dream in Crisis by Robert Putnam.
• The school's grand rounds requirement ensures that all graduate students are exposed to a variety of speakers. Grand rounds events are selected by the associate dean for academic affairs to ensure a diverse set of speakers and topics. For example, grand rounds events from spring 2023 included "Diabetes as a History of Race and Disease," "Words Matter: The Ethics of Word Choice in Healthcare," and "Examining the Intended and Unintended Consequences of Drug Policies: Implications for Health Equity."
• Undergraduate students are required to accumulate 120 hours of service learning. Through this requirement they are exposed to different cultures and geographical areas. Some examples of these diverse placements include Pittsburgh Restaurant Workers Aid, Pitt CoVax Homewood Booster Clinic, Project Love Coalition, and the Sojourner House.
• The SPH 2023 faculty pedagogy survey asked faculty if they had done any of a list of seven things to improve the diversity and equity content of their courses, including "revise your course materials to add or improve a health equity lens," "address racism or other discrimination within your discipline," and "revise your course materials to improve digital accessibility." Of 112 respondents, 95 reported taking at least one of the seven actions in past or current courses. For example, 61

said that their 2022-23 courses addressed racism or other forms of discrimination as a social determinant of health and 46 indicated that they had plans to improve anti-racist course content for next year. The full report from the pedagogy survey can be found in ERF> Criterion G.

Department and program initiatives

Many of our highest-impact initiatives are developed at the department or program level in response to specific issues or needs. Examples include the following.

• The Department of Epidemiology devoted its fall 2021 seminar series to social epidemiology and health equity.

The Department of Human Genetics devoted its fall 2022 retreat to the topics of: 1) the ethics of doing genetic studies in cultures other than one's own, and 2) the structural racism inherent in so-called "polygenic risk scores" and potential solutions.

The Department of Behavioral and Community Health Sciences is currently discussing a departmental pronoun policy.

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.

Category	Data source	Target	Fall 2020	Fall 2021	Fall 2022	Fall 2023**
GRADUATE STUDENTS – African American*	Self-report, from PeopleSoft	Match or exceed proportion in PA (12%)	8%	10%	10%	11%
BSPH STUDENTS – African American*	Self-report, from PeopleSoft	Match or exceed proportion in PA (12%)	-	-	21%	19%
FACULTY – African American	Self-report, from Oracle	Match or exceed proportion of US doctoral degree recipients (8%)	5%	6%	6%	7%
STAFF (includes Research Assts.) – African American	Self-report, from Oracle	Match or exceed proportion in Allegheny County (13%)	4%	6%	5%	4%
GRADUATE STUDENT – Latino & Hispanic*	Self-report, from PeopleSoft	Match or exceed proportion in PA (6%)	7%	8%	8%	6%
BSPH STUDENT – Latino & Hispanic*	Self-report, from PeopleSoft	Match or exceed proportion in PA (6%)	-	-	3%	6%
FACULTY – Latino & Hispanic	Self-report, from Oracle	Match or exceed proportion of US doctoral degree recipients (2%)	2%	2%	2%	3%
STAFF – Latino & Hispanic	Self-report, from Oracle	Match or exceed proportion in Allegheny County (2%)	2%	2%	3%	2%

STUDENT – Academic Interest in LGBT Health	Enrollment in LGBT certificate program and courses	Increase	3	4	4	
GRADUATE STUDENT – 1st generation college graduate	Self-report, from SOPHAS	Maintain or increase	7%	10%	12%	13%
BSPH STUDENT – 1st generation college attendee	Self-report, from PeopleSoft	Maintain or increase	-	-	18%	19%

*Percentage of US students who reported this race/ethnicity, including in combination with others
**2023 numbers will be updated for the final self-study.

6) Provide student and faculty (and staff, if applicable) perceptions of the school's climate regarding diversity and cultural competence.

The school collects an enormous amount of data on graduate student perceptions in the school's exit survey. The survey is a required part of the graduation application process and thus has a 100% response rate. Since no undergraduates have yet completed the program, the school collaborated with the Office of the Provost in the spring of 2023 to add questions to the university-wide survey of current undergraduates. These data (reported below) are the first quantitative snapshot of student opinions from our inaugural BSPH class. In the future, questions the SPH will add questions to the University-wide undergraduate exit survey and alumni survey. Faculty perceptions have historically been questioned in the University-wide COACHE survey. In 2023, the University conducted an institution-wide climate survey of all faculty, staff, and students. As of June 2023, preliminary results from the climate survey are available (see report in ERF>Criterion G); selected results are reported below.

Graduate
The tables below report a few key results from the SPH exit survey. The full exit survey reports can be found in ERF> Criterion G.

	% of students responding "too little"			
During your program of study, how much emphasis in courses was there on:	**2019-20**	**2020-21**	**2021-22**	**2022-23***
Issues of race/ethnicity in the US?	14%	9%	8%	
Gender issues?	13%	12%	15%	
International issues?	22%	25%	23%	

	2019-20	**2020-21**	**2021-22**	**2022-23**
% satisfied or very satisfied with overall school climate	80%	84%	79%	
% responding "often" or "occasionally" to "Have you ever experienced uncomfortable or inappropriate treatment from faculty, staff, or students at Pitt Public Health as a result of your: - **Sexual orientation**	2%	0%	2%	

- **Disability**	3%	4%	2%	
- **Age**	3%	0%	4%	
- **National origin**	5%	0%	2%	
- **Gender or gender expression**	3%	6%	6%	
- **Race**	4%	3%	9%	

*2023 data will be added to the final self-study once the survey is completed.

Undergraduate

In spring 2023, 23 out of 62 BSPH students responded to the University's survey of current students. Of these respondents, 96% reported that during the course of their program or study there was "about right amount" of emphasis on issues related to race/ethnicity in the US, with 78% reporting the same related to gender issues, and 74% related to international issues.

From this same survey, only nine BSPH students responded to the following set of questions: When asked whether faculty and University staff treated students the same regardless of the student's gender/gender identity or race and ethnicity, 78% and 100%, respectively, agreed or strongly agreed that When asked whether students treated fellow students the same regardless of the student's gender/gender identity or race and ethnicity, 78% and 44%, respectively, agreed or strongly agreed. Overall, 78% of the nine respondents reported they were satisfied with cultural diversity at the University.

Faculty

Faculty are surveyed at the University level in the COACHE survey every three years. The most recent results are from 2019. The table below displays 2016 and 2019 mean results for SPH faculty on key questions related to diversity and cultural competence. Faculty were asked to rate their level of agreement with each statement, with five as the highest rating.

	2016 SPH	**2019 SPH**	**2019 University**
Diversity is important at Pitt	4.16	4.00	4.10
Comfortable with the climate for diversity and inclusiveness at Pitt	3.48	3.51	3.62
Colleagues committed to diversity and inclusion	4.04	4.15	4.05
Visible leadership support for diversity	3.73	4.00	4.13
Prepared to develop curricula to reflect diverse experiences of students	4.04	3.64	3.77

2023 University Climate Survey (Faculty, Staff, Students)

The 2023 University Climate Survey elicited responses from 66 SPH graduate students and five SPH undergraduate students, 50 faculty, and 102 staff. The table below presents three major summary indicators for each group. The campus climate indicator and the institutional support indicator are on a scale with 5 indicating the best. The insensitive/disparaging remarks indicator is on a scale with 1 indicating the best. Each of these indicators is calculated from a combination of several individual questions. Comparison data to other schools and universities were not available as of June 2023 but will be available in the fall and added to the final self-study. More detailed methodology and results are available in ERF>Criterion G.

University Climate Survey Major Indicators (Mean Value for Group)

	Campus Climate Indicator	Institutional Support Indicator	Insensitive/Disparaging Remarks Indicator
Students	3.6	3.4	1.9
Staff	3.9	3.5	1.7
Faculty	3.5	3.2	1.9
All male respondents	3.8	3.7	1.7
All female respondents	3.7	3.4	1.7
Non-binary and/or transgender	2.7	2.3	2.7
LGBTQ+	3.4	3.0	2.0
Non-LGBTQ+	3.8	3.5	1.7
White	3.7	3.4	1.7
Black/African-American	3.6	3.0	2.4
Asian	3.8	3.3	1.9
Latino or multiple identities	3.4	3.2	1.9
International	4.1	3.9	1.7

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

Strengths, challenges, and solutions in progress: The school has a long-standing emphasis on health equity and cultural competence in the curriculum, and this has been re-examined and strengthened regularly over the years. Moreover, the school has a decades-long history of commitment to a broad definition of diversity, which includes not only racial and ethnic diversity, but also sexual and gender expression, socio-economic status, disability, and other dimensions of diversity. Some of the most recent curriculum revisions, spurred by the EPCC and the SJAC, have resulted in significant and specific anti-racist course content. The faculty pedagogy survey demonstrates that the vast majority of faculty are working to address issues of diversity, cultural competence, and anti-racism in their courses. The BSPH program has a very high percentage of ethnic and racial minority students, and the school's new pathways programs for undergraduates and high school students have the potential to add to the diversity of the student body in coming years. Both faculty and student data on perception of climate are fairly stagnant, however, and the school is committed to continuing to employ all possible approaches to further enhance the climate for diversity and inclusiveness. One important area that contributes to the overall climate is diversity of the faculty. An emphasis on faculty hiring in recent years, in combination with the cluster hires, has increased the number of individuals from historically marginalized racial and ethnic groups as part of the school's faculty, with the goal to continue this growth significantly. The University climate survey includes some important data by subgroup, for example, the very high rates of exposure to disparaging remarks reported by African Americans and gender non-binary and transgender individuals. These data will be examined more closely, and appropriate action plans developed and implemented when the full data report is available in fall 2023.

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.

   Graduate student orientation
   Graduate student orientation consists of several major components. Over the summer, the school engages students remotely in several knowledge-building and community-building activities. For example, the school connects with new students virtually through a regular school newsletter that introduces students to the school and campus community. A variety of in-person and virtual events are also held, such as hikes through a local park, trivia nights, and panel discussions on school and University resources. Once students arrive on site, the school holds a half-day in-person schoolwide orientation program consisting of a lunch hosted by the dean's office, a resource fair, and community-building activities centered on public health interests and general ways to meet new students. There is also a university-wide orientation event for graduate students, as well as special events for international students. Finally, each department and/or program holds orientation activities. For example, Epidemiology hosts a departmental orientation that includes a New Student Fundamentals Workshop where they share departmental policies and resources. The event also includes a networking lunch with faculty and current students. Human Genetics holds separate orientation events for each graduate program as well as a reception for all incoming students to meet faculty as well as a fall departmental retreat Each level of orientation is aimed at both imparting fundamental knowledge needed to navigate the educational experience and connecting students with one another and with faculty and staff to build a sense of community. For students who start in the spring, a smaller version of orientation is provided virtually. With a smaller spring incoming class, it has been more effective to engage students through virtual environments and point them towards available resources. Students who start their degree programs in the summer term are included in all fall orientation activities.

   Undergraduate student orientation
   Undergraduate orientation consists of several major components. Over the summer, students participate in an online orientation program that introduces them to the University and school. After students complete online orientation, they have an individual 90-minute appointment with their public health advisor to go over the public health major and discuss opportunities to enhance their undergraduate experience. During this appointment, the student enrolls in appropriate coursework for the major. The University then holds an in-person Welcome Week orientation the week before classes begin. Students attend a variety of academic and social events to become connected with the University and their classmates. The BSPH program holds an orientation event as part of Welcome Week to introduce students to the SPH faculty and staff and their fellow students. During this orientation, students participate in their first service-learning activity. In addition, BSPH students take a SPH first-year seminar course during their first term to help them make the transition to the University, navigate the resources available, and make connections with their classmates.

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.

Graduate student advising
Graduate students are assigned an advisor at the time of admission. In many departments this is the director of their program, but in some programs advising is distributed among several faculty. For example, in the Department of Human Genetics, there is one advisor for quantitatively- oriented MS and PhD students, another for lab-oriented MS and PhD students, one for MPH students (the program director), and one for genome bioinformatics students (the program director). Likewise, Department of Epidemiology MPH program students are advised by the program director throughout their program via one-on-one appointments scheduled at least once per term. After their first term, the program director facilitates a connection between the student and a research mentor who oversees their master's essay work. For MS students, since the research commitment is more substantial, the program director works with the student to identify a thesis chair, and continues to meet with the student each term to oversee academic progression. In the Department of Behavioral and Community Health Sciences, students are connected to faculty advisors based on matching interests and faculty advising loads. Students are further encouraged to develop additional advising/mentoring relationships by networking with other faculty. Across all departments, departmental student services staff also play an important role in advising students, particularly on course sequencing. As students advance through their programs, they typically reach out to other faculty as research advisors, APE advisors, or ILE advisors, depending on their programs.

Undergraduate student advising
Undergraduate students are assigned a staff advisor when they schedule their new student advising appointment. During this one-on-one appointment, the student and staff advisor get to know one another and begin to develop the student's initial academic plans and discuss other opportunities available such as studying abroad, conducting research, and participating in internships. After their initial advising appointment, students are required to meet with their advisor once per term to discuss current courses, campus resources, progress toward completing the public major requirements, general education requirements, service-learning hours needed for graduation, and planning their next term coursework. There are also discussions about the student's long-term goals and career plans. In addition to the required advising appointment, students can meet with their advisor as needed to discuss immediate concerns regarding coursework and issues that may impact their success. The advisor helps the student problem-solve any issues and directs them students to the appropriate campus resources. Students can meet with their advisor in-person or virtually depending on the student's preference.

Undergraduate students will also be assigned faculty mentors to provide public health domain knowledge as well as guidance on public health careers and advice for preparing for graduate school. All students in the program will be assigned to a faculty mentor no later than the end of their sophomore year. Meetings with faculty mentors are not required, but students are encouraged to engage with their faculty mentor at any time.

3) Explain how advisors are selected and oriented to their roles and responsibilities.

Graduate
Graduate advisors (including program directors) are appointed within departments based on faculty interests, qualifications, etc. The associate dean for academic affairs provides significant support to program directors to orient them to their duties and ensure that processes, such as advising, are carried out consistently across departments. The program directors meet as a group once a month, and all MPH program directors also meet monthly as a part of the MPH committee. These groups are instrumental in sharing policies, practices, and experiences. Student services staff also meet monthly, and these meetings are also instrumental for training and ensuring consistency in advising practices.

Undergraduate
Undergraduate advisors are hired by a committee consisting of the associate dean for academic affairs (who is also the director of the BSPH program), the director of undergraduate curriculum, and the director of undergraduate advising. Advisors complete a university-wide advising

certification and training program known as Pitt Advising and Certification Training (Pitt-ACT). This training is based on the National Academic Advising Association (NACADA) core competencies and includes modules on university policy & procedures, academic programs, technology for student success, advising theory, and relationship building. Each advisor also conducts one-on-one training with the SPH director of advising and other seasoned advisors in which they observe student appointments before they meet with students individually. There are also weekly group advisor meetings to discuss any updates and training opportunities. Each advisor has a weekly one-on-one with the SPH director of advising to address individual training needs and concerns. Advisors are encouraged to seek out University and NACADA trainings and conferences to enhance their advising practice and to stay up to date on the policies and procedures.

4) Provide a sample of advising materials and resources, such as student handbooks and plans of study, that provide additional guidance to students.

Advising materials are provided at several different levels. The University undergraduate and graduate catalogs provide specific coursework and milestone requirements for each degree program. School, program, and department handbooks provide the next level of information, including guidance on how milestone exams are conducted, processes for APE, ILE, thesis, dissertation, etc. Additional materials, such as templates for dissertation proposals, exam practice materials, and samples of previous student work, are available for some programs on websites or Canvas learning management system sites.

Please see ERF> Criterion H> H1> H1.4. Updated handbooks for fall 2023 will be included in the final self-study.

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.

The school collects an enormous amount of data on graduate student perceptions in the exit survey. The survey is a required part of the graduation application process and thus has a 100% response rate. A similar exit survey is planned for undergraduates, but since the first graduating class has yet to complete the program, the school added questions to the University-level survey of current undergraduates in spring 2023 through a collaboration with the Office of the Provost. These data (reported below) are the first quantitative snapshot of student opinions from our inaugural BSPH class.

Graduate
The table below reports overall levels of satisfaction with the indicated element. Students responded on a Likert scale (very dissatisfied, dissatisfied, neutral, satisfied, very satisfied).

	% very satisfied or satisfied			
	2019-20 (n=249)	**2020-21 (n = 200)**	**2021-22 (n=188)**	**2022-23***
Academic advising	62%	78%	70%	
Mentoring from faculty	64%	79%	76%	
Quality of advising for your thesis/essay or dissertation	64%	83%	79%	
Availability of faculty	Not asked	87%	81%	

*2022-23 data will be added in fall 2023.

Undergraduate

In spring 2023, 23 out of 62 BSPH students responded to the University's survey of current students. Of the 23 who responded, 96% (22/23) were satisfied with their academic advising experience, and 87% (20/23) were satisfied with the availability of faculty.

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

Strengths, challenges, and solutions in progress: Student orientation is approached as a continuous process, not a single event. At both the graduate and undergraduate levels, the school connects with incoming students over a period of several months before and after they arrive to provide them with a variety of tools for success, including personal connections. Students have a wide range of human and written resources for advising and indicate a high level of satisfaction with both academic and research/ILE advising. One challenge in this area is that the Multidisciplinary MPH program recently changed leadership and added an advisory board of three faculty members, in addition to the program director, all of whom will be responsible for student advising. This new group is being offered special training led by the current program director (Dr. Hershey) and the associate dean for academic affairs.

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, resume 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 alumni. The school may accomplish this through a variety of formal or informal mechanisms including connecting graduates with professional associations, making faculty and other alumni 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.

   The lead for career services in the SPH is Mike Dolinger, the director of student services. A third of his time is devoted to career services, an effort which builds on his other work engaging and supporting students throughout their time at the school. He offers resume review, mock interviews, workshops, general advice, and job search help to undergraduate and graduate students and alumni. Over the last year, numerous students have used this service: 47% for resume/CV reviews, 26% for mock interviews, 10% for cover letter review, 10% for job search strategies, and 7% for general career advice. In total, there were 78 appointments scheduled for needs related to career services. These were made by 55 master's level students, nine doctoral students, two sophomores, and one alumnus. All appointments are made through HandShake, a University-owned license system that allows students and alumni to create appointments with SPH Career Services to find job and internship listings, and events and workshops, such as career fairs and training sessions.

   SPH Career Services hosts associated workshops and trainings throughout the year. These are promoted through the schoolwide marketing channels (social media, bi-monthly newsletters, and digital boards throughout the school), along with University communications (events calendar). Recent workshop topics have included salary negotiations, international student employment, and resume building 101. Most presentations are led by University and community partners. For instance, the F-1 and Visa workshop was led by a coordinator from the Office of International Services. The salary negotiations session was led by a human resources staff member at the University of Pittsburgh Medical Center (UPMC). This allows students to hear messages from a variety of sources, and also gives them a chance to network with school partners. In some cases, the presenters promote open job positions and internships, which have led to employment for students and alumni.

   Experience has demonstrated that students are most successful professionally when they connect with Career Services as early as possible in their programs. As a result, SPH orientation events for new graduate and undergraduate students include a career services presentation on the available resources to provide details on how to make appointments and search for jobs and internships. Undergraduate students are also connected with Career Services resources in the First-Year Seminar course. In addition, departmental events provide discipline-specific career services information to students early on. For example, Health Policy and Management conducts a professional development seminar that invites the director of student services to speak to the first-year class of MPH students.

Other sources of career advising for SPH students include the following resources:
• The University Career Center is available to undergraduates and undergraduate alumni, and provides a full range of services, including drop-in help with resumes and cover letters, advising on student employment, and job search assistance.
• Graduate students, particularly doctoral students, receive career advising from their academic and research advisors and program directors. It is not unusual for doctoral students to work with their advisor, other committee members, and the director of student services on creating their CVs or resumes. Faculty advisors are more often the preferred source for information on how to search for positions, especially for doctoral students.
• The school's experiential learning specialist, Adrianna Gradisek, advises students on practice experiences, which often includes both resume review and general career advice.
• The University's Office of Academic Career Development provides a range of workshops and services for doctoral students.
• Many individual departments and programs conduct career-focused programming. The greater use of virtual formats in recent years has allowed for a significant expansion of these events. For example, Biostatistics has invited alumni from the pharmaceutical industry to speak at a panel as part of the departmental seminar series. Likewise, Epidemiology has held several departmental career panels in the past few years. The director of the Genome Bioinformatics program also invites guest speakers from industry to talk with students, while the Department of Health Policy and Management brings in public health professionals for a day of mock interviews with students annually.

2) Explain how individuals providing career advising are selected and oriented to their roles and responsibilities.

The director of student services has a master's degree in student affairs in higher education and has been working in a career services capacity for 15 years. He works closely with the University Career Center to identify resources in career management, such as HandShake, a worldwide system for students to search for jobs and find local career-related events. Faculty are made aware of the school's career services offerings via venues, such as the monthly program directors' meeting, so that they can help steer students toward all available resources.

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 alumnus/a. For each category, indicate the number of individuals participating.

On April 14, 2023, the school held a salary negotiation workshop for public health students and alumni. The event highlighted a guest speaker from UPMC and was attended by 10 current students.

Throughout the course of the 2021-2022 academic year, the director of student services met with an Environmental and Occupational Health PhD alumnus to discuss and support their job search for instructor/faculty positions in higher education.

As part of the 2021 fall orientation, the director of student services held a Career Services introductory meeting for new public health students. Approximately 50 to 60 students attended.

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.

Graduate
The graduate exit survey (full results can be found in ERF> Criterion H> H2) asks a number of detailed questions about what Career Services students use and their level of satisfaction. The overall satisfaction numbers are provided below. Responses are on a Likert scale (excellent, good, fair, poor).

	% excellent or good			
	2019-20	**2020-21**	**2021-22**	**2022-23***
How would you rate the services provided by Pitt Public Health Career Services staff during individual appointments?	89%	91%	85%	
Overall satisfaction with career advising from Pitt Public Health Career Services	not asked	94%	78%	

*2022-23 data will be added for the final self-study.

Undergraduate

In spring 2023, 23 of 62 BSPH students responded to the university's survey of current students. Of the 20 students who responded to this question, 90% (18/20) were satisfied with their professional or career advising (combined University career counseling and SPH career counseling).

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

Strengths, challenges, and solutions in progress: Student satisfaction is high and students have a wide range of resources available to them for career advice at both the school and University level. Students have the ability to meet with an individual one-on-one, or explore opportunities at their own convenience. These resources include submitting their resume or CV and receiving instant feedback, or attending an online mock interview at any time of the day. A primary challenge is that the school is not currently staffed to aggressively promote Career Services (for example requiring an initial meeting with each student during their first semester). This is evident in the satisfaction numbers above and in the associated comments provided in the survey: students who meet with Career Services staff are very satisfied, but many are not adequately aware of what is available to them. The school is in the process of considering ways to augment Career Services staffing, including collaborating with the University Career Center to hire a public health specialist for undergraduates.

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.

   Students are encouraged to share concerns with any faculty or staff member at any time. This message is reinforced at the new student orientation events where students are encouraged to reach out to school and department leadership with concerns. The school's experience is that a culture that welcomes conversation around points of pain and friction can allow issues to be resolved before they become exacerbated. Experience also shows that students are most likely to share concerns with whomever they feel most comfortable with, regardless of that person's formal title or role.

   The school's ombudsperson is Mike Dolinger, who is also director of student services. Information about the ombudsperson role and other complaint procedures is discussed at orientation and provided on the school website and in the student handbook. Specifically, the ombudsperson listens to concerns and assists students with resolving conflicts and issues that arise during their education (including internships, research projects, service-learning placements, and practicums) that they believe have not or cannot be addressed with a faculty person or their academic department (BSPH office at the undergraduate level). The ombudsperson helps to mediate conflicts, facilitates conversations between individuals, and provides information about institutional policies related to the student's issues, including University policies and procedures. The ombudsperson explains the procedures and processes related to the issue and directs students to additional resources on campus, as appropriate.

   The student handbook gives the following instructions on complaint procedures: "The first step to resolving any dispute should be a professional discussion with the faculty member involved. The next step is a discussion with the chair of your department. In situations in which it is uncomfortable to talk to those individuals, you can raise issues with the associate dean responsible for academic oversight. Your departmental student services staff can also be a good source of advice."

   In addition, every syllabus includes statements about sexual misconduct and title IX, academic integrity, and diversity (among others), and each of these statements includes a link for reporting concerns.

   Formal procedures for disputing failure of milestone exams and other academic censure are contained in the school's probation and dismissal policy.

   University-level grievance-reporting procedures are also available to all SPH students, staff, and faculty, including the following:
   • Grievance Procedure | Office for Equity, Diversity, and Inclusion | University of Pittsburgh
   • Office of Compliance, Investigation and Ethics
   • Student Conduct | Student Affairs (pitt.edu)

2) Briefly summarize the steps for how a formal complaint or grievance is filed through official university processes progresses. Include information on all levels of review/appeal.

The school defines and tracks “formal complaints” as any complaint that is formally referred to the ombudsperson, rather than being resolved via the informal and semi-formal processes described above. Generally, any such complaint involves a dedicated meeting with the ombudsperson, who then follows up and tracks the situation until it is resolved. The path to resolution varies greatly depending on the type of complaint.

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.

   A graduate student felt they were faced with very unprofessional behavior in their lab experience. The ombudsperson reached out to the appropriate faculty and staff, who worked to find ways to address the concerns with the lab manager, and ultimately facilitated the student’s move to a new research setting.

   A student felt that there were students acting inappropriately in the building which was negatively affecting the environment. To address this issue, the dean’s office sent a schoolwide email to the students about building a positive community.

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

   Strengths, challenges, and solutions in progress: Students have a wide variety of avenues for addressing both formal and informal concerns. In the course of conducting the self-study, it was determined that some avenues were better advertised than others. A more systematic and comprehensive overview of complaint processes in handbooks and orientation materials is now being implemented.

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 school seeks to recruit and admit a capable and diverse student body. The school admits qualified students regardless of race, ethnicity, national origin, religion, gender, sexual orientation, age, disability, or veteran's status and adheres to the University's policies on affirmative action and equal opportunity. Recruitment activities differ between the undergraduate and graduate degrees, and s are both extensive and varied (see below), which is an intentional strategy for recruiting a diverse applicant pool and student body.

   In fall 2021, the school hired a local market research company, Campos, to provide research-informed recommendations on how to best position undergraduate and graduate programs to prospective students. The findings were used to create a digital media marketing campaign with Red House Communications, a local advertising agency, to promote our programs across Pennsylvania. In addition, the school actively markets graduate programs through digital advertisements targeting visitors to the SOPHAS application website from Pennsylvania, Maryland and Washington, DC. These marketing campaign slogans have also been used to refresh recruitment and marketing materials at in-person events (e.g. open house and recruitment fairs).

   Undergraduate recruitment

   Undergraduate recruitment is led by the University of Pittsburgh Office of Admissions and Financial Aid (OAFA) and overseen by the vice provost for enrollment. OAFA manages all undergraduate marketing efforts and attends local, national, and international recruitment fairs to drive applications for undergraduate admission. In addition, OAFA plans and coordinates on-campus recruitment activities for the six freshman-admitting schools at the university, including the School of Public Health. Each school shares a joint full-time undergraduate enrollment coordinator with OAFA to assist in bridging the two units together and splits 50% of their time between OAFA and the school.

   In addition to first-year students, the BSPH program also accepts internal transfers from all University of Pittsburgh branches and external transfers from outside institutions for fall and spring admission. Due to the popularity of the new BSPH program, the school has received a large response from current University of Pittsburgh students who want to internally transfer. Given the number of applications received, the BSPH program director and curriculum director had to limit the number that could be accepted into the program. Due to the number of internal transfers, the school has not recruited heavily for external transfers, although it has participated in a number of outreach events to local community colleges.

   Prospect System - The University of Pittsburgh currently utilizes SalesForce to maintain the contact information of all leads and prospects, along with Marketing Cloud to send email communication to prospective students. All communication is created by OAFA's marketing team. OAFA also enlists additional systems, such as Visit Days, Panther Link, and Mowgli, to manage the communication with prospective applicants. Within the next year, OAFA will be transitioning to Slate for the prospective applicant outreach.

   Daily Visits – OAFA provides various daily visit options for freshman and external transfer applicants, including admissions presentations, campus tours, and program specific presentations. The School of Public Health offers a presentation for prospective applicants on Monday afternoons.

Blue & Gold Days – OAFA coordinates approximately 12 large day-long on-campus recruitment events between the summer and fall terms to introduce prospective applicants to the Pitt community. Each freshman-admitting school participates and provides a program specific presentation, along with a student panel.

Virtual Information Sessions – OAFA provides regular virtual admissions presentations and campus tours, and the freshman-admitting schools host monthly virtual presentations.

Group Visits – OAFA accommodates group tours of campus. Visits must be planned at least 14 days in advance.

Admitted Student Days – OAFA plans 8 to10 visit days for admitted undergraduate students in the fall and spring terms. Both the freshman-admitting and upper-division majors participate in recruiting students to the University. Program specific presentations are given, along with faculty and student panels. A virtual admitted student day is also held in late April.

Multicultural Visit Program – an annual event for admitted students and families who have historically been underrepresented in higher education to connect with university leaders, staff, faculty, and students, and to see firsthand Pitt's shared commitment to building and maintaining a diverse, equitable, and just campus for everyone. One night at a local hotel is paid for by Pitt, and the University partially reimburses for travel expenses.

Graduate recruitment

Schoolwide recruitment efforts are organized through the Recruitment and Admissions unit within the Office of Student Affairs, which consist of four full-time employees (a director of recruitment and admissions, a recruitment coordinator, and two admissions staff members). Primary responsibility for recruitment events lies with the associate dean for enrollment and director of recruitment and admissions, with regular communication and input about priorities and new events from the vice dean, departmental student affairs staff, and the Educational Policies and Curriculum Committee (EPCC). Faculty, staff, and current students participate in the school's recruitment efforts.

Prospect System – SPH uses the University's SalesForce system to maintain the contact information of all leads and prospects, along with Marketing Cloud to send email communication to prospective students. An introductory welcome email is sent from the director of recruitment and admissions, along with a welcome message from the department(s) of interest. These emails were updated in fall 2022 by Red House Communications, a local Pittsburgh marketing agency, in conjunction with school and departmental level staff and faculty. In addition, monthly emails are sent on various topics, such as deadline reminders, open house invites, and school news features. Special announcements may also be sent ad hoc on topics such as virtual information sessions or the American Public Health Association's annual meeting.

Virtual fairs and information sessions – SPH actively participates in a series of virtual fairs through Career Eco (January, July, September, and November) and TIPH mini-fairs that are organized by SOPHAS and the Association of Schools and Programs of Public Health (ASPPH). In addition, the school hosts virtual "Chat with Admissions" sessions twice per month in the fall term to address application instructions and answer questions, and hosts three virtual information sessions in the fall to highlight all of the school's departments.

Open House – SPH holds an open house for prospective applicants every fall term. The event has historically been held in-person but was changed to virtual in 2020 and 2021 due to the COVID-19 pandemic. Starting in 2022, a virtual and in-person event was hosted every year. Maintaining the virtual event provides an additional tool for recruiting students who may not have the means to travel easily, including economically disadvantaged students, first-generation students, and students with disabilities. All departments participate in the scheduled program. Open house announcements and flyers are emailed to potential applicants listed in the prospect system. Notices

are also sent to pre-health and Career Services advisors, department heads, other targeted undergraduate institutions (including Pitt's regional campuses), and state and local public health and healthcare agencies and organizations. Attendance numbers for the past five years are provided below.

	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022
Virtual open house	-	-	182	115	89
In-person open house	87	95	-	-	59
Total	87	95	182	115	148

Accepted Applicants Day – During this event, held annually in March, SPH invites all accepted applicants to visit the school. The event schedule includes a morning welcome, informational marketplace, a session for guests (parents or spouses/partners who may also be relocating to Pittsburgh), department information sessions with faculty and staff, lunch with other applicants, student poster presentations, and a pre-recorded panel discussion with alumni. As with open house, this event was historically held on-campus with a small virtual option for those who could not visit Pittsburgh. During the pandemic, Accepted Applicants Day was presented virtually. Due to the success of the virtual event, it will continue to be held both in-person and virtually. Attendance numbers for the past five years are provided below.

	Spring 2019	Spring 2020	Spring 2021	Spring 2022	Spring 2023
Virtual accepted applicants' day	15	146	212	169	94
In-person accepted applicants' day	74	-	-	-	84
Total	89	146	212	169	178

Recruitment fairs – As a result of the pandemic, participation in in-person recruitment fairs has dropped. While some programs have moved back to in-person programming, the number of attendees has not returned to pre-pandemic levels. Consequently, SPH has limited participation to east coast TIPH graduate fairs (hosted by ASPPH), local graduate fairs, and a few select fairs on the eastern side of the United States. SPH also partners with the University's Office of Health Sciences Diversity, Equity and Inclusion which attends fairs to reach underrepresented populations such as the National Hispanic Medical Association, the National Association of Minority Medical Educators (NAMME), Cheyney University, and the Atlanta University Consortium. Many fairs are attended by faculty and program directors in addition to staff and student recruiters.

Guaranteed admissions program **--** Since 2004, SPH has worked with the University in its guaranteed admissions program for incoming freshmen who meet specific criteria and maintain a designated academic standard in their undergraduate years. As a participating graduate program, the University identifies incoming freshman who meet its requirements for consideration, based on high school grade point average (GPA) and admission test scores (when submitted), and matches students to the programs based on their expressed interests. The guaranteed admissions program is featured in Pitt's undergraduate recruitment materials. Starting in 2018, SPH has also developed a sophomore guaranteed admissions program with the University of Pittsburgh Bradford campus, which has since been expanded to other local institutions, including Grove City College, Washington and Jefferson College, Chatham University, Carlow University and Duquesne University. The sophomore guarantee identifies high achieving second-year students using similar criteria as the other guaranteed admissions program.

4+1 program – SPH offers an Accelerated Bachelor's/Master's (4+1) program for participating programs within the University of Pittsburgh: the Dietrich School of Arts and Sciences; School of Computing and Information; and School of Health and Rehabilitation Sciences. This program allows

a student to complete both a bachelor's and a master's degree in five years. Students apply to a participating graduate program in SPH during their junior year. If accepted, they will remain an undergraduate student in year 4, but will begin enrolling in graduate level courses. At the undergraduate school's discretion, public health graduate courses may be counted towards the undergraduate degree and will also be counted towards the graduate degree. 4+1 students will earn their bachelor's degree at the end of their senior year (year 4) and will become full-time graduate students during their 5th and final year. At this time, a 4+1 program has not been developed within the BSPH program, but the SPH expects to develop this in the near future.

Tuition scholarships – SPH developed a master's scholarship program in fall 2020, in response to declining admissions and in order to more aggressively recruit a diverse student body. The scholarship program has proven to be very successful. All accepted master's applicants are offered one of two school-level scholarships, Pitt Public Health Futures Award for non-Pitt applicants or Pitt2Pitt for applicants who earned an undergraduate degree at the University. These awards range from $1,500-$6,000 per semester and are partially based on residency. In addition, all accepted master's applicants are offered a Department Achievement Award ranging from $1,000-$7,500 per semester, which is based on residency and merit. Both school-wide and departmental awards have been used to recruit a diverse class, with consideration given to underrepresented groups, first generation college students, economically disadvantaged applicants, and applicants who have self-reported a disability. In addition, all departments have had the option to offer a 75% tuition scholarship to one to two applicants per year with membership in underrepresented groups (very broadly defined). In addition, some departments sponsor in-person visits for accepted applicants from historically marginalized backgrounds. The University and the school will be revisiting all of these programs aimed at historically marginalized students given recent Supreme Court decisions.

Student Recruitment Ambassadors – One of the goals of the Dean's Student Recruitment Revitalization Plan is to have current students contact every admitted master's applicant in the spring term. To do this, SPH hired one to two students per department to communicate with their own department's accepted applicants. Students are paid a stipend to schedule one-on-one meetings with applicants, to attend "chat with students" virtual events, and to help with any other recruitment-related activities, such as Open House and Accepted Applicants Days events. The program has been an overwhelming success.

Departmental activities – Many more recruiting activities happen at the departmental level. For example, Infectious Diseases and Microbiology holds virtual open hours for admitted students with current students. In Biostatistics, the admissions committee reaches out to all admitted students. In Environmental and Occupational Health, both students and faculty reach out to admitted students by email.

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 admissions
All freshman and external transfer applicants must apply through the University's Office of Admissions and Financial Aid (OAFA). OAFA maintains processing and decision authority over applications for admission to the BSPH program on behalf of the School of Public Health, with most BSPH applicants being first reviewed by the school's "50/50" undergraduate enrollment coordinator. Second and additional reviews are completed by OAFA staff. Internal transfers applicants from other Pitt schools are reviewed by an internal admissions committee. Application requirements are listed on the school website.

Graduate admissions
Detailed admission requirements are listed on the school website and on department webpages. All applicants must have completed at least a bachelor's degree, or the equivalent of a U.S.

bachelor's degree from a foreign institution. The Graduate Record Examination (GRE) is optional for all programs, except for the PhD program in Behavioral and Community Health Sciences (not accepted), the MS in Genetic Counseling program (not accepted) and the Multidisciplinary MPH, which requires the GRE, MCAT, DAT or another standardized test. Applicants must have also completed prerequisite courses in social sciences and mathematics; other prerequisites differ by department and program.

There are additional requirements for international applicants. If the applicant is from a country where English is not the official language or does not have U.S. degree, then they must submit a valid Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Duolingo English Test score. The University of Pittsburgh requires a minimum total TOEFL score of 80, a minimum IELTS of Band 6.5, or a minimum Duolingo of 105, though SPH graduate programs may set higher minimum scores. Except in special circumstances (described on the website), international applicants are also required to submit a completed evaluation by World Education Services (WES), which verifies credentials on official transcripts from international institutions (since September 2010).

Admissions review process
The Office of Student Affairs coordinates the admissions process, but all evaluation is done at the department and program level. Individual programs review their applicants and make written recommendations to admit, provisionally admit, reject, or defer them. Review processes vary by program and may include interviews. Admission recommendations undergo subsequent review by the recruitment and admissions unit in the Office of Student Affairs. Unless the team notes a discrepancy between the departmental decision and admissions policies, the applicant is notified by email of the decision.

As a CEPH-accredited school of public health, SPH has participated in ASPPH's centralized application service (SOPHAS) since its inception in September 2006, and began using the paperless application review system (WebAdmit) since September 2012, with subsequent participation in HAMPCAS (for MHA applicants only) and SOPHAS Express (for non-degree, certificate only, 4+1, and Genetic Counseling applicants). Through discussion with departments, the Office of Student Affairs has tailored the preprocessing and sorting capabilities of WebAdmit to meet individual department- and program specific needs. Information technology support for the dean's office generates weekly applications and admissions reports to student affairs staff, which is in turn disseminated to admissions staff, faculty, and department chairs to regularly track the school's progress for processing applications.

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.

Outcome Measures for Recruitment and Admissions					
Measure	**Target**	**2019-20**	**2020-21**	**2021-22**	**2022-23****
Yield among underrepresented* graduate students	50%	42%	40%	46%	42%
Number of underrepresented students matriculating to BSPH program		--	--	--	14 (20%)
Number of underrepresented students matriculating	50	20 (18%)	26 (14%)	36 (17%)	31 (17%)

to public health masters programs					
Number of underrepresented students matriculating to PhD programs (percentage of US students)	10	3 (%)	8 (28%)	7 (27%)	9 (33%)

*African American, Hispanic/Latino, Native American
** 2022-23 data will be updated in the final self-study.

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

Strength, challenges, and solutions in progress: Application numbers for all programs are robust, and yields have been substantially improved by the highly successful master's scholarship program. Numbers of underrepresented students are strong compared to other schools at the University of Pittsburgh but do not meet SPH goals. Numbers of underrepresented students have stayed relatively flat in recent years despite aggressive recruiting and scholarship strategies. The school is actively engaged in strategizing how to maintain and strengthen recruitment of underrepresented minority students given recent U.S. Supreme Court decisions.

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.

   Handbooks are provided in ERF> Criterion H> H5. Updated handbooks for fall 2023 will be included in the final self-study.

   Academic Calendar

   2023-24 Undergraduate Catalog

   2023-24 Graduate Catalog

   Undergraduate Regulations

   Graduate Regulations